

INDUSTRIAL QUALITY

Cutting tools for all types of wood,
composites, plastics & aluminium

FS TOOL



Celebrating 50 years!

Since 1973, FS Tool Corporation has been providing solution-driven approaches to unique tooling needs for various industries across the globe. FS Tool has been recognized as an industry leader in providing quality carbide and diamond tooling solution for composites, non-ferrous metals, plastics, and woodworking applications. Living by the motto – Engineered to Outperform – our innovative solutions have continued to evolve alongside new machines and materials. We have partnered with valued customers around the world to ensure ultimate customer satisfaction and unsurpassed technical expertise. Here is to 50 more!

Application Support and Product Knowledge

We are application driven. In addition to showcasing over 6000 products, we also offer custom tooling solutions and dedicated technical support for every approach. We offer training, inventory management programs, tooling consultations, and other educational support services as part of our partnership approach. FS Tool is there when you need us.

Our Partnership Approach

FS Tool only partners with distributors who are industry experts. Our distributors can provide you with the technical support and product knowledge when you need it the most. Our sales team and engineering advisors work closely with our distributors to coordinate on-site customer training, troubleshooting advise, and ongoing research and development for our innovative solutions.

Our Commitment

We are committed to providing you with premium products that are cost efficient. If you have a unique tooling need outside of what is listed in the catalogue, please contact us at 1-800-387-9723. Our customer service team will be happy to assist you or put you in contact with a distributor in your area.

To learn more about FS Tool or to download the digital version of the catalog,
please visit our website: **www.fstoolcorp.com**





Delivery and Availability

Tools offered from stock are subject to availability. Buyer agrees to partial deliveries which will be considered separate transactions. Cancellation or alteration of orders are subject to our written consent. Returns only upon approval. Tools made to special order are not returnable.

Delivery time is based on our present commitments and starts from the date of order confirmation. Although every effort will be made to maintain delivery times, we will not be liable for any loss or damage due to delays, however occasioned.

Our Guarantee

All our tools are manufactured according to specifications described in this catalogue, which includes guarantee of quality and workmanship. Tools returned for inspection are to be sent shipping prepaid. We will replace only tools which prove, upon examination, to have been defective, and which have not been misused or carelessly handled. We decline any responsibility for mistakes caused by improper application, handling, or inappropriate sharpening/ service. Tools may be altered in design from provided illustrations due to improvements or changes in production methods.

"They're like family. We don't give our tooling or sharpening a second thought. They keep us ahead of the curve with the best tools."

- Mark Cacioppo

"We consider FS an extension of our company. When we need something, they make it happen. And it's done right."

- Aaron Jud

"Our business is based on quality products. Working with FS, my production team has a partner they can rely on."

- Marcus Aisley

ENGINEERED TO **OUTPERFORM**

We promise to provide you with custom tooling, product knowledge, and application support when you need it.

WHAT'S NEW?

55DL SERIES



SEE PAGE E48

FINE DADO SETS WITH 4 WING CHIPPERS

SHRKFH-HSK63F



SEE PAGE FC1

SHRINKFIT TOOLHOLDERS

MD2010



SEE PAGE FC22

ADJUSTABLE MOUNTING DEVICES

RD2571



SEE PAGE FC79

V GROOVE INSERT ROUTER BITS

1TS02

1TS03



SEE PAGE D25

STILE AND RAIL TOOLHEAD SET

WHAT'S NEW?

DRS01



SEE PAGE FC88

PCD DIAMOND MDF DOOR TOOLING SET

D41L (57.5MM)

D41M (70MM)



SEE PAGE G3

HIGH PRECISION DOWEL DRILLS

RSF01 - RSF04



SEE PAGE FC67 FC68

HIGH POLISH O-FLUTE ROUTER BITS (PLASTICS & ALUMINIUM)

D42L (57.5MM)

D42M (70MM)



SEE PAGE G4

ROUND SPURS, PRECISION DOWEL DRILLS

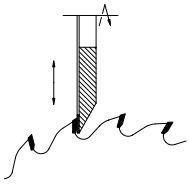
D30 (57MM)



SEE PAGE G27

SOLID CARBIDE BORING DRILLS, 2 TEETH

CONTENT OVERVIEW

TECHNICAL INFORMATION  A

CUTTERS AND CUTTER COMBINATIONS
Carbide or Stellite Tipped  B

CUTTER BLOCKS
HSS Knives / Carbide Tipped  C

TOOLHEADS with **DISPOSABLE CARBIDE KNIVES**
Reversible Inserts  D

CIRCULAR SAW BLADES
Dado Sets / Grooving Saw Blades / Hogging Units  E

ROUTER BITS
Standard & Solid Surface / Insert Router Bits  F

PRECISION TOOLING FOR CNC MACHINES
Spiral Bits / Insert Bits / Tool Holders  FC

DRILL BITS / HINGE BORING BITS
Drill Bit Adaptors / Mortise Bits  G

ACCESSORIES  H

DATA FOR ORDERING

Standard Tools In Catalogue

Part number
Dimensions

Custom Tools

Bore or shank size
Machine RPM and required feedrate
Direction of rotation
Drawing showing dimensions of cut or a workpiece sample giving orientation to machine table and fence
Type of material to be cut including wood species and moisture content if appropriate

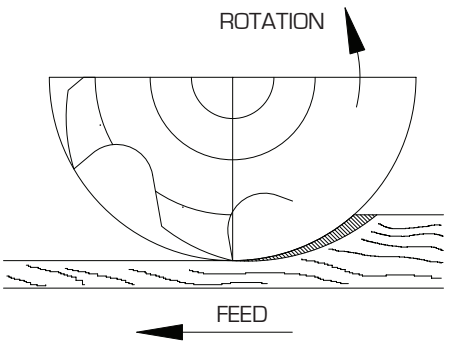
Main Specifications

Tool diameter x width of cut x bore (or shank) diameter
Number of teeth
Direction of rotation
Maximum RPM (n max)
Keyway size
Tooth material: Tungsten Carbide, HSS, Stellite, or Diamond

WORKING METHOD

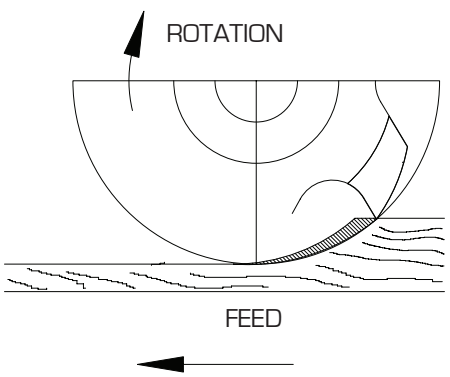
Against Feed Direction (Up Cut)

The usual method of operation. The cutting motion of the tool and the feed direction work counter to one another. The cutting force exerted on the workpiece resists the direction of feed.
Only the 'Up Cut' method is suitable for hand feeding.



With Feed Direction (Climb Cut)

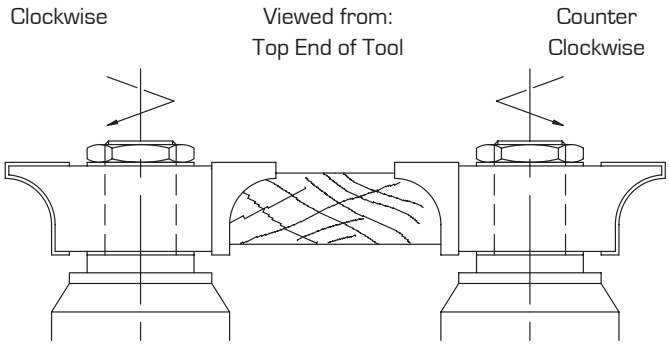
The cutting motion of the tool and the feed direction are in the same direction. The cutting force exerted on the workpiece works in the same direction as the feed. Only the 'Climb Cut' method is suitable for mechanical feed.



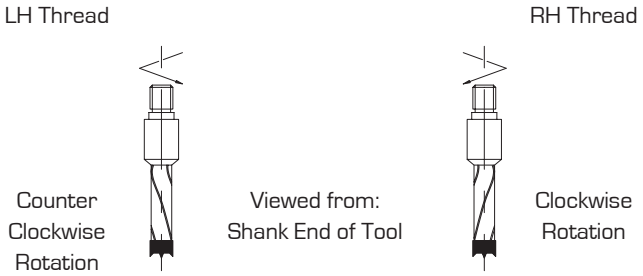
DIRECTION OF ROTATION

Left Hand Cutting — **Right Hand Cutting**

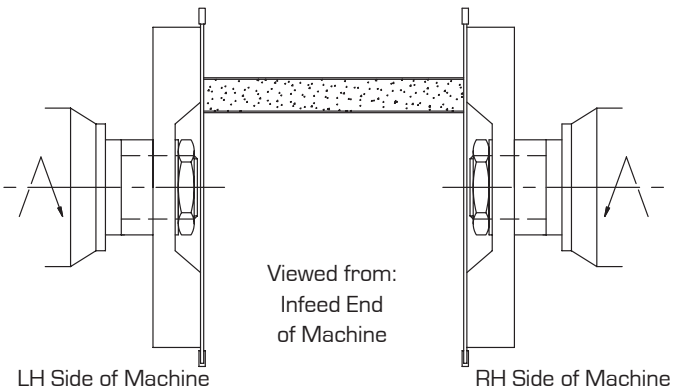
Bore Mounted Tools



Shank Mounted Tools

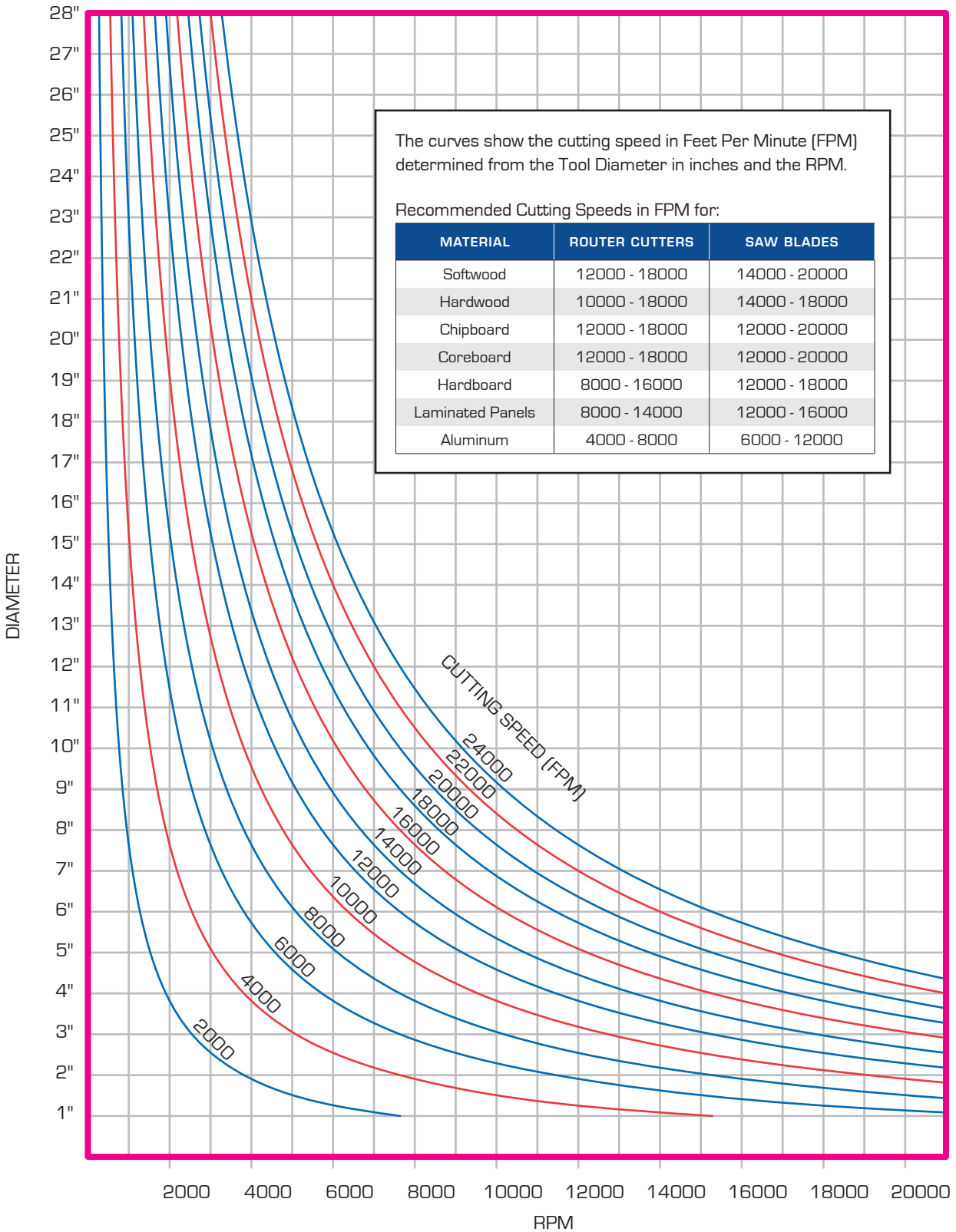


Hogging Units



DETERMINATION OF CUTTING SPEED

In relation to RPM and tool diameter



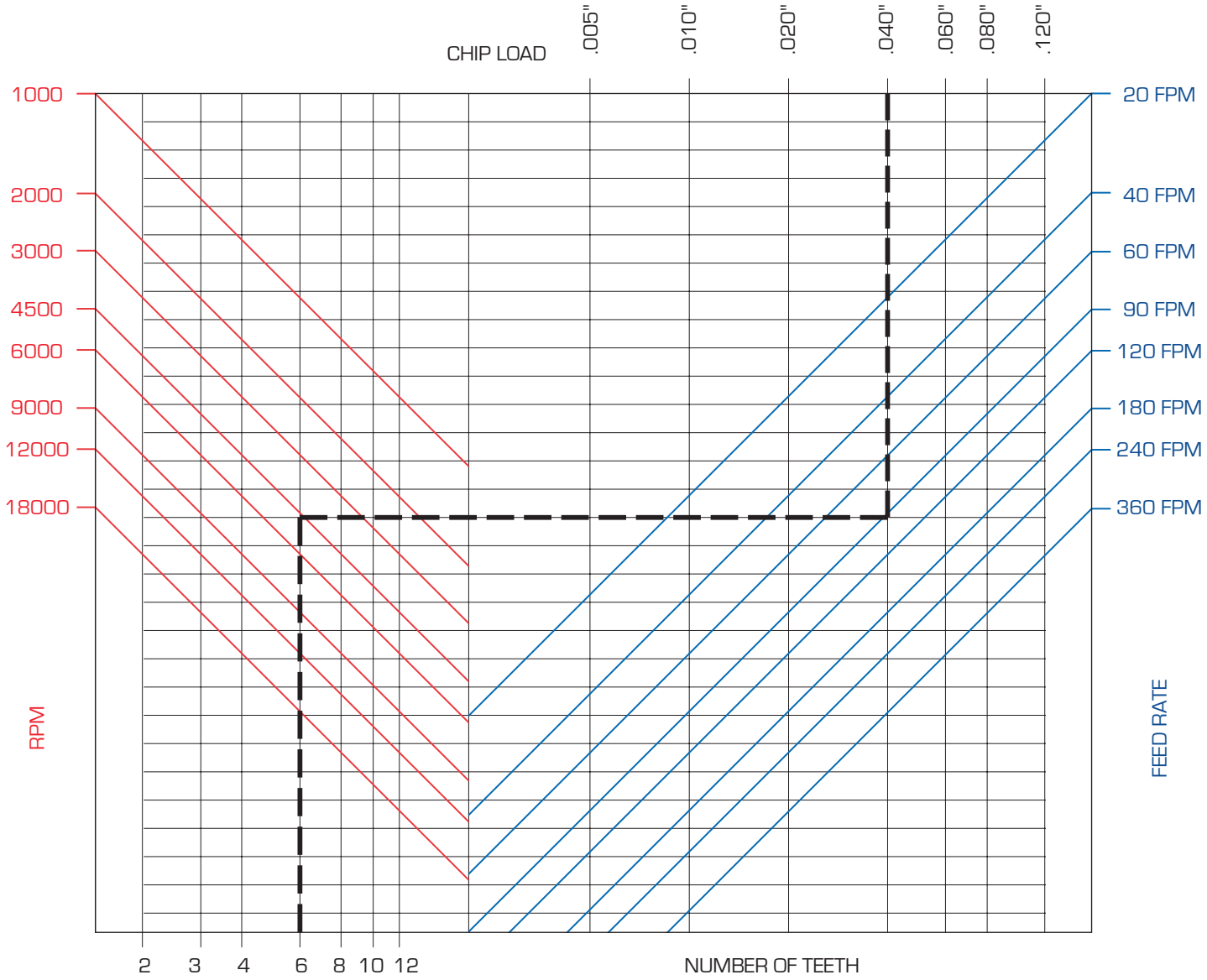
The curves show the cutting speed in Feet Per Minute (FPM) determined from the Tool Diameter in inches and the RPM.

Recommended Cutting Speeds in FPM for:

MATERIAL	ROUTER CUTTERS	SAW BLADES
Softwood	12000 - 18000	14000 - 20000
Hardwood	10000 - 18000	14000 - 18000
Chipboard	12000 - 18000	12000 - 20000
Coreboard	12000 - 18000	12000 - 20000
Hardboard	8000 - 16000	12000 - 18000
Laminated Panels	8000 - 14000	12000 - 16000
Aluminum	4000 - 8000	6000 - 12000

DETERMINATION OF OPERATION PARAMETERS FOR CUTTERS

Chipload, Feed Rate, RPM, Number of Teeth



RECOMMENDED CHIP LOADS (INCH/TOOTH)

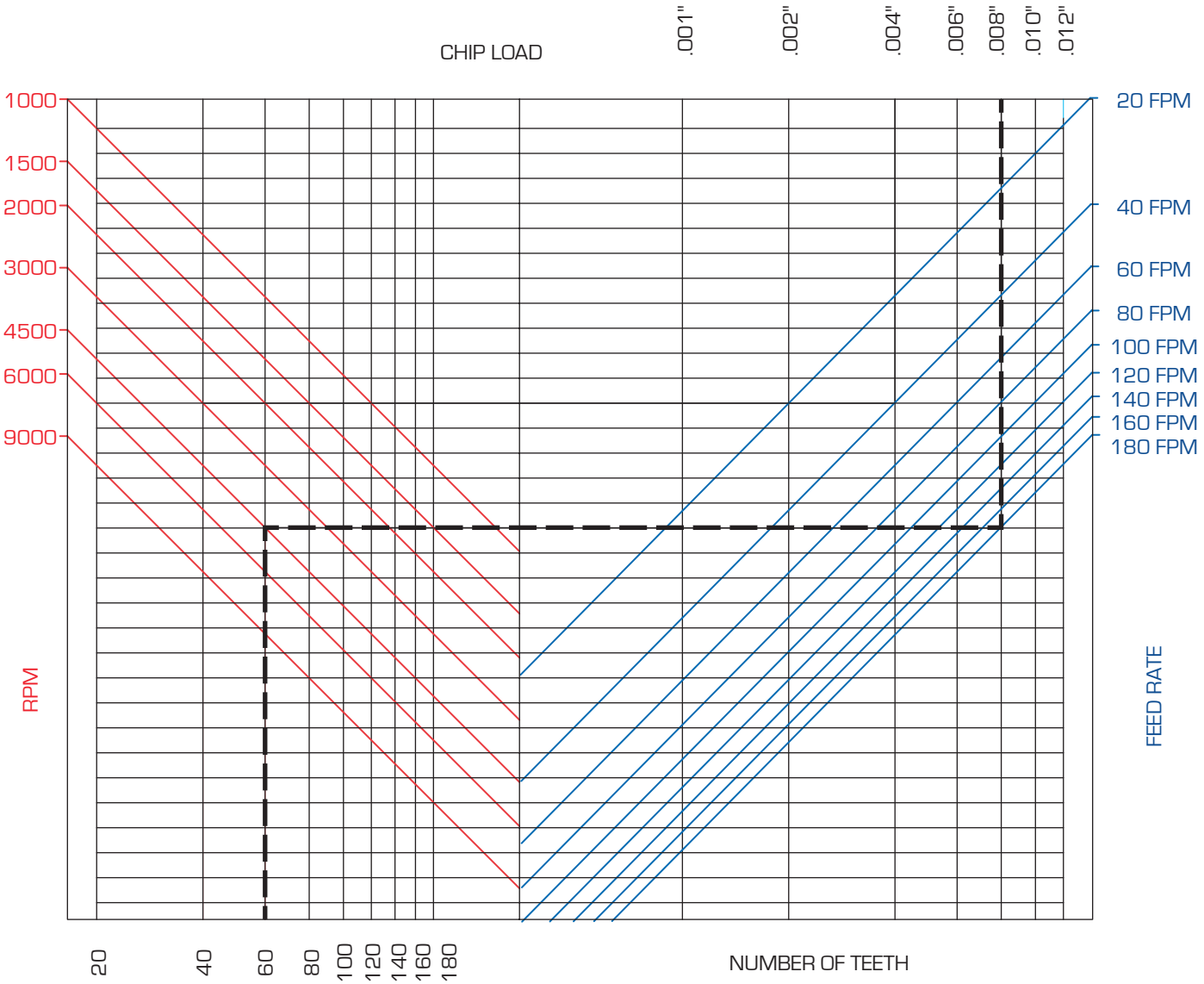
FINE FINISH	.010" - .030"
MEDIUM FINISH	.030" - .100"
COARSE FINISH	.100" - .200"

Example — — — —

6 tooth cutter, rotating at 4,500 RPM and feeding at 90 FPM, has a chip load of .040"/ tooth

DETERMINATION OF OPERATION PARAMETERS FOR CIRCULAR SAW BLADES

Chipload, Feed Rate, R.P.M., Number of Teeth



RECOMMENDED CHIPLOADS (INCH / TOOTH)

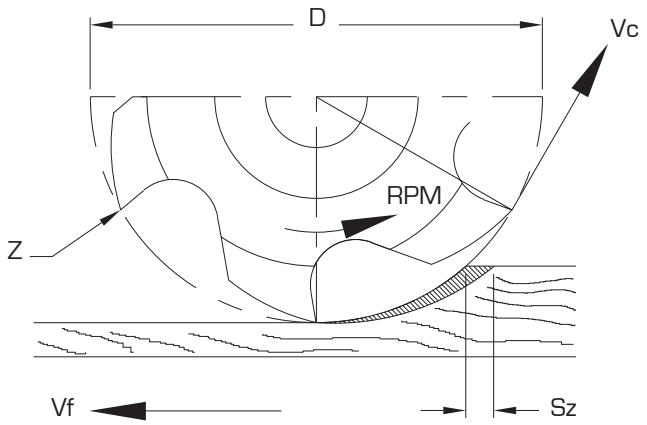
SOFTWOOD: ALONG GRAIN	.008" - .035"
SOFTWOOD: CROSS GRAIN	.004" - .008"
HARDWOOD	.002" - .006"
CHIPBOARD	.004" - .010"
VENEERED PANELS	.001" - .004"
PLASTIC LAMINATED PANELS	.001" - .002"
ALUMINUM	.001" - .003"

Example — — — —

60 tooth saw blade, rotating at 4,500 RPM and feeding at 180 FPM, has a chipload of .008"/tooth

FORMULAS

For calculating chipload, cutter marks per inch, feed rate, and cutting speed



Symbols

D = Diameter (inches)
Z = Number of Teeth
RPM = Spindle Speed
Vf = Feed Rate (FPM)
Vc = Cutting Speed (FPM)
Sz = Chipload (inch/tooth)
MPI = Cutter Marks per Inch

Chipload

$$Sz = \frac{Vf \times 12}{RPM \times Z}$$

Example

Vf = 90 FPM
RPM = 4500
Z = 6

$$Sz = \frac{90 \times 12}{4500 \times 6}$$

= .040"/ tooth

Cutter Marks Per Inch

$$MPI = \frac{1}{Sz}$$

Example

Sz = .040"/tooth

$$MPI = \frac{1}{.040}$$

= 25

Feed Rate

$$Vf = \frac{Sz \times RPM \times Z}{12}$$

Example

Sz = .040"/ tooth
RPM = 4500
Z = 6

$$Vf = \frac{.040 \times 4500 \times 6}{12}$$

= 90 FPM

Cutting Speed

$$Vc = \frac{D \times \pi \times RPM}{12}$$

Example

D = 6"
π = 3.14
RPM = 6000

$$Vc = \frac{6 \times 3.14 \times 6000}{12}$$

= 9420 FPM

OPERATING INSTRUCTIONS

Handling (Packing/Unpacking)

Use special care when unpacking and packing tools, as well as in handling (e.g. mounting onto the machine) due to the risk of injury from sharp cutting edges.

Transport

Due to the risk of injury, transport tool only in suitable packing. Use the original packaging where possible.

Use

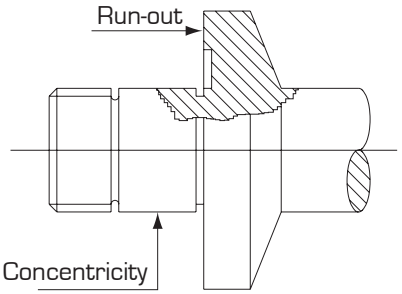
Exclusively for the cutting and machining of wood materials, laminates, plastics, and non-ferrous materials as described in the product pages of this catalogue.

RPM

The maximum permissible speed (n max) stated on the tool must not be exceeded. This speed should not be adopted as the operating speed, as the optimum speed for the tool will be dependant upon the application of use.

Machine

Secure the machine against accidental starting before mounting or changing the tool. Use appropriate lock-out procedures.
Ensure machine spindle speed does not exceed maximum permissible speed stated on the tool. Check direction of rotation.
Check spindle for concentricity and flange for run-out using a dial gauge.



Use only precision ground spacers and flanges, otherwise the spindle can become distorted.
Check that workpiece is securely clamped and that feed is correctly aligned to the spindle.

Operation

All tools should be handled with care. Placing tools against each other or on hard surfaces such as machine tables may damage the cutting edges. Tools must be protected when not in use and when being moved to and from the machine.

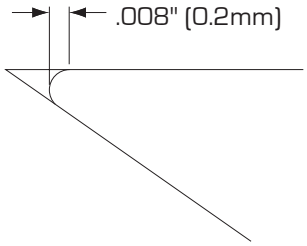
Mount and secure the tool as specified by the machine manufacturers' instructions. Do not block the tool to assist in tightening the tool onto the machine spindle as this may cause damage to the tool. Similarly, do not jam material against the tool to assist in slowing down the tool when stopping the spindle.

Observe all instructions and warnings included with the tool.
The tool may only be mounted by trained and qualified personnel.
Never operate the tool without appropriate guarding in place.
Always wear correct eye, ear, and breathing protection which complies with current standards. All machine specifications must be adhered to. Never leave a running machine unattended. All valid safety regulations must be adhered to. Incorrect use for purposes not intended is prohibited.

Tool Maintenance

Proper care and maintenance of tooling is paramount to ensure long tool life and economic overall tool costs.
Never let any tool become blunt because its teeth could break if production continues. A good method of monitoring tool wear is to install an ammeter which will show the increase in power consumption on the machine as the tool wears.

Tools should be re-sharpened or knives changed when:
- Surface finish of workpiece is no longer acceptable
- Cutting edges become rounded more than .008"



- Machine power consumption becomes too high
- Cutting edges are chipped or broken

The servicing of tooling should be performed by competent personnel using suitable equipment. To ensure continued high performance of your tooling throughout its service life, tools must be maintained to the manufacturers' specifications. The people best able to do this are your local FS Tool Distributors who have been selected for their ability to provide a sharpening service which will maintain your tools to our specifications.

CARBIDE TIPPED CIRCULAR SAW BLADES

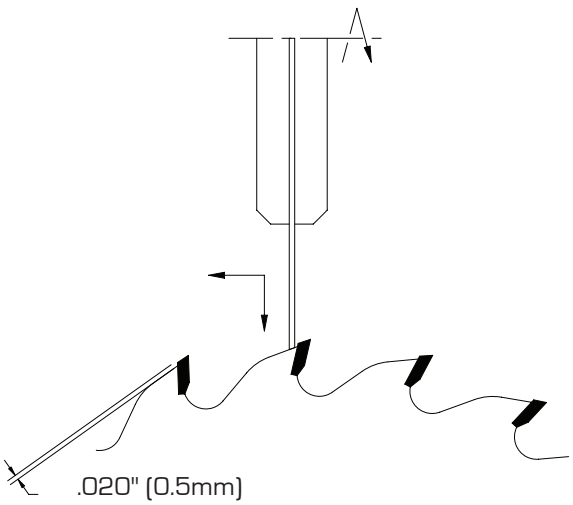
Safety

Circular saw blades which are cracked or which have been deformed may not be used. Welding or soldering of cracked saw blades is not permissible. The saw blade should not be stopped with side pressure during run down. Use of loose rings or bushings to 'make-up' bore sizes is not permitted. Reduction of the bore may only be done by the using a fixed bushing (e.g. pressed or held by adhesive fixing). Saw blades where tips have been reduced to a minimum of .040" (1mm) will have reached the end of their regrind life and shall be taken out of service.

Cleaning and Steel Relieving

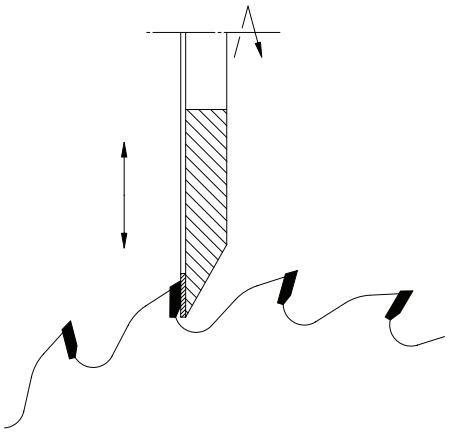
The saw blade should be cleaned to remove all build up of material (resin, gum, dust, etc.,) from the saw plate and sides of the carbide teeth. Effective cleaning of the saw blade will increase service life by minimizing friction of the saw plate and thereby preventing overheating and loss of saw plate tension. Cleaning the sides of the teeth will maintain the effectiveness of side clearances originally ground on the saw blade when it was manufactured. The sides of the teeth are not reground during resharpening but the face and top geometry is reground. Cleaning is best done using an ultrasonic cleaning tank or else a propriety cleaning solution. Do not scrape or use an abrasive wheel to clean the sides of the saw plate. Such action can affect the tension of the saw plate.

As the saw blade progresses through its regrind life it will periodically be necessary to relieve the steel body behind the top geometry of the teeth. This is necessary to ensure optimal chip clearance and to allow effective regrinding of the top geometry using diamond abrasive wheels.

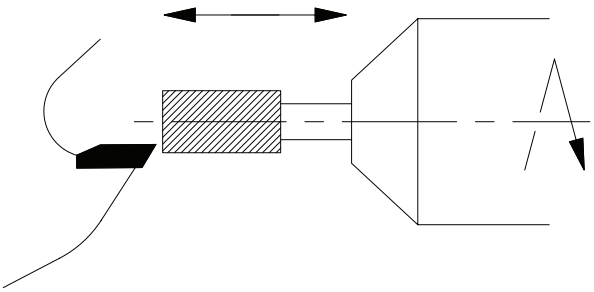


Face Grinding

Align the face of the tooth to the grinding wheel linear axis. Adjust the tooth so that the face remains parallel during regrinding. If the tooth is not ground parallel then the radial side clearance and rake angle will be adversely affected. The amount to be removed from the face is dependent upon the wear on the tooth. Typically .008" (0.2mm) is removed. When top grinding is also to be performed then not all of the wear should be removed by face grinding as the remainder will be ground from the top geometry. Take care to ensure the tip thickness is equal on all teeth. Variations in tip thickness will cause variations in tip kerf which may lead to chipping of workpiece material.
We recommend the use of coolant when grinding with diamond abrasive wheels.



Hollow face tooth saw blades are resharpened on their face using a diamond abrasive rod operating at high speed. Particular care is required to make sure that the abrasive rod is centered accurately. Failure to center accurately will adversely affect tooth geometry and may lead to chipping of material being cut.



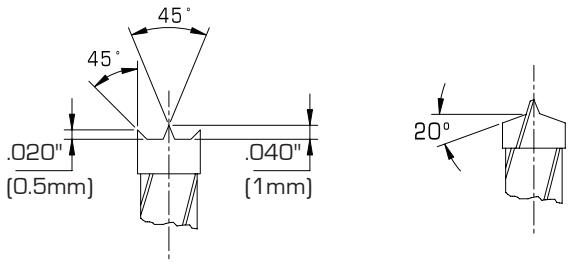
Top Grinding

Top grinding is used to sharpen the periphery of the saw blade and regenerate the original tooth geometry.
Care must be taken to reproduce the original FS Tool tooth specifications.

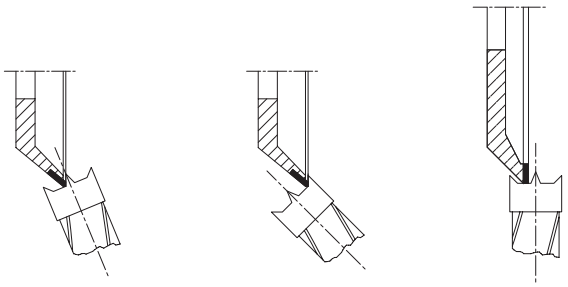
CARBIDE TIPPED DOWEL DRILLS

Sharpening

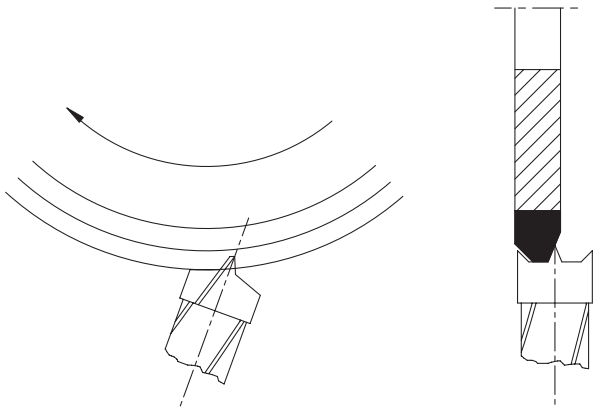
Clamp drill bits in a holder or collet and check for concentricity. Sharpen spurs and brad point maintaining projection from rakers. To avoid chipping of spurs only grind with very light grinding pressure.



Small quantities can be sharpened using standard grinding wheels using three setups. The brad point and spurs are ground using the end face of a cup wheel as shown. Next the rakers are sharpened using the periphery of a suitable wheel.



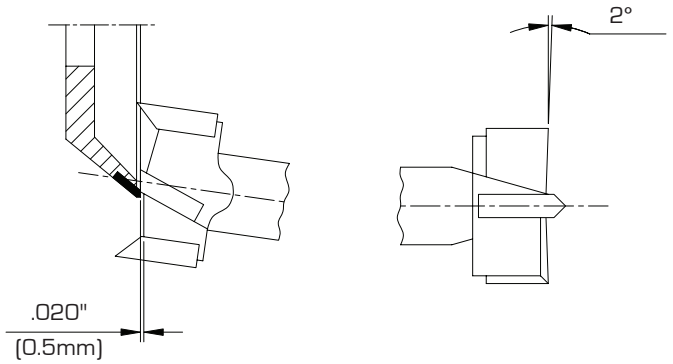
Larger quantities are best sharpened using a formed grinding wheel. With a 45 degree angle dressed on both sides of a suitable 1A1 style wheel the spur, brad point, and rakers can be sharpened in one setup. Different widths of rakers are accommodated by shifting sideways. After sharpening one cutting edge the bit is rotated and the process repeated.



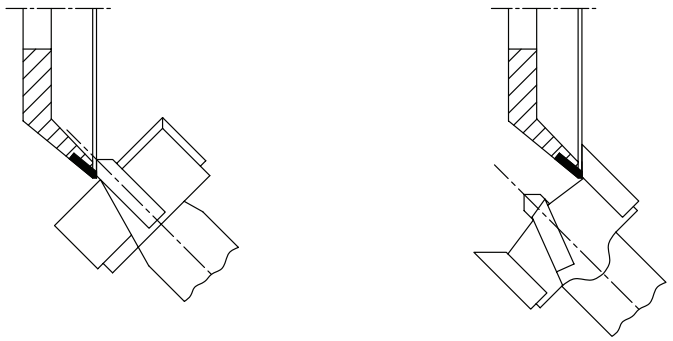
CARBIDE TIPPED CYLINDER BORING BITS

Sharpening

Clamp drill bits in a holder or collet and check for concentricity. Relieve steel body behind rakers to maintain .020" (0.5mm) protrusion of cutting edges above body. Sharpen rakers by regrinding end clearance. Maintain
2 degree end dish angle. If rakers are heavily worn then also grind rake face.



Sharpen spurs and brad point to maintain .012" to .020" (0.3 to 0.5mm) protrusion above rakers. Grind 45 degree angles on inside edge of spurs and on all edges of brad point. Spurs also require leading and trailing edges to be sharpened to ensure correct cutting action.



Always index tool using a precision dividing head or mechanical stop to make sure equal amounts are taken from cutting edges.

CARBIDE TIPPED ROUTER BITS

Safety

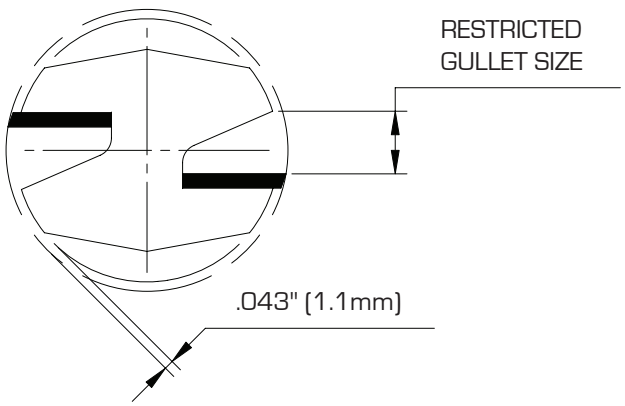
The most progressive safety standards for woodworking tooling exist in Europe, where a harmonized European Standard has been developed and adopted by all members of the EU. Here in North America, there are no similar safety standards; so, to promote the best safe working practices and tool design, FS Tool Corporation has utilized European Standard number EN 847-1 in the router bits we supply.

According to this standard there are two distinct methods of working with router bits. The first is working by hand, or **MAN**ual feed, where the workpiece is held or guided by hand. This also includes use of a hand operated carriage on which the workpiece is held manually or clamped and the use of a demountable power feed unit. The second is working with integrated feed where the feed mechanism for the workpiece or tool is integrated with the machine and where the workpiece or tool are held and controlled **MEC**hanically during the machining operation.

These two methods of working have lead to two different requirements for tool safety.

MANual

With manual feed there is greater risk of injury to operators due to accidental kickback of the workpiece and contact with the tool.

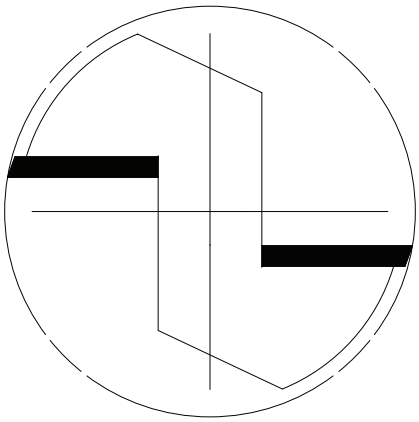


For this reason, tools for manual feed are designed with additional safety features. These include a limited projection of the cutting edges beyond the tool body and, for tools greater than 5/8" (16mm), a restricted gullet width.

Both of these safety features have the effect of minimizing the severity of kickback and injury caused by physical contact with a rotating tool.

MEChanical

Fully automated machines, for example CNC routers, do not pose the same hazards to operators as manual fed machines. For this reason, restrictions of tip to body clearances and gullet sizes do not apply and allow greater flexibility in tool design.



Sharpening

Router bits for jointing and rebating are to be resharpened on the face. If the teeth are excessively worn or chipped then they can also be ground on the outer cutting diameter.

Any router bits for **MAN**ual feed with chip thickness limiters will require reduction of the limiters as the router bit progresses through its regrind life. The teeth must protrude above the limiters by a maximum of .043" (1.1mm).

Profiled router bits are to be resharpened parallel to the face only.

CARBIDE TIPPED CUTTERS

Sharpening

Tools must be cleaned before sharpening to remove resin and dust. Inspect the cutting edges to determine the extent of wear and to identify any edges that are more heavily worn.

Cutters can be sharpened on either universal tool and cutter grinders or purpose built CNC cutter grinders using diamond grinding wheels.

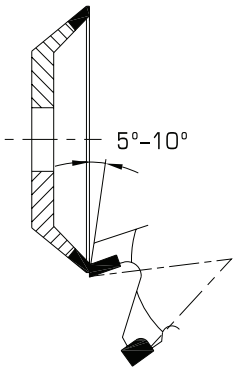
Sharpening should be performed using coolant to avoid overheating and possible damage to either the grinding wheel or the carbide teeth.

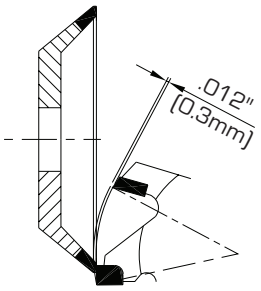
Sharpen all teeth by the same amount to remove all wear and to ensure good concentricity. Check concentricity using a dial gauge.

The sharpening method employed is dependant on the type of cutter as follows:

Grooving Cutters With or Without Spurs

These tools are face tipped and therefore are to be sharpened on the top of the teeth. Spurs must protrude raker teeth by .012" (0.3mm) radially and .008" (0.2mm) laterally.

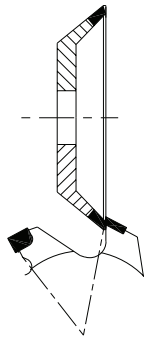


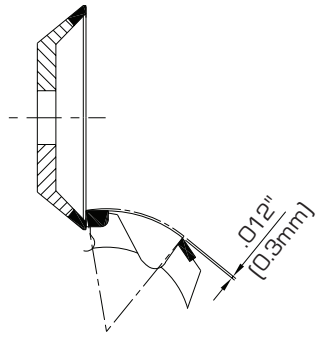


As the diameter of the cutter is reduced it may become necessary to relieve the steel body as shown. To relieve the steel increase the top clearance angle ground on the body by 5° to 10° using a carborundum or CBN grinding wheel.

Rebating and Jointing Cutters

These tools are top tipped and therefore are to be sharpened on the face of the teeth. Spurs must protrude raker teeth by .012" (0.3mm) radially and .008" (0.2mm) laterally.

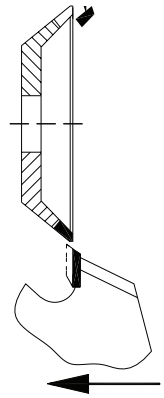




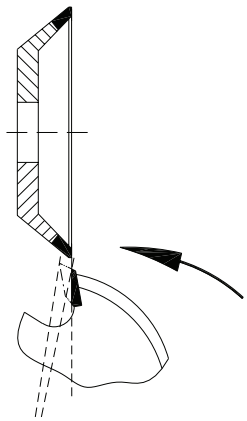
Profile Cutters

There are two different methods to sharpen profile cutters dependant upon how the profile shape has been ground.

For profile cutters with straight back relief the cutting edges are sharpened by face grinding parallel to the original face.



For profile cutters with radial back relief the cutting edges are not sharpened parallel to the original face but by rotating the tool onto the grinding wheel. This will ensure that the original cutting angle of the tool and profile shape are maintained.



CONVERSION OF MILLIMETERS TO INCHES

MM	0	1	2	3	4	5	6	7	8	9
0	-	3/64"	5/64"	1/8"	5/32"	13/64"	15/64"	9/32"	5/16"	23/64"
10	25/64"	7/16"	15/32"	33/64"	35/64"	19/32"	5/8"	43/64"	45/64"	3/4"
20	25/32"	53/64"	55/64"	29/32"	15/16"	63/64"	1-1/32"	1-1/16"	1-7/64"	1-9/64"
30	1-3/16"	1-7/32"	1-17/64"	1-19/64"	1-11/32"	1-3/8"	1-27/64"	1-29/64"	1-1/2"	1-17/32"
40	1-37/64"	1-39/64"	1-21/32"	1-11/16"	1-47/64"	1-49/64"	1-13/16"	1-27/32"	1-57/64"	1-59/64"
50	1-31/32"	2-1/64"	2-3/64"	2-3/32"	2-1/8"	2-11/64"	2-13/64"	2-1/4"	2-9/32"	2-21/64"
60	2-23/64"	2-13/32"	2-7/16"	2-31/64"	2-33/64"	2-9/16"	2-19/32"	2-41/64"	2-43/64"	2-23/32"
70	2-3/4"	2-51/64"	2-53/64"	2-7/8"	2-29/32"	2-61/64"	2-63/64"	3-1/32"	3-5/64"	3-7/64"
80	3-5/32"	3-3/16"	3-15/64"	3-17/64"	3-5/16"	3-11/32"	3-25/64"	3-27/64"	3-15/32"	3-1/2"
90	3-35/64"	3-37/64"	3-5/8"	3-21/32"	3-45/64"	3-47/64"	3-25/32"	3-13/16"	3-55/64"	3-57/64"
100	3-15/16"	3-31/32"	4-1/64"	4-1/16"	4-3/32"	4-9/64"	4-11/64"	4-7/32"	4-1/4"	4-19/64"
110	4-21/64"	4-3/8"	4-13/32"	4-29/64"	4-31/64"	4-17/32"	4-9/16"	4-39/64"	4-41/64"	4-11/16"
120	4-23/32"	4-49/64"	4-51/64"	4-27/32"	4-7/8"	4-59/64"	4-61/64"	5"	5-3/64"	5-5/64"
130	5-1/8"	5-5/32"	5-13/64"	5-15/64"	5-9/32"	5-5/16"	5-23/64"	5-25/64"	5-7/16"	5-15/32"
140	5-33/64"	5-35/64"	5-19/32"	5-5/8"	5-43/64"	5-45/64"	5-3/4"	5-25/32"	5-53/64"	5-55/64"
150	5-29/32"	5-15/16"	5-63/64"	6-1/32"	6-1/16"	6-7/64"	6-9/64"	6-3/16"	6-7/32"	6-17/64"
160	6-19/64"	6-11/32"	6-3/8"	6-27/64"	6-29/64"	6-1/2"	6-17/32"	6-37/64"	6-39/64"	6-21/32"
170	6-11/16"	6-47/64"	6-49/64"	6-13/16"	6-27/32"	6-57/64"	6-59/64"	6-31/32"	7-1/64"	7-3/64"
180	7-3/32"	7-1/8"	7-11/64"	7-13/64"	7-1/4"	7-9/32"	7-21/64"	7-23/64"	7-13/32"	7-7/16"
190	7-31/64"	7-33/64"	7-9/16"	7-19/32"	7-41/64"	7-43/64"	7-23/32"	7-3/4"	7-51/64"	7-53/64"
200	7-7/8"	7-29/32"	7-61/64"	7-63/64"	8-1/32"	8-5/64"	8-7/64"	8-5/32"	8-3/16"	8-15/64"
210	8-17/64"	8-5/16"	8-11/32"	8-25/64"	8-27/64"	8-15/32"	8-1/2"	8-35/64"	8-37/64"	8-5/8"
220	8-21/32"	8-45/64"	8-47/64"	8-25/32"	8-13/16"	8-55/64"	8-57/64"	8-15/16"	8-31/32"	9-1/64"
230	9-1/16"	9-3/32"	9-9/64"	9-11/64"	9-7/32"	9-1/4"	9-19/64"	9-21/64"	9-3/8"	9-13/32"
240	9-29/64"	9-31/64"	9-17/32"	9-9/16"	9-39/64"	9-41/64"	9-11/16"	9-23/32"	9-49/64"	9-51/64"
250	9-27/32"	9-7/8"	9-59/64"	9-61/64"	10"	10-3/64"	10-5/64"	10-1/8"	10-5/32"	10-13/64"
260	10-15/64"	10-9/32"	10-5/16"	10-23/64"	10-25/64"	10-7/16"	10-15/32"	10-33/64"	10-35/64"	10-19/32"
270	10-5/8"	10-43/64"	10-45/64"	10-3/4"	10-25/32"	10-53/64"	10-55/64"	10-29/32"	10-15/16"	10-63/64"
280	11-1/32"	11-1/16"	11-7/64"	11-9/64"	11-3/16"	11-7/32"	11-17/64"	11-19/64"	11-11/32"	11-3/8"
290	11-27/64"	11-29/64"	11-1/2"	11-17/32"	11-37/64"	11-39/64"	11-21/32"	11-11/16"	11-47/64"	11-49/64"
300	11-13/16"	11-27/64"	11-57/64"	11-59/64"	11-31/32"	12-1/64"	12-3/64"	12-3/32"	12-1/8"	12-11/64"
310	12-13/64"	12-1/4"	12-9/32"	12-21/64"	12-23/64"	12-13/32"	12-7/16"	12-31/64"	12-33/64"	12-9/16"
320	12-19/32"	12-41/64"	12-43/64"	12-23/32"	12-3/4"	12-51/64"	12-53/64"	12-7/8"	12-29/32"	12-61/64"
330	12-63/64"	13-1/32"	13-5/64"	13-7/64"	13-5/32"	13-3/16"	13-15/64"	12-7/8"	13-5/16"	13-11/32"
340	13-25/64"	13-27/64"	13-15/32"	13-1/2"	13-35/64"	13-37/64"	13-5/8"	13-21/32"	13-45/64"	13-47/64"
350	13-25/32"	13-13/16"	13-55/64"	13-57/64"	13-15/16"	13-31/32"	14-1/64"	14-1/16"	14-3/32"	14-9/64"
360	14-11/64"	14-7/32"	14-1/4"	14-19/64"	14-21/64"	14-3/8"	14-13/32"	14-29/64"	14-7/8"	14-17/32"
370	14-9/16"	14-39/64"	14-41/64"	14-11/16"	14-23/32"	14-49/64"	14-51/64"	14-27/32"	14-7/8"	14-59/64"
380	14-61/64"	15"	15-3/64"	15-5/64"	15-1/8"	15-5/32"	15-13/64"	15-15/64"	15-9/32"	15-5/16"
390	15-23/64"	15-25/64"	15-7/16"	15-15/32"	15-33/64"	15-35/64"	15-19/32"	15-5/8"	15-43/64"	15-45/64"
400	15-3/4"	15-25/32"	15-53/64"	15-55/64"	15-29/32"	15-15/16"	15-63/64"	16-1/32"	16-1/16"	16-7/64"
410	16-9/64"	16-3/16"	16-7/32"	16-17/64"	16-19/64"	16-11/32"	16-3/8"	16-27/64"	16-29/64"	16-1/2"
420	16-17/32"	16-37/64"	16-39/64"	16-21/32"	16-11/16"	16-47/64"	16-49/64"	16-13/16"	16-27/32"	16-57/64"
430	16-59/64"	16-31/32"	17-1/64"	17-3/64"	17-3/32"	17-1/8"	17-11/64"	17-13/64"	17-1/4"	17-9/32"
440	17-21/64"	17-23/64"	17-13/32"	17-7/16"	17-31/64"	17-33/64"	17-9/16"	17-19/32"	17-41/64"	17-43/64"
450	17-23/32"	17-3/4"	17-51/64"	17-53/64"	17-7/8"	17-29/32"	17-61/64"	17-63/64"	18-1/32"	18-5/64"
460	18-7/64"	18-5/32"	18-3/16"	18-15/64"	18-17/64"	18-5/16"	18-11/32"	18-25/64"	18-27/64"	18-15/32"
470	18-1/2"	18-35/64"	18-37/64"	18-5/8"	18-21/32"	18-45/64"	18-47/64"	18-25/32"	18-13/16"	18-55/64"
480	18-57/64"	18-15/16"	18-31/32"	19-1/64"	19-1/16"	19-3/32"	19-9/64"	19-11/64"	19-7/32"	19-1/4"
490	19-19/64"	19-21/64"	19-3/8"	19-14/32"	19-29/64"	19-31/64"	19-17/32"	19-9/16"	19-39/64"	19-41/64"
500	19-11/16"	19-23/32"	19-49/64"	19-51/64"	19-27/32"	19-7/8"	19-59/64"	19-61/64"	-	-

CONVERSION OF INCHES TO MILLIMETERS

INCHES	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0.00	25.40	50.80	76.20	101.60	127.00	152.40	177.80	203.20	228.60	254.00	279.40	304.80
1/64	0.40	25.80	51.20	76.60	102.00	127.40	152.80	178.20	203.60	229.00	254.40	279.80	305.20
1/32	0.79	26.19	51.59	76.99	102.39	127.79	153.19	178.59	203.99	229.39	254.79	280.19	305.59
3/64	1.19	26.59	51.99	77.39	102.79	128.19	153.59	178.99	204.39	229.79	225.19	280.59	305.99
1/16	1.59	26.99	52.39	77.79	103.19	128.59	153.99	179.39	204.79	230.19	255.59	280.99	306.99
5/64	1.98	27.78	52.79	78.18	103.58	128.98	154.38	179.78	205.18	230.58	255.99	281.38	306.78
3/32	2.38	27.78	53.18	78.58	103.98	129.38	154.78	180.18	205.58	230.98	256.38	281.78	307.18
7/64	2.78	28.18	53.58	78.98	104.38	129.78	155.18	180.58	205.98	231.38	256.78	282.18	307.58
1/8	3.18	28.58	53.98	79.38	104.78	130.18	155.58	180.98	206.38	231.78	257.18	282.58	307.98
9/64	3.57	28.97	54.37	79.77	105.17	130.57	155.97	181.37	206.77	232.17	257.57	282.97	308.37
5/32	3.97	29.37	54.77	80.17	105.57	130.97	156.37	181.77	207.17	232.57	257.97	283.37	308.77
11/64	4.37	29.77	55.17	80.57	105.97	131.37	156.77	182.17	207.57	232.97	258.37	283.77	309.17
3/16	4.76	30.16	55.56	80.96	106.36	131.76	157.16	182.56	207.96	233.36	258.76	284.16	309.56
13/64	5.16	30.56	55.96	81.36	106.76	132.16	157.56	182.96	208.36	233.76	259.16	284.56	309.96
7/32	5.56	30.96	56.36	81.76	107.16	132.56	157.96	183.36	208.76	234.16	259.56	284.96	310.36
15/64	5.95	31.35	56.75	82.15	107.55	132.95	158.35	183.75	209.15	234.55	259.95	285.35	310.75
1/4	6.35	31.75	57.15	85.55	107.95	133.35	158.75	184.15	209.55	234.95	260.35	285.75	311.15
17/64	6.75	32.15	57.55	82.94	108.35	133.75	159.15	184.55	209.95	235.35	260.75	286.15	311.55
9/32	7.14	32.54	57.94	83.34	108.74	134.14	159.54	184.94	210.34	235.74	261.14	286.54	311.94
5/64	7.54	32.94	58.34	83.74	109.14	134.54	159.94	185.34	210.74	236.14	261.54	286.94	312.34
5/16	7.94	33.34	58.74	84.14	109.54	134.94	160.34	185.74	211.14	236.54	261.94	287.34	312.74
21/64	8.33	33.73	59.13	84.53	109.93	135.33	160.73	186.13	211.53	236.93	262.34	287.74	313.14
11/32	8.73	34.13	59.53	84.93	110.33	135.73	161.13	186.53	211.93	273.33	262.73	288.13	313.53
23/64	9.13	34.53	59.93	85.33	110.73	136.13	161.53	186.93	212.33	237.73	263.13	288.53	313.93
3/8	9.53	34.93	60.33	85.73	111.13	136.53	161.93	187.33	212.73	238.13	263.53	288.93	314.33
25/64	9.92	35.32	60.72	86.12	111.52	136.92	162.32	187.72	213.12	238.52	263.92	289.32	314.72
13/32	10.32	35.72	61.12	86.52	111.92	137.32	162.72	188.12	213.52	238.92	264.32	289.72	315.12
27/64	10.72	36.12	61.52	86.92	112.32	137.72	163.12	188.52	213.92	239.32	264.72	290.12	315.52
7/16	11.11	36.51	61.91	87.31	112.71	138.11	163.51	188.91	214.31	239.71	265.11	290.51	315.91
29/64	11.51	36.91	62.31	87.71	113.11	138.51	163.91	189.31	214.71	240.11	265.51	290.91	316.31
15/32	11.91	37.31	62.71	88.11	113.51	138.91	164.31	189.71	215.11	240.51	265.91	291.31	316.71
31/64	12.30	37.70	63.10	88.50	113.90	139.30	164.70	190.10	215.50	240.90	266.30	291.70	317.10
1/2	12.70	38.10	63.50	88.90	114.30	139.70	165.10	190.50	215.90	241.30	266.70	292.10	317.50
33/64	13.10	38.50	63.90	89.30	114.70	140.10	165.50	190.90	216.30	241.70	267.10	292.50	317.90
17/32	13.49	38.89	64.29	89.69	115.09	140.49	165.89	191.29	216.69	242.09	267.49	292.89	318.29
35/64	13.89	39.29	64.69	90.09	115.49	140.89	166.29	191.69	217.09	242.49	267.89	293.29	318.69
9/16	14.29	39.69	65.09	90.49	115.89	141.29	166.69	192.09	217.49	242.89	268.29	293.69	319.09
37/64	14.68	40.08	65.48	90.88	116.28	141.68	167.08	192.48	217.88	243.28	268.68	294.08	319.48
19/32	15.08	40.48	65.88	91.28	116.68	142.08	167.48	192.88	218.28	243.68	269.08	294.48	319.88
39/64	15.48	40.88	66.28	91.68	117.08	142.48	167.88	193.28	218.68	244.08	269.48	294.88	320.28
5/8	15.88	41.28	66.68	92.08	117.48	142.88	168.28	193.68	219.08	244.48	269.88	295.28	230.68
41/64	16.27	41.67	67.07	92.47	117.87	143.27	168.67	194.07	219.47	244.87	270.27	295.67	321.07
21/32	16.67	42.07	67.47	92.87	118.27	143.67	169.07	194.47	219.87	245.27	270.67	296.07	321.47
43/64	17.07	42.47	67.87	93.27	118.67	144.07	169.47	194.87	220.27	245.67	271.07	296.47	321.87
11/16	17.46	42.86	68.26	93.66	119.06	144.46	169.86	195.26	220.66	246.06	271.46	296.86	322.26
45/64	17.86	43.26	68.66	94.06	119.46	144.86	170.26	195.66	221.06	246.46	271.86	297.26	322.66
23/32	18.26	43.66	69.06	94.46	119.86	145.26	170.66	196.06	221.46	246.86	272.26	297.66	323.06
47/64	18.65	44.05	69.45	94.85	120.25	145.65	171.05	196.45	221.85	247.25	272.65	298.05	323.45
3/4	19.05	44.45	69.85	95.25	120.65	146.05	171.45	196.85	222.25	247.65	273.05	298.45	323.85
49/64	19.45	44.85	70.25	95.65	121.05	146.45	171.85	197.25	222.65	248.05	273.45	298.85	324.25
25/32	19.84	45.24	70.64	96.04	121.44	146.85	172.24	197.64	223.04	248.44	273.84	299.24	324.64
51/64	20.24	45.64	71.04	96.44	121.84	147.24	172.64	198.04	223.44	248.84	274.24	299.64	325.04
13/16	20.64	46.04	71.44	96.84	122.24	147.64	173.04	198.44	223.84	249.24	274.64	300.04	325.44
53/64	21.03	46.43	71.83	97.23	122.63	148.03	173.43	198.83	224.23	249.64	275.04	300.44	325.84
27/32	21.43	46.83	72.23	97.63	123.03	148.43	173.83	199.23	224.63	250.03	275.43	300.83	326.23
55/64	21.83	47.23	72.63	98.03	123.43	148.83	174.23	199.63	225.03	250.43	275.83	301.23	326.63
7/8	22.23	47.63	73.03	98.43	123.83	149.23	174.63	200.03	225.43	250.83	276.23	301.63	327.03
57/64	22.62	48.02	73.42	98.82	124.22	149.62	175.02	200.42	225.82	251.22	276.62	302.02	327.42
29/32	23.02	48.42	73.82	99.22	124.62	150.02	175.42	200.82	266.22	251.62	277.02	302.42	327.82
59/64	23.42	48.82	47.22	99.62	125.02	150.42	175.82	201.22	226.62	252.02	277.42	302.82	328.22
15/16	23.81	49.21	74.61	100.01	125.41	150.81	176.21	201.61	227.01	252.41	277.81	303.21	328.61
61/64	24.21	49.61	75.01	100.41	125.81	151.21	176.61	202.01	227.41	252.81	278.21	303.61	329.01
31/32	24.61	50.01	75.41	100.81	126.21	151.61	177.01	202.41	227.81	253.21	278.61	304.01	329.41
63/64	25.00	50.40	75.80	101.20	126.60	152.00	177.40	202.40	228.20	253.60	279.00	304.40	329.80



CUTTERS AND CUTTER COMBINATIONS

Carbide or Stellite Tipped

B

BRAZED CUTTERS - TABLE OF CONTENTS

PRODUCT CATEGORY	PAGE NO.
ADJUSTABLE GROOVING CUTTERS	B9 - B10
CONVEX RADIUS CUTTERS	B13
CUT-ALL CUTTER SET	B18 - B22
DUAL QUARTER ROUND CUTTERS	B13
EDGEBANDING CUTTERS	B4
ENTRY AND PASSAGE DOOR CUTTER SET	B17
GROOVING CUTTERS	B6 - B7
HALF ROUND CUTTERS	B12
HORIZONTAL PANEL RAISING CUTTERS	B15 - B16
STAGGERED TOOTH JOINTING CUTTERS	B5
LAMELLO GROOVING CUTTERS	B8
PROFILE CUTTERS	B2 - B3
QUARTER ROUND CUTTERS	B12
REVERSIBLE MITRE JOINT CUTTERS	B11
STILE AND RAIL CUTTER SETS	B14
TONGUE AND GROOVE SHAPER CUTTERS	B11

PART NO.	PAGE NO.
1121IC - 11218IC	B6
1121MC - 11221MC	B6
1131IC - 11318IC	B7
1131MC - 11321MC	B7
113B - 113L	B8
1141MC - 1148MC	B9
1151MC - 1152MC	B10
135IC	B11
139IC	B11
1491IC - 1494IC	B12
1501IC - 1504IC	B12
1516IC - 1518IC	B13
154IC	B13
1681IC - 1696IC	B15
177AI - 177BI	B14
178AI - 179CI	B17
1821IC - 1822IC	B18

MADE ACCORDING TO APPLICATION:

STELLITE (Stellite Tipped)
For softwood and hardwood without glue lines.

T.C.T. (Tungsten Carbide-Tipped)
For hardwood, plywood, chipboard, MDF, and other panel materials.

Our cutters are designed to conform with safety regulations and are dynamically balanced.

To determine min. diameter on profiled cutters, the calculation is:

bore (B) + 60mm (2-3/8") + (2 x profile depth) (P)

As per table below:

METRIC SIZES

BORE B MM	PROFILE DEPTH P MM							
	5	10	15	20	25	30	35	40
30	100	110	120	130	140	150	160	170
35	105	115	125	135	145	155	165	175
40	110	120	130	140	150	160	170	180
50	120	130	140	150	160	170	180	190
60	130	140	150	160	170	180	190	200

B = Bore Diameter **P = Profile Depth**

INCH SIZES

BORE B	PROFILE DEPTH P				
	3/8"	3/4"	1"	1-1/4"	1-1/2"
3/4"	3-7/8"	4-5/8"	5-1/8"	5-5/8"	6-1/8"
1-1/4"	4-3/8"	5-1/8"	5-5/8"	6-1/8"	6-5/8"
1-13/16"	4-7/8"	5-7/16"	5-11/16"	5-15/16"	6-3/16"
2"	5-1/8"	6-1/8"	6-5/8"	7-1/8"	7-5/8"

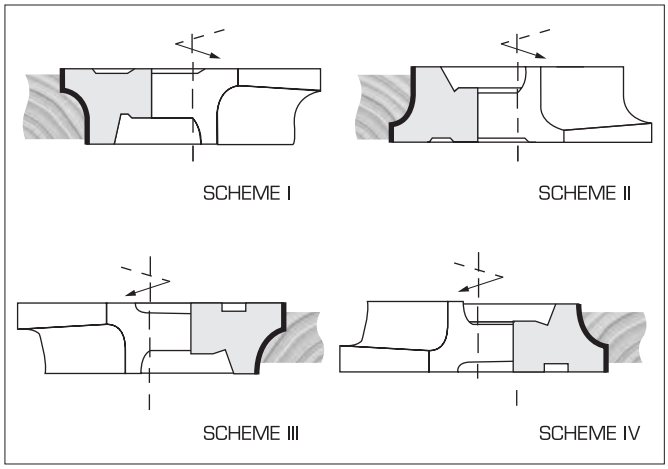
B = Bore Diameter **P = Profile Depth**

WHEN ORDERING SPECIFY:

1. Type of cutter as numbered.
   For softwood and hardwood without glue lines.
2. Main dimensions in the following order:
   (diameter) x (cutting width) x (bore) x (# of teeth)
3. Cutting materials (STELLITE or T.C.T.).
4. RPM of machine and rate of feed.
   Material to be cut, if possible provide sample.
5. Type of cut: against feed direction or with feed direction.

WHEN ORDERING CUTTERS WITH PROFILES:

Fully dimensioned sketches, CAD files, or samples of profiles must be supplied. Details of side to table, fence side, and direction of feed must also be given.



Direction of Rotation
Scheme I - II = Counter Clockwise (CCW)
Scheme III - IV = Counter Clockwise (CCW)

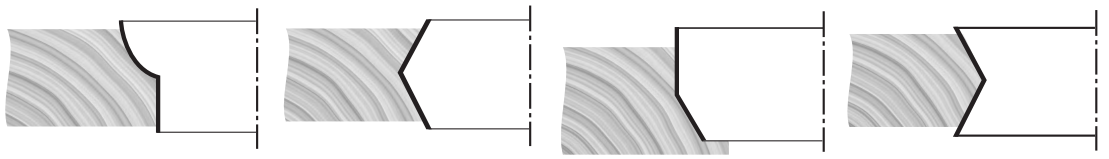
PA PROFILE CUTTERS
SIMPLE PROFILES



Examples of Simple Profiles - PA

DESIGN:
» With 2, 3, 4, or 6 cutting teeth, straight or with shear angle according to profile

WHEN ORDERING SPECIFY:
» Type of wood or material to be cut
» Rotation
» Details of profile to table, fence side
» RPM of machine
» Rate of feed
» Exact sketch of profile
» Possibly a wood sample or a DXF file
» Bore diameter
» Diameter of cutter



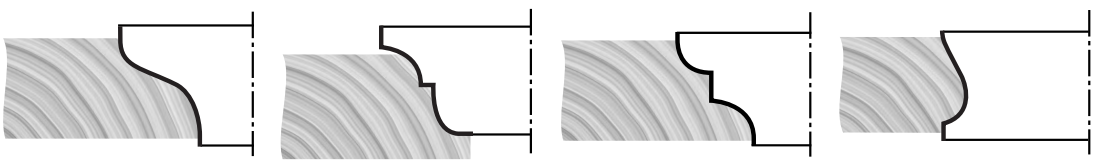
PB PROFILE CUTTERS
COMPLEX PROFILES



Examples of Complex Profiles - PB

DESIGN:
» With 2, 3, 4, or 6 cutting teeth, straight or with shear angle according to profile

WHEN ORDERING SPECIFY:
» Type of wood or material to be cut
» Rotation
» Details of profile to table, fence side
» RPM of machine
» Rate of feed
» Exact sketch of profile
» Possibly a wood sample or a DXF file
» Bore diameter
» Diameter of cutter



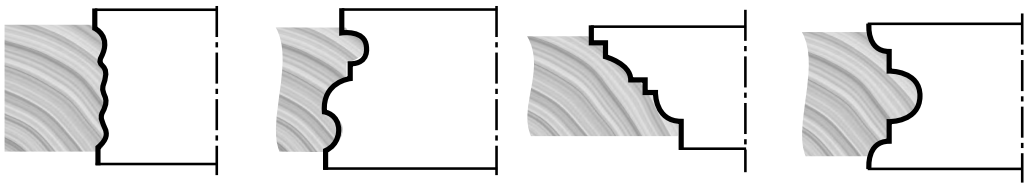
PC PROFILE CUTTERS
VERY COMPLEX PROFILES



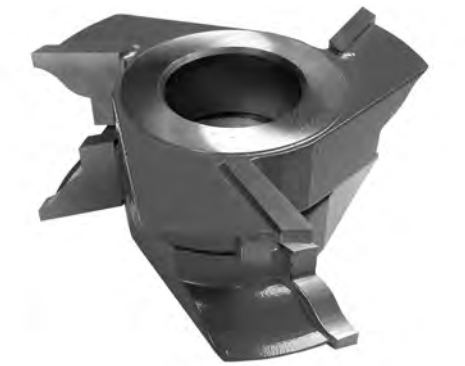
DESIGN:
» With 2, 3, 4, or 6 cutting teeth, straight or with shear angle according to profile

WHEN ORDERING SPECIFY:
» Type of wood or material to be cut
» Rotation
» Details of profile to table, fence side
» RPM of machine
» Rate of feed
» Exact sketch of profile
» Possibly a wood sample or a DXF file
» Bore diameter
» Diameter of cutter

Examples of Very Combined Profiles - PC



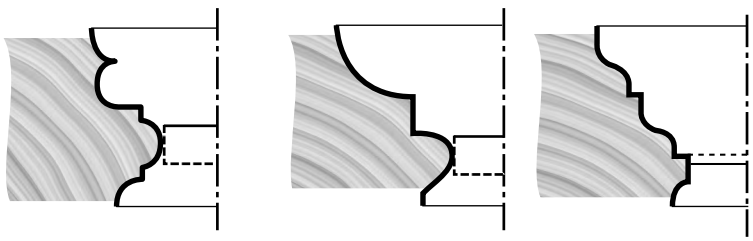
PI PROFILE CUTTERS
COMBINED PROFILES



DESIGN:
» With 2, 3, or 4 teeth interlocked for staggered cut and spur action with shearing cut

WHEN ORDERING SPECIFY:
» Type of wood or material to be cut
» Rotation
» Details of profile to table, fence side
» RPM of machine
» Rate of feed
» Exact sketch of profile
» Possibly a wood sample or a DXF file
» Bore diameter
» Diameter of cutter

Examples of Combined Profiles - PI





DESIGN:

» High tensile steel body
» 4 or 6 straight or bevelled teeth
» Tungsten carbide cutting edges

APPLICATION:

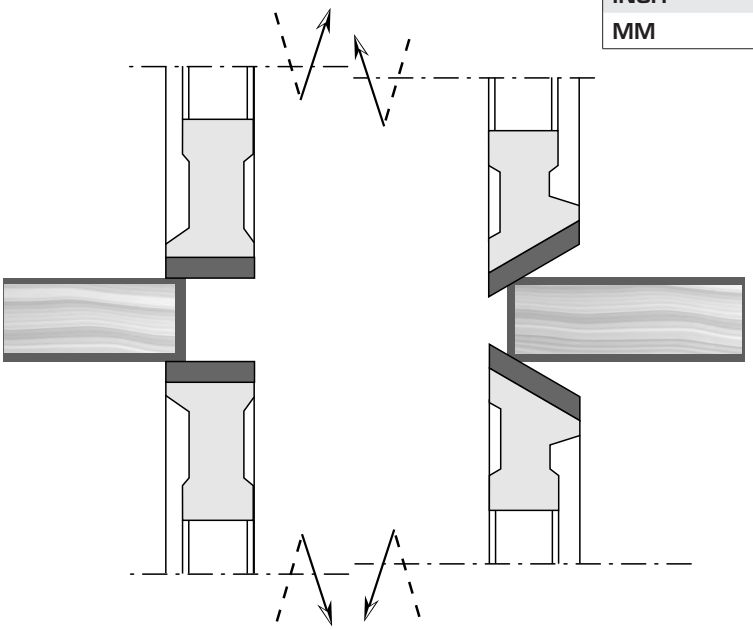
» On edgebanding cutters
» For flush trimming, chamfering, and profiling of wood veneer and plastic edge bands

WHEN ORDERING SPECIFY:

» Machine
» If bevelled
» Cutting edge degrees required

SPECIAL PRODUCTION

UNIT OF MEASURE	DIAMETER	KERF	NO. TEETH
INCH	2-3/4" to 4"	5/8" to 1-3/8"	4 or 6
MM	70 to 100	15 to 35	4 or 6





DESIGN:

» High tensile steel body
» 8 or 12 rows of straight carbide teeth staggered on a spiral progression
» Tungsten carbide cutting edges

APPLICATION:

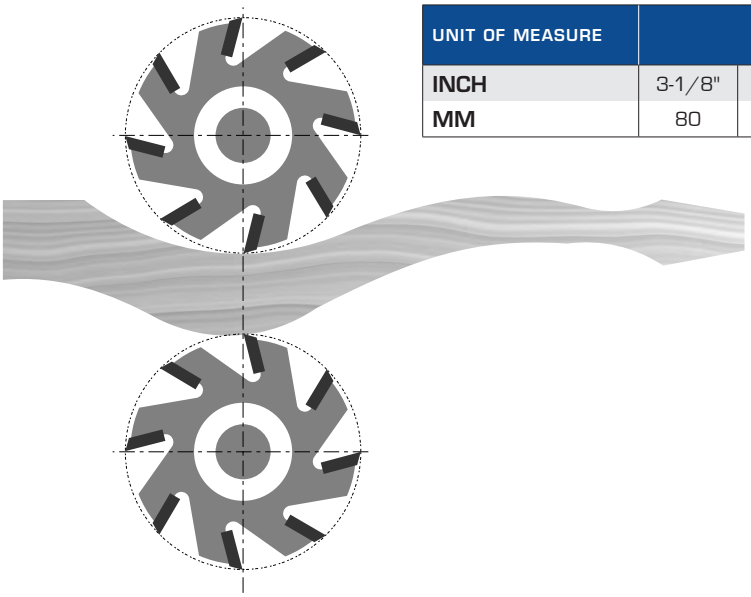
» Ideal for “easy chip flow” with fast feeding on solid wood and composite materials
» Mainly used for roughing-out furniture components
» On shapers and copying machines

FOR MACHINES:

» Brandt, Egurco, Franke, Homag, Homburg, IDM, IMA, IMEF, Manea, Ocmac, Olympic, Raiman, Salgo, Stefani, and others

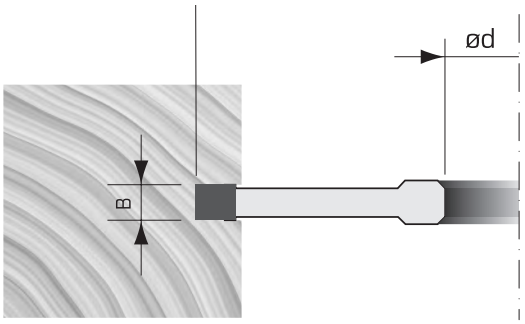
WHEN ORDERING SPECIFY:

» Cutter diameter
» Bore diameter
» Number of teeth
» Type of wood to cut
» Usable length of spindle



SPECIAL PRODUCTION

UNIT OF MEASURE	DIAMETER				KERF	NO. TEETH
INCH	3-1/8"	4"	4-3/4"	5-1/2"	2-3/8" to 9"	8 or 12
MM	80	100	120	140	60 to 230	8 or 12



DESIGN:

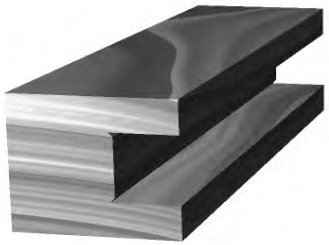
» High tensile steel body
» 6 straight teeth
» If required with alternating teeth or left-right + raker
» Tungsten carbide cutting edges

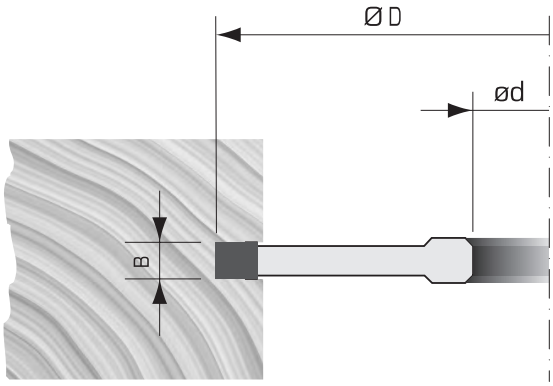
APPLICATION:

» To make grooves in solid wood with the grain and in uncoated panels
» Can be used in laminated materials if cutting with feed

MACHINES:

» On shapers, double-end tenoners, and moulders





IMPERIAL

DIAMETER ØD 4-3/4"	DIAMETER ØD 5-1/2"	DIAMETER ØD 6-1/4"	KERF B	NO. TEETH
PART NO.	PART NO.	PART NO.		
1121IC	1127IC	11213IC	3/16"	6
1122IC	1128IC	11214IC	1/4"	6
1123IC	1129IC	11215IC	5/16"	6
1124IC	11210IC	11216IC	3/8"	6
1125IC	11211IC	11217IC	1/2"	6
1126IC	11212IC	11218IC	5/8"	6

ød Bore: 1-1/4"
Bore can be opened or bushed to spindle size of your machine.
Maximum bore size: 50mm (2")

Other sizes available upon request

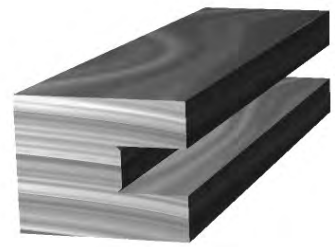
METRIC

DIAMETER ØD 120MM	DIAMETER ØD 140MM	DIAMETER ØD 160MM	KERF B MM	NO. TEETH
PART NO.	PART NO.	PART NO.		
1121MC	1128MC	11215MC	5	6
1122MC	1129MC	11216MC	6	6
1123MC	11210MC	11217MC	8	6
1124MC	11211MC	11218MC	10	6
1125MC	11212MC	11219MC	12	6
1126MC	11213MC	11220MC	14	6
1127MC	11214MC	11221MC	16	6

ød Bore: 1-1/4"
Bore can be opened or bushed to spindle size of your machine.
Maximum bore size: 50mm (2")

Other sizes available upon request





DESIGN:

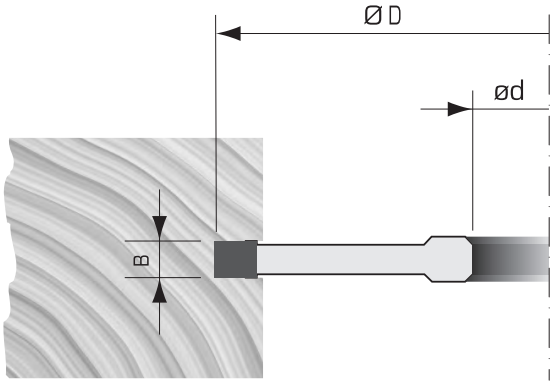
» High tensile steel body
» With 4 alternating spurs
» Tungsten carbide cutting edges

APPLICATION:

» For grooving solid wood, plywood, and laminated panels

MACHINES:

» On shapers, double-end tenoners, and moulders



IMPERIAL

DIAMETER ØD 4-3/4"	DIAMETER ØD 5-1/2"	DIAMETER ØD 6-1/4"	KERF B	NO. TEETH + SPURS
PART NO.	PART NO.	PART NO.		
1131IC	1137IC	11313IC	3/16"	4+4
1132IC	1138IC	11314IC	1/4"	4+4
1133IC	1139IC	11315IC	5/16"	4+4
1134IC	11310IC	11316IC	3/8"	4+4
1135IC	11311IC	11317IC	1/2"	4+4
1136IC	11312IC	11318IC	5/8"	4+4

ød Bore: 1-1/4"
Bore can be opened or bushed to spindle size of your machine.
Maximum bore size: 50mm (2")

Other sizes available upon request

METRIC

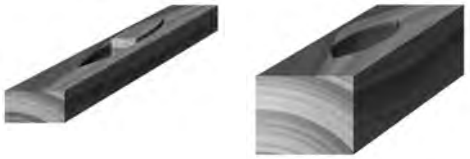
DIAMETER ØD 120 MM	DIAMETER ØD 140 MM	DIAMETER ØD 160 MM	KERF B MM	NO. TEETH + SPURS
PART NO.	PART NO.	PART NO.		
1131MC	1138MC	11315MC	5	4+4
1132MC	1139MC	11316MC	6	4+4
1133MC	11310MC	11317MC	8	4+4
1134MC	11311MC	11318MC	10	4+4
1135MC	11312MC	11319MC	12	4+4
1136MC	11313MC	11320MC	14	4+4
1137MC	11314MC	11321MC	16	4+4

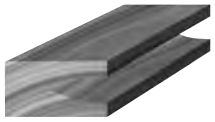
ød Bore: 1-1/4"
Bore can be opened or bushed to spindle size of your machine.
Maximum bore size: 50mm (2")

Other sizes available upon request

113B LAMELLO GROOVING CUTTERS



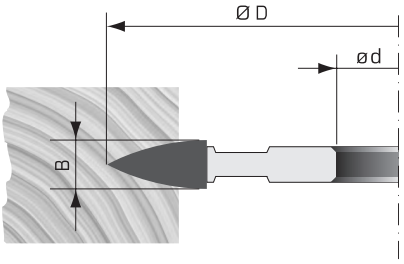




DESIGN:
» High tensile steel body
» With 4 alternating shear angle teeth
» Tungsten carbide cutting edges

APPLICATION:
» For cutting out defects in solid woods
» For patch sizes 1-4

MACHINES:
» For use on mini-spot machines



PART NO.	DIAM. ØD MM	KERF B MM	BORE ød MM	NO. TEETH	RPM MIN-MAX
113B	100	8	22	4	7600-13400

113L LAMELLO GROOVING CUTTERS

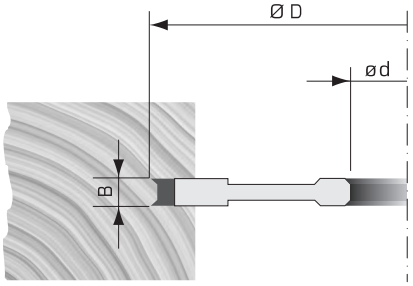




DESIGN:
» High tensile steel body
» With 2 teeth and 4 spurs
» Tungsten carbide cutting edges

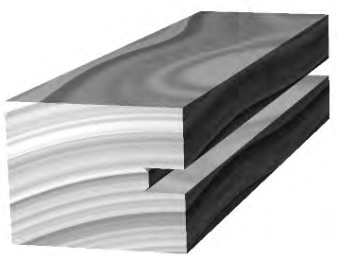
APPLICATION:
» For chip free grooving of LAMELLO wood joints
» For solid woods with and against the grain

MACHINES:
» On LAMELLO and ELU machines for biscuit joints



PART NO.	DIAM. Ø MM	KERF B MM	BORE ød MM	NO. TEETH	NO. SPURS	RPM MIN-MAX
113L	100	3.95	22	2	2+2	7600-13400





DESIGN:

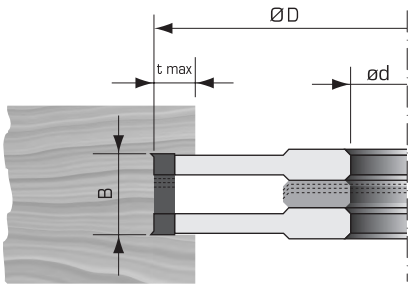
» High tensile steel body
» Set of cutters with 4 teeth + 4 spurs, each adjustable by a set of spacers
» Tungsten carbide cutting edges

APPLICATION:

» For chip-free grooving of plywood, chipboard, and solid wood with and across the grain
» In uncoated and laminated panel materials with feed

MACHINES:

» On shapers, moulders, and double-end tenoners



PART NO.	DIAM. ØD	KERF MIN. B	KERF MAX. B	BORE ød	NO. TEETH	NO. SPURS	GROOVE DEPTH T MAX	RPM MIN-MAX
1141MC	140mm 5-1/2"	1.8mm 5/64"	3.4mm 9/64"	31.75mm 1-1/4"	4	4	15mm 19/32"	5500-9500
1142MC	140mm 5-1/2"	2.5mm 3/32"	4.8mm 3/16"	31.75mm 1-1/4"	4	4	15mm 19/32"	5500-9500
1143MC	160mm 6-1/4"	4.0mm 5/32"	7.5mm 19/64"	31.75mm 1-1/4"	4	4	35mm 1-3/8"	5100-9000
1144MC	160mm 6-1/4"	7.5mm 19/64"	14mm 9/16"	31.75mm 1-1/4"	4	4	35mm 1-3/8"	5100-9000
1145MC	160mm 6-1/4"	10mm 13/32"	19mm 3/4"	31.75mm 1-1/4"	4	4	40mm 1-9/16"	4800-8300
1146MC	180mm 7-3/32"	4.0mm 5/32"	7.5mm 19/64"	31.75mm 1-1/4"	4	4	50mm 2"	4200-7400
1147MC	180mm 7-3/32"	7.5mm 19/64"	14mm 9/16"	31.75mm 1-1/4"	4	4	50mm 2"	4200-7400
1148MC	180mm 7-3/32"	10mm 13/32"	19mm 3/4"	31.75mm 1-1/4"	4	4	50mm 2"	4200-7400

Bore can be opened or bushed to spindle size of your machine

Maximum bore size 50mm (2")





DESIGN:

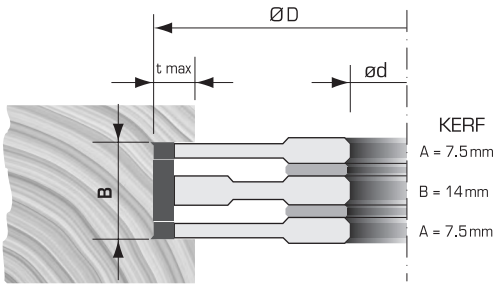
» High tensile steel body
» Set of 3 or 4 interlocked cutters adjustable by spacers and shims
» Outside cutters each with 2 raker teeth and 2 spurs on outside at negative rake
» Middle cutters with 4 raker teeth
» Chip limiter for manual feed
» Cuts grooves sharp and clean, no tear-outs
» Tungsten carbide cutting edges

APPLICATION:

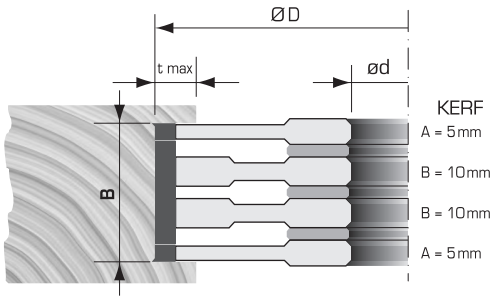
» For chip-free grooving of plywood, chipboard, and solid wood with and against the grain
» In uncoated and laminated panel materials with feed

MACHINES:

» On shapers, moulders, and double-end tenoners



1151MC



1152MC

PART NO.	DIAM. ØD	KERF MIN. B	KERF MAX. B	BORE ød MM	NO. TEETH	NO. SPURS	GROOVE DEPTH T MAX	RPM MIN-MAX
1151MC	150mm 6"	7.5mm 19/64"	28mm 1-7/64"	31.75mm 1-1/4"	4	4+4	30mm 1-3/16"	5100-8900
1152MC	220mm 8-5/8"	5mm 3/16"	30mm 1-3/16"	31.75mm 1-1/4"	4	4+4	40mm 1-9/16"	3500-6000

Bore can be opened or bushed to spindle size of your machine

Maximum bore size 50mm (2")

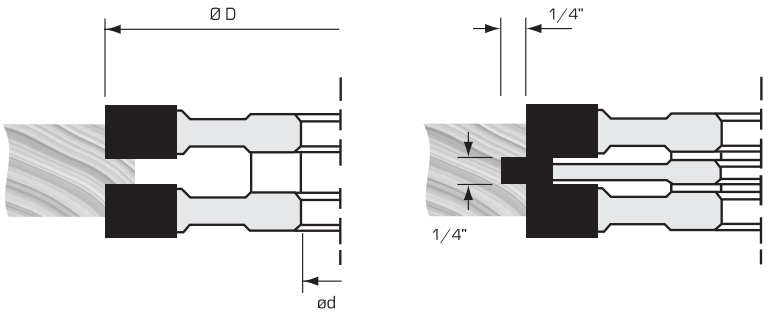
139 TONGUE AND GROOVE SHAPER CUTTERS



DESIGN:
» High tensile steel body
» Set of 3 cutters (1 groover + 2 cutters)
» Each with 3 teeth and spacers to obtain profiles
» Tungsten carbide cutting edges

APPLICATION:
» For producing tongue and groove shapes on plywood and solid wood

MACHINES:
» On shapers

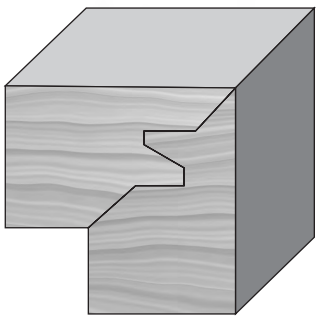


PART NO.	DIAM. ØD	WOOD THICKNESS MIN.	WOOD THICKNESS MAX.	BORE ød	NO. TEETH
139IC	4"	3/4"	1-1/8"	1-1/4"	3+3+3

Bore can be opened or bushed to spindle size of your machine

135 REVERSIBLE MITRE JOINT CUTTER

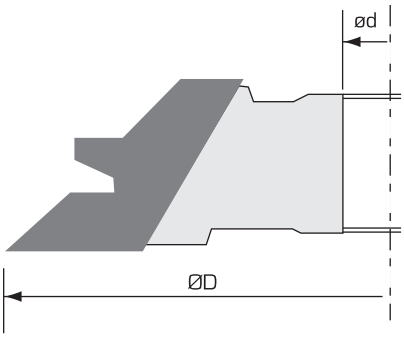




DESIGN:
» High tensile steel body
» With 3 straight teeth
» Tungsten carbide cutting edges

APPLICATION:
» For cutting mitre lock joints in solid wood and panel materials

MACHINES:
» On shapers

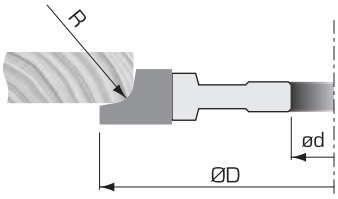


PART NO.	DIAM. ØD	WOOD THICKNESS MIN.	WOOD THICKNESS MAX.	BORE ød	NO. TEETH
135IC	4-3/4"	3/8"	3/4"	1-1/4"	3

Bore can be opened or bushed to spindle size of your machine

149 QUARTER ROUND CUTTERS





DESIGN:
» High tensile steel body
» With 3 teeth sheer cut for optimum quality of cut
» Tungsten carbide cutting edges

APPLICATION:
» To cut quarter round shapes in solid wood and panel materials

MACHINES:
» On shapers

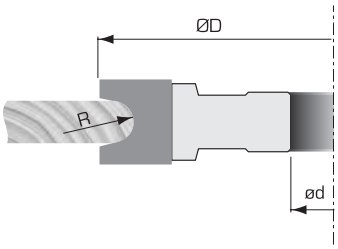
SPECIAL PRODUCTION:
» For all other sizes see Cutters Special Profiles “PA” on page B2

PART NO.	DIAM. ØD	RADIUS R	BORE ød	NO. TEETH
1491IC	4"	1/4"	1-1/4"	3
1492IC	4"	3/8"	1-1/4"	3
1493IC	4"	1/2"	1-1/4"	3
1494IC	4-3/4"	3/4"	1-1/4"	3

Bore can be opened or bushed to spindle size of your machine

150 HALF ROUND CUTTERS





DESIGN:
» High tensile steel body
» With 3 straight teeth
» Tungsten carbide cutting edges

APPLICATION:
» To cut half round shapes in solid wood and panel materials

MACHINES:
» On shapers

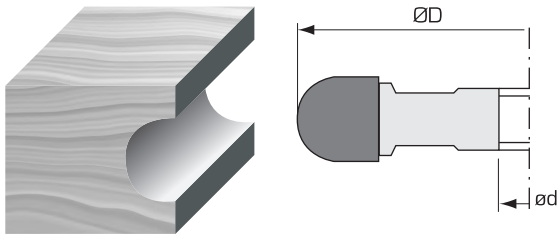
SPECIAL PRODUCTION:
» For all other sizes see Cutters Special Profiles “PB” on page B2

PART NO.	DIAM. ØD	RADIUS R	PROFILE HEIGHT	BORE ød	NO. TEETH
1501IC	4"	1/8"	1/4"	1-1/4"	3
1502IC	4"	1/4"	1/2"	1-1/4"	3
1503IC	4-1/2"	3/8"	3/4"	1-1/4"	3
1504IC	4-1/2"	1/2"	1"	1-1/4"	3

Bore can be opened or bushed to spindle size of your machine

151 CONVEX RADIUS CUTTERS





DESIGN:
» High tensile steel body
» With 4 straight teeth
» Tungsten carbide cutting edges

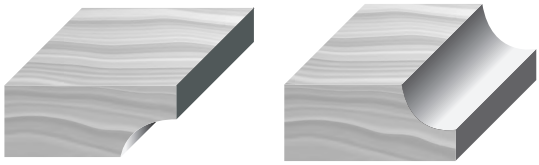
APPLICATION:
» For cutting coves in solid wood and panel materials

MACHINES:
» On shapers

SPECIAL PRODUCTION:
» For all other sizes see Cutters Special Profiles “PA” on page B2

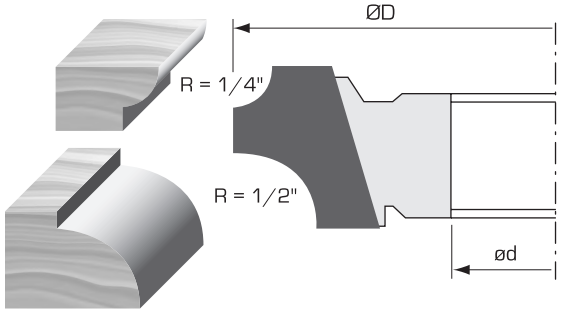
PART NO.	DIAM. ØD	RADIUS R	KERF B	BORE ød	NO. TEETH
1516IC	4"	3/8"	3/4"	1-1/4"	4
1518IC	4"	1/2"	1"	1-1/4"	4

Bore can be opened or bushed to spindle size of your machine



154 DUAL QUARTER ROUND CUTTERS
1/4" AND 1/2" RADIUS





DESIGN:
» High tensile steel body
» With 3 teeth, straight
» Tungsten carbide cutting edges

APPLICATION:
» To make 1/4" or 1/2" quarter round shapes in solid wood and panel materials

MACHINES:
» On shapers

SPECIAL PRODUCTION:
» For all other sizes see Cutters Special Profiles “PB” on page B2

PART NO.	DIAM. ØD	RADIUS R1	RADIUS R2	KERF B	BORE ød	NO. TEETH
154IC	4"	1/4"	1/2"	1"	1-1/4"	3

Bore can be opened or bushed to spindle size of your machine



DESIGN:

» High tensile steel body
» Set of 4 cutters and spacers
» With 3 teeth
» Tungsten carbide cutting edges

APPLICATION:

» To cut stile and rail for producing solid wood cabinet doors

MACHINES:

» On shapers

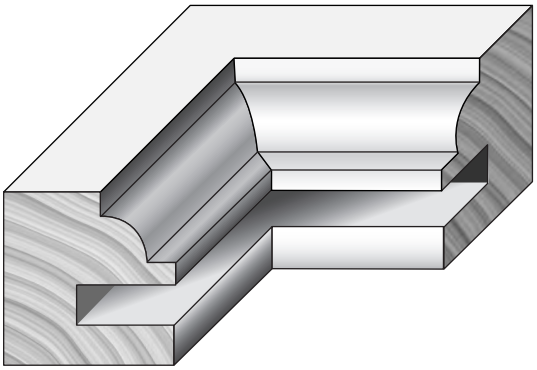
SPECIAL PRODUCTION:

» For all other sizes see Cutters Special Profiles “PA” on page B2

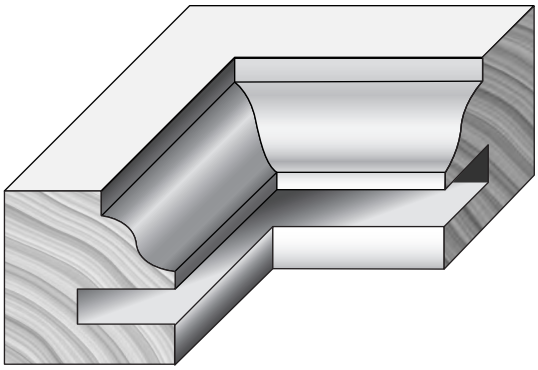
PART NO.	PROFILE	DIAM. ØD	WOOD THICKNESS	BORE ød	NO. TEETH
177AI	A	4"	3/4" to 1"	1-1/4"	3+3
177BI	B	4"	3/4" to 1"	1-1/4"	3+3

Bore can be opened or bushed to spindle size of your machine

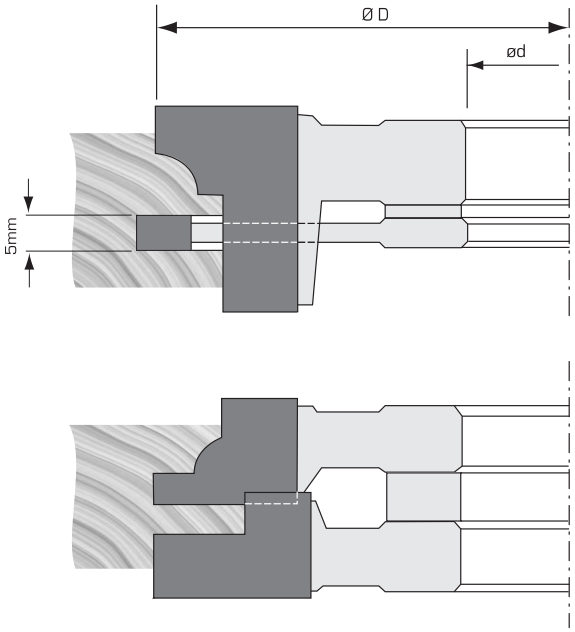
PROFILE A



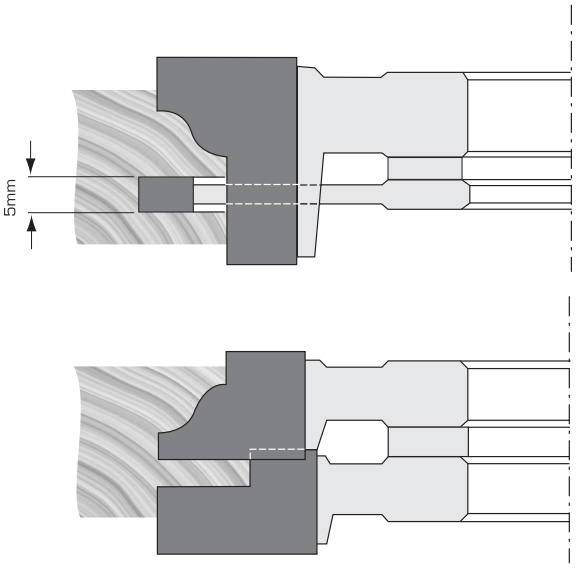
PROFILE B



BEAD PROFILE



OGEE PROFILE





DESIGN:

» High tensile steel body
» With 3 teeth and shear angle for optimum quality of cut
» Tungsten carbide cutting edges

APPLICATION:

» For raised panel cutting in solid wood and MDF panels

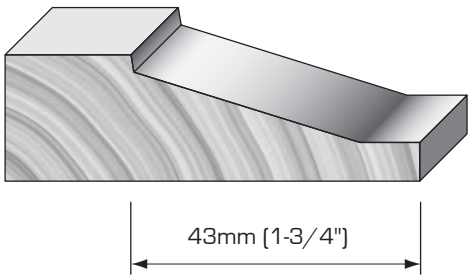
MACHINES:

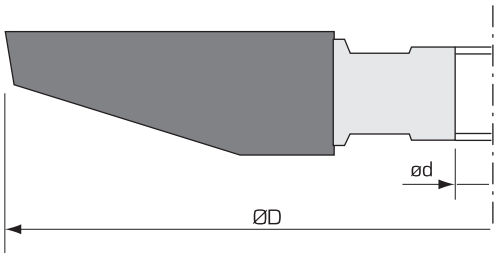
» On shapers

PART NO.	PROFILE	DIAM. ØD	KERF B	BORE ød	NO. TEETH
1681IC	Profile No. 1	6"	5/8"	1-1/4"	3
1682IC	Profile No. 2	6"	5/8"	1-1/4"	3
1693IC	Profile No. 3	5-3/4"	5/8"	1-1/4"	3
1694IC	Profile No. 4	5-3/4"	5/8"	1-1/4"	3
1695IC	Profile No. 5	5-3/4"	5/8"	1-1/4"	3
1696IC	Profile No. 6	5-3/4"	5/8"	1-1/4"	3

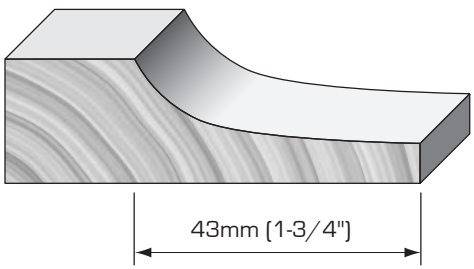
Bore can be opened or bushed to spindle size of your machine

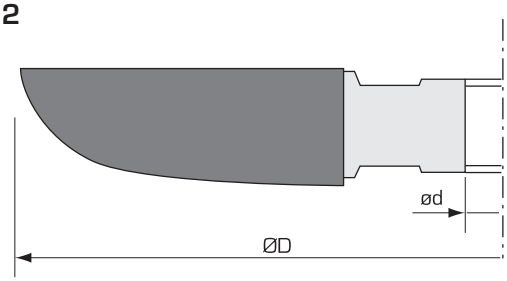
PROFILE NO. 1





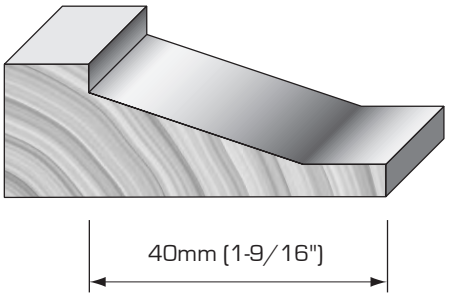
PROFILE NO. 2

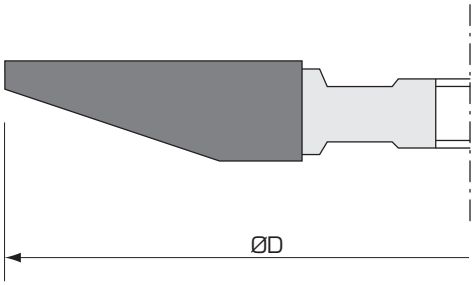




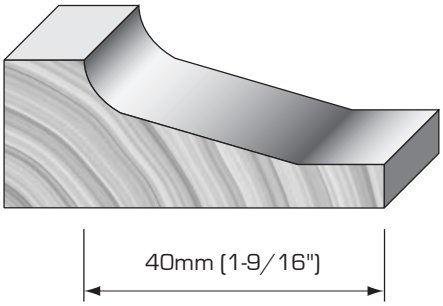
SCALE 1:1

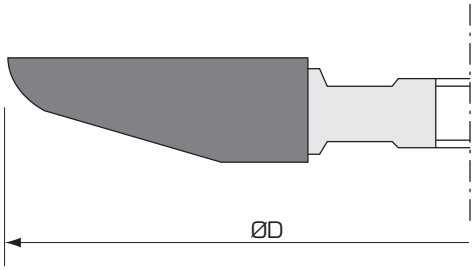
PROFILE NO. 3



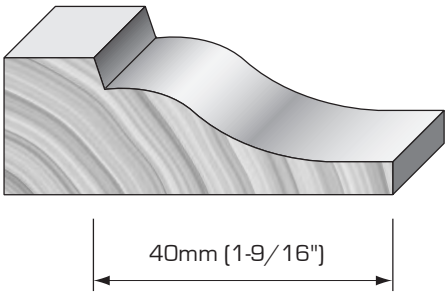


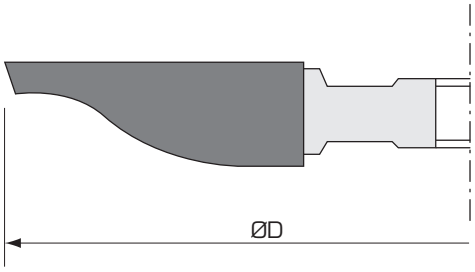
PROFILE NO. 4



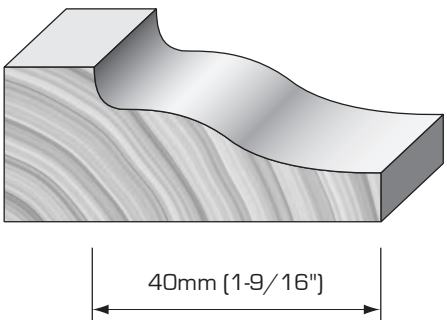


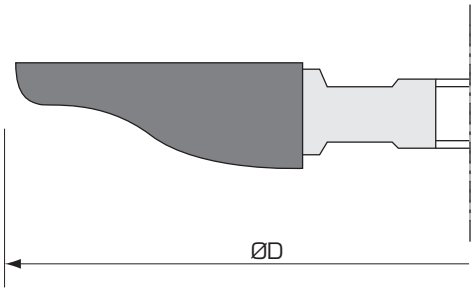
PROFILE NO. 5





PROFILE NO. 6





SCALE 1:1

178 ENTRY AND PASSAGE DOOR CUTTER SET



DESIGN:

» High tensile steel body
» Set of 5 cutters with 3 teeth interlocked and set of spacers
» Tungsten carbide cutting edges

APPLICATION:

» To cut stile and rail in solid wood for producing entry and passage doors

MACHINES:

» On shapers

TYPE: 178

PART NO.	PROFILE	DIAM. ØD	WOOD THICKNESS	TENON	BORE ød	NO. TEETH	RPM MIN-MAX
178AI	A	4"	1-3/8"	1/4"	1-1/4"	3	7500-12500
178BI	B	4"	1-3/8"	1/4"	1-1/4"	3	7500-12500
178CI	C	4"	1-3/8"	1/4"	1-1/4"	3	7500-12500

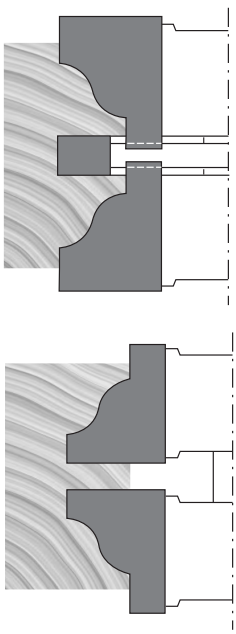
Bore can be opened or bushed to spindle size of your machine

TYPE: 179

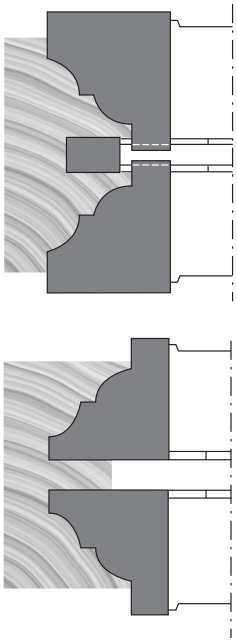
PART NO.	PROFILE	DIAM. ØD	WOOD THICKNESS	TENON	BORE ød	NO. TEETH	RPM MIN-MAX
179AI	A	4"	1-3/4"	3/8"	1-1/4"	3	7500-12500
179BI	B	4"	1-3/4"	3/8"	1-1/4"	3	7500-12500
179CI	C	4"	1-3/4"	3/8"	1-1/4"	3	7500-12500

Bore can be opened or bushed to spindle size of your machine

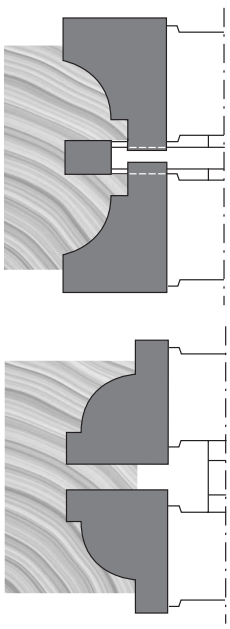
PROFILE A



PROFILE B



PROFILE C





DESIGN:

» High tensile steel body
» Each set consists of 4 cutters with 3 teeth and 3 spacers engraved with No. 1, No. 2, and No. 3
» Tungsten carbide cutting edges
» 4 different interlocking joints

APPLICATION:

» To cut all standard moulding profiles and anything else you can think of

MACHINES:

» On shapers

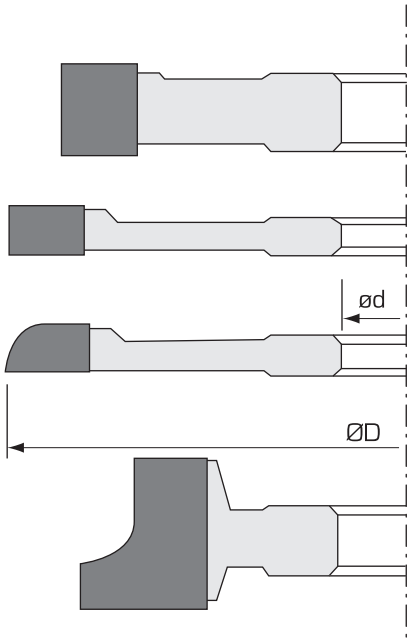
PART NO.	TYPE	DIAM. ØD	BORE ØD	NO. TEETH
1821IC	Small Set	4-1/8"	3/4"	3
1822IC	Large Set	5-1/2"	1-1/4"	3

TOOL. NO. 1

TOOL. NO. 2

TOOL. NO. 3

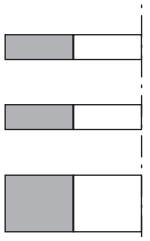
TOOL. NO. 4

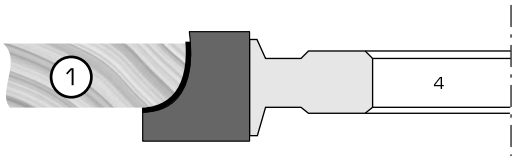


SPACER NO. 5

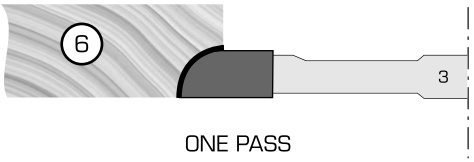
SPACER NO. 6

SPACER NO. 7

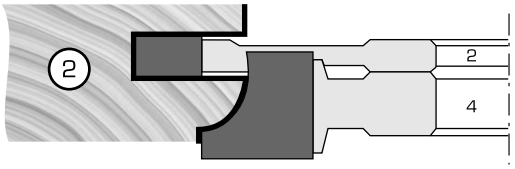




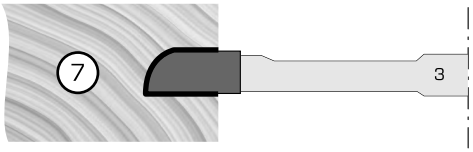
ONE PASS



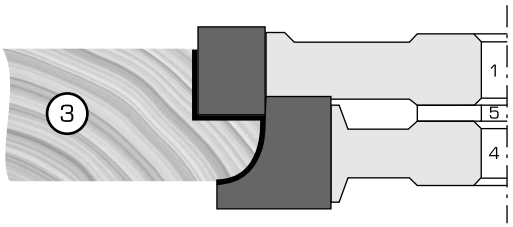
ONE PASS



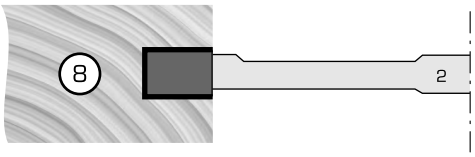
ONE PASS



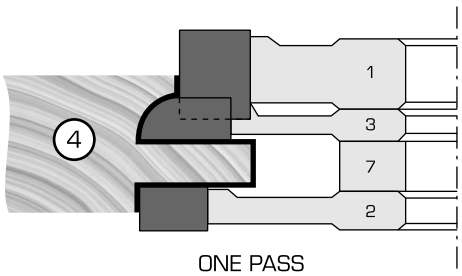
ONE PASS



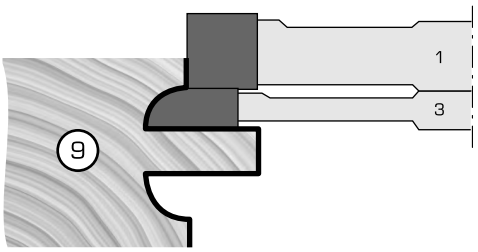
ONE PASS



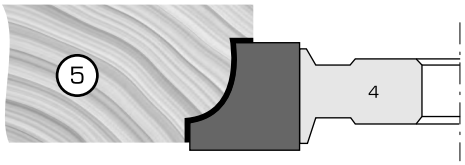
ONE PASS



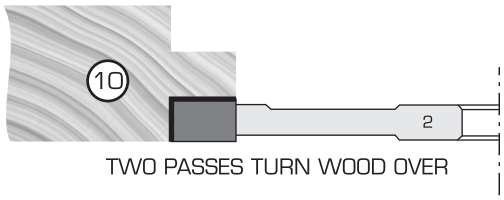
ONE PASS



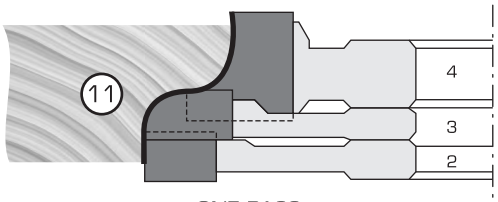
TWO PASSES TURN WOOD OVER



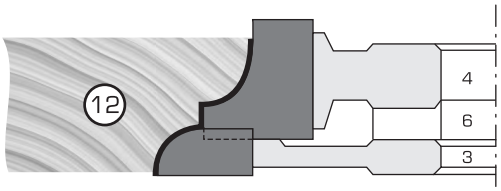
ONE PASS



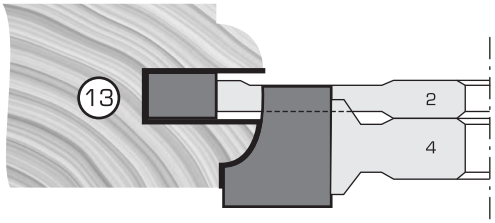
TWO PASSES TURN WOOD OVER



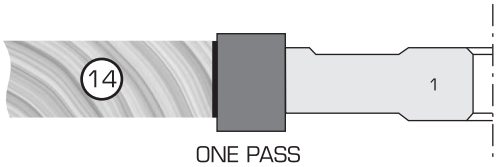
ONE PASS



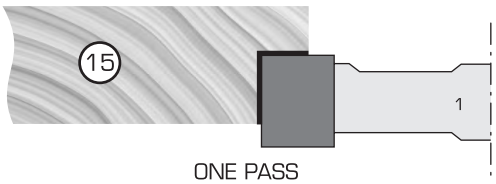
ONE PASS



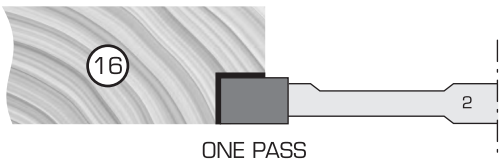
TWO PASSES TURN WOOD OVER



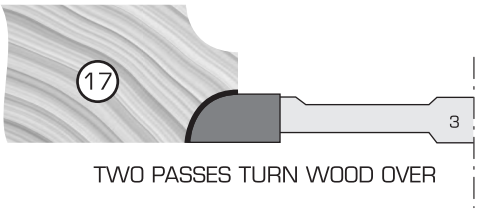
ONE PASS



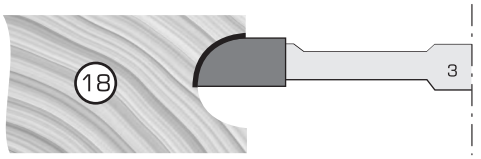
ONE PASS



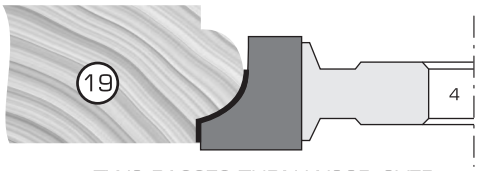
ONE PASS



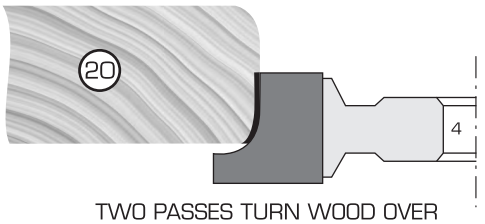
TWO PASSES TURN WOOD OVER



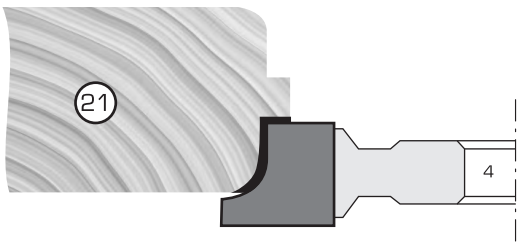
TWO PASSES TURN WOOD OVER



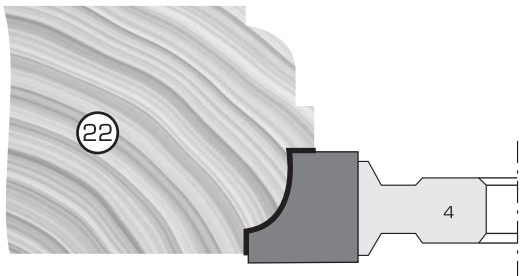
TWO PASSES TURN WOOD OVER



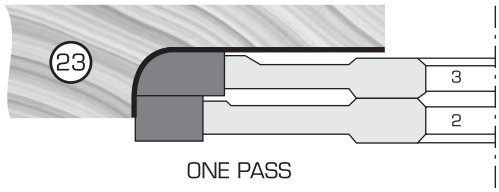
TWO PASSES TURN WOOD OVER



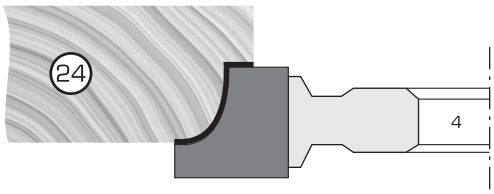
TWO PASSES TURN WOOD OVER



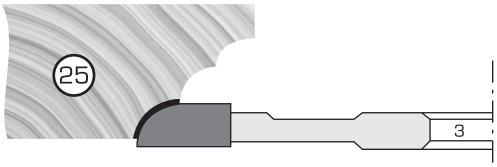
TWO PASSES TURN WOOD OVER



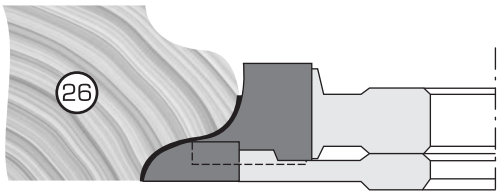
ONE PASS



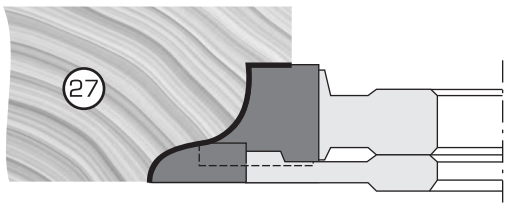
ONE PASS



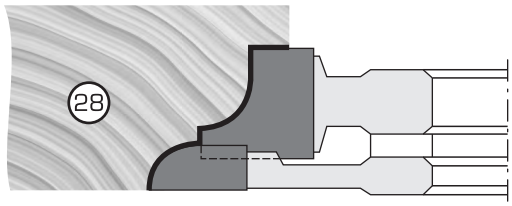
THREE PASSES



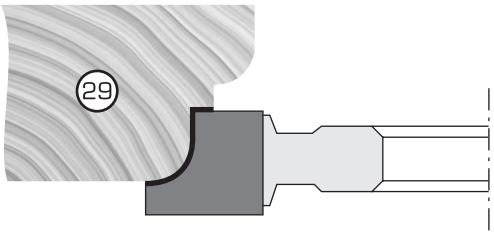
TWO PASSES TURN WOOD OVER



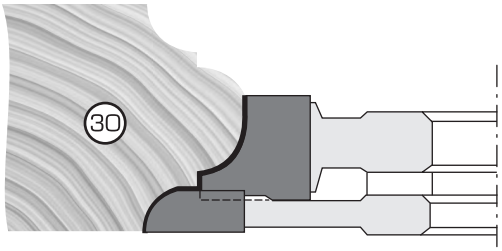
ONE PASS



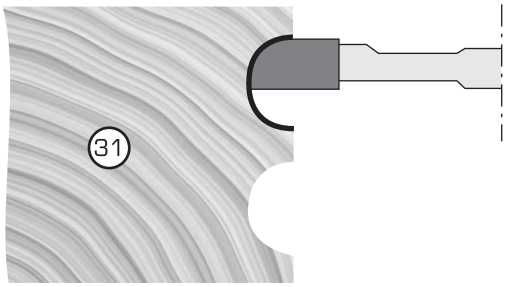
ONE PASS



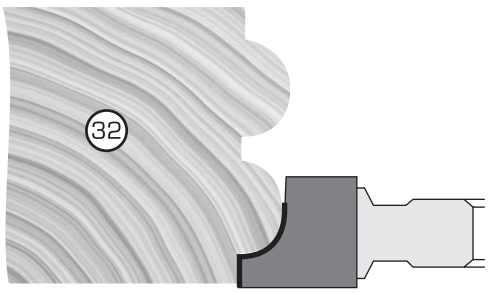
TWO PASSES



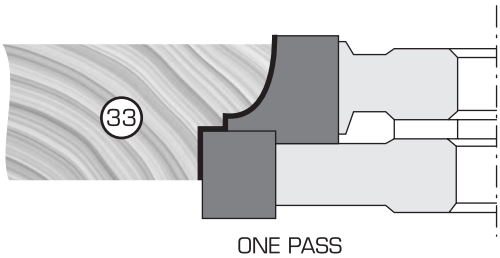
TWO PASSES TURN WOOD OVER



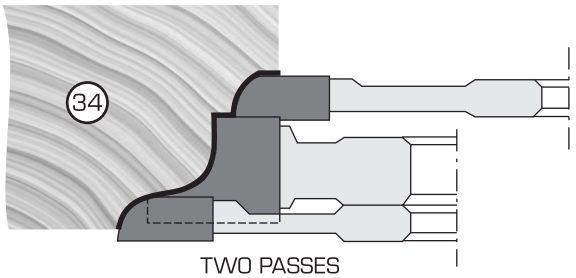
FOUR PASSES TURN WOOD OVER



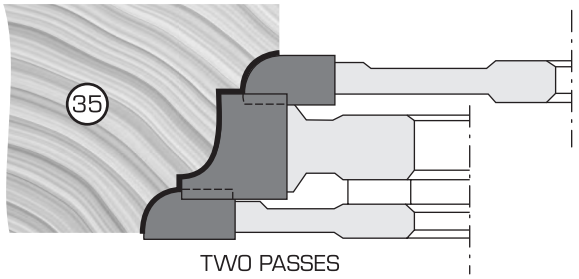
FOUR PASSES TURN WOOD OVER



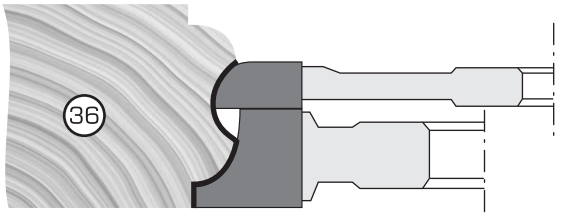
ONE PASS



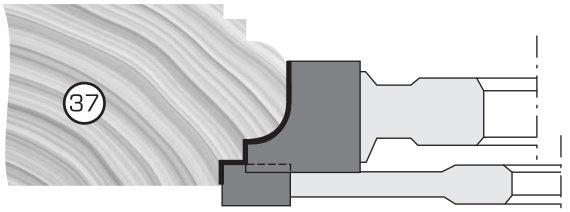
TWO PASSES



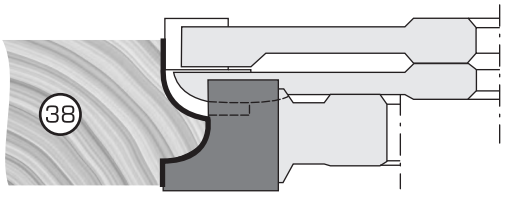
TWO PASSES



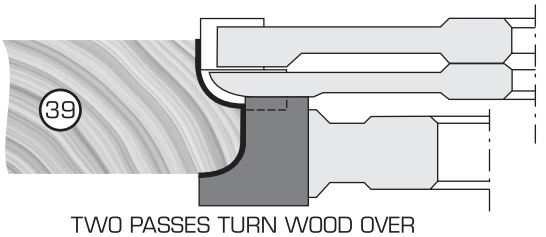
FOUR PASSES TURN WOOD OVER



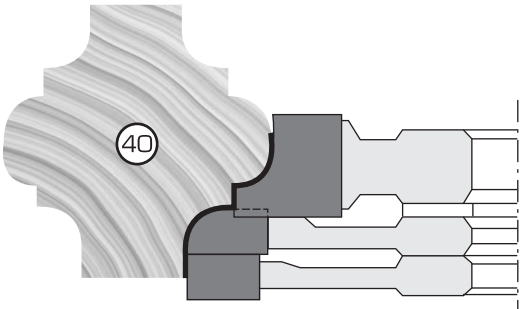
TWO PASSES TURN WOOD OVER



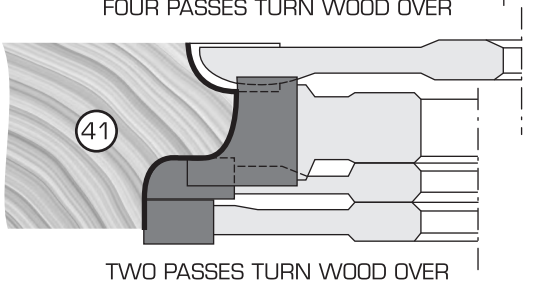
TWO PASSES TURN WOOD OVER



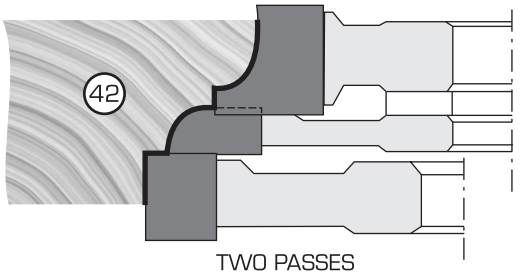
TWO PASSES TURN WOOD OVER



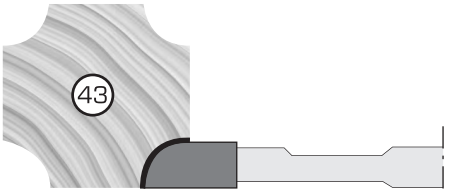
FOUR PASSES TURN WOOD OVER



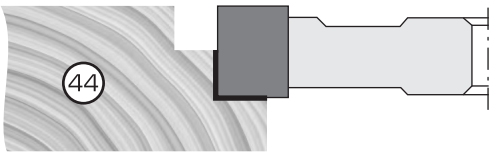
TWO PASSES TURN WOOD OVER



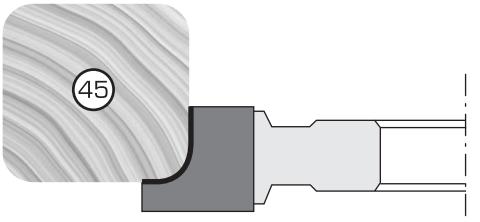
TWO PASSES



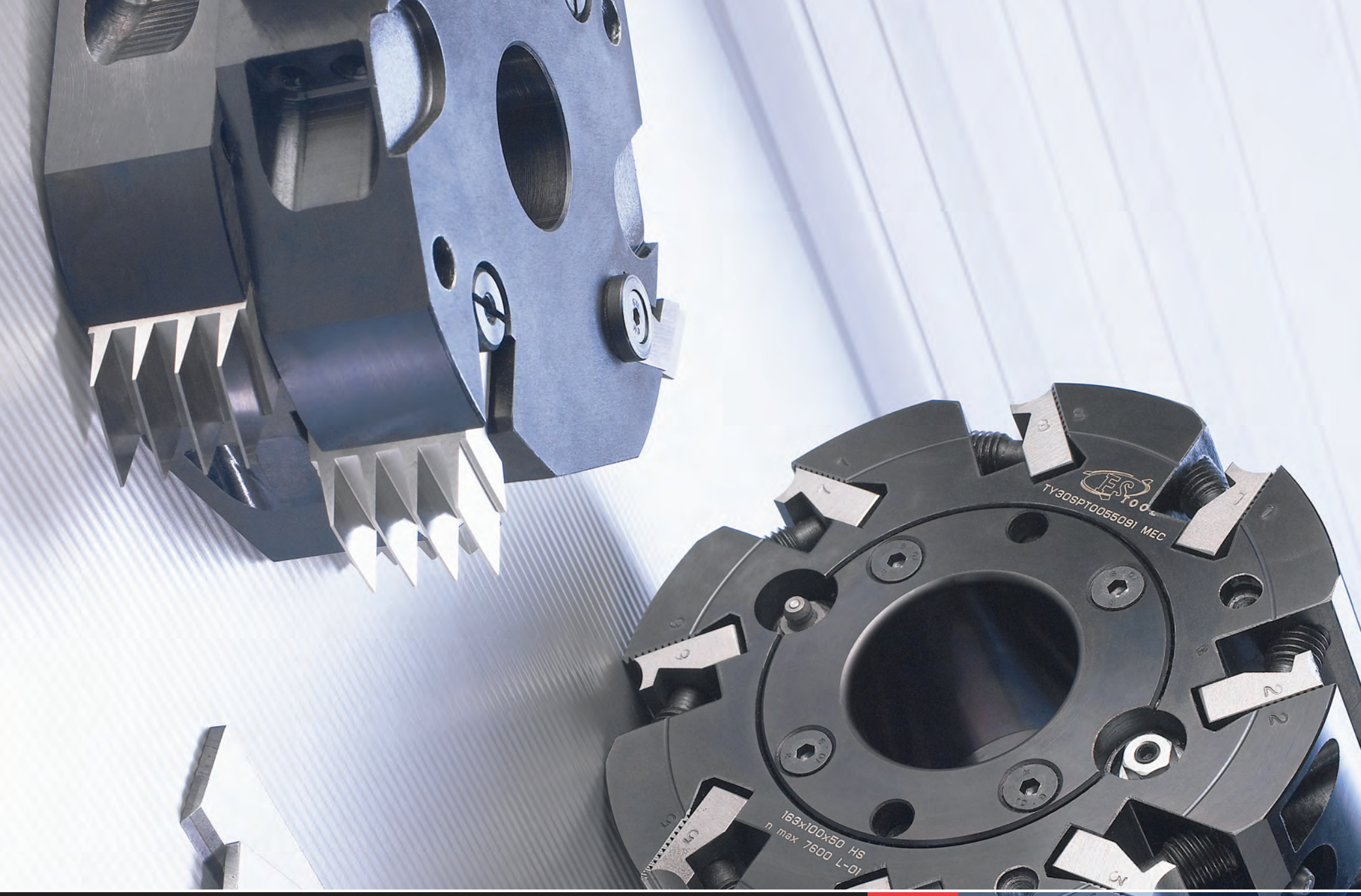
FOUR PASSES TURN WOOD OVER



TWO PASSES



FOUR PASSES TURN WOOD OVER



CUTTER BLOCKS

HSS Knives / Carbide Tipped

CUTTER BLOCKS - TABLE OF CONTENTS

PRODUCT CATEGORY	PAGE NO.
COMBI-CUT SOLID CARBIDE KNIVES AND BACKERS	C25 - C26
CORRUGATED BACK KNIVES	C21 - C24
CORRUGATED TOOLHEADS	C7 - C8
HYDRO-BORE CORRUGATED TOOLHEADS	C9 - C10
HYDRO-BORE PLANING HEADS	C11 - C12
HYDRO-GRIP SLEEVES - INTERCHANGEABLE	C15 - C20
HYDRO-GRIP SLEEVES - PERMANENT	C13 - C14
INTERCHANGEABLE MINI-FINGER JOINT	C3 - C4
MULTI DOWEL CUTTER	C1 - C2
PLANING HEADS	C5 - C6
PLANING KNIVES - CARBIDE TIPPED	C30 - C32
PLANING KNIVES - DISPOSABLE DOUBLE-EDGED	C29
PLANING KNIVES - FOR PORTABLE MACHINES - CARBIDE TIPPED AND HSS	C33
PLANING KNIVES - M2 STEEL - HSS	C28
PLANING KNIVES - T1 STEEL - HSS	C27

CUTTER BLOCKS - ALPHA-NUMERIC INDEX

PART NO.	PAGE NO.
186A11 - 186A14	C03
186A50 - 186A66	C04
18812 - 18869-12	C7 - C8
1901012 - 1902622	C9
1901022 - 1924622	C11
1903012 - 1905622	C10
20160354 - 20317354	C33
2076203 -2092303	C33
2110293 - 2155323	C33
25120303 - 25640353	C27
26040051 - 26370145	C28
2610114 - 2611300	C21
2611112ST - 2611234ST	C22
2710114 - 2711300	C22
29H060 - 299810	C29
2M82293 - 2S82293	C33
30040051 - 30122071	C32
30060253 - 30510253	C31
30060303 - 30810303	C31
30060353 - 30810353	C31
30131065 - 30300141	C32
30156313 - 30317354	C33
3030A04038 - 3030A23060	C26
3030C04038 - 3030C23060	C26
3030S04038 - 3030S23060	C26
3071183 - 3092303	C33
3110293 - 3170353	C33
3M82293 - 3S82293	C33
A-40/60-55 - A-2 1/8"/65-55	C13
AI-40/50-55 - AI-2 1/8"/65-55	C14
B-1 1/2"/50-85 - B-2 1/8"/65-185	C16
B-40/50-75 - B-60/70-190	C15
BI-40/50-75 - BI-2 1/8"/65-85	C17
CI-40/50-75 - CI-50/60-140	C18
DX10114 - DX11300	C21



DESIGN:

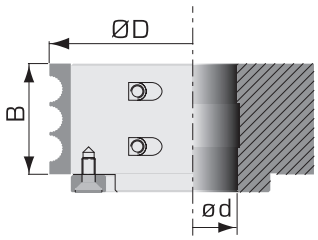
- » High tensile steel body with 3 teeth
- » The knife locking system is very precise due to the positioning ring mounted on each toolhead
- » Solid HSS knives are resharpenable and replaceable
- » For higher performance, knives with titanium nitride coating (tin) available on request

APPLICATION:

- » For producing smooth dowels from 6mm to 16mm diameter

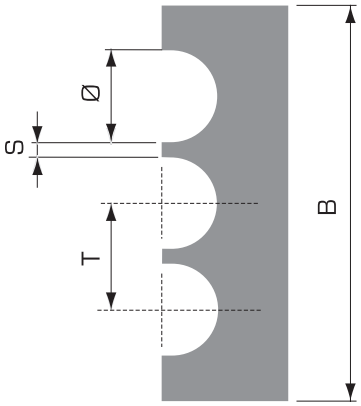
MACHINE TYPE:

- » On moulders



TOOLHEADS: SPECIAL PRODUCTION

DIAM. ØD MM	KERF B	MAX BORE ØD	NO. TEETH	MAX. RPM
110mm	50mm, 75mm, 100mm or 125mm	50mm	3	10000
4-3/8"	2", 3", 4" or 5"	2"	3	10000



KNIVES FOR SMOOTH DOWELS: SPECIAL PRODUCTION

DOWEL DIAM. Ø MM	SPLITTER SIZE S MM	PITCH T MM	NO. OF DOWELS	KERF B MM	CUTTING DIAM. ØD MM
6	1	7	6	50	138
8	1	9	4	50	138
10	1	11	3	50	138
12	1.5	13.5	3	50	148
14	1.5	15.5	2	50	148
16	1.5	17.5	2	50	148
6	1	7	9	75	138
8	1	9	7	75	138
10	1	11	5	75	138
12	1.5	13.5	5	75	148
14	1.5	15.5	4	75	148
16	1.5	17.5	3	75	148
6	1	7	12	100	138
8	1	9	10	100	138
10	1	11	8	100	138
12	1.5	13.5	6	100	148
14	1.5	15.5	5	100	148
16	1.5	17.5	5	100	148
6	1	7	16	125	138
8	1	9	13	125	138
10	1	11	10	125	138
12	1.5	13.5	8	125	148
14	1.5	15.5	7	125	148
16	1.5	17.5	6	125	148





DESIGN:

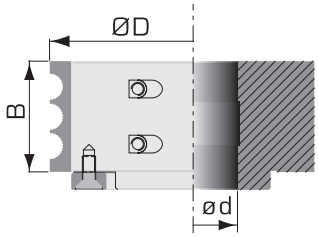
» High tensile steel body with 3 teeth
» The knife locking system is very precise due to the positioning ring mounted on each toolhead
» Solid HSS knives are resharpenable and replaceable
» For higher performance, knives with titanium nitride coating (tin) available on request

APPLICATION:

» For producing serrated dowels from 6.2mm to 16.2mm diameter

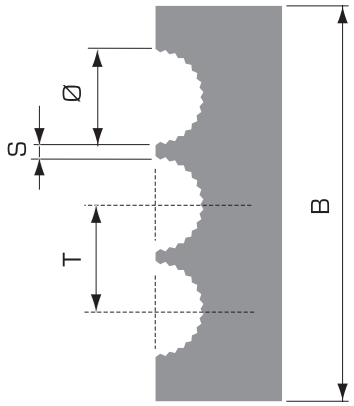
MACHINE TYPE:

» On moulders



TOOLHEADS: SPECIAL PRODUCTION

DIAM. ØD MM	KERF B	MAX BORE ØD	NO. TEETH	MAX.RPM
110mm	50mm, 75mm, 100mm or 125mm	50mm	3	10000
4-3/8"	2", 3", 4" or 5"	2"	3	10000





KNIVES FOR SMOOTH DOWELS: SPECIAL PRODUCTION

DOWEL DIAM. Ø MM	SPLITTER SIZE S MM	PITCH T MM	NO. OF SERRATIONS	NO. OF DOWELS	KERF B MM	CUTTING DIAM. ØD MM
6.2	1	7.2	16	6	50	138
8.2	1	9.2	20	4	50	138
10.2	1	11.2	22	3	50	138
12.2	1.5	13.7	22	3	50	148
14.2	1.5	15.7	22	2	50	148
16.2	1.5	17.7	22	2	50	148
6.2	1	7.2	16	9	75	138
8.2	1	9.2	20	7	75	138
10.2	1	11.2	22	5	75	138
12.2	1.5	13.7	22	5	75	148
14.2	1.5	15.7	22	4	75	148
16.2	1.5	17.7	22	3	75	148
6.2	1	7.2	16	12	100	138
8.2	1	9.2	20	10	100	138
10.2	1	11.2	22	8	100	138
12.2	1.5	13.7	22	6	100	148
14.2	1.5	15.7	22	5	100	148
16.2	1.5	17.7	22	5	100	148
6.2	1	7.2	16	16	125	138
8.2	1	9.2	20	13	125	138
10.2	1	11.2	22	10	125	138
12.2	1.5	13.7	22	8	125	148
14.2	1.5	15.7	22	7	125	148
16.2	1.5	17.7	22	6	125	148



DESIGN:

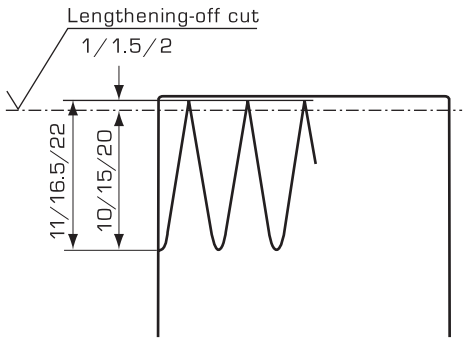
- » High tensile steel body requires 4 knives, not included with toolhead
- » Tools can be stacked based on the wood thickness to be cut
- » Solid HSS knives are resharpenable and exchangeable
- » Knives can be coated with a special PVD surface coating for longer tool life

APPLICATION:

- » For finger joints in solid wood
- » When ordering, specify 'Interchangable Mini-Finger Joint Knives' and 'Bore Size'
- » For machines with lengthening-off device (TrimSaw), finger length will be 11mm, 16.5mm or 22mm. By means of the lengthening-off device, the machined finger length may be between 10 and 11mm, 15 and 16.5mm or 20 and 22mm according to requirements for fitting and strength of joint
- » If not stated otherwise, cutters will be supplied to suit machines without lengthening-off devices

MACHINE TYPE:

- » On finger jointing machines with or without lengthening-off device

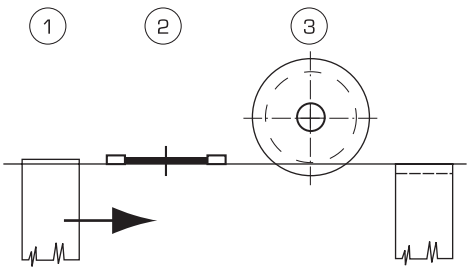


If not stated otherwise, cutters will be supplied to suit machines without lengthening-off device

PART NO.	JOINT LENGTH MM	DIAM. ØD MM	KERF B MM	BORE ØD	NO. TEETH	MAX. RPM
186A11	4	160	25.6	1-1/4"	4	8000
186A12	10	160	30.4	1-1/4"	4	8000
186A13	15	170	30.4	1-1/4"	4	8000
186A14	20	180	37.2	1-1/4"	4	7000

Max. bore size 50mm (2")

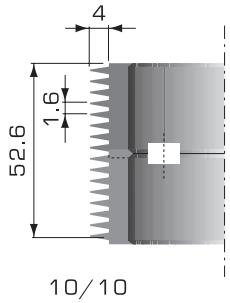
Other bore sizes and diameters available upon request



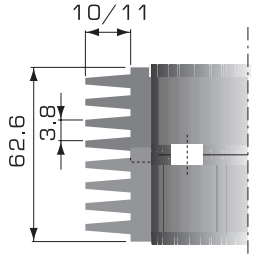
1. Timber
2. Lengthening-off device (Trim Saw)
3. Mini finger joint cutter

TOOLHEAD PART NO.

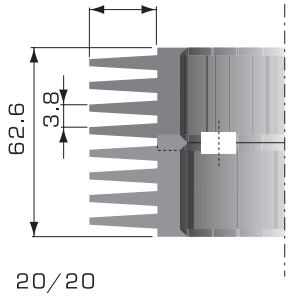
[186A50]



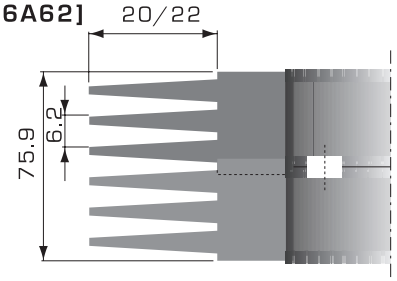
[186A52] 10/10
[186A54] 10/11



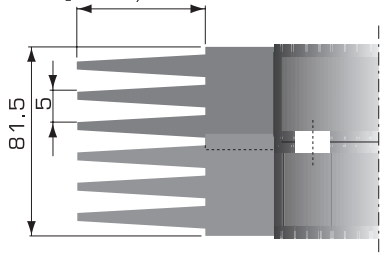
[186A56] 15/15
[186A58] 15/16.5



[186A60] 20/20
[186A62] 20/22



[186A64] 20/20
[186A66] 20/22



PART NO.	JOINT LENGTH MM	LENGTHENING OFF DEVICE (A)	PITCH MM	KNIFE SIZE MM
186A50	4	No	1.6	25.4 x 33 x 14
186A52	10-10	No	3.8	28.4 x 38.5 x 14
186A54	10-11	Yes	3.8	28.4 x 38.5 x 14
186A56	15-15	No	3.8	28.4 x 43.5 x 14
186A58	15-16.5	Yes	3.8	28.4 x 43.5 x 14
186A60	20-20	No	6.2	32.5 x 48.5 x 14
186A62	20-22	Yes	6.2	32.5 x 48.5 x 14
186A64	20-20	No	5.0	36.5 x 48.5 x 14
186A66	20-22	Yes	5.0	36.5 x 48.5 x 14

JOINT LENGTH MM		WOOD THICKNESS MM	NO. TOOLHEADS	TOTAL KERF MM
4	1.6mm PITCH	25.2	1	27.0
4		50.8	2	52.6
4		76.4	3	78.2
4		102.0	4	103.8
4		127.6	5	129.4
10 & 15	3.8mm PITCH	29.8	1	32.2
10 & 15		60.2	2	62.6
10 & 15		90.6	3	93.0
10 & 15		121.0	4	123.4
10 & 15		151.4	5	153.8
20	6.2mm PITCH	36.3	1	38.7
20		73.5	2	75.9
20		110.7	3	113.1
20		147.9	4	150.3
20		185.1	5	187.5
20	5mm PITCH	37.4	1	41.5
20		77.4	2	81.5
20		117.4	3	121.5
20		157.4	4	161.5
20		197.6	5	201.5



DESIGN:

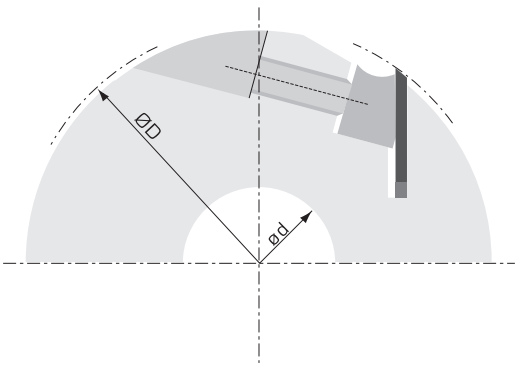
» High tensile steel body with 4 teeth
» Supplied with T1 steel knives 30 x 3mm
» Positioning of knives requires use of appropriate gauge
» Can also be supplied with TCT knives (priced separately)

APPLICATION:

» With HSS knives for planing solid woods without glue lines
» With tungsten carbide tipped knives for planing hardwoods, exotic woods and solid woods with glue lines

MACHINE TYPE:

» On moulders and four sided planers



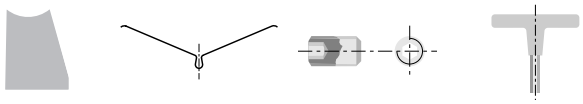
SPECIAL PRODUCTION

DIAM. ØD	KERF	MAX BORE ØD	NO. TEETH	MAX. RPM
125mm 5"	100mm 4"	50mm 2"	4	9000
125mm 5"	120mm 4-3/4"	50mm 2"	4	9000
125mm 5"	130mm 5-1/8"	50mm 2"	4	9000
125mm 5"	150mm 6"	50mm 2"	4	9000
125mm 5"	180mm 7"	50mm 2"	4	9000
125mm 5"	210mm 8-1/4"	50mm 2"	4	9000
125mm 5"	230mm 9"	50mm 2"	4	9000

Other sizes available upon request

For replacement knives, see HSS or TCT Planing Knives catalogue pages C25 - C30

REPLACEMENT PARTS



TOOLHEAD KERF	WEDGE PART NO.	SPRING PART NO.	WEDGE SCREW PART NO.	WRENCH PART NO.
100mm 4"	W301109	W501602	W501309	W400004
120mm 4-3/4"	W301111	W501602	W501309	W400004
130mm 5-1/8"	W301112	W501602	W501309	W400004
150mm 6"	W301114	W501602	W501309	W400004
180mm 7"	W301117	W501602	W501309	W400004
210mm 8-1/4"	W301120	W501602	W501309	W400004
230mm 9"	W301122	W501602	W501309	W400004



DESIGN:

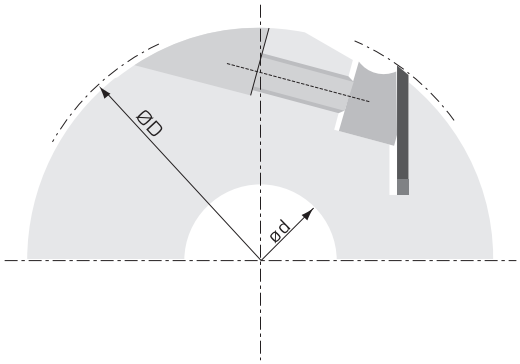
» Aluminum body with 4 teeth
» Supplied with T1 steel knives 30 x 3mm
» Positioning of knives requires use of appropriate gauge
» Can also be supplied with TCT knives (priced separately)

APPLICATION:

» With HSS knives for planing solid woods without glue lines
» With tungsten carbide tipped knives for planing hardwoods, exotic woods and solid woods with glue lines

MACHINE TYPE:

» On moulders and four sided planers



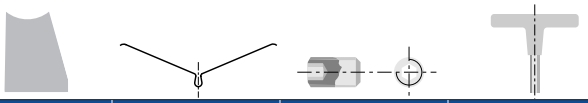
SPECIAL PRODUCTION

DIAM. ØD	KERF	MAX BORE ØD	NO. TEETH	MAX. RPM
125mm 5"	100mm 4"	50mm 2"	4	9000
125mm 5"	120mm 4-3/4"	50mm 2"	4	9000
125mm 5"	130mm 5-1/8"	50mm 2"	4	9000
125mm 5"	150mm 6"	50mm 2"	4	9000
125mm 5"	180mm 7"	50mm 2"	4	9000
125mm 5"	210mm 8-1/4"	50mm 2"	4	9000
125mm 5"	230mm 9"	50mm 2"	4	9000

Other sizes available upon request

For replacement knives see HSS or TCT Planing Knives; Catalogue pages C25 - C30

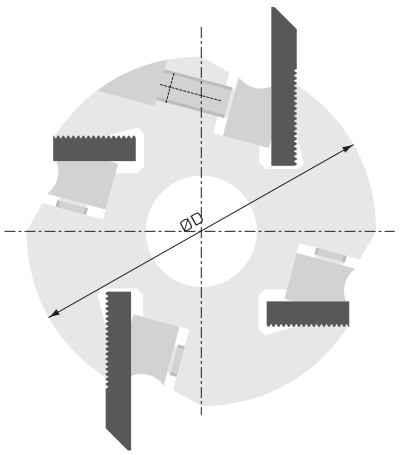
REPLACEMENT PARTS

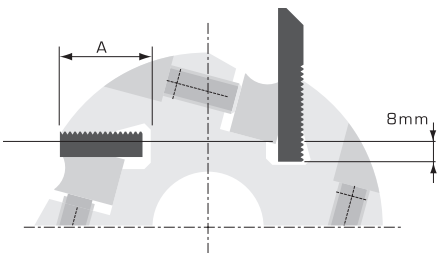


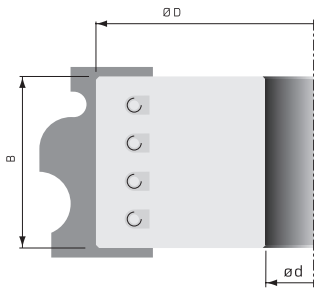
TOOLHEAD KERF	WEDGE PART NO.	SPRING PART NO.	WEDGE SCREW PART NO.	WRENCH PART NO.
100mm 4"	W301109	W501602	W501309	W400004
120mm 4-3/4"	W301111	W501602	W501309	W400004
130mm 5-1/8"	W301112	W501602	W501309	W400004
150mm 6"	W301114	W501602	W501309	W400004
180mm 7"	W301117	W501602	W501309	W400004
210mm 8-1/4"	W301120	W501602	W501309	W400004
230mm 9"	W301122	W501602	W501309	W400004



A = 25mm for 4" diam.
A = 28mm for 4-3/4" diam. and over







DESIGN:

» High tensile steel body with 4 teeth
» Available in 22° or 12° hook angle
» Precise serration (60°, 1.6mm pitch) ensures tight and accurate positioning of knives

APPLICATION:

» For profiling of solid woods using HSS knives (see pages C21 - C22)
» For profiling MDF and other abrasive materials carbide tipped knives are required (see pages C23 - C24)

MACHINE TYPE:

» On moulders

PART NO. 22° HOOK	PART NO. 12° HOOK	DIAM. ØD	KERF B	BORE ød	NO. TEETH	MAX. RPM
18812	-	101.6mm 4"	50mm 2"	31.75mm 1-1/4"	4	11000
18813	-	101.6mm 4"	76.2mm 3"	31.75mm 1-1/4"	4	11000
18814	-	101.6mm 4"	101.6mm 4"	31.75mm 1-1/4"	4	11000
18822	18822-12	122mm 4-3/4"	50mm 2"	38.1mm 1-1/2"	4	9000
18823	18823-12	122mm 4-3/4"	80mm 3-1/8"	38.1mm 1-1/2"	4	9000
18824	18824-12	122mm 4-3/4"	100mm 4"	38.1mm 1-1/2"	4	9000
18825	18825-12	122mm 4-3/4"	130mm 5-1/8"	38.1mm 1-1/2"	4	9000
18826	18826-12	122mm 4-3/4"	150mm 6"	38.1mm 1-1/2"	4	9000
18828	18828-12	122mm 4-3/4"	180mm 7"	38.1mm 1-1/2"	4	9000
18830	18830-12	122mm 4-3/4"	230mm 9"	38.1mm 1-1/2"	4	9000
18832	18832-12	122mm 4-3/4"	50mm 2"	40mm 1.575"	4	9000
18833	18833-12	122mm 4-3/4"	80mm 3-1/8"	40mm 1.575"	4	9000
18834	18834-12	122mm 4-3/4"	100mm 4"	40mm 1.575"	4	9000
18835	18835-12	122mm 4-3/4"	130mm 5-1/8"	40mm 1.575"	4	9000
18836	18836-12	122mm 4-3/4"	150mm 6"	40mm 1.575"	4	9000
18837	18837-12	122mm 4-3/4"	180mm 7"	40mm 1.575"	4	9000
18839	18839-12	122mm 4-3/4"	230mm 9"	40mm 1.575"	4	9000

Continued to page C8...



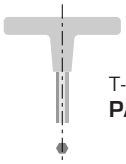
...Continued from page C7

PART NO. 22° HOOK	PART NO. 12° HOOK	DIAM. ØD	KERF B	BORE ød	NO. TEETH	MAX. RPM
18842	18842-12	122mm 4-3/4	50mm 2"	46.04mm 1-13/16"	4	9000
18843	18843-12	122mm 4-3/4"	80mm 3-1/8"	46.04mm 1-13/16"	4	9000
18844	18844-12	122mm 4-3/4"	100mm 4"	46.04mm 1-13/16"	4	9000
18845	18845-12	122mm 4-3/4"	130mm 5-1/8"	46.04mm 1-13/16"	4	9000
18846	18846-12	122mm 4-3/4"	150mm 6"	46.04mm 1-13/16"	4	9000
18852	18852-12	137mm 5-3/8"	50mm 2"	46.04mm 1-13/16"	4	8000
18853	18853-12	137mm 5-3/8"	80mm 3-1/8"	46.04mm 1-13/16"	4	8000
18854	18854-12	137mm 5-3/8"	100mm 4"	46.04mm 1-13/16"	4	8000
18855	18855-12	137mm 5-3/8"	130mm 5-1/8"	46.04mm 1-13/16"	4	8000
18856	18856-12	137mm 5-3/8"	150mm 6"	46.04mm 1-13/16"	4	8000
18857	18857-12	137mm 5-3/8"	180mm 7"	46.04mm 1-13/16"	4	8000
18859	18859-12	137mm 5-3/8"	230mm 9"	46.04mm 1-13/16"	4	8000
18862	18862-12	137mm 5-3/8"	50mm 2"	40mm 1.575"	4	8000
18863	18863-12	137mm 5-3/8"	80mm 3-1/8"	40mm 1.575"	4	8000
18864	18864-12	137mm 5-3/8"	100mm 4"	40mm 1.575"	4	8000
18865	18865-12	137mm 5-3/8"	130mm 5-1/8"	40mm 1.575"	4	8000
18866	18866-12	137mm 5-3/8"	150mm 6"	40mm 1.575"	4	8000
18867	18867-12	137mm 5-3/8"	180mm 7"	40mm 1.575"	4	8000
18869	18869-12	137mm 5-3/8"	230mm 9"	40mm 1.575"	4	8000

REPLACEMENT PARTS



TOOLHEAD KERF	WEDGE PART NO.	WEDGE SCREW PART NO.
50mm 2"	W301104	W501305
80mm 3-1/8"	W301107	W501305
100mm 4"	W301109	W501305
130mm 5-1/8"	W301112	W501305
150mm 6"	W301114	W501305
180mm 7"	W301117	W501305
230mm 9"	W301122	W501305



T-HANDLE ALLEN WRENCH
PART NO. W400115 5mm



DESIGN:

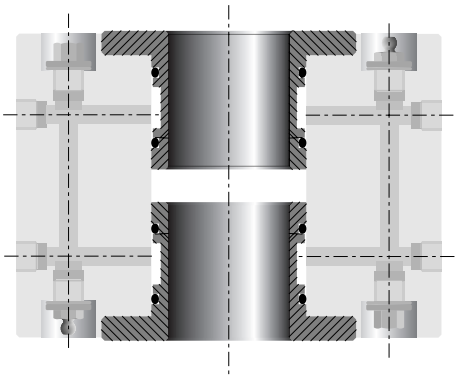
» High tensile steel body with 4, 6 or 8 teeth
» Available in 22° or 12° hook angle
» Precise serration (60°, 1.6mm pitch) ensure tight and accurate positioning of knives
» With dual-chamber hydro-clamping to ensure precise concentricity tolerance
» High radial running accuracy and low operating vibration

APPLICATION:

» For profiling at high feed rates with superior surface finish
» Use HSS or Stellite tipped knives for solid woods (see pages C21 - C22)
» Use carbide tipped knives for exotic woods and MDF (see pages C23 - C24)

MACHINE TYPE:

» On moulders



Grease fittings mounted on both ends of toolheads for easy access.

PART NO. 22° HOOK	PART NO. 12° HOOK	DIAM. ØD	KERF B	BORE ØD	NO. TEETH	MAX. RPM
1901022	1901012	137mm 5-3/8"	60mm 2-3/8"	1-1/2" 40mm	4	8900
1901122	1901112	137mm 5-3/8"	80mm 3-1/8"		4	8900
1901222	1901212	137mm 5-3/8"	100mm 4"		4	8900
1901322	1901312	137mm 5-3/8"	130mm 5-1/8"		4	8900
1901422	1901412	137mm 5-3/8"	150mm 6"		4	8900
1901522	1901512	137mm 5-3/8"	180mm 7"		4	8900
1901622	1901612	137mm 5-3/8"	230mm 9"		4	8900
1902022	1902012	150mm 6"	60mm 2-3/8"	1-1/2", 1-13/16", 2-1/8" 40mm, 50mm	4	8000
1902122	1902112	150mm 6"	80mm 3-1/8"		4	8000
1902222	1902212	150mm 6"	100mm 4"		4	8000
1902322	1902312	150mm 6"	130mm 5-1/8"		4	8000
1902422	1902412	150mm 6"	150mm 6"		4	8000
1902522	1902512	150mm 6"	180mm 7"		4	8000
1902622	1902612	150mm 6"	230mm 9"		4	8000

Continued to page C10...



...Continued from page C9

PART NO. 22° HOOK	PART NO. 12° HOOK	DIAM. ØD	KERF B	BORE ØD	NO. TEETH	MAX. RPM
1903022	1903012	150mm 6"	60mm 2-3/8"	1-1/2", 1-13/16", 2-1/8" 40mm, 50mm	6	8000
1903122	1903112	150mm 6"	80mm 3-1/8"		6	8000
1903222	1903212	150mm 6"	100mm 4"		6	8000
1903322	1903312	150mm 6"	130mm 5-1/8"		6	8000
1903422	1903412	150mm 6"	150mm 6"		6	8000
1903522	1903512	150mm 6"	180mm 7"		6	8000
1903622	1903612	150mm 6"	230mm 9"		6	8000
1904022	1904012	163mm 6-3/8"	60mm 2-3/8"	1-13/16", 2-1/8" 50mm	6	7600
1904122	1904112	163mm 6-3/8"	80mm 3-1/8"		6	7600
1904222	1904212	163mm 6-3/8"	100mm 4"		6	7600
1904322	1904312	163mm 6-3/8"	130mm 5-1/8"		6	7600
1904422	1904412	163mm 6-3/8"	150mm 8"		6	7600
1904522	1904512	163mm 6-3/8"	180mm 7"		6	7600
1904622	1904612	163mm 6-3/8"	230mm 9"		6	7600
1905022	1905012	163mm 6-3/8"	60mm 2-3/8"		8	7600
1905122	1905112	163mm 6-3/8"	80mm 4		8	7600
1905222	1905212	163mm 6-3/8"	100mm 2-3/8"		8	7600
1905322	1905312	163mm 6-3/8"	130mm 5-1/8"		8	7600
1905422	1905412	163mm 6-3/8"	150mm 6"		8	7600
1905522	1905512	163mm 6-3/8"	180mm 7"		8	7600
1905622	1905612	163mm 6-3/8"	230mm 9"		8	7600

Other sizes available upon request.

When ordering, add bore size to part no.
(ie. 1921022-112 for 1-1/2" Bore)

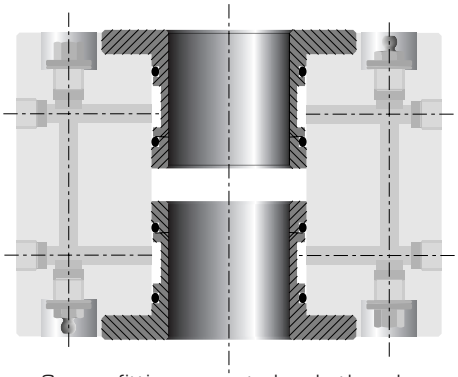
REPLACEMENT PARTS

PART NO.	DESCRIPTION	PRODUCT
W500605	Screw for flanges M6 x 16mm	
W501810	Grease Nipple	
W501811	Release Valve	
1T463HP	Grease Gun	
W400113	Wrench 3mm	
W400115	Wrench 5mm	



TOOLHEAD KERF	WEDGE PART NO.	WEDGE SCREW PART NO.
60mm (2-3/8")	W301805	W501409
80mm (3-1/8")	W301807	W501409
100mm (4")	W301809	W501409
130mm (5-1/8")	W301812	W501409
150mm (6")	W301814	W501409
180mm (7")	W301817	W501409
230mm (9")	W301822	W501409





Grease fittings mounted on both ends of toolheads for easy access.

DESIGN:

» High tensile steel body with 6, 8, 12 and 16 teeth
» Available hook angle between 23° and 27°
» With dual-chamber hydro-clamping to ensure precise concentricity tolerance
» High radial running accuracy and low operating vibration

APPLICATION:

» With HSS knives for planing solid woods without glue lines
» With tungsten carbide tipped knives for planing hardwoods, exotic woods and solid woods with glue lines
» When ordering, specificy 'Bore Size' to 'Part No.' (i.e., 1925022-112 for 1-1/2" Bore)

MACHINE TYPE:

» On moulders, conventional or high speed

PART NO.	DIAM. ØD	KERF B	BORE ØD	NO. TEETH	MAX. RPM
1921022	163mm 6-3/8"	150mm 6"	1-1/2", 1-13/16", 2-1/8" 40mm, 50mm	6	9300
1921222	163mm 6-3/8"	230mm 9"		6	9300
1921422	163mm 6-3/8"	260mm 10-1/4"		6	9300
1921622	163mm 6-3/8"	310mm 12-1/4"		6	9300
1922022	163mm 6-3/8"	150mm 6"	1-1/2", 1-13/16", 2-1/8" 40mm, 50mm	8	9300
1922222	163mm 6-3/8"	230mm 9"		8	9300
1922422	163mm 6-3/8"	260mm 10-1/4"		8	9300
1922622	163mm 6-3/8"	310mm 12-1/4"		8	9300
1923022	203mm 8"	150mm 6"	1-1/2", 1-13/16", 2-1/8" 40mm, 50mm, 60mm	8	7500
1923222	203mm 8"	230mm 9"		8	7500
1923422	203mm 8"	260mm 10-1/4"		8	7500
1923622	203mm 8"	310mm 12-1/4"		8	7500
1924022	203mm 8"	150mm 6"	1-1/2", 1-13/16", 2-1/8" 40 mm, 50 mm, 60mm	12	7500
1924222	203mm 8"	230mm 9"		12	7500
1924422	203mm 8"	260mm 10-1/4"		12	7500
1924622	203mm 8"	310mm 12-1/4"		12	7500

Continued to page C12...



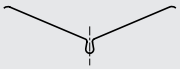
...Continued from page C11

PART NO.	DIAM. ØD	KERF B	BORE ØD	NO. TEETH	MAX. RPM
1925022	203mm 8"	150mm 6"	1-1/2", 1-13/16", 2-1/8" 40mm, 50mm, 60mm	16	7500
1925222	203mm 8"	230mm 9"		16	7500
1925422	203mm 8"	260mm 10-1/4"		16	7500
1925622	203mm 8"	310mm 12-1/4"		16	7500

Other sizes available upon request.

When ordering, add bore size to part no.
(ie. 1921022-112 for 1-1/2" Bore)

REPLACEMENT PARTS

PART NO.	DESCRIPTION	PRODUCT
W500605	Screw for flanges M6 x 16mm	
W501810	Grease Nipple	
W501811	Release Valve	
1T463HP	Grease Gun	
W501602	Spring	
W400113	Wrench 3mm	
W400115	Wrench 5mm	



TOOLHEAD KERF	WEDGE PART NO.	WEDGE SCREW M10 X 20MM FOR Z = 6,8 & 12 PART NO.	WEDGE SCREW M8 X 16MM FOR Z = 16 PART NO.
150mm 6"	W302014	W501409	W501403
230mm 9"	W302022	W501409	W501403
260mm 10-1/4"	W302025	W501409	W501403
310mm 12-1/4"	W302030	W501409	W501403

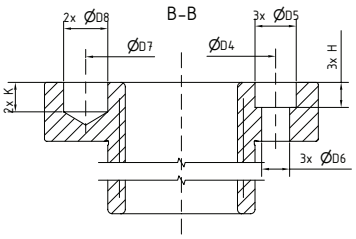
TYPE A

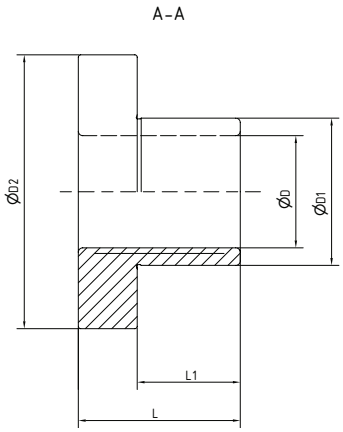
HYDRO-GRIP SLEEVES - PERMANENT
PRESSURIZED WITH GREASE PUMP

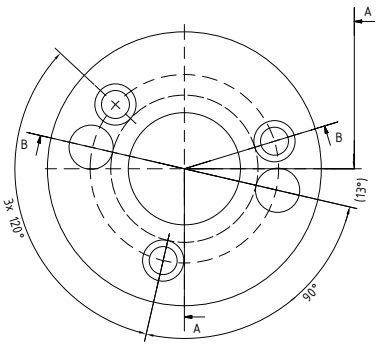


DESIGN:
» High precision hydraulic sleeves
» Manufactured to a G6 spindle tolerance and a H7 bore tolerance
» Designed for light press fit against the tool
» Tool is bolted to the sleeve's collar
» When pressurized, the sleeve expands only against the spindle
» Sleeve pressurized with a grease pump

APPLICATION:
» For permanent mounting of tools or tool assemblies







PART NO.	BORE ØD	DIAM. ØD1 MM	D2 MM	D4 MM	D5 MM	D6 MM	D7 MM	D8 MM	H MM	K MM	L MM	L1 MM
A-40/60-55	40mm	60	93	74	14	9	75	15	8.5	10	55	35
A-45/60-55 ■	45mm	60	93	74	14	9	70	M8	8.5	–	55	35
A-45/60-75 ■	45mm	60	93	74	14	9	70	M8	8.5	–	75	55
A-50/60-55 ■	50mm	60	93	74	14	9	75	15	8.5	10	55	35
A-50/60-75 ■	50mm	60	93	74	14	9	75	15	8.5	10	55	55
A-60/70-55 ▲	60mm	70	105	85	14	9	85	15	9	10	55	35
A-1 1/4"/40-55 ●	1-1/4"	40	75	55	14	9	55	15	9	10	55	35
A-1 13/16"/60-55	1-13/16"	60	93	74	14	9	75	15	8.5	10	55	35
A-1 13/16"/65-55	1-13/16"	65	98	80	14	9	80	15	9	10	55	35
A-2 1/8"/65-55	2-1/8"	65	98	80	14	9	80	15	9	10	55	35

■ Has two threaded M8-holes for carrier pegs, on a 70mm pitch diameter

▲ Has two threaded M8-holes for carrier pegs, on a 85mm pitch diameter

● Has two tool fastening holes

HYDRO-GRIP SLEEVES - PERMANENT
PRESSURIZED WITH ALLEN WRENCH

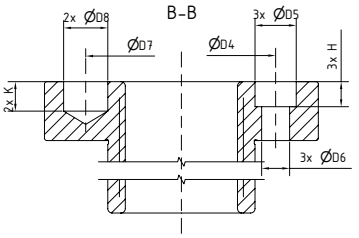


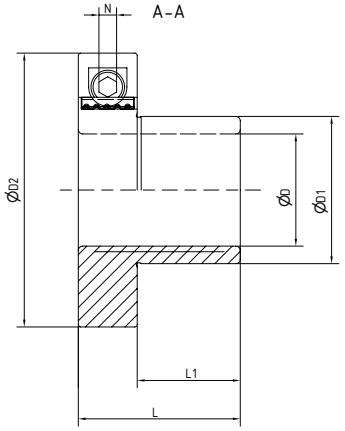
DESIGN:

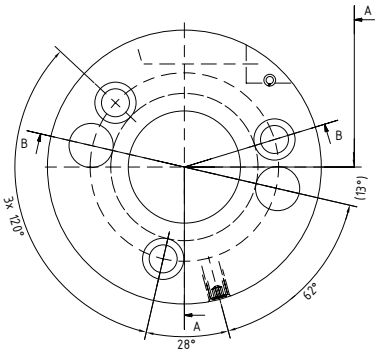
- » High precision hydraulic sleeves
- » Manufactured to a G6 spindle tolerance and a H7 bore tolerance
- » Designed for light press fit against the tool
- » Tool is bolted to the sleeve's collar
- » When pressurized, the sleeve expands only against the spindle
- » Sleeve pressurized with a T-handle allen wrench
- » No grease pump required

APPLICATION:

- » For permanent mounting of tools or tool assemblies







PART NO.	BORE ØD	DIAM. ØD1 MM	D2 MM	D4 MM	D5 MM	D6 MM	D7 MM	D8 MM	H MM	K MM	L MM	L1 MM	N MM
AI-40/50-55	40mm	50	83	64	10	6	65	15	5.5	10	55	35	6
AI-40/60-55	40mm	60	93	74	14	9	75	15	8.5	10	55	35	6
AI-50/60-55 ■	50mm	60	93	74	14	9	75	15	8.5	10	55	35	6
AI-50/60-75 ■	50mm	60	93	74	14	9	75	15	8.5	10	75	55	6
AI-50/65-75 ■	50mm	65	98	80	14	9	80	15	8.5	10	75	55	6
AI-1 1/4"/40-55 ▲	1-1/4"	40	83	55	14	9	55	15	9	10	55	35	6
AI-1 1/2"/50-55	1-1/2"	50	93	65	14	9	65	15	8.5	10	55	35	6
AI-1 13/16"/60-55	1-13/16"	60	93	74	14	9	75	15	8.5	10	55	35	6
AI-2 1/8"/65-55	2-1/8"	65	98	80	14	9	80	15	8.5	10	55	35	6

■ Has two threaded M8 holes for carrier pegs on a 70mm pitch diameter

▲ Has two tool fastening holes

TYPE B

HYDRO-GRIP SLEEVES - INTERCHANGEABLE
PRESSURIZED WITH GREASE PUMP



DESIGN:

» High precision hydraulic sleeves provided with threaded and knurled ring nut
» Manufactured to a G6 spindle tolerance and a H7 bore tolerance
» Sleeves can be easily interchanged between tools
» Tool is bolted to the sleeve's collar
» When pressurized, the outer sleeve expands against the tool and the inner sleeve against the spindle
» Sleeve pressurized by a grease pump

APPLICATION:

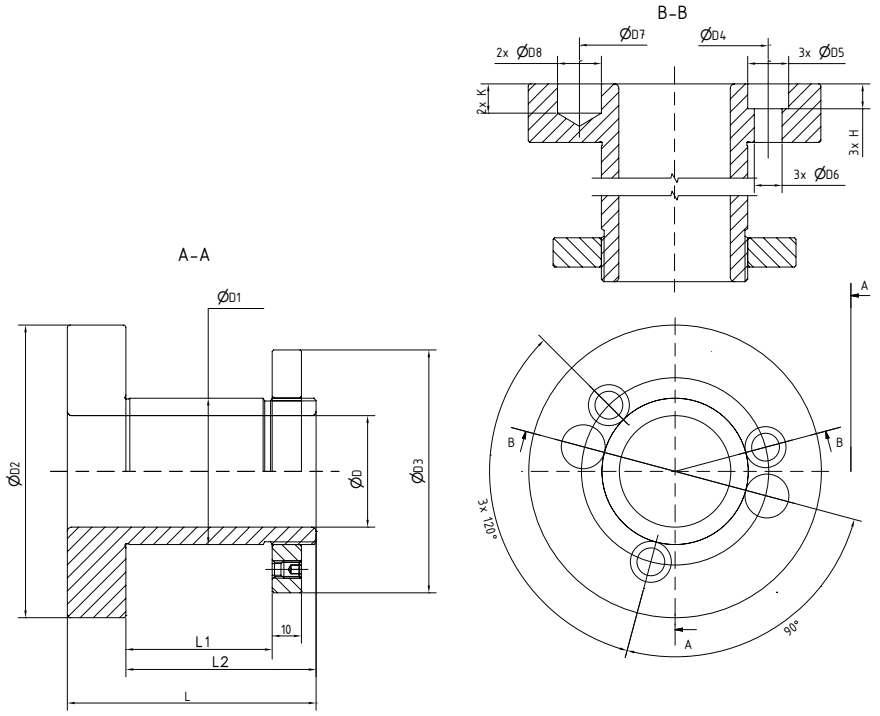
» For interchangeable tools or tool assemblies

PART NO.	BORE ØD MM	DIAM. ØD1 MM	D2 MM	D3 MM	D4 MM	D5 MM	D6 MM	D7 MM	D8 MM	H MM	K MM	L MM	L1 MM	L2 MM
B-40/50-75	40	50	83	83	64	10	6	65	15	5.5	10	75	40	55
B-40/50-115	40	50	83	83	64	10	6	65	15	5.5	10	115	80	95
B-40/60-75	40	60	93	90	74	14	9	75	15	8.5	10	75	40	55
B-40/60-95	40	60	93	90	74	14	9	75	15	8.5	10	95	60	75
B-40/60-115	40	60	93	90	74	14	9	75	15	8.5	10	115	80	95
B-40/60-165	40	60	93	90	74	14	9	75	15	8.5	10	165	130	145
B-40/60-215	40	60	93	90	74	14	9	75	15	8.5	10	215	180	195
B-45/60-75 ■	45	60	93	90	74	14	9	70	M8	8.5	–	75	40	55
B-45/60-95 ■	45	60	93	90	74	14	9	70	M8	8.5	–	95	60	75
B-45/60-115 ■	45	60	93	90	74	14	9	70	M8	8.5	–	115	80	95
B-45/60-140 ■	45	60	93	90	74	14	9	70	M8	8.5	–	140	105	120
B-45/60-190 ■	45	60	93	90	74	14	9	70	M8	8.5	–	190	155	170
B-50/60-75 ■	50	60	93	90	74	14	9	75	15	8.5	10	75	40	55
B-50/60-95 ■	50	60	93	90	74	14	9	75	15	8.5	10	95	60	7
B-50/60-115 ■	50	60	93	90	74	14	9	75	15	8.5	10	115	80	95
B-50/60-140 ■	50	60	93	90	74	14	9	75	15	8.5	10	140	105	120
B-50/60-190 ■	50	60	93	90	74	14	9	75	15	8.5	10	190	155	170
B-50/60-240 ■	50	60	93	90	74	14	9	75	15	8.5	10	240	205	220
B-60/70-75 ▲	60	70	105	105	86	14	9	85	15	8.5	10	75	40	55
B-60/70-140 ▲	60	70	105	105	86	14	9	85	15	8.5	10	140	105	120
B-60/70-190 ▲	60	70	105	105	86	14	9	85	15	8.5	10	190	155	170

■ Sleeve has two threaded M8-holes for carrier pegs on a 70mm pitch diameter

▲ Sleeve has two threaded M8-holes for carrier pegs on a 85mm pitch diameter

Continued to page C16...



...Continued from page C15

PART NO.	BORE ØD	DIAM. ØD1 MM	D2 MM	D3 MM	D4 MM	D5 MM	D6 MM	D7 MM	D8 MM	H MM	K MM	L MM	L1 MM	L2 MM
B-1 1/2"/50-85	1-1/2"	50	83	83	64	14	9	64	15	8.5	10	85	50	65
B-1 1/2"/50-135	1-1/2"	50	83	83	64	14	9	64	15	8.5	10	135	100	115
B-1 1/2"/50-185	1-1/2"	50	83	83	64	14	9	64	15	8.5	10	185	150	165
B-1 13/16"/60-75	1-13/16"	60	93	90	74	14	9	75	15	8.5	10	75	40	55
B-1 13/16"/60-115	1-13/16"	60	93	90	74	14	9	75	15	8.5	10	115	80	95
B-1 13/16"/60-190	1-13/16"	60	93	90	74	14	9	75	15	8.5	10	190	155	170
B-1 13/16"/65-85	1-13/16"	65	98	98	80	14	9	80	15	8.5	10	85	50	65
B-1 13/16"/65-135	1-13/16"	65	98	98	80	14	9	80	15	8.5	10	135	100	115
B-1 13/16"/65-185	1-13/16"	65	98	98	80	14	9	80	15	8.5	10	185	150	165
B-2 1/8"/65-85	2-1/8"	65	98	98	80	14	9	80	15	8.5	10	85	50	65
B-2 1/8"/65-135	2-1/8"	65	98	98	80	14	9	80	15	8.5	10	135	100	115
B-2 1/8"/65-185	2-1/8"	65	98	98	80	14	9	80	15	8.5	10	185	150	165

TYPE BI

HYDRO-GRIP SLEEVES - INTERCHANGEABLE
PRESSURIZED WITH ALLEN WRENCH

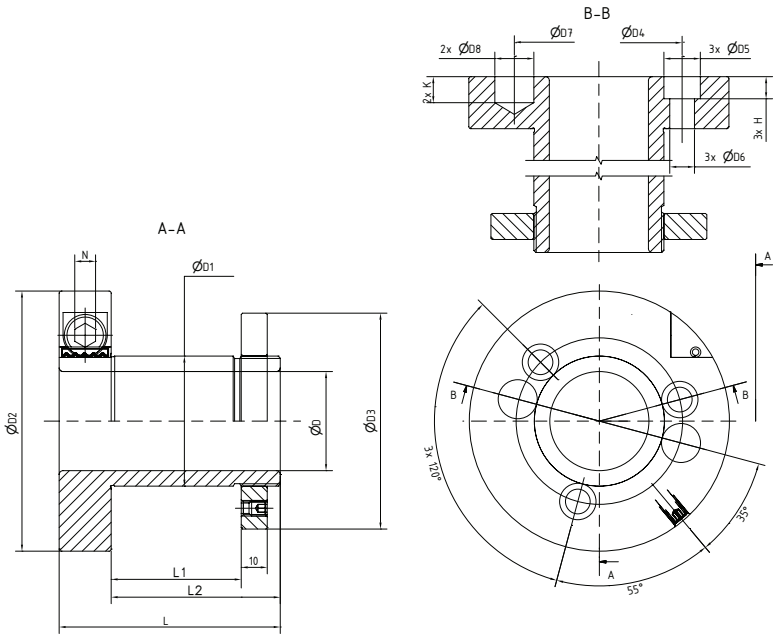


DESIGN:

- » High precision hydraulic sleeves provided with threaded and knurled ring nut
- » Manufactured to a G6 spindle tolerance and a H7 bore tolerance
- » Tool is bolted to the sleeve's collar
- » Sleeves can be easily interchanged between tools
- » When pressurized, the outer sleeve expands against the tool and the inner sleeve against the spindle
- » Sleeve pressurized by tightening a pressure screw with a T-handle allen wrench
- » No grease pump required

APPLICATION:

- » For interchangeable tools or tool assemblies



PART NO.	BORE ØD	DIAM. ØD1 MM	D2 MM	D3 MM	D4 MM	D5 MM	D6 MM	D7 MM	D8 MM	H MM	K MM	L MM	L1 MM	L2 MM	N MM
BI-40/50-75	40mm	50	100	83	64	14	9	65	15	8.5	10	75	40	55	8
BI-40/60-75	40mm	60	102	90	74	14	9	75	15	8.5	10	75	40	55	8
BI-40/60-95	40mm	60	108	90	74	14	9	75	15	8.5	10	95	60	75	8
BI-40/60-115	40mm	60	108	90	74	14	9	75	15	8.5	10	115	80	95	8
BI-50/60-75 ■	50mm	60	102	90	74	14	9	75	15	8.5	10	75	40	55	8
BI-50/60-95 ■	50mm	60	108	90	74	14	9	75	15	8.5	10	95	60	75	8
BI-50/60-115 ■	50mm	60	108	90	74	14	9	75	15	8.5	10	115	80	95	8
BI-1 1/2"/50-85	1-1/2"	50	106	83	64	14	9	65	15	8.5	10	85	50	65	8
BI-1 1/2"/50-135	1-1/2"	50	106	83	64	14	9	65	15	8.5	10	135	100	115	8
BI-1 13/16"/60-75	1-13/16"	60	102	90	74	14	9	75	15	8.5	10	75	40	55	8
BI-1 13/16"/60-115	1-13/16"	60	108	90	74	14	9	75	15	8.5	10	115	80	95	8
BI-1 13/16"/60-140	1-13/16"	60	108	90	74	14	9	75	15	8.5	10	140	105	120	8
BI-1 13/16"/65-85	1-13/16"	65	108	98	80	14	9	80	15	8.5	10	85	50	65	8
BI-2 1/8"/65-85	2-1/8"	65	108	98	80	14	9	80	15	8.5	10	85	50	65	8

■ BI Ø50 has two threaded M8-holes for carrier pegs on a 70mm pitch diameter

HYDRO-GRIP SLEEVES - INTERCHANGEABLE
PRESSURIZED WITH ALLEN WRENCH

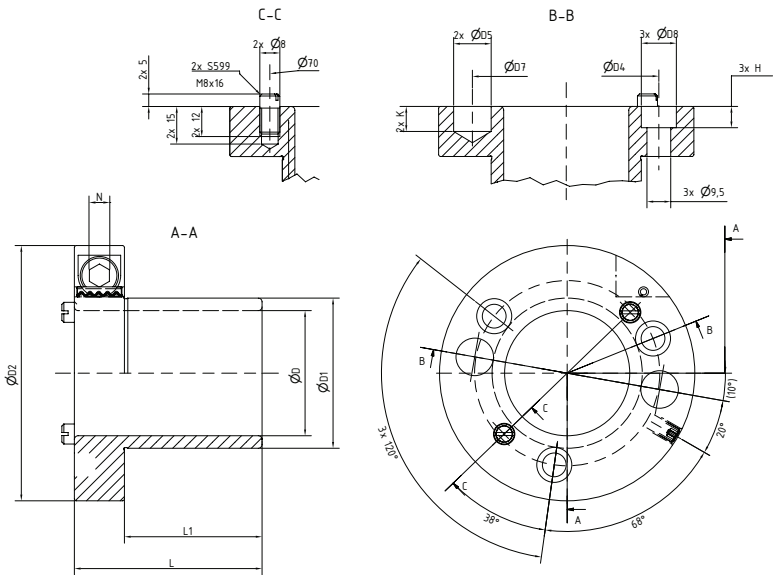


DESIGN:

- » High precision hydraulic sleeves
- » Manufactured to a G6 spindle tolerance and a H7 bore tolerance
- » Tool is bolted to the sleeve's collar
- » Sleeves can be easily interchanged between tools
- » When pressurized, the outer sleeve expands against the tool and the inner sleeve against the spindle
- » Sleeve pressurized by tightening a pressure screw with a T-handle allen wrench
- » No grease pump required

APPLICATION:

- » For interchangeable tools or tool assemblies



PART NO.	BORE ØD MM	DIAM. ØD1 MM	D2 MM	D4 MM	D5 MM	D6 MM	D7 MM	D8 MM	H MM	K MM	L MM	L1 MM	N MM
CI-40/50-75	40	50	100	64	14	9	65	15	8.5	10	75	55	8
CI-40/60-75	40	60	102	74	14	9	75	15	8.5	10	75	55	8
CI-40/60-95	40	60	108	74	14	9	75	15	8.5	10	95	75	8
CI-40/60-115	40	60	108	74	14	9	75	15	8.5	10	115	95	8
CI-40/60-140 ▲	40	60	114	74	14	9	75	15	8.5	10	140	115	10
CI-50/60-75 ■	50	60	102	74	14	9	75	15	8.5	10	75	55	8
CI-50/60-95 ■	50	60	108	74	14	9	75	15	8.5	10	95	75	8
CI-50/60-115 ■	50	60	108	74	14	9	75	15	8.5	10	115	95	8
CI-50/60-140 ▲	50	60	114	74	14	9	75	15	8.5	10	140	115	10

■ CI Ø50 has two threaded M8-holes for carrier pegs on a 70mm pitch diameter

▲ The sleeve has two threaded M8-holes for carrier pegs on a 68mm pitch diameter

EI-40/60-92



DESIGN:

- » High precision hydraulic sleeves
- » Manufactured to a G6 spindle tolerance and a H7 bore tolerance
- » Tool is bolted to the sleeve's collar
- » Sleeve is supplied with an internal hexagonal insert in the collar
- » Sleeves can be easily interchanged between tools
- » When pressurized, the outer sleeve expands against the tool and the inner sleeve against the spindle
- » Sleeve pressurized by tightening a pressure screw with a T-handle allen wrench
- » No grease pump required

MACHINE TYPE:

- » For machines with hexagonal spindle profile

EI-40/80-92



TYPE EI2:EIS

HYDRO-GRIP SLEEVES - INTERCHANGEABLE
PRESSURIZED WITH ALLEN WRENCH

EI2-40/60-96



DESIGN:
» High precision hydraulic sleeves
» Manufactured to a G6 spindle tolerance and a H7 bore tolerance
» Tool is bolted to the sleeve's collar
» Sleeves can be easily interchanged between tools
» When pressurized, the outer sleeve expands against the tool and the inner sleeve against the spindle
» Sleeve pressurized by tightening a pressure screw with a T-handle allen wrench
» No grease pump required

APPLICATION:
» For interchangeable tools or tool assemblies

MACHINE TYPE:
» For machines with hexagonal spindle profile

EIS-40/60-92



DX10/DX11 CORRUGATED BACK KNIVES
D2 STEEL



DESIGN:
» Solid D2 high carbon, high chrome steel
» Precision ground serrations (60°, 1.6mm pitch) ensures tight and accurate positioning of knives onto toolheads

APPLICATION:
» Used primarily in softwood production and short runs in hardwoods

ADVANTAGES:
» Resistant to chipping and nicks
» Ideal for use where there is high moisture content
» Resists chemical erosion found in such woods as cedar and redwood

PART NO.	LENGTH L	HEIGHT H	THICKNESS T
DX10114	25"	1-1/4"	1/4"
DX10112	25"	1-1/2"	1/4"
DX10134	25"	1-3/4"	1/4"
DX10200	25"	2"	1/4"
DX10214	25"	2-1/4"	1/4"
DX10212	25"	2-1/2"	1/4"
DX11112	25"	1-1/2"	5/16"
DX11134	25"	1-3/4"	5/16"
DX11200	25"	2"	5/16"
DX11214	25"	2-1/4"	5/16"
DX11212	25"	2-1/2"	5/16"
DX11234	25"	2-3/4"	5/16"
DX11300	25"	3"	5/16"

2610/2611 CORRUGATED BACK KNIVES
M2 STEEL



DESIGN:
» Solid M2 high speed steel with 6% tungsten content
» Precision ground serrations (60°, 1.6mm pitch) ensures tight and accurate positioning of knives onto toolheads

APPLICATION:
» Used for longer runs than D2 in softwoods and hardwoods

ADVANTAGES:
» Consistent hardness with high molybdenum content that allows for easy grinding
» Higher wear resistance in harder materials
» Retains edge in medium to long production runs

PART NO.	LENGTH L	HEIGHT H	THICKNESS T
2610114	25"	1-1/4"	1/4"
2610112	25"	1-1/2"	1/4"
2610134	25"	1-3/4"	1/4"
2610200	25"	2"	1/4"
2610214	25"	2-1/4"	1/4"
2610212	25"	2-1/2"	1/4"
2611112	25"	1-1/2"	5/16"
2611134	25"	1-3/4"	5/16"
2611200	25"	2"	5/16"
2611214	25"	2-1/4"	5/16"
2611212	25"	2-1/2"	5/16"
2611234	25"	2-3/4"	5/16"
2611300	25"	3"	5/16"

2710/2711 CORRUGATED BACK KNIVES
T1 STEEL



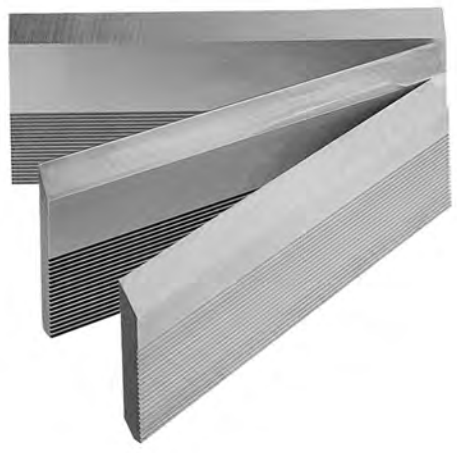
DESIGN:
» Solid T1 high speed steel with 18% tungsten content
» Precision ground serrations (60°, 1.6mm pitch) ensures tight and accurate positioning of knives onto toolheads

APPLICATION:
» Used for longer runs than M2 in softwoods and hardwoods

ADVANTAGES:
» Higher wear resistance in harder materials due to increased tungsten content
» Retains edge in long production runs

PART NO.	LENGTH L	HEIGHT H	THICKNESS T
2710114	25"	1-1/4"	1/4"
2710112	25"	1-1/2"	1/4"
2710134	25"	1-3/4"	1/4"
2710200	25"	2"	1/4"
2711112	25"	1-1/2"	5/16"
2711134	25"	1-3/4"	5/16"
2711200	25"	2"	5/16"
2711214	25"	2-1/4"	5/16"
2711212	25"	2-1/2"	5/16"
2711234	25"	2-3/4"	5/16"
2711300	25"	3"	5/16"

ST-1 CORRUGATED BACK KNIVES
SUPER TECH

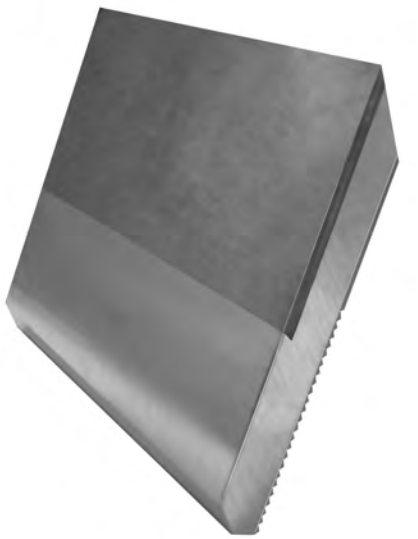


DESIGN:
» Solid M2 steel with special coating
» Precision ground serrations (60°, 1.6mm pitch) ensures tight and accurate positioning of knives onto toolheads

APPLICATION:
» For surface planing and profiling soft and hardwoods

ADVANTAGES:
» Up to 10 times longer cutting life
» Superior surface finish
» Increased cutting life dramatically reduces downtime
» Cutting edge is more resistant to knots and exotic woods minimizing edge chipping
» Reduces noise levels due to lower cutting resistance
» Easy to grind using standard grinding wheels normally used for grinding HSS knives

PART NO.	LENGTH L	HEIGHT H	THICKNESS T
2611112ST	25"	1-1/2"	5/16"
2611134ST	25"	1-3/4"	5/16"
2611200ST	25"	2"	5/16"
2611214ST	25"	2-1/4"	5/16"
2611212ST	25"	2-1/2"	5/16"
2611234ST	25"	2-3/4"	5/16"



DESIGN:

» Solid HSS knives with brazed tungsten carbide inlay
» Precision ground serrations (60°, 1.6mm pitch) ensures tight and accurate positioning of knives onto toolheads

APPLICATION:

» For surface planing and profiling hardwoods, solid woods with glue lines, exotic woods and MDF



SPECIAL PRODUCTION

CARBIDE INLAY (H1) OF: 14MM, 20MM		
L MM	H MM	T MM
40	40	10
50	40	10
60	40	10
70	40	10
80	40	10
90	40	10
100	40	10
120	40	10
130	40	10
150	40	10
170	40	10
180	40	10
200	40	10
210	40	10
230	40	10
260	40	10
310	40	10

SPECIAL PRODUCTION

CARBIDE INLAY (H1) OF: 20MM, 25MM		
L MM	H MM	T MM
40	50	10
50	50	10
60	50	10
70	50	10
80	50	10
90	50	10
100	50	10
120	50	10
130	50	10
150	50	10
170	50	10
180	50	10
200	50	10
210	50	10
230	50	10
260	50	10
310	50	10

SPECIAL PRODUCTION

CARBIDE INLAY (H1) OF: 25MM, 30MM, 35MM		
L MM	H MM	T MM
40	60	10
50	60	10
60	60	10
70	60	10
80	60	10
90	60	10
100	60	10
120	60	10
130	60	10
150	60	10
170	60	10
180	60	10
200	60	10
210	60	10
230	60	10
260	60	10
310	60	10

SPECIAL PRODUCTION

CARBIDE INLAY (H1) OF: 30MM, 35MM		
L MM	H MM	T MM
40	70	10
50	70	10
60	70	10
70	70	10
80	70	10
90	70	10
100	70	10
120	70	10
130	70	10
150	70	10
170	70	10
180	70	10
200	70	10
210	70	10
230	70	10
260	70	10
310	70	10



DESIGN:

» Solid HSS knives with brazed stellite inlay
» Precision ground serrations (60°, 1.6mm pitch) ensures tight and accurate positioning of knives onto toolheads

APPLICATION:

» For surface planing and profiling hardwoods
» For solid wood with glue lines and exotic woods, see carbide inlay knives on page C23



SPECIAL PRODUCTION

L MM	H MM	T MM	H1 MM
40	55	10	25
50	55	10	25
60	55	10	25
80	55	10	25
100	55	10	25
130	55	10	25
150	55	10	25
165	55	10	25
180	55	10	25
210	55	10	25
230	55	10	25
260	55	10	25
300	55	10	25
310	55	10	25
350	55	10	25

SPECIAL PRODUCTION

L MM	H MM	T MM	H1 MM
40	60	10	32
50	60	10	32
60	60	10	32
80	60	10	32
100	60	10	32
130	60	10	32
150	60	10	32
165	60	10	32
180	60	10	32
210	60	10	32
230	60	10	32
260	60	10	32
300	60	10	32
310	60	10	32
350	60	10	32

SPECIAL PRODUCTION

L MM	H MM	T MM	H1 MM
40	70	10	45
50	70	10	45
60	70	10	45
80	70	10	45
100	70	10	45
130	70	10	45
150	70	10	45
165	70	10	45
180	70	10	45
210	70	10	45
230	70	10	45
260	70	10	45
300	70	10	45
310	70	10	45
350	70	10	45

COMBI-CUT

PERCISION TOOLS



» DESIGN

Separate TC knife and steel backing plate allows for:

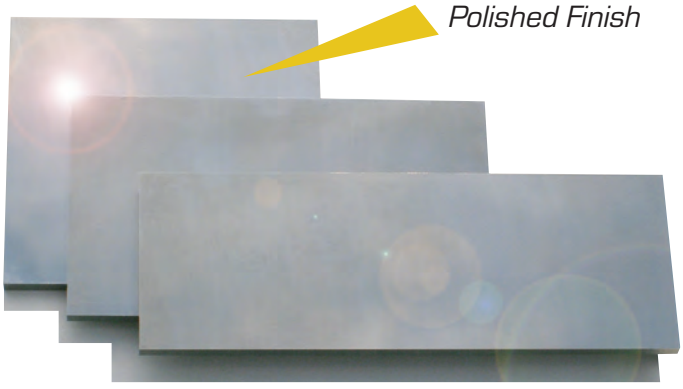
- Faster profiling/grinding process at reduced costs
- Sharper cutting edges and better finishes
- Longer tool life
- Greater design options

» APPLICATION

For machining abrasive work piece materials on moulders: **MDF, hardwoods, coated chipboards, and fibre materials.**

TC knives and backers available in 40, 50, 60, 80, 100, 120, 130, 150, 170, 180, 200, 210, 230mm length & 38, 50, 60mm knife height *Other sizes available upon request.*

- Knife blanks are face polished for maximum sharpness/ cutting edge quality
- Serrations on TC knives allow for constant diameter after grinding
- Backers do not need to get touched for sharpening
- Greater profile depths, depending on knife height



FS TOOL

Part numbers and specifications on the back...

PART NO: SETS	L MM	H MM	T MM
3030S04038	40	38	10
3030S05038	50	38	10
3030S06038	60	38	10
3030S08038	80	38	10
3030S10038	100	38	10
3030S12038	120	38	10
3030S13038	130	38	10
3030S15038	150	38	10
3030S17038	170	38	10
3030S18038	180	38	10
3030S20038	200	38	10
3030S21038	210	38	10
3030S23038	230	38	10
3030S04050	40	50	10
3030S05050	50	50	10
3030S06050	60	50	10
3030S08050	80	50	10
3030S10050	100	50	10
3030S12050	120	50	10
3030S13050	130	50	10
3030S15050	150	50	10
3030S17050	170	50	10
3030S18050	180	50	10
3030S20050	200	50	10
3030S21050	210	50	10
3030S23050	230	50	10
3030S04060	40	60	10
3030S05060	50	60	10
3030S06060	60	60	10
3030S08060	80	60	10
3030S10060	100	60	10
3030S12060	120	60	10
3030S13060	130	60	10
3030S15060	150	60	10
3030S17060	170	60	10
3030S18060	180	60	10
3030S20060	200	60	10
3030S21060	210	60	10
3030S23060	230	60	10

PART NO: KNIVES ONLY	L MM	H MM	T MM
3030C04038	40	38	3.2
3030C05038	50	38	3.2
3030C06038	60	38	3.2
3030C08038	80	38	3.2
3030C10038	100	38	3.2
3030C12038	120	38	3.2
3030C13038	130	38	3.2
3030C15038	150	38	3.2
3030C17038	170	38	3.2
3030C18038	180	38	3.2
3030C20038	200	38	3.2
3030C21038	210	38	3.2
3030C23038	230	38	3.2
3030C04050	40	50	3.2
3030C05050	50	50	3.2
3030C06050	60	50	3.2
3030C08050	80	50	3.2
3030C10050	100	50	3.2
3030C12050	120	50	3.2
3030C13050	130	50	3.2
3030C15050	150	50	3.2
3030C17050	170	50	3.2
3030C18050	180	50	3.2
3030C20050	200	50	3.2
3030C21050	210	50	3.2
3030C23050	230	50	3.2
3030C04060	40	60	3.2
3030C05060	50	60	3.2
3030C06060	60	60	3.2
3030C08060	80	60	3.2
3030C10060	100	60	3.2
3030C12060	120	60	3.2
3030C13060	130	60	3.2
3030C15060	150	60	3.2
3030C17060	170	60	3.2
3030C18060	180	60	3.2
3030C20060	200	60	3.2
3030C21060	210	60	3.2
3030C23060	230	60	3.2

PART NO: BACKERS ONLY	L MM	H MM	T MM
3030A04038	40	35	7.1
3030A05038	50	35	7.1
3030A06038	60	35	7.1
3030A08038	80	35	7.1
3030A10038	100	35	7.1
3030A12038	120	35	7.1
3030A13038	130	35	7.1
3030A15038	150	35	7.1
3030A17038	170	35	7.1
3030A18038	180	35	7.1
3030A20038	200	35	7.1
3030A21038	210	35	7.1
3030A23038	230	35	7.1
3030A04050	40	47	7.1
3030A05050	50	47	7.1
3030A06050	60	47	7.1
3030A08050	80	47	7.1
3030A10050	100	47	7.1
3030A12050	120	47	7.1
3030A13050	130	47	7.1
3030A15050	150	47	7.1
3030A17050	170	47	7.1
3030A18050	180	47	7.1
3030A20050	200	47	7.1
3030A21050	210	47	7.1
3030A23050	230	47	7.1
3030A04060	40	57	7.1
3030A05060	50	57	7.1
3030A06060	60	57	7.1
3030A08060	80	57	7.1
3030A10060	100	57	7.1
3030A12060	120	57	7.1
3030A13060	130	57	7.1
3030A15060	150	57	7.1
3030A17060	170	57	7.1
3030A18060	180	57	7.1
3030A20060	200	57	7.1
3030A21060	210	57	7.1
3030A23060	230	57	7.1

L = Length
H = Height
T = Thickness



DESIGN:

» Solid T1 steel (18% w) knives
» Precision ground

APPLICATION:

» For surface planing hardwoods
» For exotic woods or solid woods with glue lines use tungsten carbide inlaid knives on pages C28 - C31

MACHINE TYPE:

» On surface planers, jointers, four sided planers and moulders

Thin Planing Knives
Precision ground and sharpened

2501 HSS 18% W

Standard Dimensions

Special dimensions
Single piece production

2501 HSS 18% W

Priced per meter

For Lengths from 200 to 1000mm (8" to 40")

» 30 x 3mm (1-3/16" x 1/8")
» 35 x 3mm (1-3/8" x 1/8")

Extra charges for other lengths on request.
Extra charges for knives with slots and holes on request.

PART NO.	DIMENSIONS - L X H X T	
	INCH	MM
25 120 303	4-3/4" x 1-3/16" x 1/8"	120 x 30 x 3
25 130 303	5-1/8" x 1-3/16" x 1/8"	130 x 30 x 3
25 150 303	6" x 1-3/16" x 1/8"	150 x 30 x 3
25 160 303	6-1/4" x 1-3/16" x 1/8"	160 x 30 x 3
25 170 303	6-3/4" x 1-3/16" x 1/8"	170 x 30 x 3
25 180 303	7" x 1-3/16" x 1/8"	180 x 30 x 3
25 210 303	8-1/4" x 1-3/16" x 1/8"	210 x 30 x 3
25 230 303	9" x 1-3/16" x 1/8"	230 x 30 x 3
25 260 303	10-1/4" x 1-3/16" x 1/8"	260 x 30 x 3
25 410 303	16" x 1-3/16" x 1/8"	410 x 30 x 3
25 510 303	20" x 1-3/16" x 1/8"	510 x 30 x 3
25 610 303	24" x 1-3/16" x 1/8"	610 x 30 x 3
25 640 303	25" x 1-3/16" x 1/8"	640 x 30 x 3
251066303	39-1/2" x 1-3/16" x 1/8"	1000 x 30 x 3
25 400 353	15-3/4" x 1-3/8" x 1/8"	400 x 35 x 3
25 410 353	16" x 1-3/8" x 1/8"	410 x 35 x 3
25 450 353	17-3/4" x 1-3/8" x 1/8"	450 x 35 x 3
25 500 353	19-5/8" x 1-3/8" x 1/8"	500 x 35 x 3
25 510 353	20" x 1-3/8" x 1/8"	510 x 35 x 3
25 600 353	23-5/8" x 1-3/8" x 1/8"	600 x 35 x 3
25 610 353	24" x 1-3/8" x 1/8"	610 x 35 x 3
25 630 353	24-3/4" x 1-3/8" x 1/8"	630 x 35 x 3
25 640 353	25" x 1-3/8" x 1/8"	640 x 35 x 3
251066353	39-1/2" x 1-3/8" x 1/8"	1000 x 35 x 3



DESIGN:

» Solid M2 steel
» Precision ground

APPLICATION:

» For surface planing soft and hardwoods
» For exotic woods or solid woods with glue lines, use tungsten carbide inlaid knives on pages C28 - C31

MACHINE TYPE:

» On surface planers, jointers, four sided planers and moulders

Thin Planing Knives
Precision ground and sharpened

2602 HSS M2

Standard Dimensions

Special dimensions
Single piece production

2602

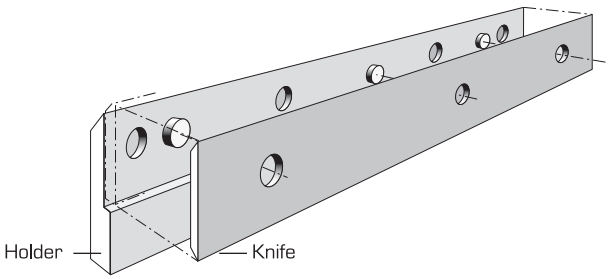
Priced per meter - For lengths from 200 to 1000mm (8" to 40")

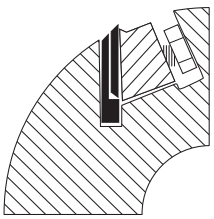
» 30 x 3mm (1-3/16" x 1/8")
» 35 x 3mm (1-3/8" x 1/8")

PART NO.	DIMENSIONS L X H X T (INCHES)
26040051	4" x 5/8" x 1/8"
26040071	4" x 7/8" x 1/8"
26051061	5-1/16" x 3/4" x 1/8"
26060051	6" x 5/8" x 1/8"
26060071	6" x 7/8" x 1/8"
26060101	6" x 1" x 1/8"
26061061	6-1/16" x 3/4" x 1/8"
26062051	6-1/8" x 3/4" x 1/8"
26068101	6-1/2" x 1" x 1/8"
26080051	8" x 5/8" x 1/8"
26080061	8" x 3/4" x 1/8"
26080071	8" x 7/8" x 1/8"
26080101	8" x 1" x 1/8"
26084121	8-1/4" x 1-1/4" x 1/8"
26120051	12" x 5/8" x 1/8"
26120061	12" x 3/4" x 1/8"
26120071	12" x 7/8" x 1/8"

PART NO.	DIMENSIONS L X H X T (INCHES)
26120101	12" x 1" x 1/8"
26121051	12-1/4" x 5/8" x 1/8"
26121061	12-1/4" x 3/4" x 1/8"
26121101	12-1/4" x 1" x 1/8"
26160101	16" x 1" x 1/8"
26200101	20" x 1" x 1/8"
26240115	24" x 1-1/8" x 5/32"
26240145	24 x 1-1/2" x 5/32"
26250051	25" x 5/8" x 1/8"
26250061	25" x 3/4" x 1/8"
26250121	25" x 1-1/4" x 1/8"
26250125	25" x 1-1/4" x 5/32"
26300141	30" x 1-1/2" x 1/8"
26370111	37" x 1-1/8" x 1/8"
26370125	37" x 1-1/4" x 5/32"
26370131	37" x 1-3/8" x 1/8"
26370135	37" x 1-3/8" x 5/32"
26370145	37" x 1-1/2" x 5/32"

PLANING KNIVES
DISPOSABLE DOUBLE-EDGED





DESIGN:
» Precision made knife holder for easy and accurate knife positioning
» Precision ground reversible knives

APPLICATION:
» For surface planing of solid wood
» Can be fitted into any planing toolheads and jointer heads
» On surface planers, jointers, four sided planers and moulders

FOR PLANING HEADS & JOINTING HEADS
Reduction of cost is one of the major features of our double-edged knife system. The price of double-edged knives is lower than reusable knives, and the knife holder is a non-recurrent investment easily amortised by the savings of knife cost.

Knife cost is cut to 80% and set-up is decreased by 400%.
More detailed instructions are available with separate brochure.

KNIFE LENGTH		KNIFE HOLDER 25x3mm / 1"x1/8"	DOUBLE EDGE KNIFE 18.6 x 1.0mm
MM	INCH	PART NO.	PART NO.
60	2-3/8"	29H060	299060
80	3-1/8"	29H080	299080
100	4"	29H100	299100
105	-	29H105	299105
120	4-3/4"	29H120	299120
125	-	29H125	299125
130	5-1/8"	29H130	299130
136	-	29H136	299136
140	-	29H140	299140
150	6"	29H150	299150
150 (3/4" H)	6" (3/4" H)	29H150-19	299150
160	6"	29H160	299160
170	-	29H170	299170
180	7"	29H180	299180
180 (3/4" H)	7" (3/4" H)	29H180-19	299180
186	-	29H186	299186
190	-	29H190	299190
190 (3/4" H)	7-1/2" (3/4" H)	29H190-19	299190
200	8"	29H200	299200
200 (3/4" H)	8" (3/4" H)	29H200-19	299200
210	8-1/4"	29H210	299210
230	9"	29H230	299230
240	-	29H240	299240
250	10"	29H250	299250
260	-	29H260	299260

KNIFE LENGTH		KNIFE HOLDER 25x3mm / 1"x1/8"	DOUBLE EDGE KNIFE 18.6 x 1.0mm
MM	INCH	PART NO.	PART NO.
300	-	29H300	299300
305	12"	29H305	299305
310	12-1/4"	29H310	299310
350	13-3/4"	29H350	299350
360	14-1/8"	29H360	299360
400	15-3/4"	29H400	299400
410	16-1/4"	29H410	299410
420	-	29H420	299420
430	-	29H430	299430
450	-	29H450	299450
460	18-1/8"	29H460	299460
500	-	29H500	299500
510	-	29H510	299510
520	-	29H520	299520
530	-	29H530	299530
600	-	29H600	299600
610	24"	29H610	299610
630	-	29H630	299630
640	-	29H640	299640
650	-	29H650	299650
660	-	29H660	299660
710	-	29H710	299710
740	-	29H740	299740
760	-	29H760	299760
810	-	29H810	299810



DESIGN:

» Brazed tungsten carbide inlay
» Tungsten carbide inlay ground to a polish surface finish

APPLICATION:

» For surface planing hardwoods, exotic woods and solid woods with glue lines

The knives are ground flat, sharpened and honed with fine grit diamond wheels.

Especially suitable for: all hardwoods (particularly exotics), pressed wood, layered wood, hard paper, hardweave, and all laminated materials.

SPECIAL SIZES
Single Piece Production
Part No.: 3001 000 00

Length	(L)	100 to 810mm or 4" to 32"
Height	(H)	25, 30, 35mm or 1", 1-1/4", 1-1/8"
Thickness	(T)	3mm (1/8") and 4mm (5/32")

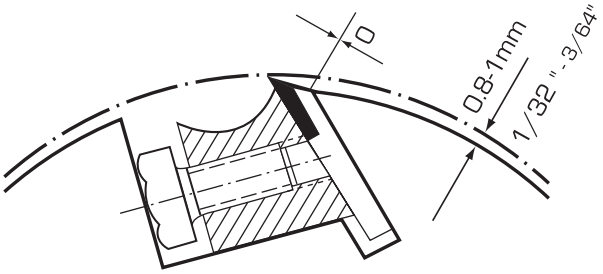
Thickness of Knife	(T)	=	2.8mm (7/64")	+	5% Surcharge
Thickness of Knife	(T)	=	2.5mm (3/32")	+	10% Surcharge
Thickness of Knife	(T)	=	4.0mm (5/32")	+	10% Surcharge
Height of Knife	(H)	=	40mm (1-1/2")	+	10% Surcharge
Height of Knife	(H)	=	Less than 25mm (1")	+	10% Surcharge

INSTRUCTIONS FOR SETTING CARBIDE TIPPED KNIVES ONTO PLANING AND JOINTING HEADS:

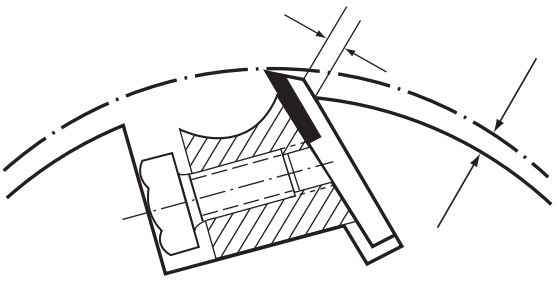
The cutting edge must not protrude more than 1.0mm, or 3/64", see sketches.

Correct setting: To protrude between 0.8 and 1.0mm (1/32" and 3/64").

CORRECT SETTING



INCORRECT SETTING





DESIGN:

» Brazed tungsten carbide inlay
» Tungsten carbide inlay ground to a polished surface finish
» Depth of tungsten carbide inlay 11mm

APPLICATION:

» For surface planing hardwoods, exotic woods and solid woods with glue lines
» The knives are ground flat, sharpened and honed with fine grit diamond wheels
» Especially suitable for: all hardwoods (particularly exotics), pressed wood, layered wood, hard paper, hardweave and all laminated materials

Height = 25MM

PART NO.	DIMENSIONS L X H X T (MM)
30 060 253	60 x 25 x 3
30 080 253	80 x 25 x 3
30 090 253	90 x 25 x 3
30 100 253	100 x 25 x 3
30 110 253	110 x 25 x 3
30 120 253	120 x 25 x 3
30 130 253	130 x 25 x 3
30 140 253	140 x 25 x 3
30 150 253	150 x 25 x 3
30 180 253	180 x 25 x 3
30 200 253	200 x 25 x 3
30 210 253	210 x 25 x 3
30 230 253	230 x 25 x 3
30 250 253	250 x 25 x 3
30 260 253	260 x 25 x 3
30 300 253	300 x 25 x 3
30 310 253	310 x 25 x 3
30 350 253	350 x 25 x 3
30 410 253	410 x 25 x 3
30 510 253	510 x 25 x 3

Height = 30MM

PART NO.	DIMENSIONS L X H X T (MM)
30 060 303	60 x 30 x 3
30 080 303	80 x 30 x 3
30 090 303	90 x 30 x 3
30 100 303	100 x 30 x 3
30 110 303	110 x 30 x 3
30 120 303	120 x 30 x 3
30 130 303	130 x 30 x 3
30 140 303	140 x 30 x 3
30 150 303	150 x 30 x 3
30 160 303	160 x 30 x 3
30 170 303	170 x 30 x 3
30 180 303	180 x 30 x 3
30 200 303	200 x 30 x 3
30 210 303	210 x 30 x 3
30 230 303	230 x 30 x 3
30 240 303	240 x 30 x 3
30 250 303	250 x 30 x 3
30 260 303	260 x 30 x 3
30 300 303	300 x 30 x 3
30 310 303	310 x 30 x 3
30 350 303	350 x 30 x 3
30 400 303	400 x 30 x 3
30 410 303	410 x 30 x 3
30 450 303	450 x 30 x 3
30 500 303	500 x 30 x 3
30 510 303	510 x 30 x 3
30 600 303	600 x 30 x 3
30 610 303	610 x 30 x 3
30 630 303	630 x 30 x 3
30 640 303	640 x 30 x 3
30 710 303	710 x 30 x 3
30 810 303	810 x 30 x 3

Height = 35MM

PART NO.	DIMENSIONS L X H X T (MM)
30 060 353	60 x 35 x 3
30 080 353	80 x 35 x 3
30 090 353	90 x 35 x 3
30 100 353	100 x 35 x 3
30 120 353	120 x 35 x 3
30 130 353	130 x 35 x 3
30 150 353	150 x 35 x 3
30 170 353	170 x 35 x 3
30 180 353	180 x 35 x 3
30 200 353	200 x 35 x 3
30 210 353	210 x 35 x 3
30 230 353	230 x 35 x 3
30 250 353	250 x 35 x 3
30 260 353	260 x 35 x 3
30 300 353	300 x 35 x 3
30 310 353	310 x 35 x 3
30 350 353	350 x 35 x 3
30 400 353	400 x 35 x 3
30 410 353	410 x 35 x 3
30 450 353	450 x 35 x 3
30 500 353	500 x 35 x 3
30 510 353	510 x 35 x 3
30 600 353	600 x 35 x 3
30 610 353	610 x 35 x 3
30 630 353	630 x 35 x 3
30 640 353	640 x 35 x 3
30 710 353	710 x 35 x 3
30 810 353	810 x 35 x 3



DESIGN:

» Brazed tungsten carbide inlay
» Tungsten carbide inlay ground to a polished surface finish
» Depth of tungsten carbide inlay 7.5mm for knives 5/8 height, all others supplied with 11mm inlay

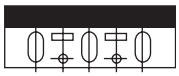
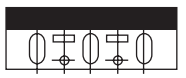
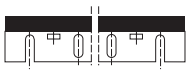
APPLICATION:

» For surface planing hardwoods, exotic woods and solid woods with glue lines
» The knives are ground flat, sharpened and honed with fine grit diamond wheels
» Especially suitable for: all hardwoods (particularly exotics), pressed wood, layered wood, hard paper, hardweave and all laminated materials

PART NO.	DIMENSIONS L X H X T (MM)
30040051	4" x 5/8" x 1/8"
30040071	4" x 7/8" x 1/8"
30051061	5-1/16" x 3/4" x 1/8"
30060051	6" x 5/8" x 1/8"
30060061	6" x 3/4" x 1/8"
30060071	6" x 7/8" x 1/8"
30060101	6" x 1" x 1/8"
30061061	6-1/16" x 3/4" x 1/8"
30062071	6-1/8" x 3/4" x 1/8"
30068101	6-1/2" x 1" x 1/8"
30080051	8" x 5/8" x 1/8"
30080061	8" x 3/4" x 1/8"
30080071	8" x 7/8" x 1/8"
30080101	8" x 1" x 1/8"
30084121	8-1/4" x 1-1/4" x 1/8"
30120051	12" x 5/8" x 1/8"
30120061	12" x 3/4" x 1/8"
30120071	12" x 7/8" x 1/8"
30120101	12" x 1" x 1/8"
30121051	12-1/4" x 5/8" x 1/8"
30121061	12-1/4" x 3/4" x 1/8"
30121101	12-1/4" x 1" x 1/8"
30122071	12-1/2" x 15/16" x 1/8"

PART NO.	DIMENSIONS L X H X T (MM)
30131065	13-1/8" x 1-1/16" x 5/32"
30141061	14-1/8" x 3/4" x 1/8"
30180115	18" x 1-1/8" x 5/32"
30190061	19" x 1-1/16" x 1/8"
30200101	20" x 1" x 1/8"
30240115	24" x 1-1/8" x 5/32"
30240145	24" x 1-1/2" x 5/32"
30250051	25" x 5/8" x 1/8"
30250061	25" x 3/4" x 1/8"
30250121	25" x 1-1/4" x 1/8"
30250125	25" x 1-1/4" x 5/32"
30300141	30" x 1-1/2" x 1/8"

PLANING KNIVES FOR PORTABLE MACHINES
HSS AND CARBIDE TIPPED

MACHINE	SHAPE	MODEL	DIMENSIONS	L X W X T MM	CARBIDE PART NO.	HSS PART NO.
AEG		HTH 75		76 x 20 x 3	3076203	2076203
		EH 82 H 822		82 x 18 x 3	3082183	2082183
BLACK & DECKER			3-1/4" x 1-1/8" x 1/8"	82 x 29 x 3	3082293	2082293
MAKITA		1900 B 1923 B 1100 1125 1001	3-1/4" x 1-1/8" x 1/8"	82 x 29 x 3	3M82293	2M82293
		1911 B	4-3/8" x 1-1/8" x 1/8"	110 x 29 x 3	3110293	2110293
		1805 1805 N 1805 B	6-1/16" x 1-1/4" x 1/8"	155 x 32 x 3	3155323	2155323
		1806 B	6-11/16" x 1-3/8" x 1/8"	170 x 35 x 3	3170353	2170353
SKIL		60506	3" x 1-1/8" x 1/8"	77 x 28.6 x 3.15	3077283	2077283
		96 H	3-1/4" x 1-1/8" x 1/8"	82 x 29 x 3	3S82293	2S82293
HITACHI		F20A FU20 FP20	3-1/4" x 1-7/64" x 1/8"	82 x 28 x 3	3082283	2082283
		F30A	3-5/8" x 1-3/16" x 1/8"	92 x 30 x 3	3092303	2092303
		F50A	6-9/64" x 1-7/32" x 1/8"	156 x 31 x 3	30156313	20156313
		F1000A P100F	12-1/2" x 1-3/8" x 5/32"	317 x 35 x 4	30317354	20317354
		F1000	6-5/16" x 1-3/8" x 5/32"	160 x 35 x 4	30160354	20160354



TOOLHEADS with **DISPOSABLE CARBIDE KNIVES**

Reversible inserts

D

PRODUCT CATEGORY	PAGE NO.
BEAD AND COVE TOOLHEADS	D23
COMPRESSION JOINTING TOOLHEADS	D9
CORNER ROUNDING TOOLHEADS	D22
CORNER ROUNDING/CHAMFERING TOOLHEAD SETS	D17 - D18
ENTRY AND PASSAGE DOOR TOOLHEAD SETS	D29 - D30
GROOVING INSERTS AND PROFILE KNIVES	D57
GROOVING TOOLHEADS	D1 - D2
GROOVING TOOLHEADS - ADJUSTABLE	D3 - D5
GROOVING/RABBETING TOOLHEADS - ADJUSTABLE	D6
GUIDING GROOVE TOOLHEADS	D45
HALF ROUND TOOLHEADS	D24
HELICAL STAGGERED TOOTH TOOLHEADS	D41 - D43
HELICAL TOOLHEADS (FOR SHAPING MACHINES)	D15
MITRE JOINT TOOLHEAD 45°	D21
MULTI-ANGLE TOOLHEADS	D16
MULTI-PROFILE TOOLHEADS	D32 - D36
PANEL RAISING TOOLHEAD SET	D28
PLANING AND JOINTING TOOLHEADS	D7
PLANING TOOLHEADS - CENTRIFUGAL SELF-LOCKING	D44
RABBETING TOOLHEADS	D8
REPLACEMENT PARTS	D58 - D61
ROUNDING AND CAMFERING TOOLHEAD	D31
SHAPING AND PLANING TOOLHEADS	D13 - D14
SOLID CARBIDE KNIVES	D50 - D56
SPIRAL TOOLHEADS	D40
STACKABLE TOOLHEADS	D39
STILE AND RAIL TOOLHEAD SETS	D25 - D27
TONGUE AND GROOVE TOOLHEADS	D46 - D49
TOOLHEADS FOR EDGEBANDERS	D10 - D12
TOOLHEADS FOR TENONING MACHINES	D19 - D20
WINDOW TOOLING	D37 - D38

PART NO.	PAGE NO.
1T13L	D1
1T2001M - 1T2005M	D16
1T2511M - 1T25116M	D46
1T4101M - 1T4102M	D13
1T411M	D14
1T4121M - 1T4123M	D15
1T46622 - 1T46652	D44
1T4710M - 1T4714M	D7
1T4721M - 1T4726M	D8
1T4742M - 1T4745M	D39
1T4751I - 1T4755M	D40
1T47601 - 1T47724	D41
1T48001 - 1T48124	D42
1T4801M - 1T4809M	D9
1T49001 - 1T49022	D43
1T4901M - 1T4904M	D45
1T5001I - 1T5006I	D2
1T5001M - 1T5006M	D2
1T511	D17
1T5201M - 1T5202M	D19
1T5221M - 1T5222M	D20
1T5301M	D21
1T5601M - 1T5608M	D22
1T5651M - 1T5658M	D23
1T5701M - 1T5708M	D24
1T580 - 1T580-40	D31
1T5851M - 1T5853M	D32
1T5871M - 1T5873M	D33
1T5891M - 1T5896M	D35
1T6001M - 1T6004M	D3
1T6201M - 1T6204M	D4
1T6301M	D5
1T6401M - 1T6405M	D6
1TS02F - 1TS02R	D25
1TS03	D26

PART NO.	PAGE NO.
1TS06	D27
1TS08	D28
1TS09	D29
300600 - 355011	D50 - D57
301200XL - 305000XL	D50 - D51
301211 - 306011M	D54
303011S - 306011S	D54
30600601 - 30600618	D56
30700501 - 30700509	D56
401002 - 402020	D57
W300004 - W350056	D58
W400001 - W400502	D60 - D61
W500002 - W502604	D59 - D60

1T13L GROOVING TOOLHEAD (LAMELLO)



DESIGN:

» High tensile steel body
» Reversible tungsten carbide inserts with 4 cutting edges

APPLICATION:

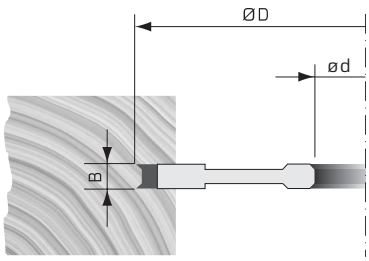
» For chip-free grooving of lamello wood joints
» For solid wood with and against the grain and laminated panels

MACHINES:

» On Lamello and ELU machines for biscuit joints



PART NO.	DIAM. ØD MM	KERF B MM	BORE ød MM	NO. TEETH	NO. SPURS	RPM MIN-MAX
1T13L	100	4	22	4	4	7700-13200



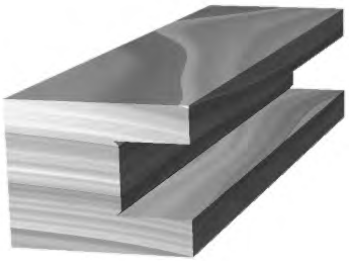
REPLACEMENT PARTS

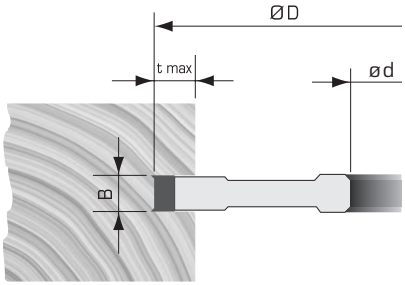


DESCRIPTION	KNIFE	KNIFE SCREW	THREADED RING FOR KNIFE	SPUR	SPUR SCREW	THREADED RING FOR SPUR	WRENCH
PART NO.	320301	W500401	W501101	301414	W500401	W501001	W400401
DIMENSIONS	18x18x1.95	M4x3.2	12x1.7	14x14x1.2	M4x3.2	10x1.65	T9 Torx

1T500 GROOVING TOOLHEADS







DESIGN:

» High tensile steel body
» Reversible tungsten carbide inserts with 2 cutting edges for the teeth and 4 cutting edges for the spurs

APPLICATION:

» For grooving solid wood, plywood, and laminated panels

MACHINES:

» On shapers, double-end tenoners and moulders

METRIC SIZES

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød MM	MAX BORE ød MM	NO. TEETH	NO. SPURS	T-MAX. MM	RPM MIN-MAX
1T5001M	140	8	31.75	50	4	4	32	5500-9200
1T5002M	140	10	31.75	50	4	4	32	5500-9200
1T5003M	140	12	31.75	50	4	4	32	5500-9200
1T5004M	180	8	31.75	60	4	4	45	4200-7200
1T5005M	180	10	31.75	60	4	4	45	4200-7200
1T5006M	180	12	31.75	60	4	4	45	4200-7200

Other sizes available upon request

IMPERIAL SIZES

PART NO.	DIAM. ØD	KERF B	BORE ød	MAX BORE ød	NO. TEETH	NO. SPURS	T-MAX.	RPM MIN-MAX
1T5001I	5-1/2"	1/4"	1-1/4"	2"	4	4	1-1/4"	5500-9200
1T5002I	5-1/2"	3/8"	1-1/4"	2"	4	4	1-1/4"	5500-9200
1T5003I	5-1/2"	1/2"	1-1/4"	2"	4	4	1-1/4"	5500-9200
1T5004I	7-3/32"	1/4"	1-1/4"	2-3/8"	4	4	1-3/4"	4200-7200
1T5005I	7-3/32"	3/8"	1-1/4"	2-3/8"	4	4	1-3/4"	4200-7200
1T5006I	7-3/32"	1/2"	1-1/4"	2-3/8"	4	4	1-3/4"	4200-7200

Other sizes available upon request

REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	WEDGE WRENCH	SPUR WRENCH
1T5001M 1T5004M	PART NO.	300800	W350021	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	7.65x12x1.5	6.8	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T5002M 1T5005M	PART NO.	300960	W350022	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	9.6x12x1.5	7.6	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T5003M 1T5006M	PART NO.	301160	W350023	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	11.6x12X1.5	9	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T5001I 1T5004I	PART NO.	300600	W302801	W501313	301404	W500002	W400000	W400405
	DIMENSIONS	6x12x1.5	5.2	M4X16	14x14x2	M5x5.1	2mm Hex	T15 Torx
1T5002I 1T5005I	PART NO.	300920	W350022	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	9.2x12x1.5	7.6	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T5003I 1T5006I	PART NO.	301230	W350023	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	12.3x12x1.5	9	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx

1T600 ADJUSTABLE GROOVING TOOLHEADS



DESIGN:

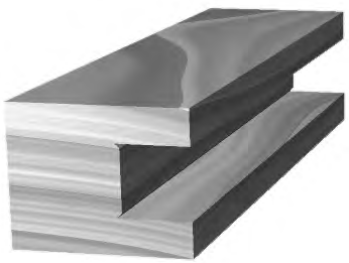
» High tensile steel body
» Toolheads and spacers secured with pins
» Cutting width adjustable with shims in 0.1mm (0.004") increments
» Reversible tungsten carbide inserts with 2 cutting edges for the teeth and 4 cutting edges for the spurs

APPLICATION:

» For grooving solid woods, plywood, and laminated panels

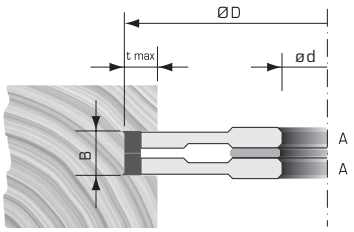
MACHINES:

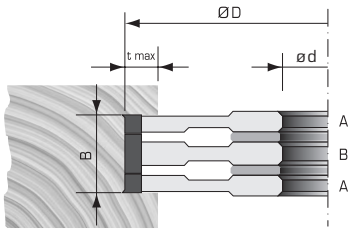
» On shapers, double-end tenoners, and moulders



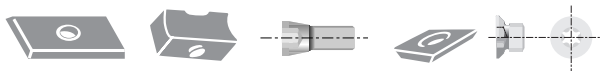
PART NO.	CUTTER TYPE	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	NO. SPURS	T-MAX. MM	RPM MIN-MAX
1T6001M	A	160	8-15	1-1/4"	40	4	4	30	4800-7200
1T6007M	B	160	15	1-1/4"	40	2	-	30	4800-7200
1T6006M	A	160	8-15	1-1/4"	40	4	8	30	4800-7200
1T6008M	A	160	12.5-24	1-1/4"	40	4	4	30	4800-7200
1T6002M	A	160	16-30	1-1/4"	40	4	4	30	4800-7200
1T6003M	A	200	8-15	1-1/4"	40	4	4	50	3800-5800
1T6009M	B	200	15	1-1/4"	40	2	-	50	3800-5800
1T6004M	A	250	8-15	1-1/4"	40	8	8	50	3100-4600

Other sizes available upon request





REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	WEDGE WRENCH	SPUR WRENCH
1T6001M	PART NO.	300800	W350021	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	7.65x12x1.5	6.8	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T6002M	PART NO.	301500	W350004	W502402	301404	W500002	W400115	W400405
	DIMENSIONS	15x12x1.5	11	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx
1T6003M	PART NO.	300800	W350021	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	7.65x12x1.5	6.8	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T6004M	PART NO.	300800	W350021	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	7.65x12x1.5	6.8	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T6006M	PART NO.	300800	W350021	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	7.65x12x1.5	6.8	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T6007M	PART NO.	301500	W350004	W502402	–	–	W400115	–
	DIMENSIONS	15x12x1.5	11	M7x21	–	–	5mm Hex	–
1T6008M	PART NO.	301200	W350023	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	12x12x1.5	9	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T6009M	PART NO.	301500	W350004	W502402	–	–	W400115	–
	DIMENSIONS	15x12x1.5	11	M7x21	–	–	5mm Hex	–

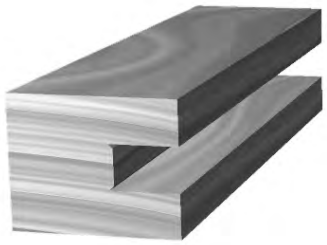
1T620 ADJUSTABLE GROOVING TOOLHEADS
WITH SPACERS



DESIGN:
» High tensile steel body
» Toolheads and spacers secured with pins
» Cutting width adjustable with shims in 0.1mm (0.004") increments
» Reversible tungsten carbide inserts with 4 cutting edges for the teeth and 4 cutting edges for the spurs

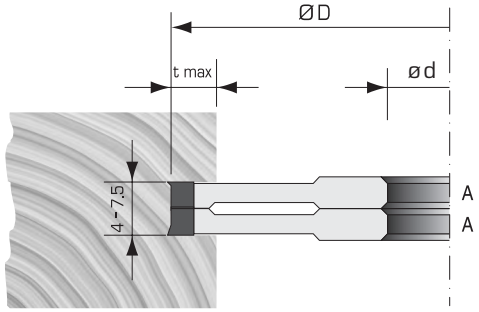
APPLICATION:
» For grooving solid woods, plywood, and laminated panels

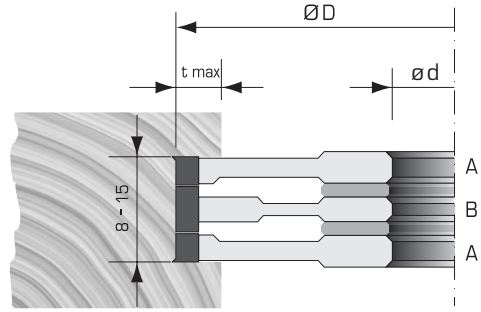
MACHINES:
» On shapers and double-end tenoners



PART NO.	CUTTER TYPE	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	NO. SPURS	T-MAX. MM	RPM MIN-MAX
1T6201M	A	180	4-7.5	1-1/4"	40	8	4	32	4200-7400
1T6204M	B	180	7.65	1-1/4"	40	2	-	32	4200-7400

Other sizes available upon request





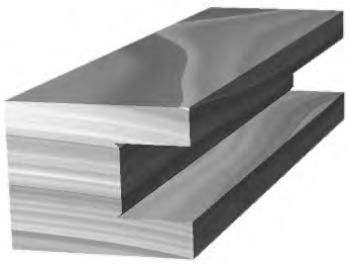
REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	KNIFE SCREW	THREADED RING	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	THREADED RING	WRENCH
1T6201M	PART NO.	320301	W500401	W501101	–	–	301414	W500401	W501001	W400401
	DIMENSIONS	18x18x1.95	M4x3.2	12x1.7	–	–	14x14x1.2	M4x3.2	10x1.65	T9 Torx
1T6204M	PART NO.	300800	–	–	W350021	W502403	–	–	–	W400420
	DIMENSIONS	7.65x12x1.5	–	–	6.8	M5x18	–	–	–	T20 Torx

1T630 ADJUSTABLE GROOVING TOOLHEAD
WITH DIAL GAUGE





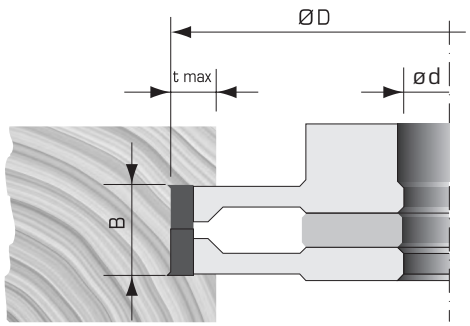
DESIGN:
» High tensile steel body
» Cutting width adjustable with threaded flange
» Reversible tungsten carbide inserts with 4 cutting edges

APPLICATION:
» For precision grooves in solid wood, plywood and laminated panels

MACHINES:
» On shapers and double-end tenoners

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	NO. SPURS	T-MAX. MM	RPM MIN-MAX
1T6301M	180	4.75	1-1/4"	50	8	4	27	4700-7400

Other sizes available upon request



REPLACEMENT PARTS



DESCRIPTION	KNIFE	KNIFE SCREW	THREADED RING FOR KNIFE	SPUR	SPUR SCREW	THREADED RING FOR SPUR	TORX WRENCH
PART NO.	**320301**	**W500401**	**W501101**	**301414**	**W500401**	**W501001**	**W400401**
DIMENSIONS	18x18x1.95	M4x3.2	12x1.7	14x14x1.2	M4x3.2	10x1.65	T9 Torx

1T640 RABBETING/GROOVING TOOLHEADS
ADJUSTABLE



DESIGN:
» High tensile steel body
» Toolheads secured together with pins
» Cutting width adjustable with shims in 0.1mm (0.004") increments
» Reversible tungsten carbide inserts with 2 cutting edges for the teeth and 4 cutting edges for the spurs

APPLICATION:
» For grooving and rabbeting solid woods, plywood and laminated panels

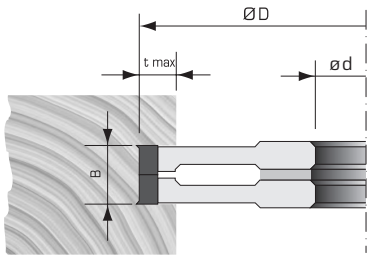
MACHINES:
» On shapers, double-end tenoners and moulders

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	NO. SPURS	T-MAX. MM	RPM MIN-MAX
1T6401M	160	26-39	1-1/4"	40	4	4	43	4800-8300
1T6403M	160	36-59	1-1/4"	40	4	4	43	4800-8300
1T6405M	160	56-99	1-1/4"	40	4	4	43	4800-8300

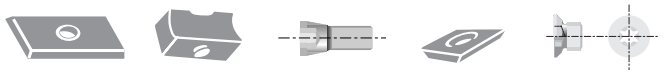
Other sizes available upon request







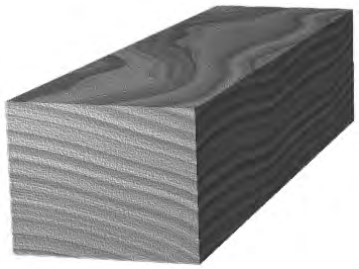
REPLACEMENT PARTS

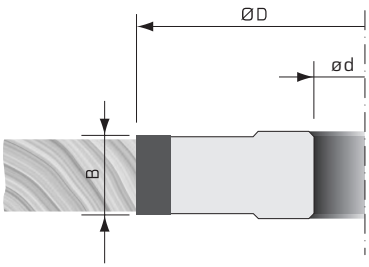


TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	WEDGE WRENCH	SPUR WRENCH
1T6401M	PART NO.	302000	W350005	W502402	301404	W500002	W400115	W400405
	DIMENSIONS	20x12x1.5	16	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx
1T6403M	PART NO.	303000	W350007	W502402	301404	W500002	W400115	W400405
	DIMENSIONS	30x12x1.5	26	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx
1T6405M	PART NO.	305000	W350009	W502402	301404	W500002	W400115	W400405
	DIMENSIONS	50x12x1.5	46	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx

1T471 PLANING AND JOINTING TOOLHEADS







DESIGN:

» High tensile steel body
» Reversible tungsten carbide inserts with 2 cutting edges

APPLICATION:

» For planing and jointing solid woods with the grain and in uncoated panels

MACHINES:

» On shapers and double-end tenoners

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN.-MAX.
1T4710M	85	100	1-1/4"	30	2	9000-15700
1T4711M	100	50	1-1/4"	35	2	7700-13300
1T4712M	125	30	1-1/4"	50	2	6100-10700
1T4713M	125	50	1-1/4"	50	2	6100-10700
1T4714M	125	50	1-1/4"	50	4	6100-10700

REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
1T4710M	PART NO.	310000	W350018	W502402	W400115
	DIMENSIONS	100x13x2.2	94	M7x21	5mm Hex
1T4711M	PART NO.	305000	W350009	W502402	W400115
	DIMENSIONS	50x12x1.5	46	M7x21	5mm Hex
1T4712M	PART NO.	303000	W350007	W502402	W400115
	DIMENSIONS	30x12x1.5	26	M7x21	5mm Hex
1T4713M	PART NO.	305000	W350009	W502402	W400115
	DIMENSIONS	50x12x1.5	46	M7x21	5mm Hex
1T4714M	PART NO.	305000	W350009	W502402	W400115
	DIMENSIONS	50x12x1.5	46	M7x21	5mm Hex



DESIGN:

» High tensile steel body
» Alternating shear angle with 4 wings and with 4 spurs
» Reversible tungsten carbide inserts with 2 cutting edges for the teeth and 4 cutting edges for the spurs

APPLICATION:

» For jointing and rabbeting solid woods with the grain and in uncoated panels

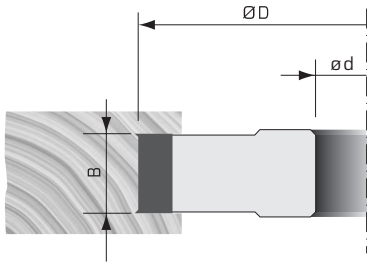
MACHINES:

» On shapers, double-end tenoners, and moulders

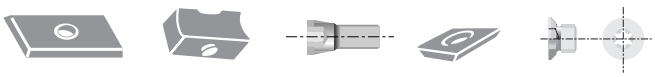
PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	NO. SPURS	RPM MIN-MAX
1T4721M	125	30	1-1/4"	50	4	4	6100-10700
1T4723M	125	50	1-1/4"	50	4	4	6100-10700
1T4724M	140	50	1-1/4"	50	4	4	5500-9500
1T4726M	180	50	1-1/4"	50	4	4	4300-7500

Other sizes available upon request





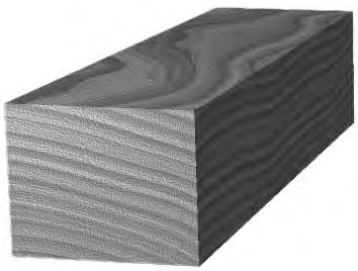
REPLACEMENT PARTS

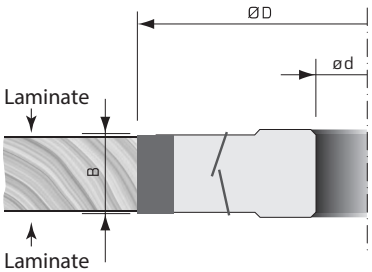


TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	WEDGE WRENCH	SPUR WRENCH
1T4721M	**PART NO.**	**303000**	**W350007**	**W502402**	**301404**	**W500002**	**W400115**	**W400405**
	DIMENSIONS	30x12x1.5	26	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx
1T4722M	**PART NO.**	**305000**	**W350009**	**W502402**	**301404**	**W500002**	**W400115**	**W400405**
	DIMENSIONS	50x12x1.5	46	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx
1T4723M	**PART NO.**	**305000**	**W350009**	**W502402**	**301404**	**W500002**	**W400115**	**W400405**
	DIMENSIONS	50x12x1.5	46	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx
1T4724M	**PART NO.**	**305000**	**W350009**	**W502402**	**301404**	**W500002**	**W400115**	**W400405**
	DIMENSIONS	50x12x1.5	46	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx
1T4726M	**PART NO.**	**305000**	**W350009**	**W502402**	**301404**	**W500002**	**W400115**	**W400405**
	DIMENSIONS	50x12x1.5	46	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx

1T480 COMPRESSION JOINTING TOOLHEADS







DESIGN:

» High tensile steel body
» Teeth with opposing (compression) shear angle for chip-free edges
» Reversible tungsten carbide inserts with 2 cutting edges

APPLICATION:

» For chip-free jointing of laminated panels

MACHINES:

» On shapers, double-end tenoners

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1T4801M	125	56	1-1/4"	50	2+2	6100-10700
1T4803M	125	56	1-1/4"	50	3+3	6100-10700
1T4805M	150	56	1-1/4"	50	2+2	5000-9000
1T4807M	150	56	1-1/4"	50	3+3	5000-9000
1T4809M	180	56	1-1/4"	50	3+3	4200-7500

Other sizes available upon request

REPLACEMENT PARTS



MANUFACTURED DATE	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
2004 - 2009	PART NO.	303000	W350007	W502402	W400115
	DIMENSIONS	30x12x1.5	26	M7x21	5mm Hex
2009 - PRESENT	PART NO.	303000	W360019	W501403	W400114
	DIMENSIONS	30x12x1.5	26	M8x16	4mm Hex





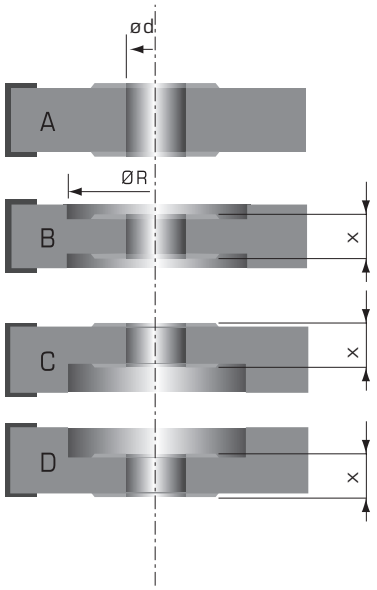


DESIGN:
» High tensile steel body
» 4 or 6 straight teeth
» Reversible tungsten carbide inserts with 2 cutting edges

APPLICATION:
» For flush trimming solid wood, veneer, and plastic edge bands

MACHINES:
» On edgebanders

WHEN ORDERING SPECIFY:
» Cutter type (A, B, C, or D)
» Cutting diameter ØD
» Kerf B
» Number of teeth
» Bore diameter ød
» Dimension X
» Hub height
» Recess diameter ØR
» Quantity and dimensions of keyways or pinholes



SPECIAL PRODUCTION

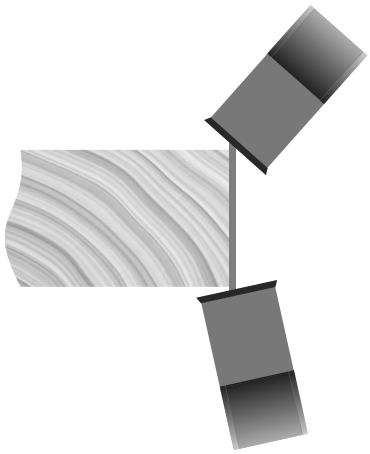
DIAM. RANGE ØD MM	KERF B MM	NO. TEETH
50 to 70	15	4
50 to 70	20	4
50 to 70	30	4
71 to 80	15	4
71 to 80	20	4
71 to 80	30	4
81 to 100	15	4
81 to 100	20	4
81 to 100	30	4
50 to 70	15	6
50 to 70	20	6
50 to 70	30	6
71 to 80	15	6
71 to 80	20	6
71 to 80	30	6
81 to 100	15	6
81 to 100	20	6
81 to 100	30	6

REPLACEMENT PARTS



DESCRIPTION	KNIFE	KNIFE	KNIFE	WEDGE	WEDGE	WEDGE	WEDGE SCREW	WRENCH
PART NO.	301500	302000	303000	W300203	W300204	W300205	W501301	W400113
DIMENSIONS	15x12x1.5	20x12x1.5	30x12x1.5	13	18	28	M6x12	3mm Hex





DESIGN:

» High tensile steel body
» 4 straight cutting edges
» Reversible tungsten carbide inserts with 4 cutting edges
» Available in HSK 25R connection type

APPLICATION:

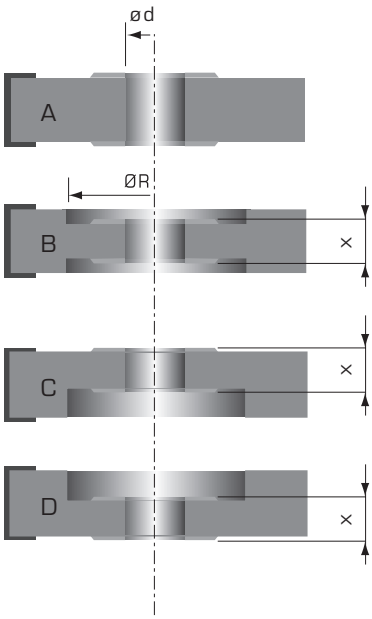
» For flush trimming solid wood, veneer, and plastic edge bands

MACHINES:

» On edgebanders

WHEN ORDERING SPECIFY:

» Cutter type (A, B, C, or D)
» Bore diameter ød or connection type HSK 25R
» If bore, then also specify:
  » Dimension X
  » Hub height
  » Recess diameter ØR
  » Quantity and dimensions of keyways or pinholes



SPECIAL PRODUCTION

DIAM. ØD MM	KERF B MM	MAX BORE ød MM	NO. TEETH
70	14	22	4

REPLACEMENT PARTS



DESCRIPTION	SPUR	SPUR SCREW	WRENCH
PART NO.	301404	W500002	W400405
DIMENSIONS	14x14x2	M5x7	T15 Torx

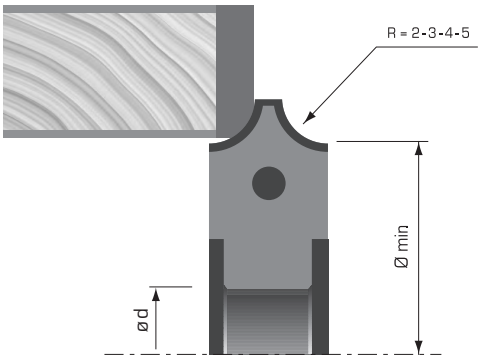


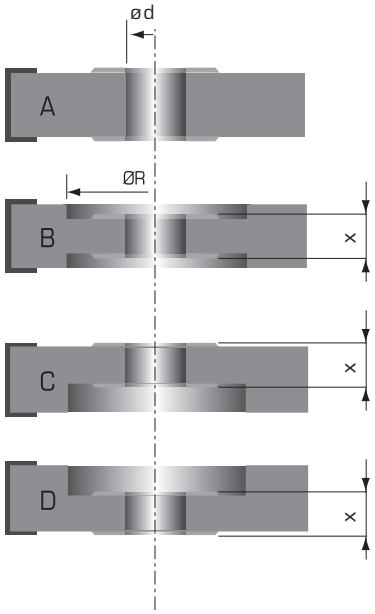
DESIGN:
» High tensile steel body
» 3 profiled cutting edges
» Disposable tungsten carbide inserts
» For right and left hand rotation

APPLICATION:
» For rounding of edge bands in solid wood and plastic edges

MACHINES:
» On edgebanders

WHEN ORDERING SPECIFY:
» Cutter type (A,B,C or D)
» Cutting diameter ØD
» Radius R
» Bore diameter ød
» Dimension X
» Hub height
» Recess diameter ØR
» Quantity and dimensions of keyways or pinholes





SPECIAL PRODUCTION

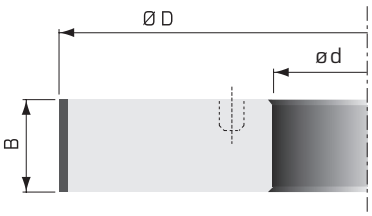
MAX DIAM. ØD MM	MIN DIAM. ØD MM	KERF B MM	MAX BORE ød MM	NO. TEETH
73	61	16	22	3
83	70	16	25	3

REPLACEMENT PARTS



DESCRIPTION	WEDGE	KNIFE R2	KNIFE R3	KNIFE R4	KNIFE R5	WEDGE SCREW	WRENCH
PART NO.	W302503	401002	401003	401004	401005	W501301	W400113
DIMENSIONS	15	16x17.5x2	16x17.5x2	16x17.5x2	16x17.5x2	M6x12	3mm Hex





DESIGN:

» High tensile steel body
» 3 straight teeth
» Toolheads can be stacked to cut various wood thickness
» Stacked cutters pinned together
» Reversible tungsten carbide inserts with 2 cutting edges

APPLICATION:

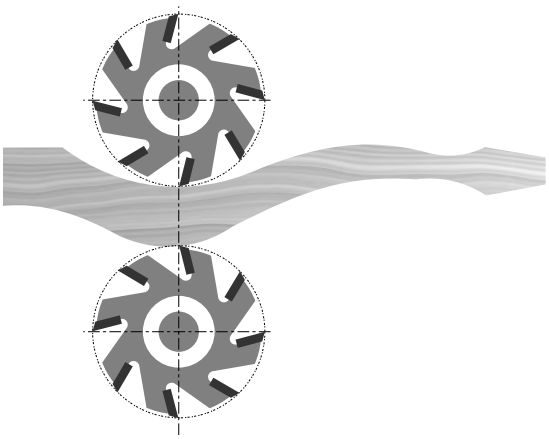
» For jointing and shaping solid wood components

MACHINES:

» On shapers and CNC machines

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød	NO. TEETH	RPM MIN-MAX
1T4101M	90	30	1-1/4"	1-1/4"	3	8500-17000
1T4102M	100	30	1-1/4"	35mm	3	7500-15000

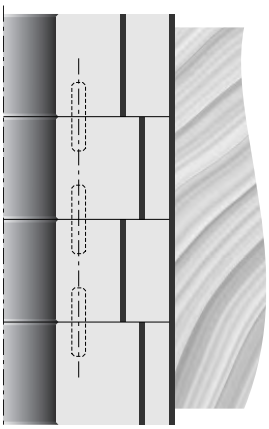
Other sizes available upon request



REPLACEMENT PARTS

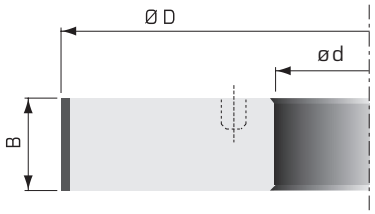


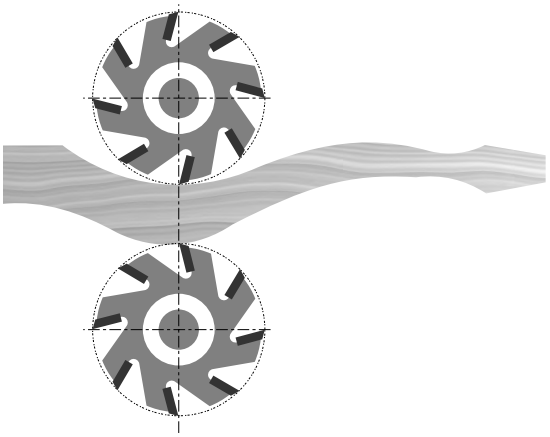
DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
PART NO.	303000	W300205	W501303	W400114
DIMENSIONS	30x12x1.5	28	M8x10	4mm Hex



1T411 SHAPING AND PLANING TOOLHEADS
STACKABLE WITH CHIPBREAKERS







DESIGN:
» High tensile steel body
» 4 straight teeth with chipbreakers
» Chipbreaker allows for heavier stock removal
» Toolheads can be stacked to cut various wood thickness
» Stacked cutters pinned together
» Reversible tungsten carbide inserts with 4 cutting edges

APPLICATION:
» For jointing and shaping solid wood components

MACHINES:
» On shapers and CNC machines

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1T411M	100	15	1-1/4"	35	4	7500-13000

Other sizes available upon request

REPLACEMENT PARTS



DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
PART NO.	301505	W360280	W501302	W400113
DIMENSIONS	15x15x2	14.5	M6x16	3mm Hex



DESIGN:

» High tensile steel body
» 4 helical wings
» Tungsten carbide reversible inserts with 4 cutting edges
» Staggered teeth and helical design provide for greater stock removal and superior surface finish
» Toolheads can be stacked to cut various wood thickness

APPLICATION:

» For jointing and shaping solid wood components

MACHINES:

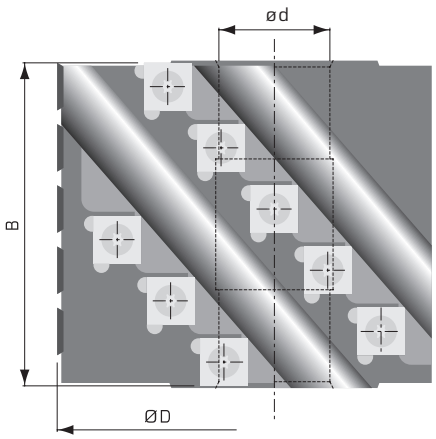
» On shapers

WHEN ORDERING SPECIFY:

» If ball bearing guide and flange sleeve is required (sold separately)

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. WINGS	TOTAL NO. KNIVES	RPM MIN-MAX
1T4121M	80	81.5	1-1/4"	35	4	14	9500-15000
1T4123M	80	126.5	1-1/4"	35	4	20	9500-15000

Other sizes available upon request

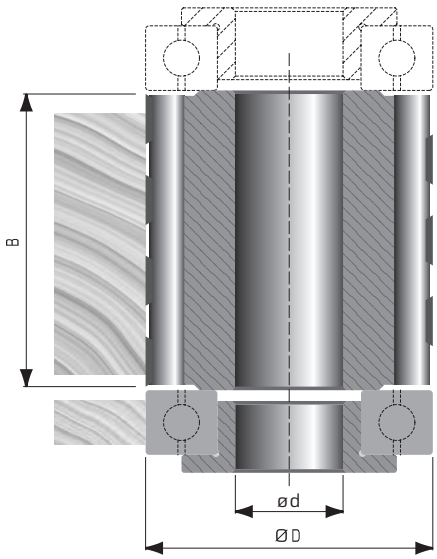


BEARING GUIDE

PART NO.	DIAM. ØD MM	BORE ød MM
W057114-80	80	40

FLANGE SLEEVE

PART NO.	O.D. ØD MM	I.D. ØD
054-40-3175	40	1-1/4"



REPLACEMENT PARTS





DESCRIPTION	KNIFE	KNIFE SCREW	WRENCH
PART NO.	301404	W500003	W400420
DIMENSIONS	14x14x2	M5x14	T20 Torx

1T200 MULTI-ANGLE TOOLHEADS



DESIGN:
» High tensile steel body
» 2 teeth progressively adjustable from 0° to 70°
» Tungsten carbide reversible inserts with 2 cutting edges

APPLICATION:
» For jointing and chamfering solid wood and veneered or laminated panel materials

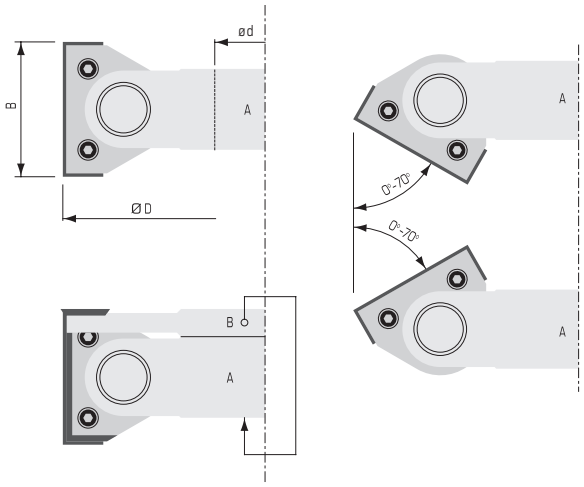
MACHINES:
» On shapers, double-end tenoners and moulders

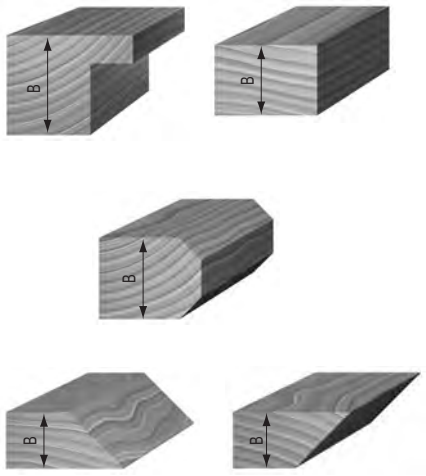
WHEN ORDERING SPECIFY:
» If additional interlocking cutter for rabbet cuts is required (sold separately)
» For rabbet cuts, toolhead must be set to the 0° position

PART NO.	CUTTER TYPE	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	NO. SPURS	RPM MIN-MAX
1T2001M	A	160	50	1-1/4"	40	2		5000-7500
1T2002M	B	160	8	1-1/4"	40		2	5000-7500
1T2004M	A	170	50	50mm	50	2		4700-7000
1T2005M	B	170	8	50mm	50		2	4700-7000

Other sizes available upon request

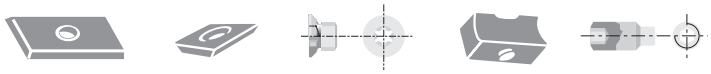
PROFILE TYPE:





MAX THICKNESS B
0° - B max = 48
5° - B max = 48
10° - B max = 47
15° - B max = 46
20° - B max = 45
25° - B max = 43
30° - B max = 41
35° - B max = 39
45° - B max = 33
50° - B max = 30
55° - B max = 26
60° - B max = 23
65° - B max = 19
70° - B max = 15

REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	SPUR	SPUR SCREW	WEDGE	WEDGE SCREW	WEDGE WRENCH	SPUR WRENCH
1T2001M	PART NO.	305000	–	–	W302602	W501401	W400007	–
	DIMENSIONS	50x12x1.5	–	–	47	M6x12	8mm Hex	–
1T2002M	PART NO.	–	301404	W500002	–	–	–	W400405
	DIMENSIONS	–	14x14x2.0	M5x7	–	–	–	T15 Torx
1T2004M	PART NO.	305000	–	–	W302602	W501401	W400007	–
	DIMENSIONS	50x12x1.5	–	–	47	M6x12	8mm Hex	–
1T2005M	PART NO.	–	301404	W500002	–	–	–	W400405
	DIMENSIONS	–	14x14x2.0	M5x7	–	–	–	T15 Torx

1T511 CORNER ROUNDING/CHAMFERING
TOOLHEAD SET

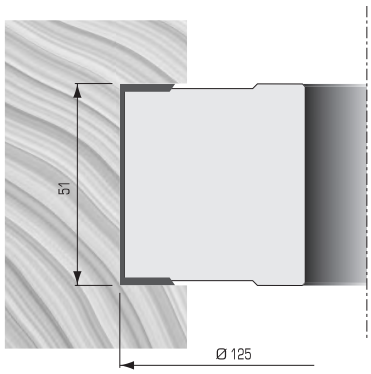


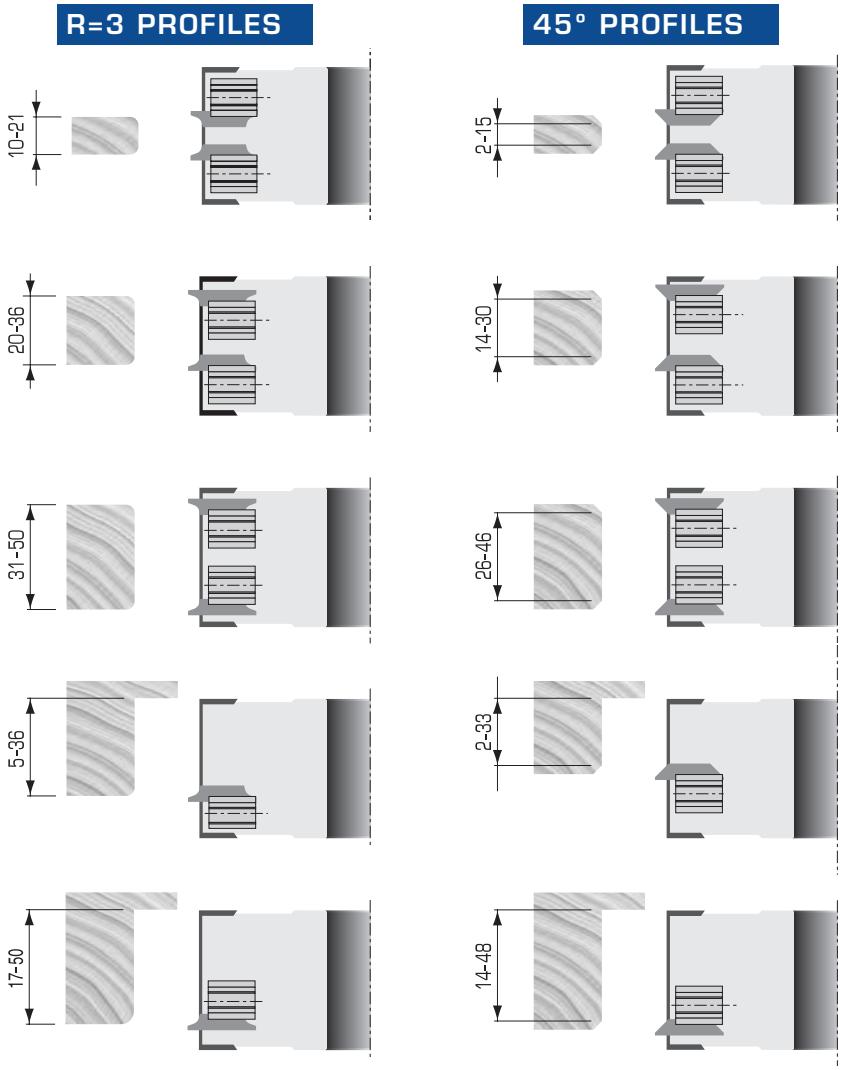
DESIGN:
» High tensile steel body
» 2 teeth with alternating shear angle
» Reversible tungsten carbide inserts
» Adjustable for various wood thicknesses
» Toolhead supplied in a wooden box complete with set of tungsten carbide knives for chamfering, corner rounding, jointing, and rabbeting

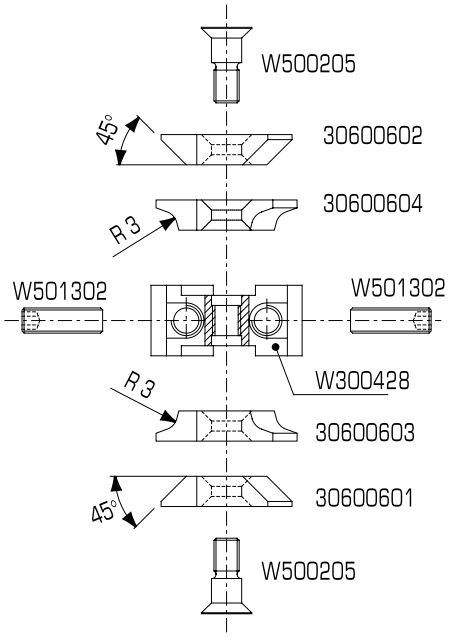
APPLICATION:
» For chamfering, corner rounding, jointing and rabbeting solid wood, MDF, particle board, and plywood materials

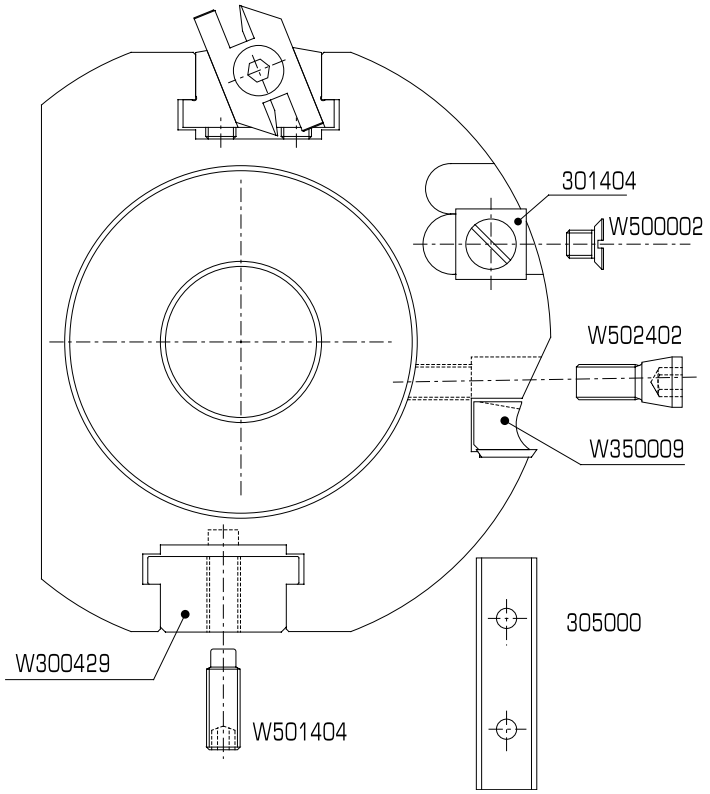
MACHINES:
» On shapers, double-end tenoners, and moulders

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	NO. SPURS	NO. CHAMFER INSERTS	NO. RADIUS INSERTS	RPM MIN-MAX
1T511	125	51	1-1/4"	50	2	4	4	4	6000-10500









REPLACEMENT PARTS - ROUNDING/CHAMFERING



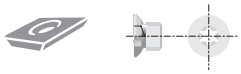
ROTATION	DESCRIPTION	CHAMFER KNIFE (45°)	ROUNDING KNIFE R=3	ROUNDING KNIFE SCREW	INSERT CARRIER	CARRIER SCREW	FILLER BLOCKS	FILLER BLOCK SCREW
LEFT-HAND	PART NO.	30600601	30600603	W500205	W300428	W501302	W300429	W501404
RIGHT-HAND	PART NO.	30600602	30600604					
	DIMENSIONS	27x6x16	27x6x16	M6x15	14x30x16.5	M6x16	48x30x15	M8x20

REPLACEMENT PARTS - KERF



DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW
PART NO.	305000	W350009	W502402
DIMENSIONS	50x12x1.5	46	M7x21

REPLACEMENT PARTS - SPURS



DESCRIPTION	SPUR	SPUR SCREW
PART NO.	301404	W500002
DIMENSIONS	14x14x2	M5x7

REPLACEMENT PARTS - WRENCHES

PART NO.	DESCRIPTION	SCREW TYPE
W400114	4mm Hex	KNIFE
W400113	3mm Hex	CARRIER
W400114	4mm Hex	FILLER BLOCK
W400115	5mm Hex	WEDGE
W400405	T15 Torx	TORX

1T520 TOOLHEADS FOR TENONING MACHINES
ADJUSTABLE

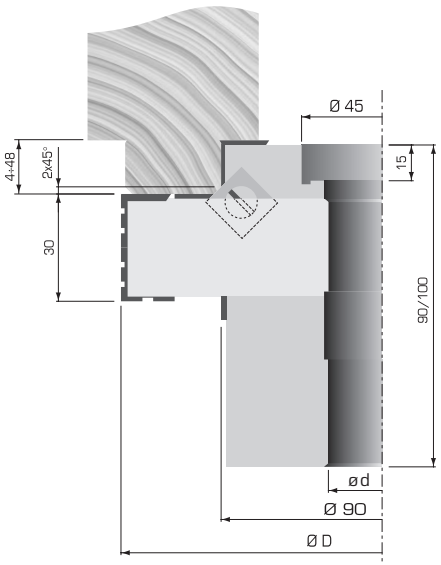


DESIGN:
» High tensile steel body
» 6+4 teeth and 2+4 spurs
» Adjustable for producing bevelled tenons from 4 to 48mm long
» Reversible tungsten carbide inserts

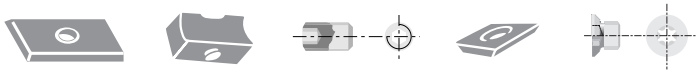
APPLICATION:
» For producing tenons in solid wood

MACHINES:
» On tenoning machines
  » For BALESTRINI machines use Part No. **1T5201M**
  » For BACCI, or PADE machines use Part No. **1T5202M**

PART NO.	MACHINES	DIAM. ØD MM	KERF B MM	BORE ød MM	MAX BORE ød MM	NO. TEETH	NO. SPURS	RPM MIN-MAX
1T5201M	BALESTRINI	145	90	30	35	6+4	2+4	5000-9000
1T5202M	BACCI, PADE	145	100	30	35	6+4	2+4	5000-9000

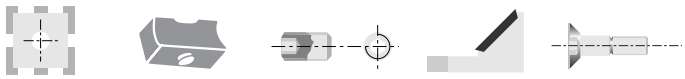


REPLACEMENT PARTS - TOP TOOLHEAD



DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW
PART NO.	**305000**	**W300206**	**W501301**	**301404**	**W500002**
DIMENSIONS	50x12x1.5	48	M6x12	14x14x2	M5x7

REPLACEMENT PARTS - BOTTOM TOOLHEAD



DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW
PART NO.	**301505**	**W300702**	**W501302**	**W300406**	**W501702**
DIMENSIONS	15x15x2	27.4	M6x16	24x15x15	M5x16

Two knives per wing required for PART NO. 301505

WRENCHES

PART NO.	DESCRIPTION	SCREW TYPE
W400114	4mm Hex	WEDGE - TOP
W400405	T15 Torx	SPUR - TOP
W400114	4mm Hex	WEDGE - BOTTOM
W400405	T15 Torx	SPUR - BOTTOM

1T522 TOOLHEADS FOR TENONING MACHINES
ADJUSTABLE



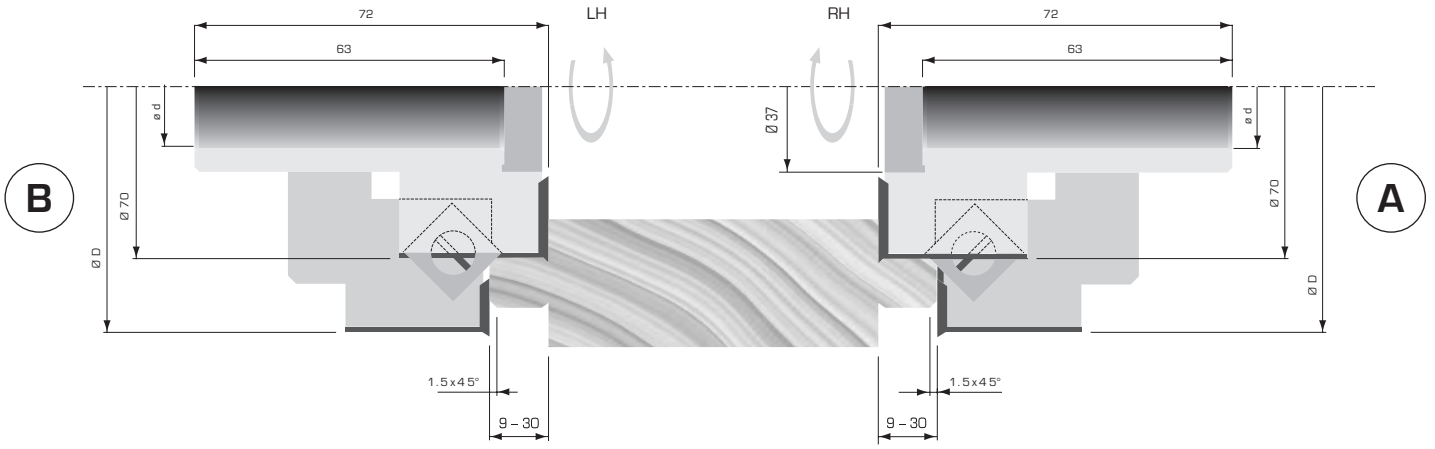
DESIGN:
» High tensile steel body
» 4+2 teeth and 2+4 spurs
» Adjustable for producing bevelled tenons from 9 to 30mm long
» Reversible tungsten carbide inserts with 2 and 4 cutting edges

APPLICATION:
» For producing tenons in solid wood

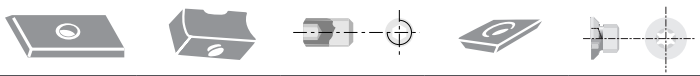
MACHINES:
» On tenoning machines

PART NO.	CUTTER TYPE	DIAM. ØD MM	KERF B MM	BORE ød MM	MAX BORE ød MM	NO. TEETH	NO. SPURS	RPM MIN-MAX
1T5221M	B	100	72	25	25	4+2	2+4	7500-12000
1T5222M	A	100	72	25	25	4+2	2+4	7500-12000

Other sizes available upon request



REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	WEDGE WRENCH	SPUR WRENCH
1T5221M	PART NO.	1T522A	W300205	W501301	301404	W500002	W400113	W400405
	DIMENSIONS	30x12x1.5	28	M6x12	14x14x2	M5x7	3mm Hex	T15 Torx
1T5222M	PART NO.	1T522B	W300205	W501301	301404	W500002	W400113	W400405
	DIMENSIONS	30x12x1.5	28	M6x12	14x14x2	M5x7	3mm Hex	T15 Torx

1T530 MITRE JOINT TOOLHEAD 45°
STRAIGHT WING



DESIGN:
» High tensile steel body
» 2 single straight teeth
» Produces 45° lock mitre joints
» Disposable tungsten carbide inserts

APPLICATION:
» For cutting 45° lock mitre joints in solid wood and panel materials in two steps: First with the workpiece in horizontal position and then with workpiece in vertical position
» Suitable for various material thickness from 5/8" to 1-3/8"

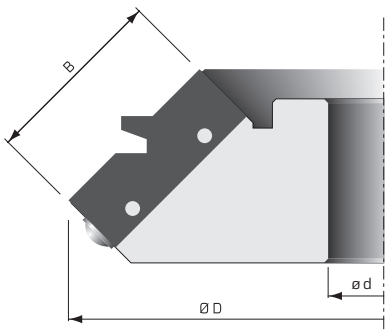
MACHINES:
» On shapers

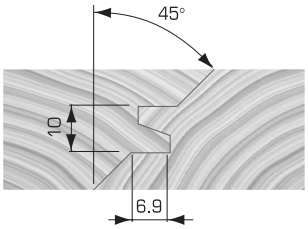


PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1T5301M	170	50	1-1/4"	40	2	4500-7800

Other sizes available upon request



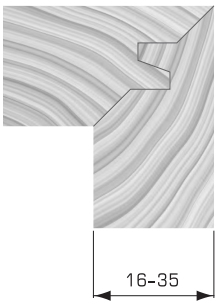


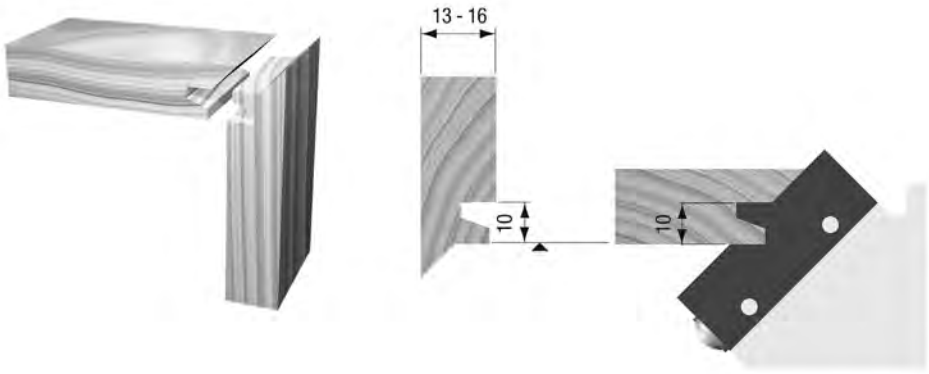


REPLACEMENT PARTS



DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
PART NO.	1T530A	W350009	W502402	W400115
DIMENSIONS	50x25x2	46	M7x21	5mm Hex





1T560 CORNER ROUNDING TOOLHEADS
WITH SHEAR ANGLE



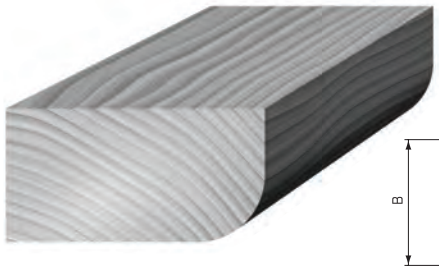
DESIGN:
» High tensile steel body
» 3 teeth on a shear angle
» Disposable tungsten carbide insert knives

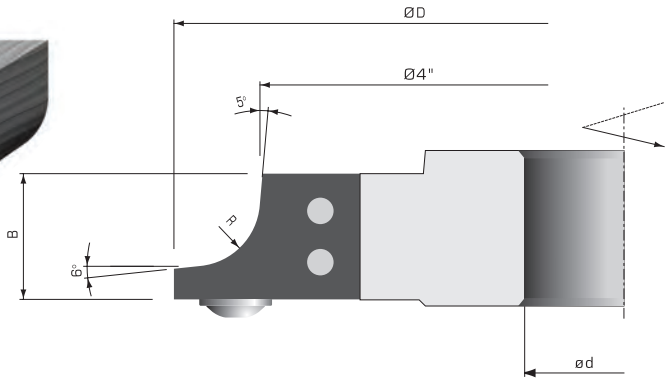
APPLICATION:
» For producing quarter round edges in solid wood and panel materials

MACHINE:
» On shapers and double-end tenoners

PART NO.	DIAM. ØD MM	KERF B MM	RADIUS R	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1T5601M	124	20	1/4"	1-1/4"	50	3	6100-10600
1T5603M	124	20	3/8"	1-1/4"	50	3	6100-10600
1T5605M	143	30	1/2"	1-1/4"	50	3	5300-9100
1T5607M	143	30	5/8"	1-1/4"	50	3	5300-9100
1T5608M	143	30	3/4"	1-1/4"	50	3	5300-9100

Other sizes available upon request





REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
1T5601M	PART NO.	1T560A	W070761	W501404	W400114
	DIMENSIONS	15x25x2	17.6x11x9.5	M8x20	4mm Hex
1T5603M	PART NO.	1T560B	W070761	W501404	W400114
	DIMENSIONS	20x25x2	17.6x11x9.5	M8x20	4mm Hex
1T5605M	PART NO.	1T560C	W049971	W501316	W400113
	DIMENSIONS	30x25x2	27x11x9.5	M6x20	3mm Hex
1T5607M	PART NO.	1T560D	W049971	W501316	W400113
	DIMENSIONS	30x30x2	27x11x9.5	M6x20	3mm Hex
1T5608M	PART NO.	1T560E	W049971	W501316	W400113
	DIMENSIONS	30x35x2	27x11x9.5	M6x20	3mm Hex

1T565 BEAD & COVE TOOLHEADS
WITH STRAIGHT TEETH



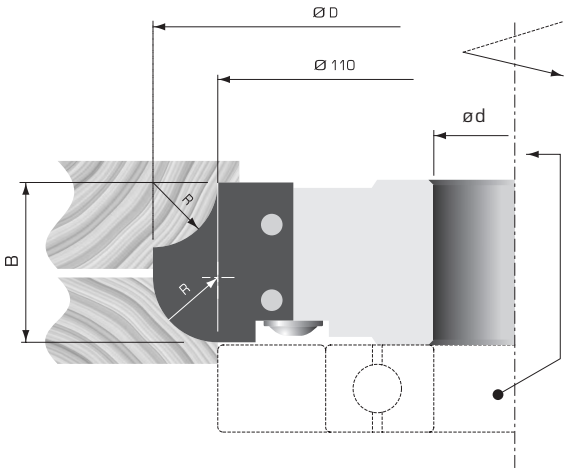
DESIGN:
» High tensile steel body
» 3 straight teeth
» Disposable tungsten carbide insert knives

APPLICATION:
» For producing bead and cove edges in solid wood and panel materials

MACHINES:
» On shapers and double-end tenoners

PART NO.	DIAM. ØD MM	KERF B MM	RADIUS R	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1T5651M	114	20	1/4"	1-1/4"	50	3	6600-11500
1T5653M	121	25	3/8"	1-1/4"	50	3	6100-10600
1T5655M	127	30	1/2"	1-1/4"	50	3	5800-10200
1T5657M	133	35	5/8"	1-1/4"	50	3	5700-9800
1T5658M	140	50	3/4"	1-1/4"	50	3	5500-9400

Other sizes available upon request



REPLACEMENT PARTS





TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
1T5651M	**PART NO.**	**1T565A**	**W340006**	**W501404**	**W400114**
	DIMENSIONS	20x25x2	15	M8x20	4mm Hex
1T5653M	**PART NO.**	**1T565B**	**W049801**	**W501404**	**W400114**
	DIMENSIONS	25x25x2	20	M8x20	4mm Hex
1T5655M	**PART NO.**	**1T565C**	**W340026**	**W501316**	**W400113**
	DIMENSIONS	30x30x2	26	M6x20	3mm Hex
1T5657M	**PART NO.**	**1T565D**	**W340027**	**W501316**	**W400113**
	DIMENSIONS	35x30x2	31	M6x20	3mm Hex
1T5658M	**PART NO.**	**1T565E**	**W049771**	**W501404**	**W400113**
	DIMENSIONS	50x35x2	46	M8x20	3mm Hex

1T570 HALF ROUND TOOLHEADS
WITH STRAIGHT TEETH



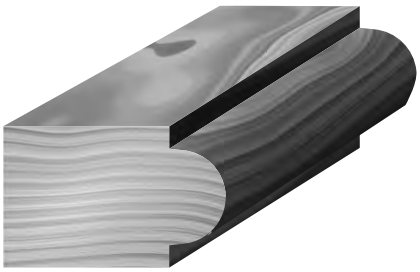
DESIGN:
» High tensile steel body
» 3 straight teeth
» Disposable tungsten carbide insert knives

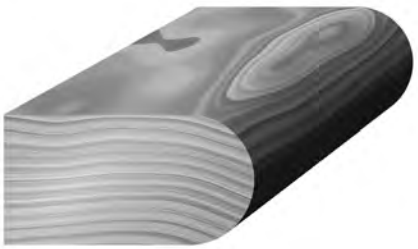
APPLICATION:
» For producing half round edges in solid wood and panel materials

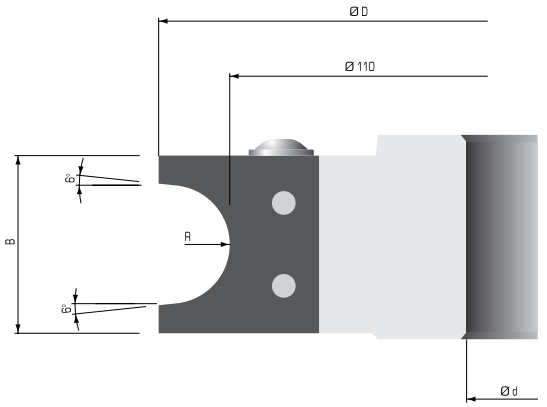
MACHINES:
» On shapers, double-end tenoners, and moulders

PART NO.	DIAM. ØD MM	KERF B MM	RADIUS R	CUTTER OPENING MM	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1T5701M	122	20	1/4"	13.0	1-1/4"	50	3	6100-10600
1T5703M	126	30	3/8"	19.5	1-1/4"	50	3	5800-10200
1T5705M	133	35	1/2"	26.0	1-1/4"	50	3	5700-9800
1T5707M	137	40	5/8"	32.3	1-1/4"	50	3	5500-9400
1T5708M	142	50	3/4"	38.5	1-1/4"	50	3	5300-9100

Other sizes available upon request







REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
1T5701M	PART NO.	1T570A	W049801	W501404	W400114
	DIMENSIONS	25x25x2	20	M8x20	4mm Hex
1T5703M	PART NO.	1T570B	W340026	W501316	W400113
	DIMENSIONS	30x25x2	26	M6x20	3mm Hex
1T5705M	PART NO.	1T570C	W0081201	W501404	W400114
	DIMENSIONS	35x30x2	32x11x9.5	M8x20	4mm Hex
1T5707M	PART NO.	1T570D	W049631	W501404	W400114
	DIMENSIONS	40x30x2	36x11x9.5	M8x20	4mm Hex
1T5708M	PART NO.	1T570E	W049771	W501404	W400114
	DIMENSIONS	50x35x2	46	M8x20	4mm Hex

1TS02 STILE AND RAIL TOOLHEAD SET
WITH 4 PROFILES, 1/2" TONGUE

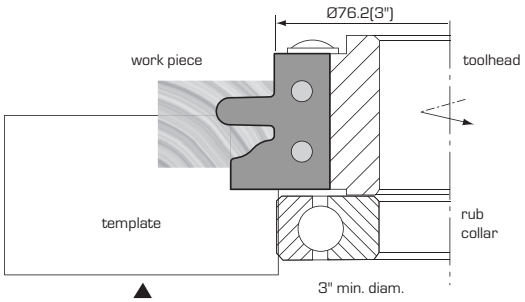


DESIGN:
» High tensile steel body
» 3 straight teeth
» 4 different profiles
» 1/2" round and flat tongue profiles
» Sets contain 2 toolheads and 24 tungsten carbide insert knives
» Ball bearing guide is optional and sold separately

APPLICATION:
» To produce stile and rails in solid wood and panel materials

MACHINES:
» Shapers

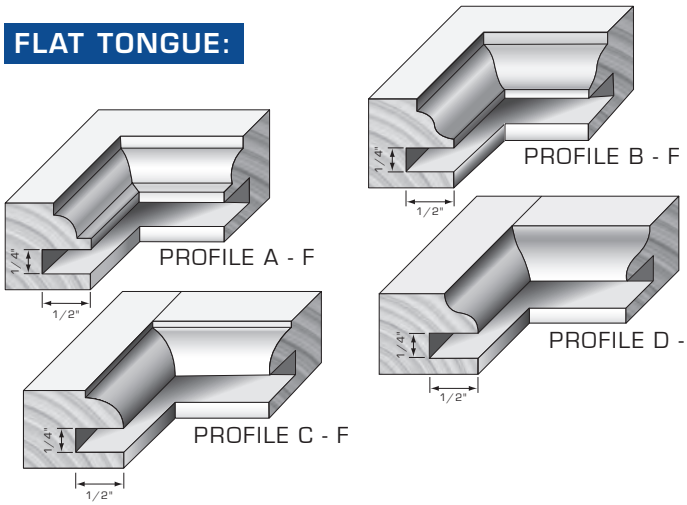
PART NO.	TONGUE TYPE	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød	NO. TEETH	MAX RPM
1TS02F	FLAT	101.85	30	1-1/4"	1-1/4"	3	13600
1TS02R	ROUND	101.85	30	1-1/4"	1-1/4"	3	13600



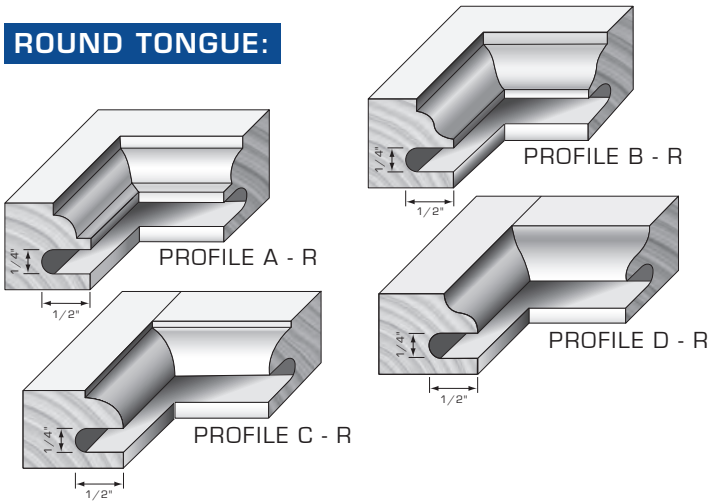
REPLACEMENT PARTS

DESCRIPTION	RUB COLLAR	WEDGE	SCREW	WRENCH
PART NO.	W057114-3	W360045	W501301	W400113
DIMENSIONS	3" DIAM.	28mm	M6x12	3mm Hex

FLAT TONGUE:



ROUND TONGUE:



REPLACEMENT KNIVES

PROFILE	DESCRIPTION	ROUND STILE KNIFE	ROUND RAIL KNIFE	FLAT STILE KNIFE	FLAT RAIL KNIFE
A	PART NO.	1TS02A1R	1TS02A2R	1TS02A1F	1TS02A2F
	DIMENSIONS	30x30x2	30x30x2	30x30x2	30x30x2
B	PART NO.	1TS02B1R	1TS02B2R	1TS02B1F	1TS02B2F
	DIMENSIONS	30x30x2	30x30x2	30x30x2	30x30x2
C	PART NO.	1TS02C1R	1TS02C2R	1TS02C1F	1TS02C2F
	DIMENSIONS	30x30x2	30x30x2	30x30x2	30x30x2
D	PART NO.	1TS02D1R	1TS02D2R	1TS02D1F	1TS02D2F
	DIMENSIONS	30x30x2	30x30x2	30x30x2	30x30x2

REDUCING SLEEVES

PART NO.	BORE
054-3175-34	3/4"
054-3175-1	1"

2 pcs per cutter recommended
(refer to "Flanged Sleeves" table on page H2)

1TS03 STILE AND RAIL TOOLHEAD SET
WITH SHAKER PROFILE, 1/2" TONGUE

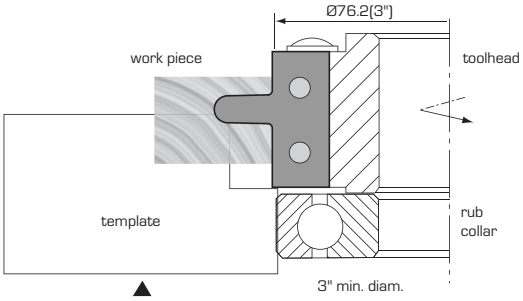


DESIGN:
» High tensile steel body
» 3 straight teeth
» Classic shaker profile
» 1/2" round and flat tongue profiles
» Set contains 2 toolheads and 12 tungsten carbide insert knives
» Ball bearing guide is optional and sold separately

APPLICATION:
» To produce stile and rails in solid wood and panel materials

MACHINES:
» Shapers

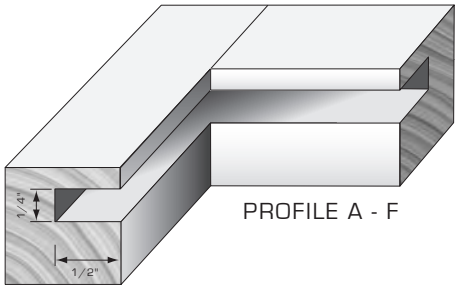
PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød	NO. TEETH	MAX RPM
1TS03	101.85	30	1-1/4"	1-1/4"	3	13600



REPLACEMENT PARTS

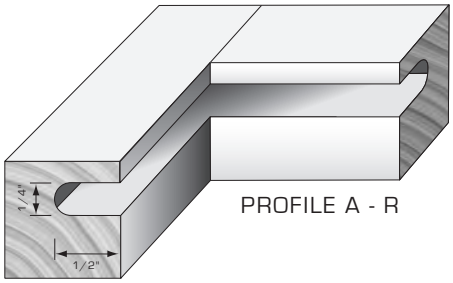
DESCRIPTION	RUB COLLAR	WEDGE	SCREW	WRENCH
PART NO.	W057114-3	W360045	W501301	W400113
DIMENSIONS	3" DIAM.	28mm	M6x12	3mm Hex

FLAT TONGUE:



PROFILE A - F

ROUND TONGUE:



PROFILE A - R

REPLACEMENT KNIVES

PROFILE	DESCRIPTION	ROUND STILE KNIFE	ROUND RAIL KNIFE	FLAT STILE KNIFE	FLAT RAIL KNIFE
A	PART NO.	1TS03A1R	1TS03A2R	1TS03A1F	1TS03A2F
	DIMENSIONS	30x30x2	30x30x2	30x30x2	30x30x2

REDUCING SLEEVES

PART NO.	BORE
054-3175-34	3/4"
054-3175-1	1"

2 pcs per cutter recommended
(refer to "Flanged Sleeves" table on page H2)

1TS06 STILE AND RAIL TOOLHEAD SET
WITH 4 PROFILES,3/8" TONGUE

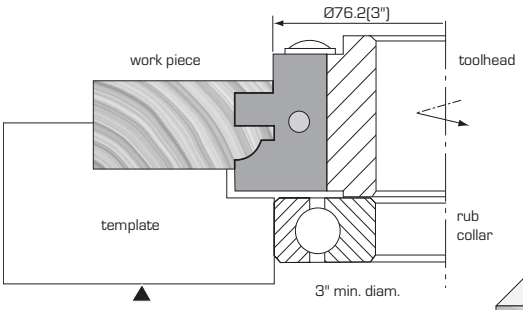


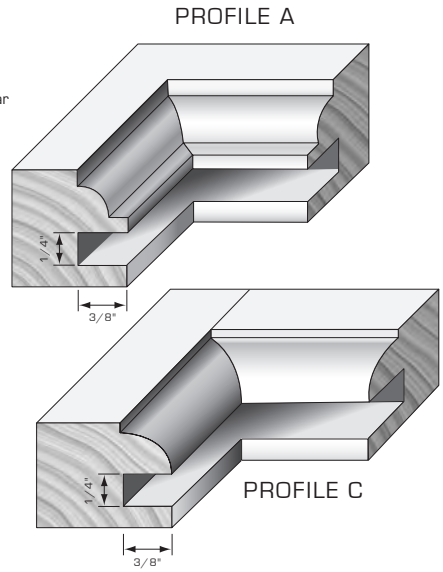
DESIGN:
» High tensile steel body
» 3 straight teeth
» 4 different profiles
» 3/8" flat tongue profile
» Set contains 2 toolheads and 24 tungsten carbide insert knives
» Packed in wooden box complete with wrenches
» Ball bearing guide is optional and sold separately

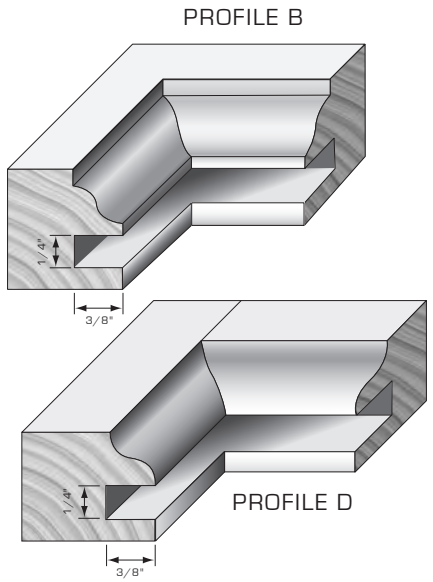
APPLICATION:
» To produce stile and rails in solid wood and panel materials

MACHINES:
» Shapers

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød	NO. TEETH	RPM MIN.-MAX
1TS06	95	30	1-1/4"	1-1/4"	3	7500-12000







REPLACEMENT PARTS

DESCRIPTION	RUB COLLAR	WEDGE	WEDGE SCREW	WRENCH
PART NO.	W057114-3	W042581	W501301	W400113
DIMENSIONS	3" DIAM.	28	M6x12	3mm Hex

REDUCING SLEEVES

PART NO.	BORE
054-3175-34	3/4"
054-3175-1	1"

2 pcs per cutter recommended
(refer to "Flanged Sleeves" table on page H2)

REPLACEMENT KNIVES

PROFILE	DESCRIPTION	RAIL KNIFE	STILE KNIFE
A	PART NO.	1TS06A1	1TS06A2
	DIMENSIONS	30x25x2.0	30x25x2.0
B	PART NO.	1TS06B1	1TS06B2
	DIMENSIONS	30x25x2.0	30x25x2.0
C	PART NO.	1TS06C1	1TS06C2
	DIMENSIONS	30x25x2.0	30x25x2.0
D	PART NO.	1TS06D1	1TS06D2
	DIMENSIONS	30x25x2.0	30x25x2.0

1TS08 PANEL RAISING TOOLHEAD SET
WITH 5 PROFILES



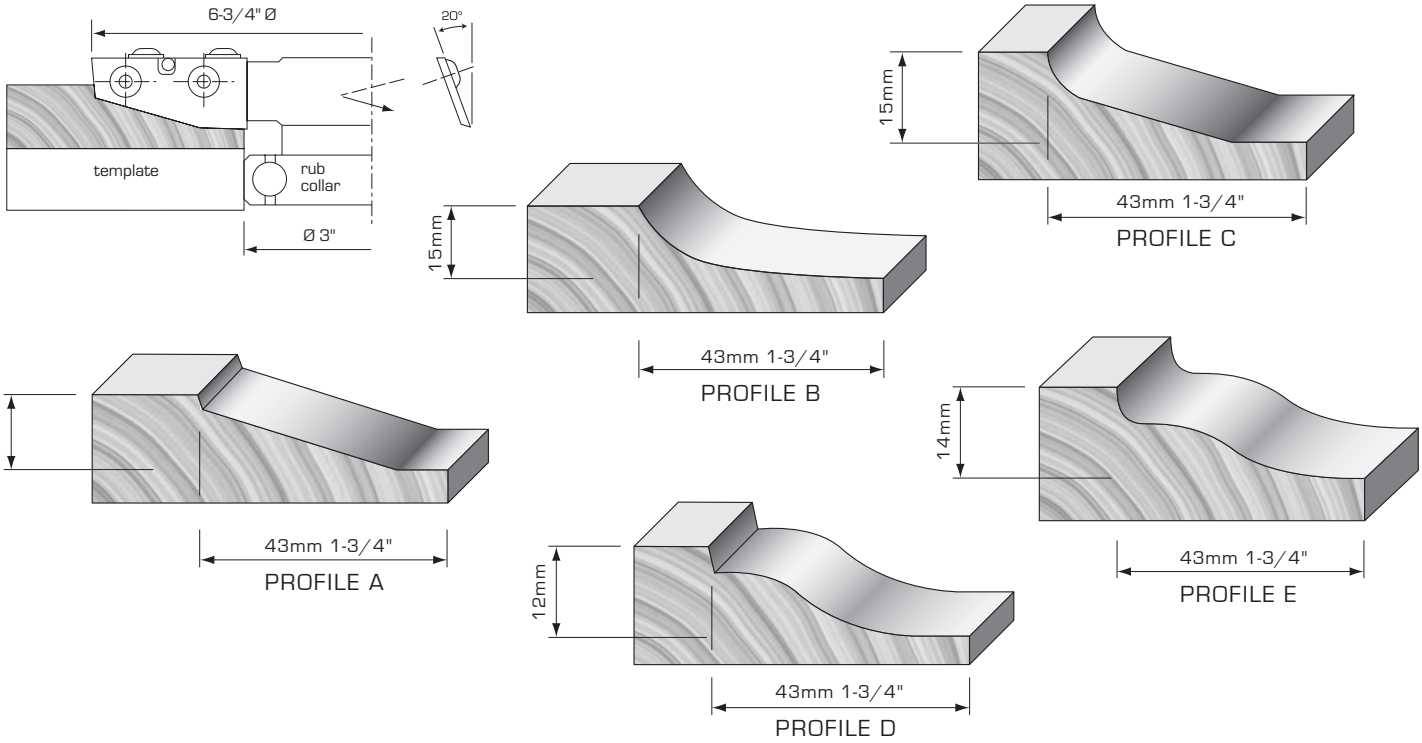
DESIGN:
» High tensile steel body
» 3 teeth on a shear angle
» 5 different profiles
» Set contains a single toolhead and 15 tungsten carbide insert knives
» Packed in wooden box complete with wrenches
» Ball bearing guide is optional and sold separately

APPLICATION:
» To produce raised panels in solid wood and panel materials

MACHINES:
» Shapers

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1TS08	172	22	1-1/4"	35	3	4500-7500

Other sizes available upon request



REPLACEMENT PARTS

DESCRIPTION	KNIFE SCREW	WASHER FOR LOCKING SCREW	POSITIONING SCREW	RUB COLLAR	WRENCH
PART NO.	W501203	W300460	W502601	W057114-3	W400405
DIMENSIONS	M5x10	10x5.3	M5x10	3" DIAM.	T15 Torx

REPLACEMENT KNIVES

PROFILE	DESCRIPTION	KNIFE
A	PART NO.	1TS08A
	DIMENSIONS	50x25x2.0
B	PART NO.	1TS08B
	DIMENSIONS	50x25x2.0
C	PART NO.	1TS08C
	DIMENSIONS	50x25x2.0
D	PART NO.	1TS08D
	DIMENSIONS	50x25x2.0
E	PART NO.	1TS08E
	DIMENSIONS	50x25x2.0

1TS09 ENTRY AND PASSAGE DOOR TOOLHEAD SET
WITH 4 PROFILES



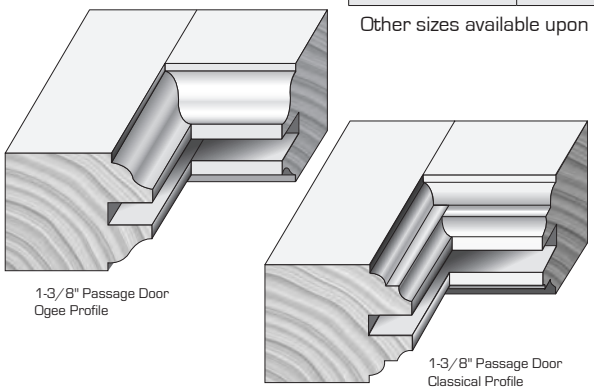
DESIGN:
» High tensile steel body
» 2 straight teeth with spurs
» Set of 2 toolheads and 24 tungsten carbide insert knives to produce 4 different profiles "A – D"
» Packed in wooden box complete with wrenches
» Ball bearing guide is optional and sold separately

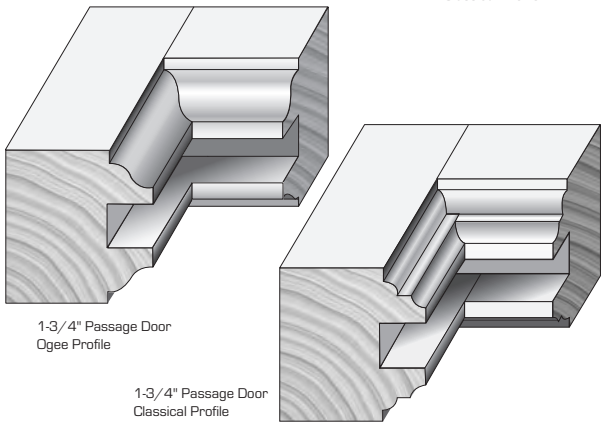
APPLICATION:
» To produce stile and rails in solid wood

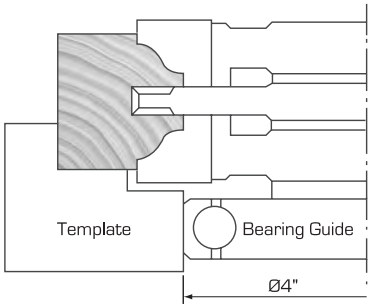
MACHINES:
» Shapers

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	NO. SPURS	RPM MIN-MAX
1TS09	127	see drawing	1-1/4"	32	2	2	6000-10000

Other sizes available upon request





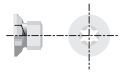


SPACERS

SPACER	SPACER PART NO.
A	1TS09A
B	1TS09B
C	1TS09C
D	1TS09D
E	1TS09E
F	1TS09F

REPLACEMENT PARTS





TOOL NO.	DESCRIPTION	WEDGE	WEDGE SCREW	SPUR SCREW
1	PART NO.	W46961	W502402	-
	DIMENSIONS	13x11x9.5	M7x21	-
2	PART NO.	W46951	W502402	-
	DIMENSIONS	13x11x9.5	M7x21	-
3	PART NO.	W32641	W501313	W500004
	DIMENSIONS	5x10x8	M4x16	M5x5.1
4	PART NO.	W350023	W502403	W500002
	DIMENSIONS	9	M5x18	M5x7
5	PART NO.	W350054	W502402	W500002
	DIMENSIONS	26x11x9.5	M7x21	M5x7

REPLACEMENT KNIVES

TOOL NO.	PROFILE	KNIFE PART NO.
1	1A	1TS091A
	1B	1TS091B
	1C	1TS091C
	1D	1TS091D
2	2A	1TS092A
	2B	1TS092B
	2C	1TS092C
	2D	1TS092D
3	STRAIGHT	1TS0914
	SPUR	301404
4	STRAIGHT	301230
	SPUR	301404
5	STRAIGHT	303000
	SPUR	301404

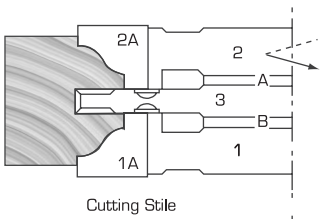
WRENCHES

TYPE	WRENCH PART NO.
WEDGE M4	W400000 2mm Hex
WEDGE M5	W400420 T20 Torx
WEDGE M7	W400115 5mm Hex
SPUR M4	W400405 T15 Torx
SPUR M5	W400405 T15 Torx

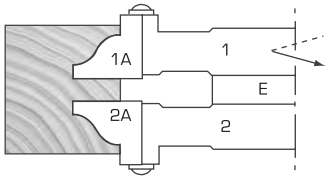
Continued on page D30...

ENTRY AND PASSAGE DOOR TOOLHEAD SET

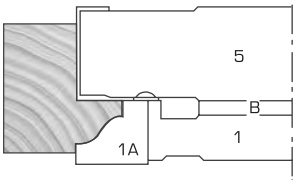
PROFILE COMBINATIONS



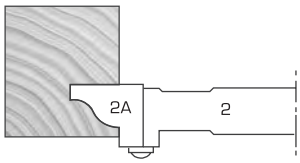
Cutting Stile



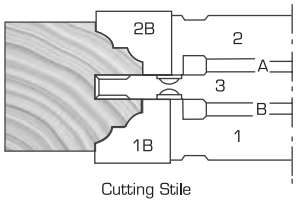
Cutting Rail



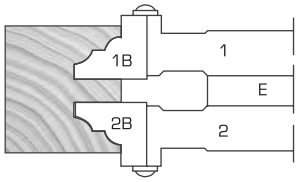
Cutting Stile for Glass Panels



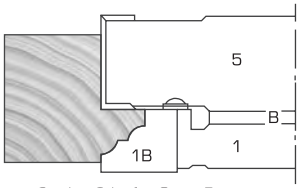
Cutting Rail for Glass Panels



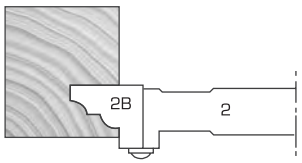
Cutting Stile



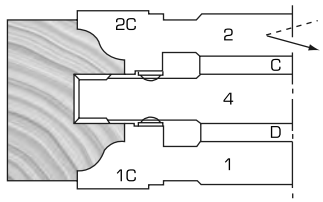
Cutting Rail



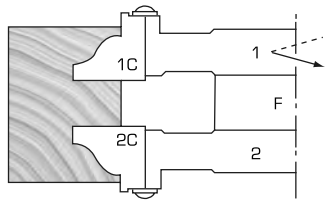
Cutting Stile for Glass Panels



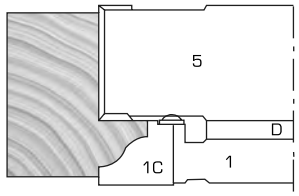
Cutting Rail for Glass Panels



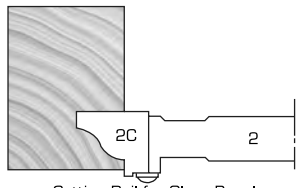
Cutting Stile



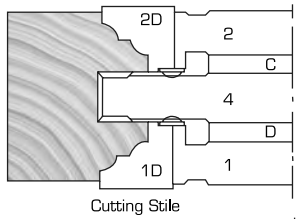
Cutting Rail



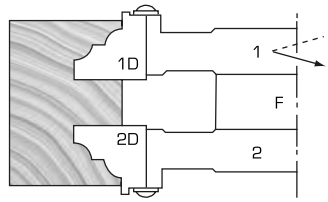
Cutting Stile for Glass Panels



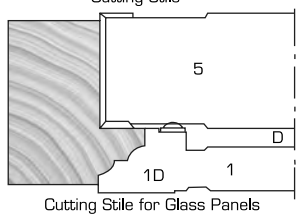
Cutting Rail for Glass Panels



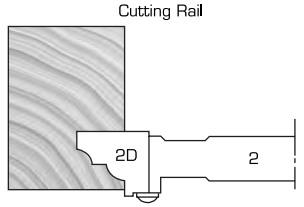
Cutting Stile



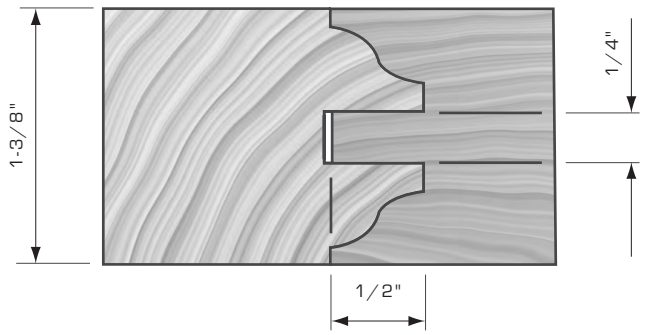
Cutting Rail

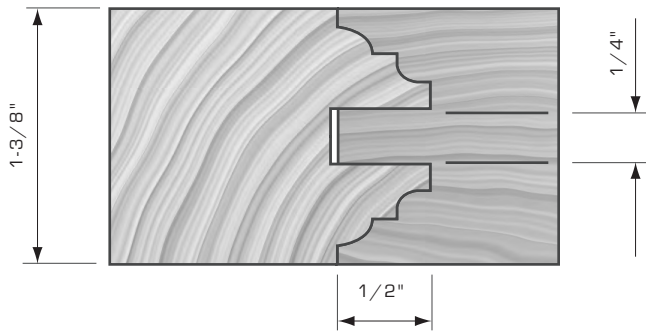


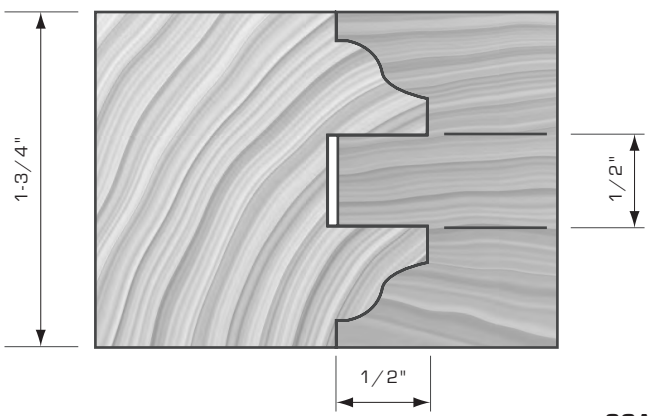
Cutting Stile for Glass Panels

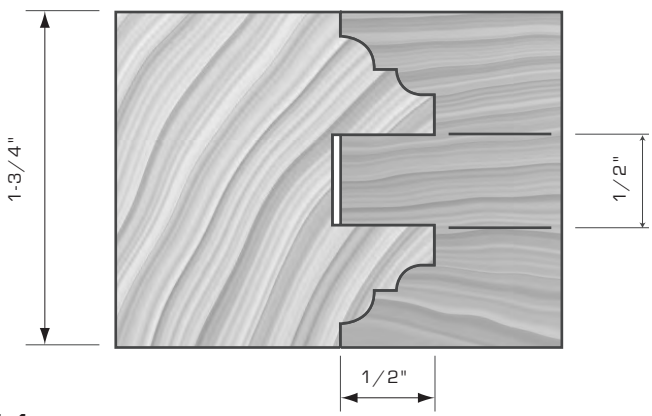


Cutting Rail for Glass Panels









SCALE 1:1

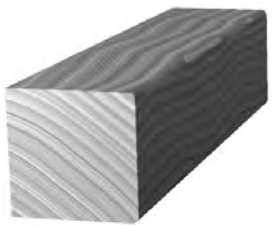
1T580 ROUNDING & CAMFERING TOOLHEAD
ADJUSTABLE



DESIGN:
» High tensile steel body
» 3 teeth on a shear angle
» Set of 3 interlocking toolheads with set of spacers, adjustable for various wood thicknesses
» Knives for toolheads “A” and “C” are sold separately
» Toolhead “B” is supplied with 1 set of knives
» Tungsten carbide insert knives

APPLICATION:
» For jointing, corner rounding, and chamfering in solid wood and panel materials

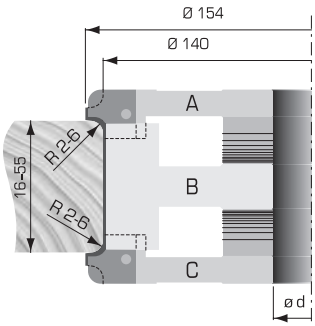
MACHINES:
» On shapers, double-end tenoners, and moulders

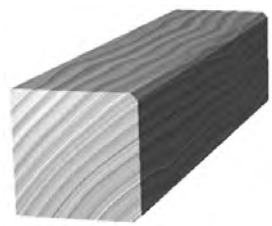


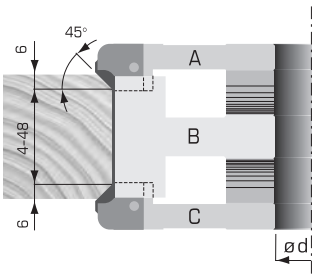
PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	CUTTER TYPE	RPM MIN-MAX
1T580 COMPLETE SET	154	20	1-1/4"	50	3	A	5600-9500
	140	50	1-1/4"	50	3	B	5600-9500
	154	20	1-1/4"	50	3	C	5600-9500
1T580-40 COMPLETE SET	154	20	40mm	50	3	A	5600-9500
	140	50	40mm	50	3	B	5600-9500
	154	20	40mm	50	3	C	5600-9500

Cutters A and C do not include knifes

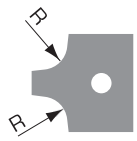
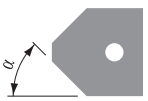
Other sizes available upon request







PROFILE KNIVES

KNIFE	KNIFE PART NO.	RADIUS	DIMENSIONS
	**402002**	2	20x20.5x2
	402003	3	20x20.5x2
	402004	4	20x20.5x2
	402005	5	20x20.5x2
	402006	6	20x20.5x2
	**402020**	α = 45°	20x20.5x2

REPLACEMENT PARTS



CUTTER TYPE	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
A	**PART NO.**	**SEE TABLE**	**W350055**	**W502402**	**W400115**
	DIMENSIONS	20x20.5x2	16	M7x21	5mm Hex
B	**PART NO.**	**305000**	**W350009**	**W502402**	**W400115**
	DIMENSIONS	50x12x1.5	46	M7x21	5mm Hex
C	**PART NO.**	**SEE TABLE**	**W350053**	**W502402**	**W400115**
	DIMENSIONS	20x20.5x2	16	M7x21	5mm Hex

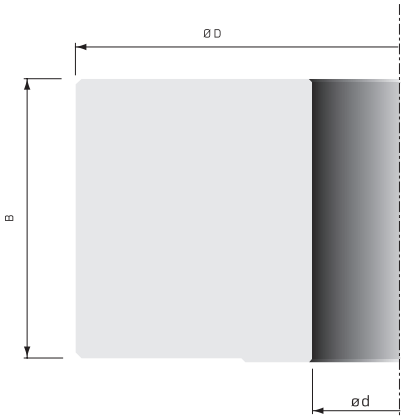


DESIGN:
» High tensile steel body
» 3 straight teeth
» Backing plates 4mm thick
» Tungsten carbide insert knives 2mm thick
» Knives and backing plates can be profiled for various shapes

APPLICATION:
» For profiling in solid wood and panel materials

MACHINES:
» On shapers, double-end tenoners, and moulders

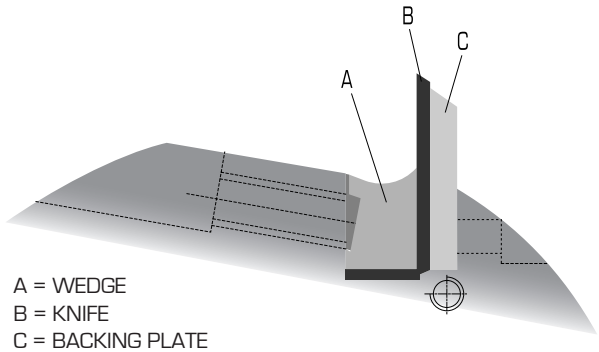
WHEN ORDERING SPECIFY:
» Knives and backing plates (items not included with toolhead)



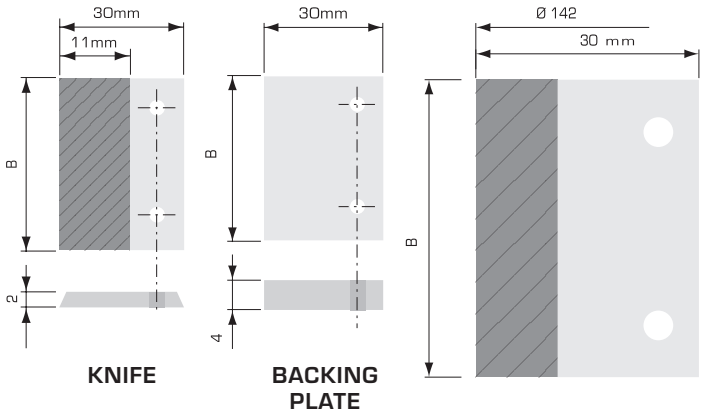
PART NO.	BODY ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	MAX. RPM
1T5851M	116	40	1-1/4"	50	3	10500
1T5852M	116	50	1-1/4"	50	3	10500
1T5853M	116	60	1-1/4"	50	3	10500

Cutter excluding knives and backing plates

Other sizes available upon request



A = WEDGE
B = KNIFE
C = BACKING PLATE



KNIFE

BACKING PLATE

REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	WEDGE	WEDGE SCREW	WRENCH
1T5851M	PART NO.	W303001	W501404	W400114
	DIMENSIONS	38	M8x20	4mm Hex
1T5852M	PART NO.	W303002	W501404	W400114
	DIMENSIONS	48	M8x20	4mm Hex
1T5853M	PART NO.	W303003	W501404	W400114
	DIMENSIONS	58	M8x20	4mm Hex

1T587 MULTI-PROFILE TOOLHEADS
15MM & 20MM MAX. PROFILE DEPTH

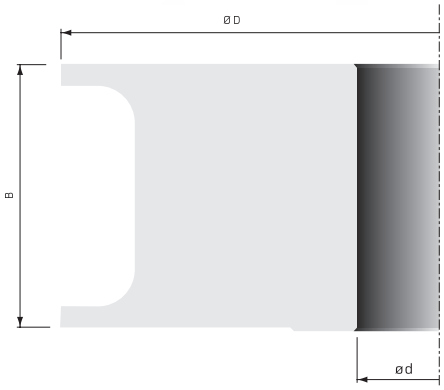


DESIGN:
» High tensile steel body
» 3 straight teeth
» Backing plates 4mm thick
» Tungsten carbide insert knives 2mm thick
» Knives and backing plates can be profiled for various shapes

APPLICATION:
» For profiling in solid wood and panel materials

MACHINES:
» On shapers, double-end tenoners, and moulders

WHEN ORDERING SPECIFY:
» Knives and backing plates (items not included with toolhead)



PART NO.	BODY ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	MAX. RPM
1T5871M	147	40	1-1/4"	50	3	9500
1T5872M	147	50	1-1/4"	50	3	9500
1T5873M	147	60	1-1/4"	50	3	9500

Cutter excluding knives and backing plates

Other sizes available upon request

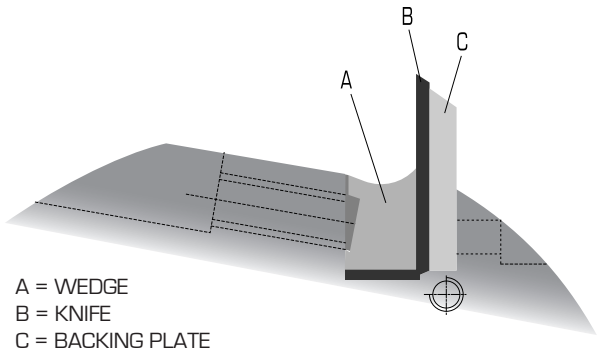
REPLACEMENT PARTS




TOOL NO.	DESCRIPTION	WEDGE	WEDGE SCREW	WRENCH
1T5871M	PART NO.	W303001	W501404	W400114
	DIMENSIONS	38	M8x20	4mm Hex
1T5872M	PART NO.	W303002	W501404	W400114
	DIMENSIONS	48	M8x20	4mm Hex
1T5873M	PART NO.	W303003	W501404	W400114
	DIMENSIONS	58	M8x20	4mm Hex

Continued on page D34...

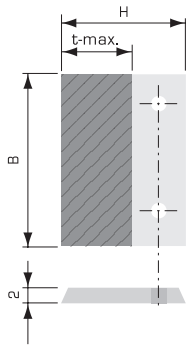
MULTI-PROFILE TOOLHEADS
15MM MAX. PROFILE DEPTH



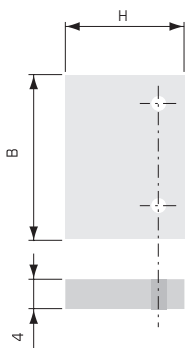
A = WEDGE
B = KNIFE
C = BACKING PLATE

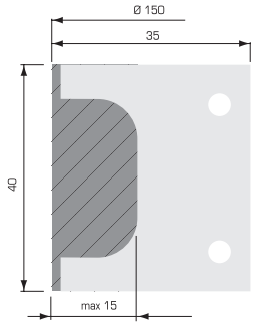
CARBIDE KNIVES	STEEL BACKING PLATES	MAXIMUM PROFILE DEPTH t-max MM
DIMENSIONS B x H x T	DIMENSIONS B x H x T	
40 x 35 x2	39 x 33 x 4	15
40 x 40 x 2	39 x 38 x 4	20
50 x 35 x 2	49 x 33 x 4	15
50 x 40 x 2	49 x 38 x 4	20
60 x 35 x 2	59 x 33 x 4	15
60 x 40 x 2	59 x 38 x 4	20

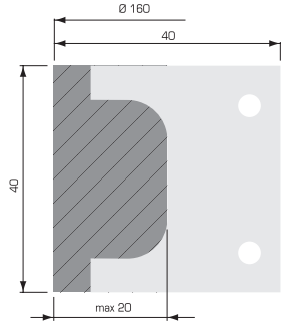
KNIFE

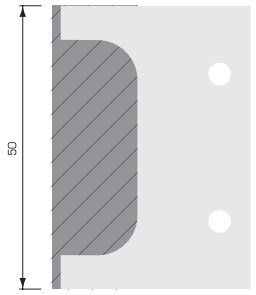


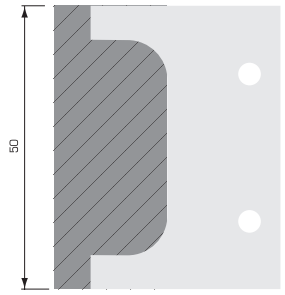
BACKING PLATE

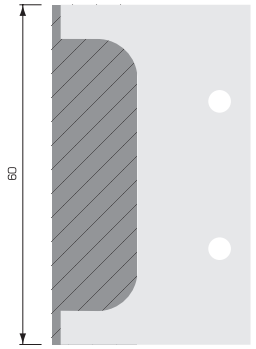


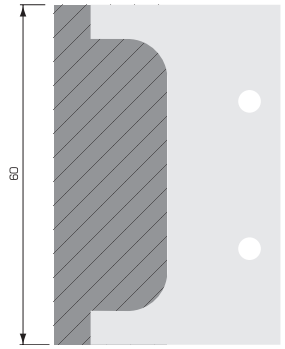












1T589 MULTI-PROFILE TOOLHEADS
11MM & 15MM MAX. PROFILE DEPTH



DESIGN:
» High tensile steel body
» 3 straight teeth
» Backing plates 4mm thick
» Tungsten carbide insert knives 2mm thick
» Knives and backing plates can be profiled for various shapes
» Knives and backing plates not included with toolhead

APPLICATION:
» For profiling in solid wood and panel materials

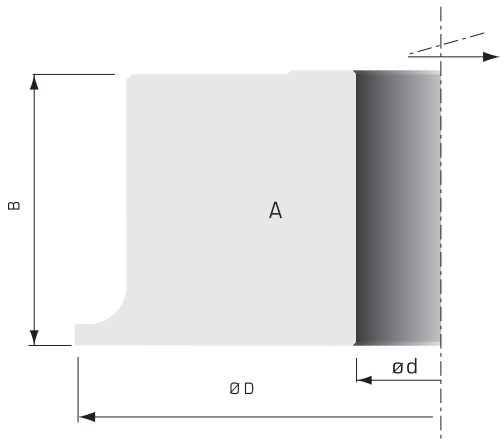
MACHINES:
» On shapers, double-end tenoners and moulders

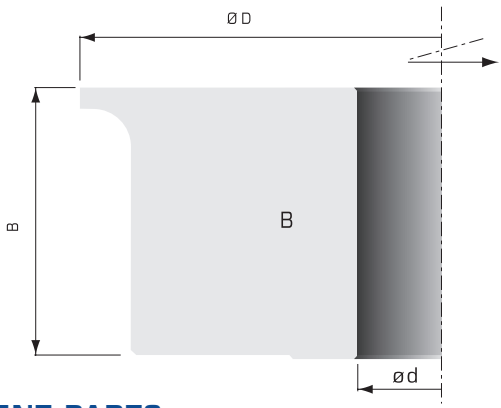
WHEN ORDERING SPECIFY:
» Knives and backing plates. Items not included with toolhead.

PART NO.	CUTTER TYPE	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. TEETH	MAX. RPM
1T5891M	A	137	40	1-1/4"	50	3	10000
1T5892M	A	137	50	1-1/4"	50	3	10000
1T5893M	A	137	60	1-1/4"	50	3	10000
1T5894M	B	137	40	1-1/4"	50	3	10000
1T5895M	B	137	50	1-1/4"	50	3	10000
1T5896M	B	137	60	1-1/4"	50	3	10000

Cutters excluding knives and backing plates

Other sizes available upon request





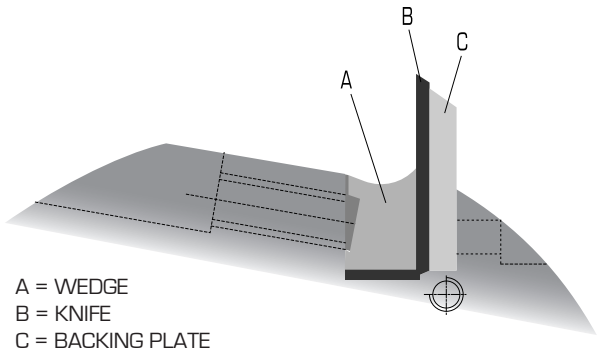
REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	WEDGE	WEDGE SCREW	WRENCH
1T5891M 1T5894M	**PART NO.**	**W303001**	**W501404**	**W400114**
	DIMENSIONS	38	M8x20	4mm Hex
1T5892M 1T5895M	**PART NO.**	**W303002**	**W501404**	**W400114**
	DIMENSIONS	48	M8x20	4mm Hex
1T5893M 1T5896M	**PART NO.**	**W303003**	**W501404**	**W400114**
	DIMENSIONS	58	M8x20	4mm Hex

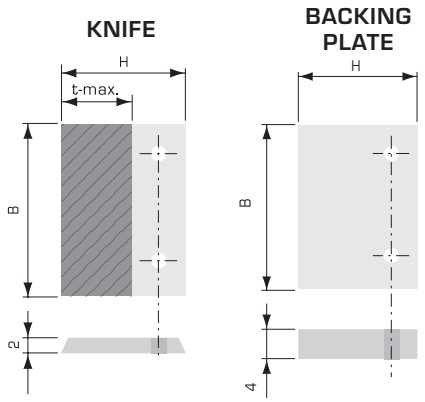
Continued on page D36...

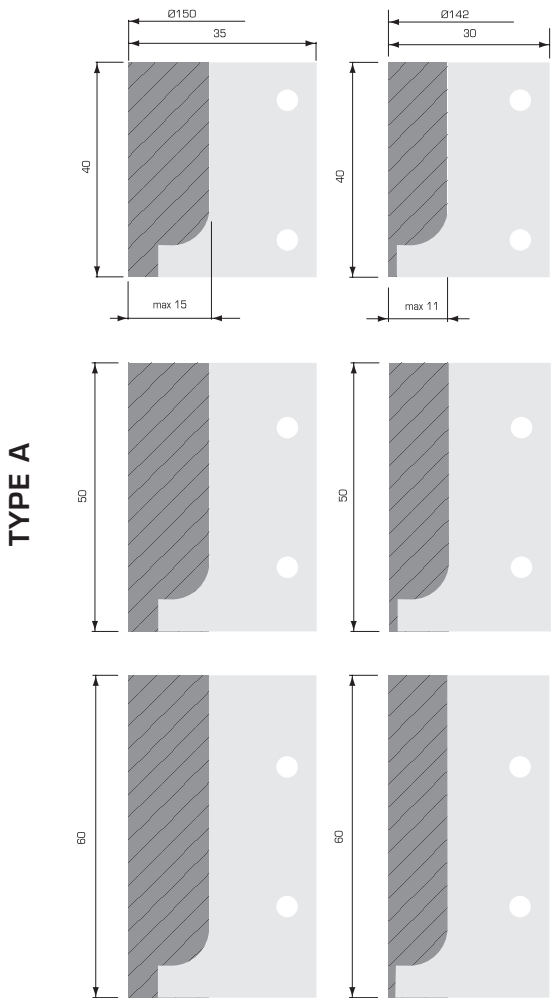
MULTI-PROFILE TOOLHEADS
11MM AND 15MM MAX. PROFILE DEPTH



A = WEDGE
B = KNIFE
C = BACKING PLATE

CARBIDE KNIVES	BACKING PLATES	MAXIMUM PROFILE DEPTH t-max MM
DIMENSIONS B x H x T	DIMENSIONS B x H x T	
40 x 30 x 2	39 x 28 x 4	11
40 x 35 x 2	39 x 33 x 4	15
50 x 30 x 2	49 x 28 x 4	11
50 x 35 x 2	49 x 33 x 4	15
60 x 30 x 2	59 x 28 x 4	11
60 x 35 x 2	59 x 33 x 4	15









DESIGN:

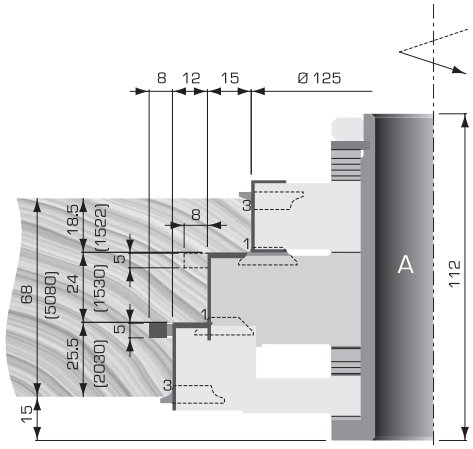
» High tensile steel body
» Tungsten carbide insert knives
» Tools custom manufactured to customer's specifications

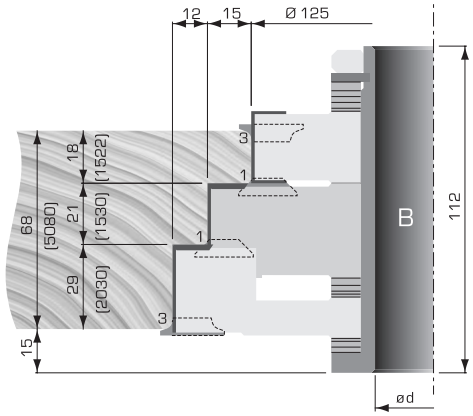
APPLICATION:

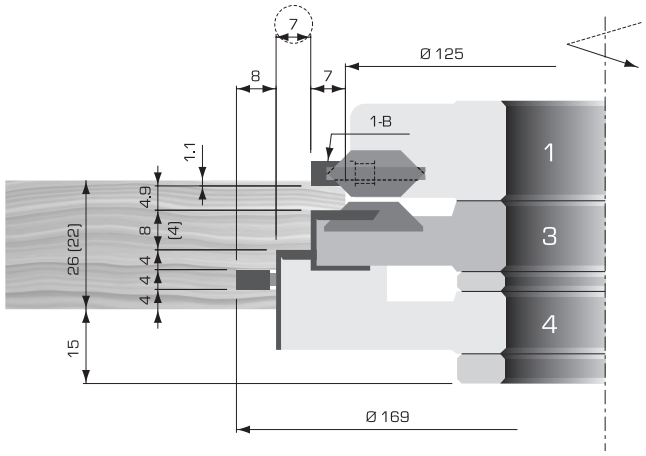
» For producing window components in solid wood

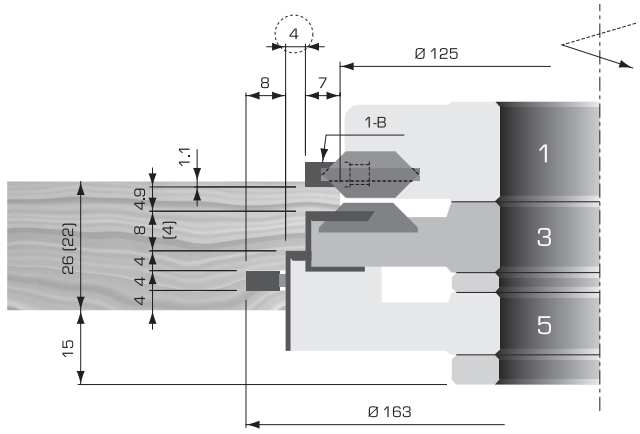
MACHINES:

» On single and double-end tenoners













DESIGN:

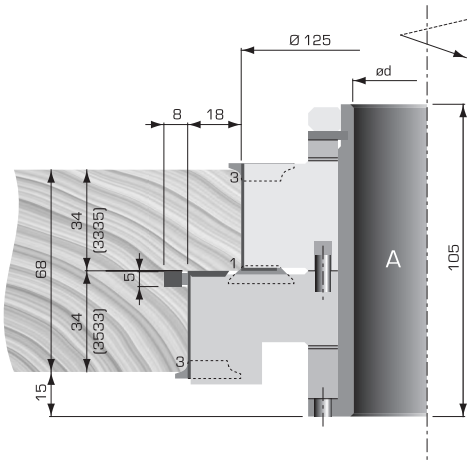
» High tensile steel body
» Tungsten carbide insert knives
» Tools custom manufactured to customer's specifications

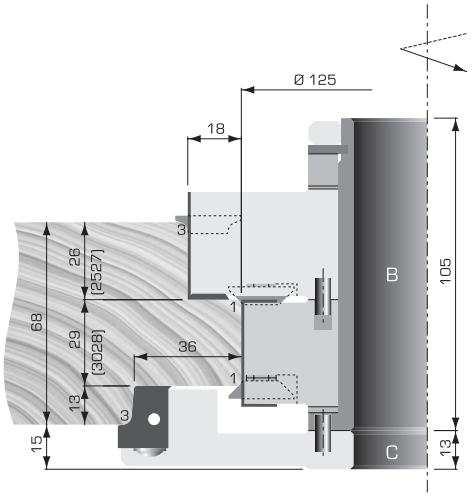
APPLICATION:

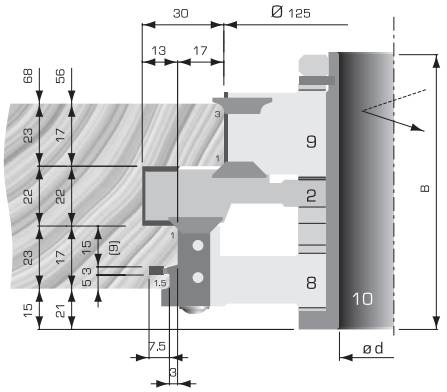
» For producing window components in solid wood

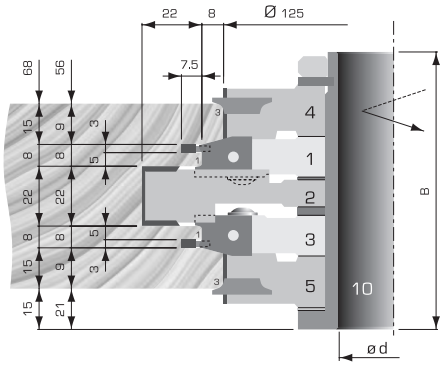
MACHINES:

» On moulders













DESIGN:

» High tensile steel body
» 4 straight teeth
» Toolheads interlock and can be stacked to required cutting width
» When stacked, the insert knives overlap each other
» Reversible tungsten carbide insert knives with 2 cutting edges

APPLICATION:

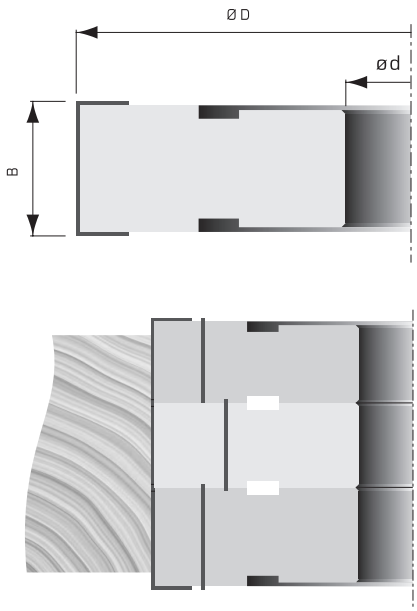
» For surface planing, jointing, and preplaning on the first bottom spindle

MACHINES:

» On moulders and four-sided planers

PART NO.	DIAM. ØD MM	KERF B MM	BORE ød MM	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1T4742M	125	30	40	50	4	6000-11500
1T4745M	125	50	40	50	4	6000-11500

Other sizes available upon request



REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	WRENCH
1T4742M	PART NO.	303000	W350007	W502402	W400115
	DIMENSIONS	30x12x1.5	26	M7x21	5mm Hex
1T4745M	PART NO.	305000	W350009	W502402	W400115
	DIMENSIONS	50x12x1.5	46	M7x21	5mm Hex



DESIGN:

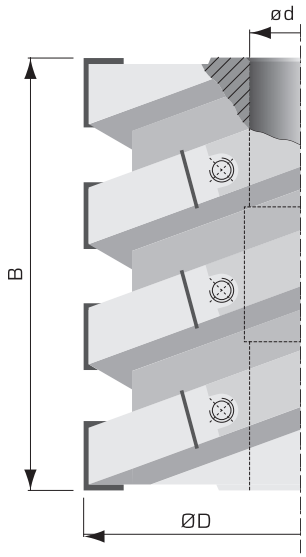
- High tensile steel body
- Staggered knives on a shear angle and spiral progression
- Toolheads supplied with type “A” reversible inserts, type “B” knives for superior surface finish are available upon request
- Reversible tungsten carbide insert knives with 2 cutting edges
- Design of toolhead reduces noise levels

APPLICATION:

- For surface planing, jointing, and preplaning on 1st bottom spindle
- Ideal for machining curved furniture components

MACHINES:

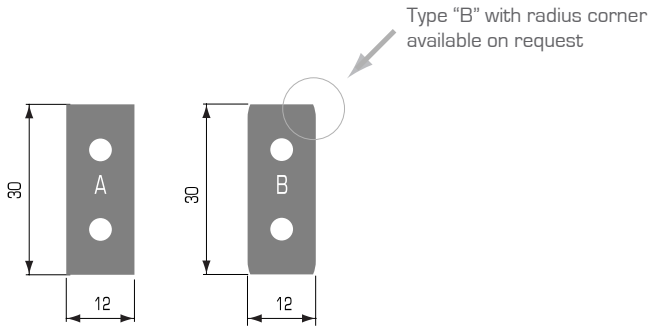
- On shapers, moulders, and four-sided planers



PART NO.	DIAM. ØD	KERF B	BORE ød	MAX BORE ød MM	NO. TEETH	RPM MIN-MAX
1T4751I	4"	3-7/8"	1-1/4"	35	12	7500-13000
1T4752I	4"	4-51/64"	1-1/4"	35	15	7500-13000
1T4751M	125mm	99mm	40mm	50	12	6000-11000
1T4752M	125mm	122mm	40mm	50	15	6000-11000
1T4753M	125mm	145mm	40mm	50	18	6000-11000
1T4754M	125mm	191mm	40mm	50	24	6000-11000
1T4755M	125mm	228mm	40mm	50	30	6000-11000

Other sizes available upon request

Available in aluminum body, quoted upon request



REPLACEMENT PARTS



DESCRIPTION	KNIFE TYPE A	KNIFE TYPE B	WEDGE	WEDGE SCREW	WRENCH
PART NO.	303000	303000R	W350063	W502402	W400115
DIMENSIONS	30x12x1.5	30x12x1.5	26	M7x21	5mm Hex

1T476 HELICAL STAGGERED TOOTH TOOLHEADS
ROUGHING



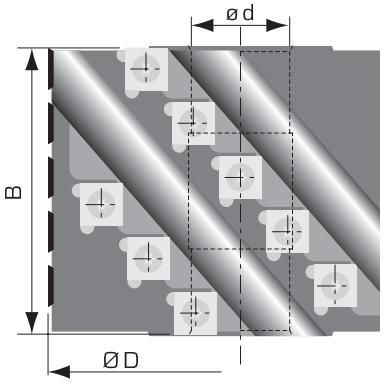
DESIGN:
» Surface treated steel or aluminum body
» Helical toolhead with 4, 6, or 8 helices
» Spiral and staggered design enables heavy stock removal with or against the wood grain
» Toolheads can be custom made with spurs on one or both sides for tenoning and rabbet cuts (quoted upon request)
» Reversible tungsten carbide inserts with 4 cutting edges

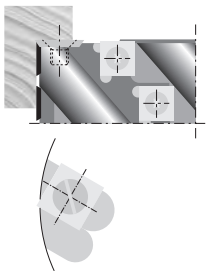
APPLICATION:
» For surface planing, jointing, and preplaning in solid wood on the 1st bottom spindle
» Ideal for machining curved furniture components

MACHINES:
» On shapers, double-end tenoners, surface planers, and moulders

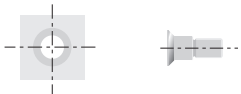
STEEL BODY PART NO.	ALUMINUM BODY PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. HELICES	NO. INSERT KNIVES	RPM MIN-MAX
1T47601	1T47701	80	89	1-1/4"	35	4	14	9500-16000
1T47603	1T47703	100	102	1-1/4"	40	4	16	7500-13000
1T47605	1T47705	125	102	40mm	60	4	16	6000-10000
1T47606	1T47706	125	127	40mm	60	4	20	6000-10000
1T47607	1T47707	125	151.5	40mm	60	4	24	6000-10000
1T47608	1T47708	125	177	40mm	60	4	28	6000-10000
1T47609	1T47709	125	227	40mm	60	4	36	6000-10000
1T47610	1T47710	125	102	40mm	60	6	27	6000-10000
1T47611	1T47711	125	127	40mm	60	6	30	6000-10000
1T47612	1T47712	125	151.5	40mm	60	6	36	6000-10000
1T47613	1T47713	125	177	40mm	60	6	42	6000-10000
1T47614	1T47714	125	227	40mm	60	6	54	6000-10000
1T47615	1T47715	140	102	40mm	60	6	27	5500-9500
1T47616	1T47716	140	127	40mm	60	6	30	5500-9500
1T47617	1T47717	140	151.5	40mm	60	6	36	5500-9500
1T47618	1T47718	140	177	40mm	60	6	42	5500-9500
1T47619	1T47719	140	227	40mm	60	6	54	5500-9500
1T47620	1T47720	140	102	40mm	60	8	32	5500-9500
1T47621	1T47721	140	127	40mm	60	8	40	5500-9500
1T47622	1T47722	140	151.5	40mm	60	8	48	5500-9500
1T47623	1T47723	140	177	40mm	60	8	56	5500-9500
1T47624	1T47724	140	227	40mm	60	8	72	5500-9500

Other sizes available upon request up to a maximum diameter of 300mm and 4, 6, 8, or 10 helices





REPLACEMENT PARTS



DESCRIPTION	KNIFE	KNIFE SCREW	WRENCH
PART NO.	301404	W500003	W400420
DIMENSIONS	14x14x2.0	M5x14	T20 Torx

1T4800 HELICAL STAGGERED TOOTH TOOLHEADS
FINISHING



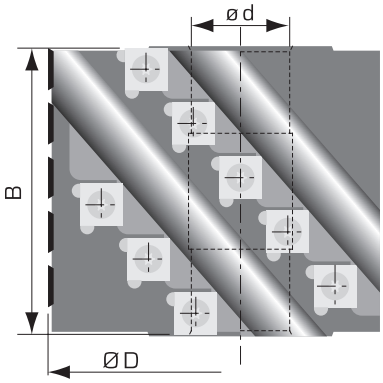
DESIGN:
» Surface treated steel or aluminum body
» Helical toolhead with 4, 6, or 8 helices
» Spiral and staggered design along with rounded corner reversible inserts provide superior surface finish
» Toolheads can be custom made with spurs on one or both sides for tenoning and rabbet cuts (quoted upon request)
» Reversible tungsten carbide inserts with 4 rounded edges and 4 radiused corners (see drawing)

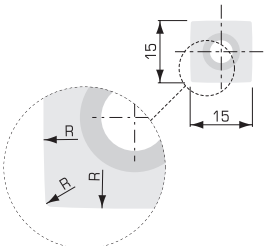
APPLICATION:
» For surface planing, jointing, and preplaning in solid wood

MACHINES:
» On shapers, double-end tenoners, surface planers, and moulders

STEEL BODY PART NO.	ALUMINUM BODY PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	MAX BORE ød MM	NO. HELICES	NO. INSERT KNIVES	RPM MIN-MAX
1T48001	1T48101	80	83	1-1/4"	35	4	18	9500-16000
1T48003	1T48103	100	102	1-1/4"	40	4	20	7500-13000
1T48005	1T48105	125	102	40mm	60	4	20	6000-10000
1T48006	1T48106	125	131	40mm	60	4	26	6000-10000
1T48007	1T48107	125	150	40mm	60	4	30	6000-10000
1T48008	1T48108	125	179	40mm	60	4	36	6000-10000
1T48009	1T48109	125	227	40mm	60	4	46	6000-10000
1T48010	1T48110	125	102	40mm	60	6	30	6000-10000
1T48011	1T48111	125	131	40mm	60	6	39	6000-10000
1T48012	1T48112	125	150	40mm	60	6	45	6000-10000
1T48013	1T48113	125	179	40mm	60	6	54	6000-10000
1T48014	1T48114	125	227	40mm	60	6	69	6000-10000
1T48015	1T48115	140	102	40mm	60	6	30	5500-9500
1T48016	1T48116	140	131	40mm	60	6	39	5500-9500
1T48017	1T48117	140	150	40mm	60	6	45	5500-9500
1T48018	1T48118	140	179	40mm	60	6	54	5500-9500
1T48019	1T48119	140	227	40mm	60	6	69	5500-9500
1T48020	1T48120	140	102	40mm	60	8	40	5500-9500
1T48021	1T48121	140	131	40mm	60	8	52	5500-9500
1T48022	1T48122	140	150	40mm	60	8	60	5500-9500
1T48023	1T48123	140	179	40mm	60	8	72	5500-9500
1T48024	1T48124	140	227	40mm	60	8	92	5500-9500

Other sizes available upon request up to a maximum diameter of 300mm and 4, 6, 8, or 10 helices





RADIUS INSERT

REPLACEMENT PARTS



DESCRIPTION	KNIFE	KNIFE SCREW	WRENCH
PART NO.	301525	W500003	W400420
DIMENSIONS	15x15x2.0	M5x14	T20 Torx

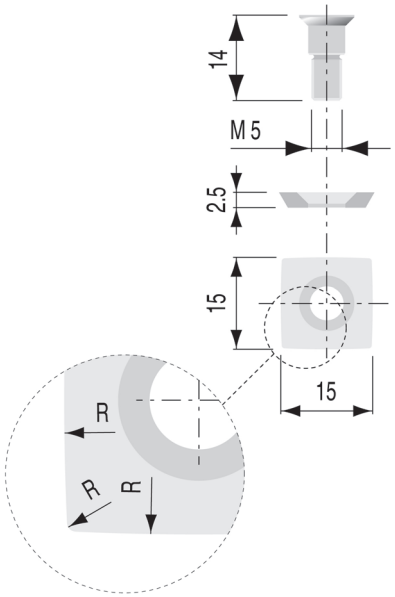
1T4900 HELICAL STAGGERED TOOTH TOOLHEADS
FINISHING - WITH SHEAR ANGLE



DESIGN:
- » Aluminum body (steel body quoted on request)
- » Helical toolhead with 4, 6, or 8 helices
- » Spiral and staggered design along with rounded corner reversible inserts provide superior surface finish
- » Axial alignment of the knvies for reduced cutting pressure
- » Suitable for high feed rates

APPLICATION:
- » For surface planing, jointing, and preplaning in solid wood

MACHINES:
- » On shapers, double-end tenoners, surface planers, and moulders



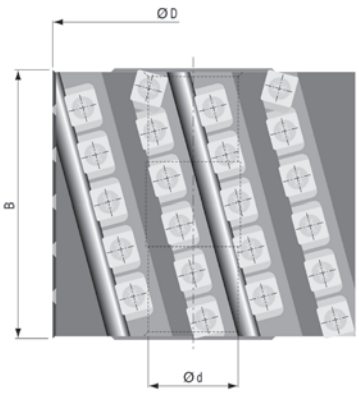
ALUMINUM BODY PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	NO. HELICES	NO. INSERT KNIVES	MAX RPM
1T49001	70	80	25	4	14	19000
1T49003	80	80	30 (-35)	4	14	16700
1T49005	100	100	30 (-40)	4	18	13300
1T49007	125	100	40 (-60)	4	18	10600
1T49008	125	130	40 (-60)	4	26	10600
1T49009	125	180	40 (-60)	4	32	10600
1T49010	125	230	40 (-60)	4	40	10600
1T49011	125	100	40 (-60)	6	27	10600
1T49012	125	130	40 (-60)	6	33	10600
1T49013	125	180	40 (-60)	6	48	10600
1T49014	125	230	40 (-60)	6	60	10600
1T49015	140	100	40 (-60)	6	27	9500
1T49016	140	130	40 (-60)	6	33	9500
1T49017	140	180	40 (-60)	6	48	9500
1T49018	140	230	40 (-60)	6	60	9500
1T49019	140	100	40 (-60)	8	36	9500
1T49020	140	130	40 (-60)	8	44	9500
1T49021	140	180	40 (-60)	8	64	9500
1T49022	140	230	40 (-60)	8	80	9500

Other sizes available upon request up to a maximum diameter of 300mm

Other sizes available upon request up to a maximum length of 300mm

Other sizes available upon request of 4, 6, 8, or 10 helices

Specify bore diameter when ordering





SUITABLE FOR CNC MACHINES

REPLACEMENT PARTS



DESCRIPTION	KNIFE	KNIFE SCREW	WRENCH
PART NO.	301525	W500003	W400420
DIMENSIONS	15x15x2.5	M5x14	T20 Torx

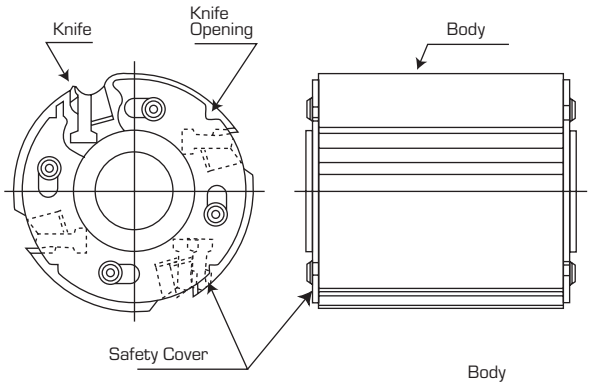


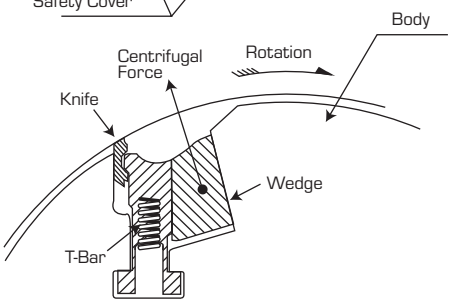
DESIGN:

- » High tensile steel body (aluminum body quoted on requested)
- » 4 straight teeth
- » Unique centrifugal self locking system accurately locks knives in place
- » The reversible double edged knives with unique chipbreaker design and polished edges provide an ultra smooth surface finish
- » Toolhead supplied without knives
- » Knives available in surface treated HSS and in micro-grain mirror-finish solid carbide

APPLICATION:

- » For surface planing and jointing in solid wood, panel materials, plastics, and cellulose





PART NO.	DIAM. ØD MM	KERF B MM	BORE ød	NO. TEETH	RPM MIN-MAX
1T46622	125	80	40mm	4	6000-8000
1T46624	125	100	40mm	4	6000-8000
1T46626	125	130	40mm	4	6000-8000
1T46628	125	150	40mm	4	6000-8000
1T46630	125	180	40mm	4	6000-8000
1T46632	125	230	40mm	4	6000-8000
1T46642	140	80	1-13/16"	4	5500-7000
1T46644	140	100	1-13/16"	4	5500-7000
1T46646	140	130	1-13/16"	4	5500-7000
1T46648	140	150	1-13/16"	4	5500-7000
1T46650	140	180	1-13/16"	4	5500-7000
1T46652	140	230	1-13/16"	4	5500-7000

Other sizes available upon request

REPLACEMENT KNIVES

CARBIDE KNIFE PART NO.	HSS KNIFE PART NO.	CUTTING LENGTH MM	WIDTH MM	THICKNESS MM	NO. OF KNIVES PER PACKAGE
1T466C080	1T466H080	80	8	2	12
1T466C100	1T466H100	100	8	2	12
1T466C130	1T466H130	130	8	2	12
1T466C150	1T466H150	150	8	2	12
1T466C180	1T466H180	180	8	2	12
1T466C230	1T466H230	230	8	2	12

REPLACEMENT PARTS

Ø125MM TOOL NO.	Ø140MM TOOL NO.	DESCRIPTION	WEDGE	T-BAR	END PLATE SCREW	GIB RELEASE PUNCH	WRENCH 3MM ALLEN
1T46622	1T46642	PART NO.	W800100	W800120	W800140	W800142	W400002
1T46624	1T46644	PART NO.	W800102	W800122	W800140	W800142	W400002
1T46626	1T46646	PART NO.	W800104	W800124	W800140	W800142	W400002
1T46628	1T46648	PART NO.	W800106	W800126	W800140	W800142	W400002
1T46630	1T46650	PART NO.	W800108	W800128	W800140	W800142	W400002
1T46632	1T46652	PART NO.	W800110	W800130	W800140	W800142	W400002

1T490 GUIDING GROOVE TOOLHEADS



DESIGN:

» High tensile steel body
» 2 straight teeth and 2 spurs
» Reversible tungsten carbide inserts with 2 cutting edges on the straight knives and 4 cutting edges on the spurs

APPLICATION:

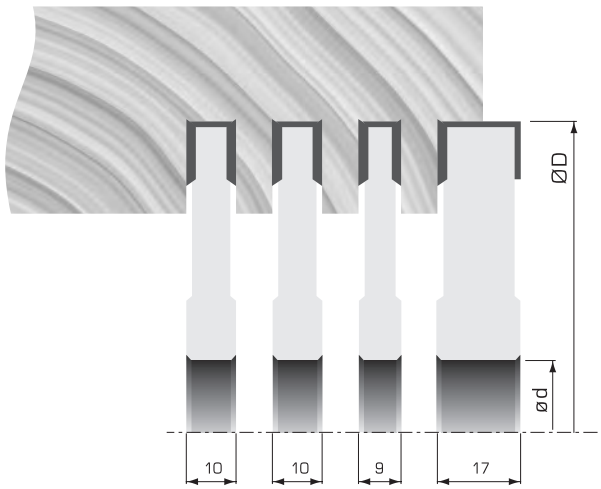
» For cutting guide grooves in solid wood

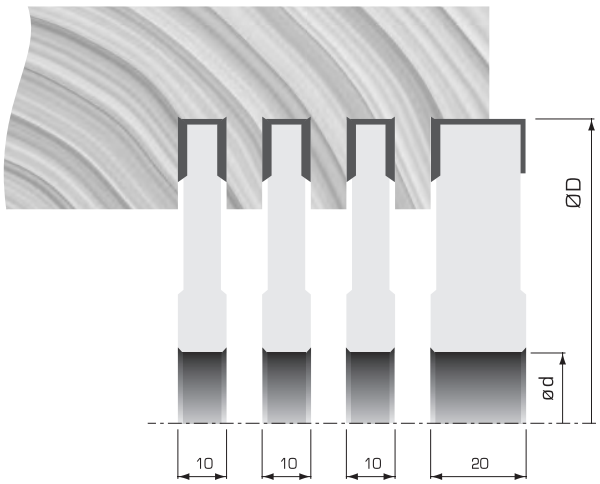
MACHINES:

» On moulders with grooved machine bed

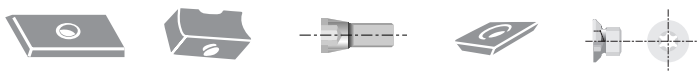
PART NO.	DIAM. ØD MM	KERF B MM	BORE ød MM	MAX BORE ød MM	NO. TEETH	NO. SPURS	RPM MIN-MAX
1T4901M	125	9	40	50	2	2	6000-11500
1T4902M	125	10	40	50	2	2	6000-11500
1T4903M	125	17	40	50	2	2	6000-11500
1T4904M	125	20	40	50	2	2	6000-11500

Other sizes available upon request





REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	WEDGE WRENCH	SPUR WRENCH
1T4901M	PART NO.	300860	W350021	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	8.6x12x1.5	6.8	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T4902M	PART NO.	300960	W350022	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	9.6x12x1.5	7.6	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T4903M	PART NO.	301700	W350017	W502403	301404	W500002	W400420	W400405
	DIMENSIONS	11.6x12x1.5	14	M5x18	14x14x2	M5x7	T20 Torx	T15 Torx
1T4904M	PART NO.	302000	W350005	W502402	301404	W500002	W400115	W400405
	DIMENSIONS	20x12x1.5	16	M7x21	14x14x2	M5x7	5mm Hex	T15 Torx

1T251 TONGUE AND GROOVE TOOLHEADS
ADJUSTABLE



DESIGN:
» High tensile steel body
» 2 or 4 teeth and 2 or 4 spurs
» Set of cutters mounted on sleeves and adjustable by spacers and shims to produce a variety of tongue and groove profiles. See details on pages D48-D49
» Toolheads sold individually, for profile selection refer to pages D48-D49
» Tungsten carbide inserts with 2 or 4 cutting edges

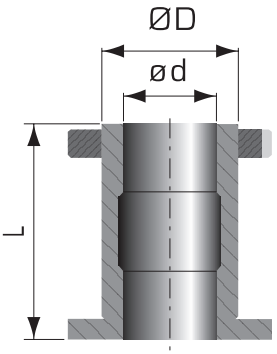
APPLICATION:
» For producing various tongue and groove profiles in solid wood and panel materials

MACHINES:
» On moulders

For profile selection, see pages D48-D49

PART NO.	TOOL TYPE	DIAM. ØD MM	KERF B MM	BORE ØD MM	NO. TEETH	NO. SPURS	NO. GROOVING INSERTS	NO. CHAMFERING INSERTS	RPM MIN-MAX
1T2511M	1	140	15	50	4	2	–	–	5500-10000
1T2512M	2	140	15	50	4	2	–	–	5500-10000
1T2513M	3	127	12	50	2	–	–	2	5800-10000
1T2514M	4	155	20	50	4	–	2	–	4900-10000
1T2515M	5	155	20	50	4	–	2	–	4900-10000
1T2516M	6	139	15	50	4	2	–	–	5500-10000
1T2517M	7	175	15	50	4	2	–	–	4400-8000
1T2518M	8	155	20	50	4	–	2	–	4900-9000
1T2519M	9	160	15	50	4	2	–	–	4800-9000
1T25110M	10	155	20	50	4	–	2	–	4900-9000
1T25111M	11	168	20	50	4	–	2	–	4500-9500
1T25112M	12	149	15	50	4	2	–	–	5100-9500
1T25113M	13	168	20	50	4	–	2	–	4500-8500
1T25114M	14	168	20	50	4	–	2	–	4500-8500
1T25115M	15	154	12	50	2	–	–	–	4900-9000
1T25116M	16	154	12	50	2	–	–	–	4900-9000

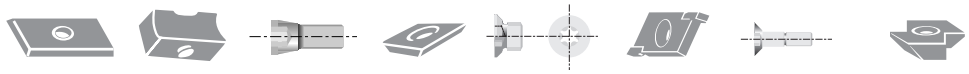
Other sizes available upon request



MECHANICAL SLEEVES

ROTATION		PART NO.	ØD x L x ød
RH		W05950105114R	50mm x 105 x 1-1/4"
		W05950105112R	50mm x 105 x 1-1/2"
		W05950105040R	50mm x 105 x 40mm
LH		W05950105114L	50mm x 105 x 1-1/4"
		W05950105112L	50mm x 105 x 1-1/2"
		W05950105040L	50mm x 105 x 40mm

REPLACEMENT PARTS



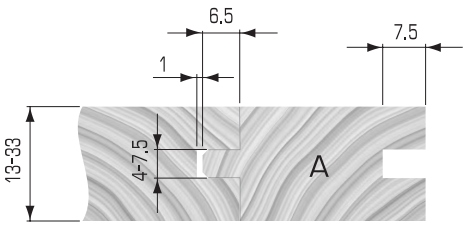
TOOL TYPE	DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	GROOVING INSERT	GROOVING/ CHAMFER SCREW	CHAMFER INSERT RH / LH
1, 2, 6	PART NO.	301500	W350004	W502404	301404	W500002	–	–	–
	DIMENSIONS	15x12x1.5	11	M7x19	14x14x2	M5x7	–	–	–
7, 9, 12	PART NO.	301500	W350004	W502402	301404	W500002	–	–	–
	DIMENSIONS	15x12x1.5	11	M7x21	14x14x2	M5x7	–	–	–
3	PART NO.	301200	W350023	W502403	–	–	–	W500201	30600601 (RH) 30600602 (LH)
	DIMENSIONS	12x12x1.5	9	M5x18	–	–	–	M6x12	27x6x14
4 •	PART NO.	302000	W350005	W502402	–	–	307806	W500205	–
	DIMENSIONS	20x12x1.5	16	M7x21	–	–	37x4x16	M6x15	–
5, 8, 10 Δ	PART NO.	302000	W350005	W502402	–	–	307806	W500205	–
	DIMENSIONS	20x12x1.5	16	M7x21	–	–	37x4x16	M6x15	–
13, 14	PART NO.	302000	W350005	W502402	–	–	307810	W500205	–
	DIMENSIONS	20x12x1.5	16	M7x21	–	–	48x4x16	M6x15	–
11	PART NO.	302000	W350005	W502402	–	–	307831	W500205	–
	DIMENSIONS	20x12x1.5	16	M7x21	–	–	60x4x16	M6x15	–
15, 16	PART NO.	301200	W350023	W502403	–	–	–	–	–
	DIMENSIONS	12x12x1.5	9	M5x18	–	–	–	–	–

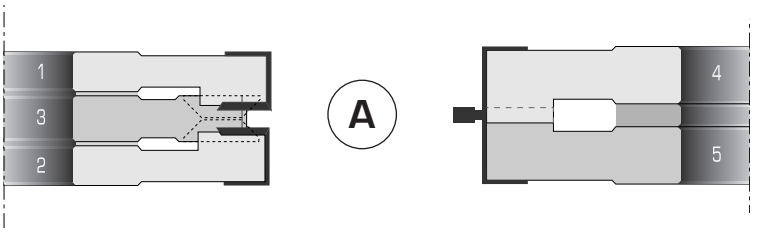
• Tool Type 4 manufactured prior to 2015 requires grooving insert 307809 (dimensions: 48x4x16)

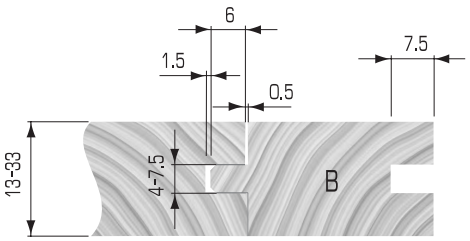
Δ Tool Type 5, 8, and 10 manufactured prior to 2015 requires grooving insert 307810 (dimensions: 48x4x16)

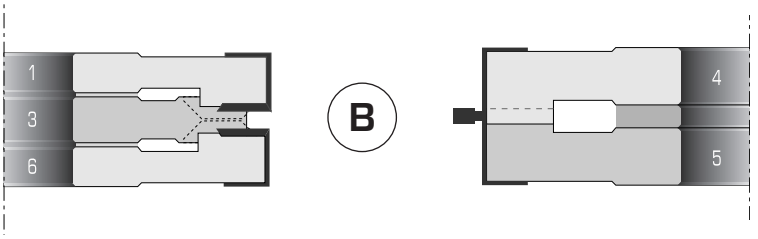
SCREWS AND WRENCHES

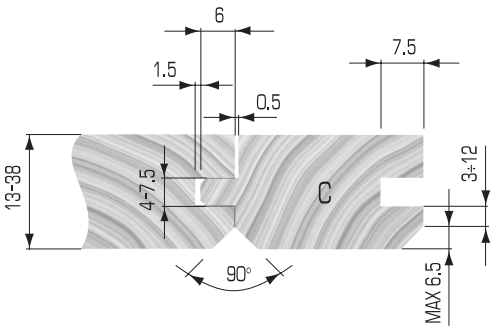
COMPONENT TYPE	COMPONENT PART NO.	DESCRIPTION	WRENCH
WEDGE	W350004	PART NO.	W400115
		DIMENSIONS	5mm Hex
	W350005	PART NO.	W400115
		DIMENSIONS	5mm Hex
	W350023	PART NO.	W400420
		DIMENSIONS	T20 Torx
SPUR SCREW	W500002	PART NO.	W400405
		DIMENSIONS	T15 Torx
GROOVING SCREW	W500201	PART NO.	W400114
		DIMENSIONS	4mm Hex
	W500205	PART NO.	W400114
		DIMENSIONS	4mm Hex
CHAMFER SCREW	W500201	PART NO.	W400114
		DIMENSIONS	4mm Hex

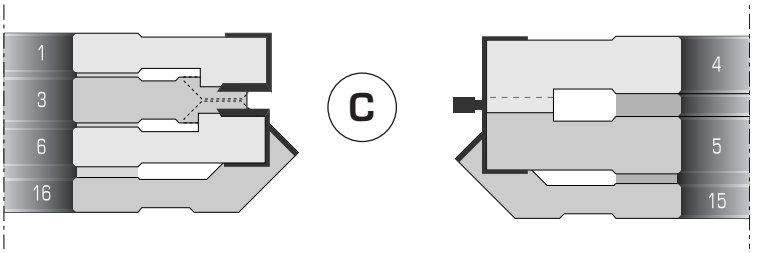

6.5
7.5
1
13-33
4-7.5
A

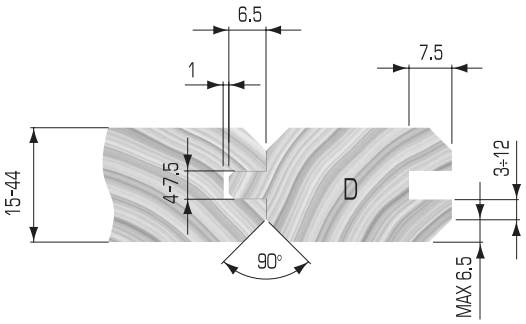

1
3
2
A
4
5

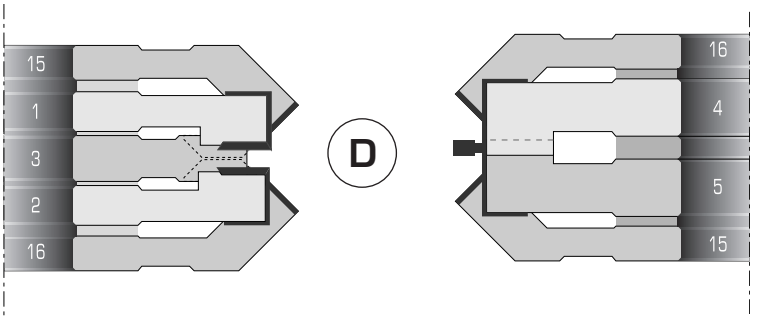

6
7.5
1.5
0.5
13-33
4-7.5
B

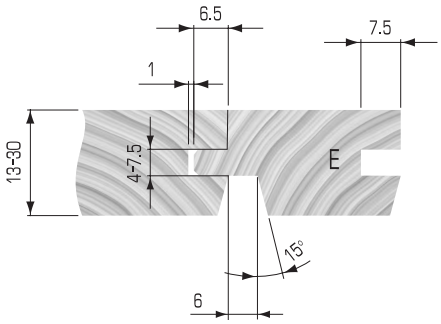

1
3
6
B
4
5

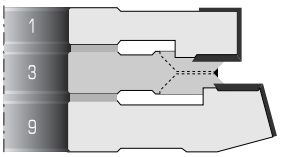

6
7.5
1.5
0.5
13-38
4-7.5
C
3-12
90°
MAX 6.5


1
3
6
16
C
4
5
15

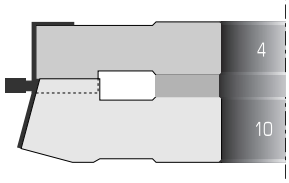

6.5
7.5
1
15-44
4-7.5
D
3-12
90°
MAX 6.5

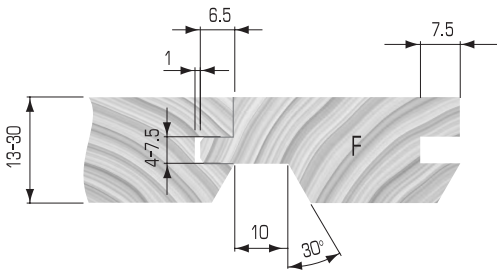

15
1
3
2
16
D
16
4
5
15

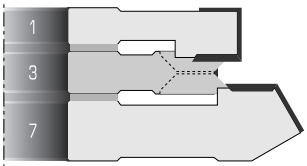

6.5
7.5
1
13-30
4-7.5
E
15°
6


1
3
9

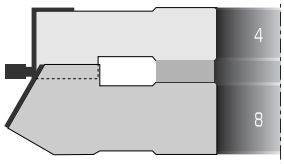
E

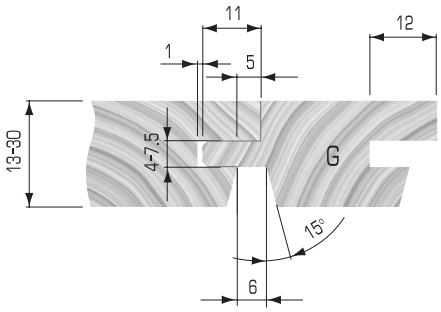

4
10

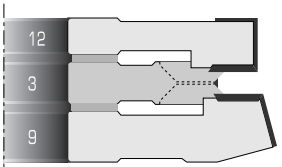

6.5
7.5
1
13-30
4-7.5
F
10
30°


1
3
7

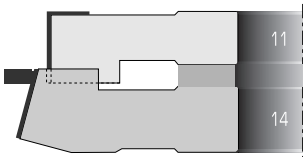
F

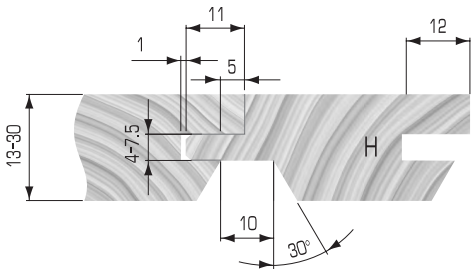

4
8

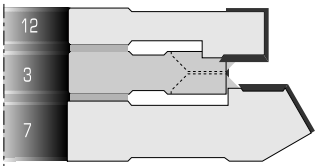

11
12
1
5
13-30
4-7.5
G
15°
6


12
3
9

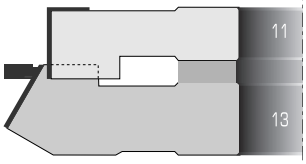
G


11
14

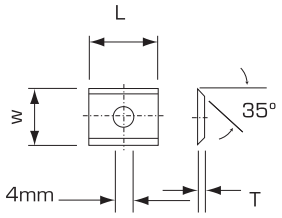
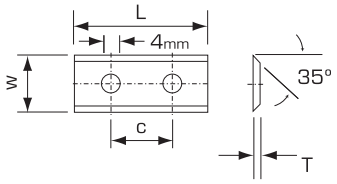
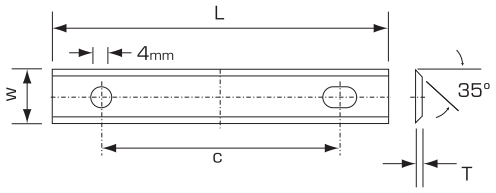
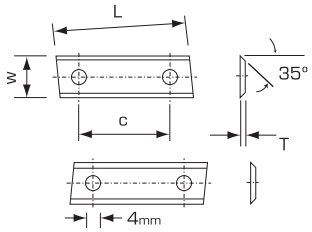
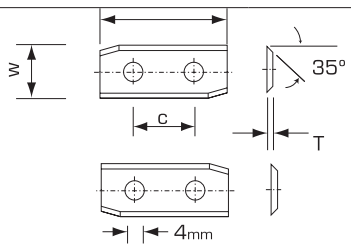

11
12
1
5
13-30
4-7.5
H
10
30°


12
3
7

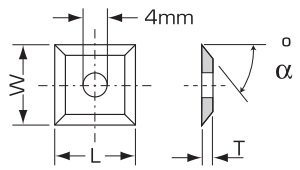
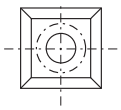
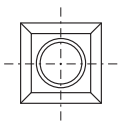
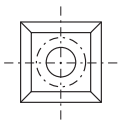
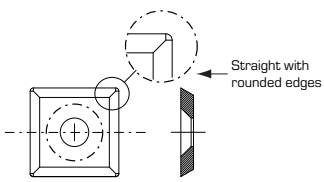
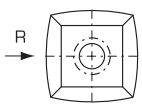
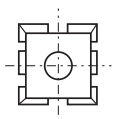
H

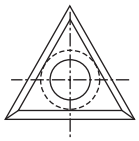
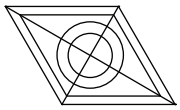
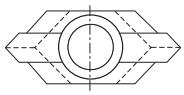
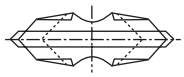
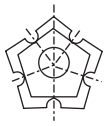
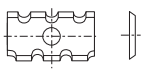
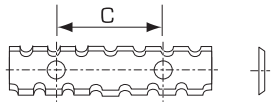

11
13

35° BACK ANGLE - 2 CUTTING EDGES

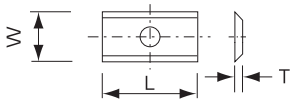
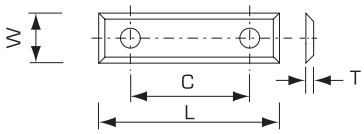
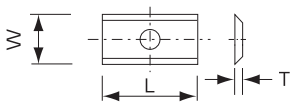
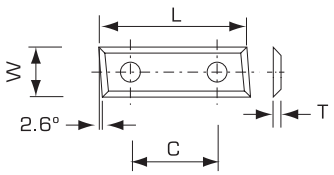
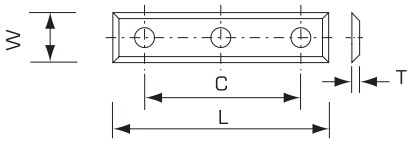
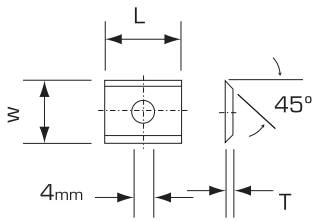
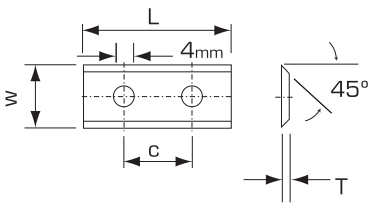
DRAWING	K05 GRADE PART NO.	XL4000 GRADE EXTENDED LIFE PART NO.	SCREW HOLE ø MM	LENGTH L MM	WIDTH W MM	THICKNESS T MM	DIMENSION C MM
	300600	–	2.5	6.0	12	1.5	–
	300800	–	4	7.5	12	1.5	–
	300860	–	4	8.6	12	1.5	–
	300920	–	4	9.2	12	1.5	–
	300960	–	4	9.6	12	1.5	–
	301050	–	4	10.5	12	1.5	–
	301100	–	4	11.0	12	1.5	–
	301160	–	4	11.6	12	1.5	–
	301230	–	4	12.3	12	1.5	–
	301300	–	4	13.0	12	1.5	–
	301500	–	4	15.0	12	1.5	–
	301570	–	4	15.7	12	1.5	–
	301700	–	4	17.0	12	1.5	–
	301800	–	4	18.0	12	1.5	–
	301900	–	4	19.0	12	1.5	–
	302000	302000XL	4	20.0	12	1.5	–
	302500	–	4	25.0	12	1.5	–
	302501	–	4	25.0	12	1.5	14
	303000	303000XL	4	30.0	12	1.5	14
	304000	–	4	40.0	12	1.5	26
	305000	305000XL	4	50.0	12	1.5	26
	306000	–	4	60.0	12	1.5	26
							
	308000	–	4	80.0	13	2.2	60
	310000	–	4	100.0	13	2.2	60
	312000	–	4	120.0	13	2.2	60
							
	LEFT-HAND	RIGHT-HAND					
	303020	303021	–	4	29.5	12	1.5	14
	305020	305021	–	4	49.5	12	1.5	26
							
	LEFT-HAND	RIGHT-HAND					
	303030	303031	–	4	29.5	12	1.5	14
	305030	305031	–	4	49.5	12	1.5	26

4 CUTTING EDGES

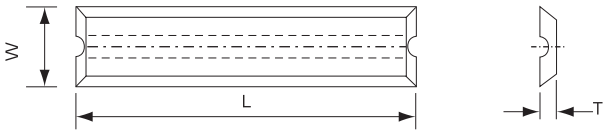
DRAWING	K05 GRADE PART NO.	XL4000 GRADE EXTENDED LIFE PART NO.	SCREW HOLE ø MM	LENGTH L MM	WIDTH W MM	THICKNESS T MM	BACK ANGLE α
	301051	–	4	10.5	10.5	1.5	35°
	301200	301200XL	4	12.0	12.0	1.5	35°
	301301	–	4	13.0	13.0	2.5	35°
	301701	–	4	17.0	17.0	2.0	35°
	301901	–	4	19.0	19.0	2.0	35°
	301052	–	–	10.5	10.5	1.5	35°
	301360	–	–	13.6	13.6	2.0	30°
	301361	–	–	13.6	13.6	2.0	45°
	301414	–	–	14.0	14.0	1.2	30°
	301424	–	–	14.0	14.0	1.7	30°
	301404	301404XL	–	14.0	14.0	2.0	30°
 For Holz-Her system	301414-H	–	–	14.0	14.0	1.2	30°
	301430	–	–	14.3	14.3	2.5	35°
	301460	–	–	14.6	14.6	2.5	30°
	301515	–	–	15.0	15.0	2.5	30°
	301405	–	–	14.0	14.0	2.0	30°
	301520	–	–	15.0	15.0	2.5	30°
 R= 150mm	301525	–	–	15.0	15.0	2.5	30°
	301505	–	–	15.0	15.0	2.0	35°

DRAWING	K05 GRADE PART NO.	LENGTH L MM	WIDTH W MM	THICKNESS T MM	DIMENSION C MM	BACK ANGLE α
	320201	22.0	19.0	2.0	–	30°
	320101	28	16	2.0	–	30°
	320301	18.0	18.0	1.95	–	–
	320302	18.0	18.0	2.45	–	–
	320303	18.0	18.0	2.95	–	–
	320305	18.0	18.0	3.70	–	–
	320401	18.9	7.9	4.0	–	–
	320501	18.0	6.0	3.5	–	–
	320601	33.5	3.0	–	–	–
	320701	18.5	–	3..25	–	30°
	320802	20.0	12.0	1.5	–	–
	320803	30.0	12.0	1.5	14.0	–
	320805	50.0	12.0	1.5	26.0	–

302010 SOLID CARBIDE KNIVES
REVERSIBLE

DRAWING	K05 GRADE PART NO.	NO. CUTTING EDGES	LENGTH L MM	WIDTH W MM	THICKNESS T MM	DIMENSION C MM	BACK ANGLE α
	**302010**	2	20.0	9.0	1.5	–	–
	302012	2	19.50	12.0	1.5	–	–
	**302810**	4	28.0	7.0	1.5	14	–
	303010	4	29.5	9.0	1.5	14	–
	303012	4	29.5	12.0	1.5	14	–
	304010	4	39.5	9.0	1.5	26	–
	304012	4	39.5	12.0	1.5	26	–
	305010	4	49.5	9.0	1.5	26	–
	305012	4	49.5	12.0	1.5	26	–
	306012	4	59.5	12.0	1.5	26	–
	**300906**	2	10.0	9.5	1.5	–	–
	301006	2	10.0	10.5	1.5	–	–
	**303009**	4	29.5	9.0	1.5	14	–
	303022	4	29.5	12.0	1.5	14	–
	304009	4	39.5	9.0	1.5	26	–
	304022	4	39.5	12.0	1.5	26	–
	305009	4	49.5	9.0	1.5	26	–
	305022	4	49.5	12.0	1.5	26	–
	**305025**	4	50.0	12.0	1.7	37	–
	**307545**	2	7.5	12.0	1.5	–	45°
	309645	2	9.6	12.0	1.5	–	45°
	301545	2	15.0	12.0	1.5	–	45°
	302045	2	20.0	12.0	1.5	–	45°
	**303045**	2	30.0	12.0	1.5	14	45°
	304045	2	40.0	12.0	1.5	26	45°
	305045	2	50.0	12.0	1.5	26	45°
	306045	2	60.0	12.0	1.5	26	45°
	301245	4	12.0	12.0	1.5	–	45°

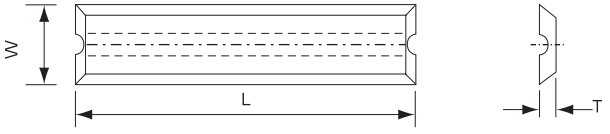
C4 GRADE MICRO GRAIN MIRROR FINISH



4 CUTTING EDGES
FACE GROOVE

PART NO.	LENGTH L MM	WIDTH W MM	THICKNESS T MM
300911M	9.0	9.0	1.5
301211M	12.0	5.5	1.1
301511M	15.0	5.5	1.1
302011M	20.0	5.5	1.1
302511M	25.0	5.5	1.1
303011M	30.0	5.5	1.1
303511M	35.0	5.5	1.1
304011M	40.0	5.5	1.1
304511M	45.0	5.5	1.1
305011M	50.0	5.5	1.1
306011M	60.0	5.5	1.1

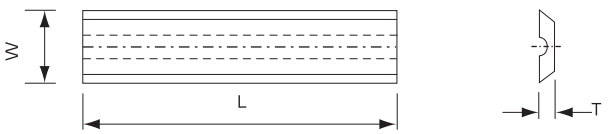
K05 GRADE STANDARD FINISH



4 CUTTING EDGES
FACE GROOVE

PART NO.	LENGTH L MM	WIDTH W MM	THICKNESS T MM
303011S	30.0	5.5	1.1
303511S	35.0	5.5	1.1
304011S	40.0	5.5	1.1
304511S	45.0	5.5	1.1
305011S	50.0	5.5	1.1
306011S	60.0	5.5	1.1

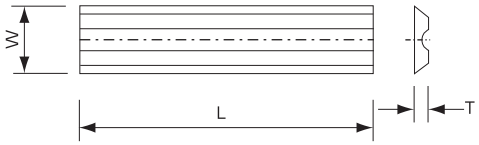
K05 GRADE STANDARD FINISH



2 CUTTING EDGES
FACE GROOVE

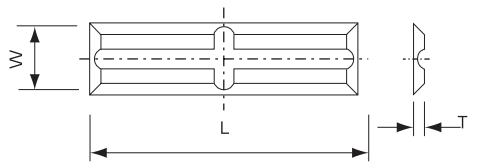
PART NO.	LENGTH L MM	WIDTH W MM	THICKNESS T MM
301211	12.0	5.5	1.1
301511	15.0	5.5	1.1
302011	20.0	5.5	1.1
303011	30.0	5.5	1.1
304011	40.0	5.5	1.1
305011	50.0	5.5	1.1
306011	60.0	5.5	1.1

K05 GRADE STANDARD FINISH



2 CUTTING EDGES
BACK GROOVE

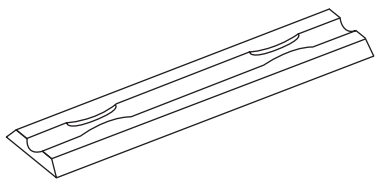
PART NO.	LENGTH L MM	WIDTH W MM	THICKNESS T MM
341211	12.0	5.5	1.1
342011	20.0	5.5	1.1
343011	30.0	5.5	1.1
345011	50.0	5.5	1.1



4 CUTTING EDGES
BACK AND CROSS-GROOVE

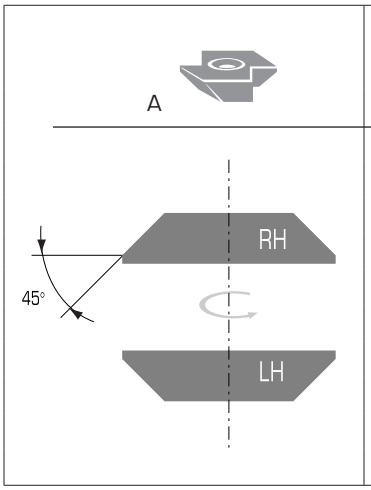
352010	20.0	4.1	1.1
352011	20.0	5.5	1.1
352511	25.0	5.5	1.1
353011	30.0	5.5	1.1
354011	40.0	5.5	1.1
355011	50.0	5.5	1.1

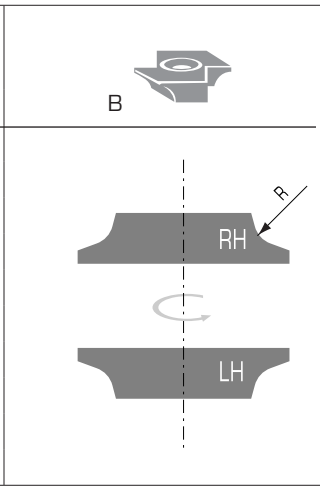
REVERSIBLE KNIVES FOR PORTABLE HAND-PLANERS



PART NO.	LENGTH L MM	WIDTH W MM	THICKNESS T MM	MACHINES
305600	56.0	5.5	1.1	ADLER
306001	60.0	5.5	1.1	WEGOMA
307500	75.5	5.5	1.1	AEG, BOSCH, FESTO HAFFNER, KRESS, MAFELL, METABO SCHEER, SKIL HOLZ-HER
307570	75.7	5.5	1.2	B & D
307800	78.0	5.5	1.1	VIRUTEX
318000	80.5	5.9	1.2	ELU
308052	80.5	5.5	1.1	ELU
308200	82.0	5.5	1.1	AEG, B & D, BOSCH ALU, FEIN, FELISATTI HAFFNER, HITACHI HOLZ-HER, MAFELL MAKITA, METABO, PEUGOT, RYOBI, SKIL
308270	82.7	5.5	1.2	B & D
309200	92.0	5.5	1.1	AEG, HITACHI RYOBI
301020	102.0	5.5	1.1	AEG

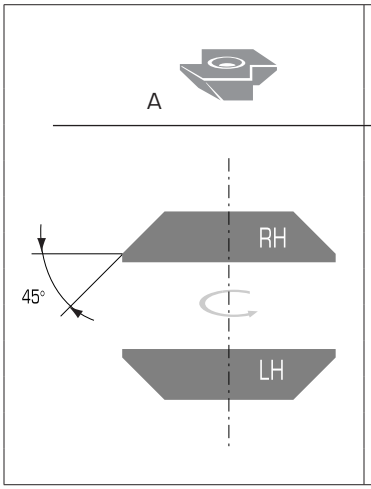
CHAMFERING AND CORNER ROUNDING

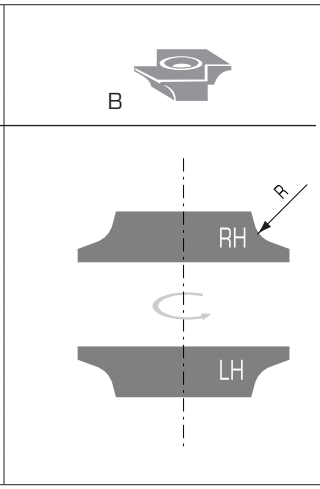




PART NO.	DIMENSIONS MM	TYPE	ROTATION
30600601	27 x 14 x 6	A	R.H.
30600602	27 x 14 x 6	A	L.H.
30600605	R=1.5	B	R.H.
30600613	R=2.0	B	R.H.
30600603	R=3.0	B	R.H.
30600606	R=1.5	B	L.H.
30600614	R=2.0	B	L.H.
30600604	R=3.0	B	L.H.

CHAMFERING AND CORNER ROUNDING (BG TEST)

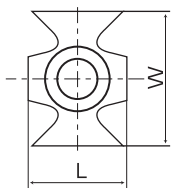


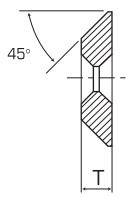


PART NO.	DIMENSIONS MM	TYPE	ROTATION
30600607	27 x 16 x 6	A	R.H.
30600608	27 x 16 x 6	A	L.H.
30600617	R=1.5	B	R.H.
30600611	R=2.0	B	R.H.
30600609	R=3.0	B	R.H.
30600618	R=1.5	B	L.H.
30600612	R=2.0	B	L.H.
30600610	R=3.0	B	L.H.

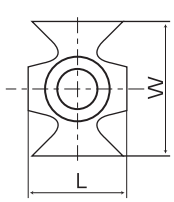
CHAMFERING AND CORNER ROUNDING (BG TEST)

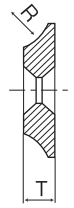
TYPE: A





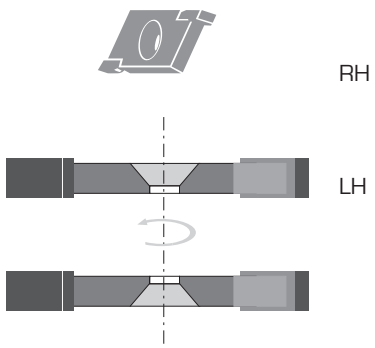
TYPE: B





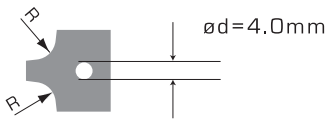
PART NO.	DIMENSIONS MM	TYPE	RADIUS R MM
30700501	16 x 22 x 5	A	-
30700503	16 x 22 x 5	B	1.5
30700504	16 x 22 x 5	B	2.0
30700505	16 x 22 x 5	B	2.5
30700506	16 x 22 x 5	B	3.0
30700507	16 x 22 x 5	B	4.0
30700508	16 x 22 x 5	B	5.0
30700509	16 x 22 x 5	B	6.0

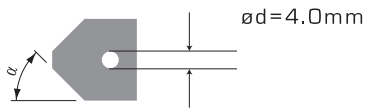
REVERSIBLE GROOVING INSERTS - CARBIDE TIPPED



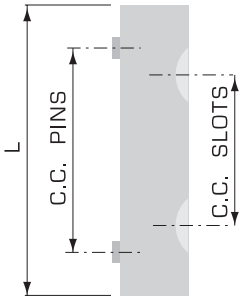
PART NO.	DIMENSIONS MM	ROTATION
307807	48 x 3.0 x 16	L.H.
307808	48 x 3.0 x 16	R.H.
307809	48 x 4.0 x 16	L.H.
307810	48 x 4.0 x 16	R.H.
307813	48 x 5.0 x 16	L.H.
307814	48 x 5.0 x 16	R.H.
307817	48 x 6.35 x 16	L.H.
307818	48 x 6.35 x 16	R.H.
307831	60 x 4.0 x 16	L.H.
307832	60 x 4.0 x 16	R.H.
307835	60 x 5.0 x 16	L.H.
307836	60 x 5.0 x 16	R.H.

REVERSIBLE GROOVING INSERTS - CARBIDE TIPPED



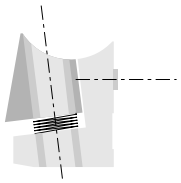


PART NO.	DIMENSIONS MM	RADIUS (R) MM
401002	16 x 17.5 x 2.0	2
401003	16 x 17.5 x 2.0	3
401004	16 x 17.5 x 2.0	4
401005	16 x 17.5 x 2.0	5
402002	20 x 20.5 x 2.0	2
402003	20 x 20.5 x 2.0	3
402004	20 x 20.5 x 2.0	4
402005	20 x 20.5 x 2.0	5
402006	20 x 20.5 x 2.0	6
402020	20 x 20.5 x 2.0	α = 5°



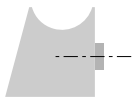
WEDGES

PART NO.	LENGTH MM	NO. PINS	C.C. PINS MM	NO. SLOTS	C.C. SLOTS MM
W350021	6.8	1	0	1	0
W350022	7.6	1	0	1	0
W350023	9.0	1	0	1	0
W350004	11.0	1	0	1	0
W350017	14.0	1	0	1	0
W350005	16.0	1	0	1	0
W350006	21.0	1	0	1	0
W350014	26.0	1	0	1	0
W350007	26.0	2	14	1	0
W350008	36.0	2	26	2	18
W350009	46.0	2	26	2	24
W350056	55.0	2	26	2	30
W350011	74.0	2	60	2	44
W350018	94.0	2	60	4	25



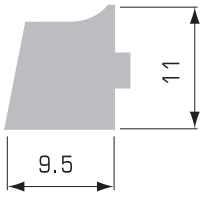
WEDGES

PART NO.	LENGTH MM	NO. PINS	C.C. PINS MM
W300004	18	1	0
W300037	26	1	0
W300023	46	2	26
W300024	56	2	26



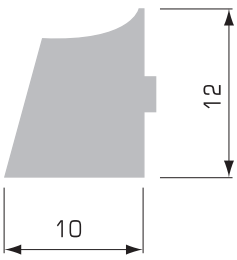
WEDGES

PART NO.	LENGTH MM	NO. PINS	C.C. PINS MM
W300203	13	1	0
W300204	18	1	0
W300205	28	2	14
W300206	48	2	26



WEDGES

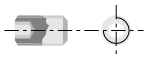
PART NO.	LENGTH MM	NO. PINS	C.C. PINS MM
W340006	15	1	0
W340026	26	2	14
W340027	31	2	18



WEDGES

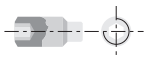
PART NO.	LENGTH MM	NO. PINS	C.C. PINS MM
W300701	14.5	1	0
W300702	27.4	2	15.3

WEDGE SCREWS



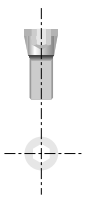
PART NO.	DIMENSIONS MM
W501313	M4x16
W501307	M5x8
W501301	M6x12
W501302	M6x16
W501316	M6x20
W501303	M8x10
W501312	M10x12
W501305	M10x20
W501309	M10x25

WEDGE SCREWS



PART NO.	DIMENSIONS MM
W501415	M5x8
W501402	M6x10
W501401	M6x12
W501404	M8x20
W501410	M8x25
W501409	M10x20

WEDGE SCREWS



PART NO.	DIMENSIONS MM
W502403*	M5x18
W502405	M7x17
W502404	M7x19
W502402	M7x21
W502401	M7x26

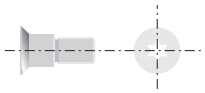
* T20 TORX

WEDGE SCREWS



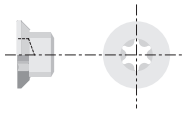
PART NO.	DIMENSIONS MM
W500901	M6x15
W500902	M6x20
W500903	M8x22

TORX SCREWS



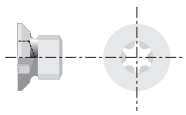
PART NO.	DIMENSIONS MM
W500003	M5x14

TORX SCREWS



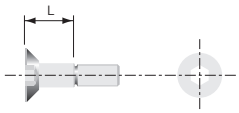
PART NO.	DIMENSIONS MM
W500002	M5x7
W500004	M5x5.1

TORX SCREWS



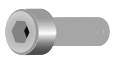
PART NO.	DIMENSIONS MM
W500401	M4x3.2
W500402	M4x4.0

HEX SCREWS



PART NO.	DIMENSIONS MM	L MM
W500205	M6x15	7.0
W500206	M6x19	11.0

HEX SCREWS



PART NO.	DIMENSIONS MM
W501702	M5x16

HEX SCREWS



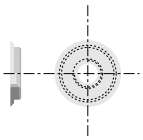
PART NO.	DIMENSIONS MM
W500605	M6x16
W500601	M8x50

HEX SCREWS



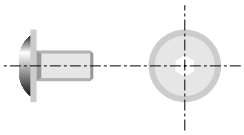
PART NO.	DIMENSIONS MM
W500201	M6x12
W500312	M16x19

THREADED RINGS FOR SPURS



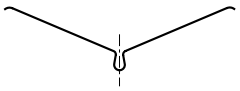
PART NO.	DIMENSIONS MM
W501001	10x1.65
W501101	12x1.7

POSITIONING SCREWS



PART NO.	DIMENSIONS MM
W502601	M5x10

PLANING TOOLHEAD SPRINGS



PART NO.	DIMENSIONS MM
W501601	25x52
W501602	36x95

POSITIONING SCREWS



PART NO.	DIMENSIONS MM
W500604	M5x10
W500303	16mmx3.5

WRENCHES



PART NO.	DIMENSIONS MM
W400501	55
W400502	65

POSITIONING SCREWS

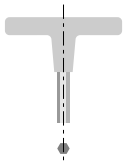


PART NO.	DIMENSIONS MM
W502604	M5x5

KEY TYPE TORX WRENCHES



PART NO.	DIMENSIONS MM
W400406	T8
W400401	T9
W400405	T15



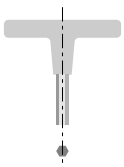
T-HANDLE TORX WRENCHES

PART NO.	DIMENSIONS MM
W400420	T20
W400430	T30



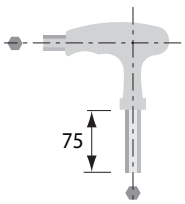
L-SHAPE HEX WRENCHES

PART NO.	DIMENSIONS MM
W400001	2.5
W400002	3
W400003	4
W400004	5
W400005	6
W400006	7
W400007	8
W400008	10



T-HANDLE HEX WRENCHES

PART NO.	DIMENSIONS MM
W400101	2.5
W400113	3
W400114	4
W400115	5
W400116	6
W400117	8
W400108	10



T-HANDLE DUAL ALLEN WRENCHES

PART NO.	DIMENSIONS MM
W400113	3



CIRCULAR SAW BLADES

Dado Sets / Grooving Saw Blades / Hogging Units

SAW BLADES - TABLE OF CONTENTS

PRODUCT CATEGORY	PAGE NO.
CHIP-FREE MELAMINE TRIM BLADES	E20, E45
CHIP-FREE MELAMINE TRIM BLADES - XL4000	E6
COMBINATION SAW BLADES	E16
COMBINATION SAW BLADES- XL4000	E2
COMBINATION/PLANER SAW BLADES - LH SERIES	E44
COMBINATIONS: MAIN SAW/SCORING SAW	E31 - E33
CONIC SCORING SAW BLADES	E28 - E29
CROSS-CUT SAW BLADES	E10, E14 - E15
CROSS-CUT SAW BLADES - XL4000	E3
DADO SHIMS	E48
DEMOLITION	E41
DOUBLE CUT-OFF SAW BLADES	E23
DOUBLE CUT-OFF SAW BLADES - XL4000	E7
EDGE BANDING SAW BLADES	E36 - E37
FINE CROSS-CUT SAW BLADES	E17 - E18, E43
FINE CROSS-CUT SAW BLADES - XL4000	E5
FINE DADO SETS	E47 - E48
FLAT TOP SCORING SAW BLADES - FOR D.E.T.	E35
GANG RIP SAW BLADES	E9, E13
GENERAL APPLICATION SAW BLADES	E42
GLUE LINE RIP SAW BLADES	E12
GLUE LINE RIP SAW BLADES - XL4000	E1
GROOVING SAW BLADES	E49 - E50
HEAVY DUTY RIP SAW BLADES	E11
HEAVY DUTY RIP SAW BLADES - XL4000	E1
HOGGING UNITS WITH DISPOSABLE INSERTS	E52
HOLLOW FACE SAW BLADES	E22 - E23
LEFT-HAND SCORING SAW BLADES - FOR D.E.T.	E34
MITRE JOINT SAW BLADES	E19, E44
MITRE JOINT SAW BLADES - XL4000	E6
NON-MELT SAW BLADES	E22
PANEL SIZING SAW BLADES	E24 - E27
RADIAL ARM SAW BLADES	E14
RADIAL ARM SAW BLADES - XL4000	E2
RIGHT-HAND SCORING SAW BLADES - FOR D.E.T.	E34
RIP SAW BLADES	E10 - E11, E13

PRODUCT CATEGORY	PAGE NO.
SAFETY DADO SETS	E47
SAW BLADES FOR CORDLESS MACHINES	E41
SAW BLADES FOR NON-FERROUS METALS	E38 - E39, E45
SEGMENTED HOGGING UNITS	E51
SOLID SURFACE SAW BLADES - XL4000	E7
SPLIT SCORING SAW BLADES	E30
STANDARD CROSS-CUT SAW BLADES	E16 - E17, E42 - E43
STANDARD CROSS-CUT SAW BLADES - XL4000	E4
STANDARD DADO SETS	E46
THIN KERF SAW BLADES	E20
THIN RIM SAW BLADES	E21

SAW BLADES - ALPHA-NUMERIC INDEX

PART NO.	PAGE NO.
1TL115-35 - 1TL115-40	E52
1TL116	E52
1TL250LH - 1TL234RH	E52
1TL255LH - 1TL255RH	E52
1TL504 - 1TL936	E51
52705401 - 52718001-45	E28
52718001-50 - 52732002	E29
528080001-20 - 52834001	E30
529150 - 529206	E34
530150 - 530206	E34
531150 - 531206	E35
53DL06 - 53DL14	E46
53DL06-LH - 53DL14-RH	E46
53DL08S	E47
53DL08S-LH - 53DL08S-RH	E47
53DSS14 - 53DSS14-1	E48
54DL08 - 54DL10-1	E47
54DL08-LH - 54DL10-1-RH	E47
560 090 A - 560 160 B	E37
560100L - 570170R-30	E36
5G0038 - 5G8516	E49
5G0M01 - 5G8M80	E50
L01200 - L01450	E18
L02250 - L02500	E13
L03150 - L03500	E14
L03200TK - L03350TK	E10
L04180 - L04500	E16
L05150 - L05400	E20
L06150 - L06450	E17
L07250 - L07400	E14
L09300 - L09500	E15
L10150 - L10450	E18
L12250 - L12350	E13
L13250 - L13352	E9
L14250 - L14352	E9
L15200 - L15300	E21

PART NO.	PAGE NO.
L16200 - L16300	E21
L18250 - L18450	E11
L19225 - L19500	E15
L1A180 - L1A500	E38
L1B200 - L1B501	E39
L1C250 - L1C308	E38
L21200 - L21400	E11
L21250TK - L21251TK	E10
L22250 - L22400	E12
L23158 - L23500	E17
L2A200 - L2A250	E12
L41200 - L41350	E22
L42220-H - L42350	E23
L4D300-LH - L6D400-RH	E23
L5030048-30 - L5067060-40	E24
L5224054-30 - L5240072-30	E25
L5240072-60 - L5248072-80	E26
L5248872-80 - L5270060-80	E27
L55180 - L55400	E16
LH112 - LH130	E42
LH12096 - LH14109	E43
LH1210	E45
LH1224 - LH1486	E42 - E43
LH140 - LH161	E43
LH162 - LH184	E44 - E45
LH3096	E45
LH407 - LH409	E44
LH424 - LH530	E41
LH501 - LH502	E44
LH624 - LH640	E42
LH708 - LH743	E42, E45
LH824 - LH842	E42
LH860 - LH868	E43 - E45
LH924	E42
LH940 - LH962	E43
LHR1212 - LHR1224-1	E41

PART NO.	PAGE NO.
LM6200 - LM6380	E19
LM6201 - LM6401	E20
LNM200 - LNM350-32	E22
S03250 - S09400	E3
S04225 - S04400	E4
S06200 - S06400CT	E5
S07250 - S07350	E2
S10200 - S10400CT	E5
S19250 - S19400	E3
S21250 - S21350	E1
S22250 - S22350-418	E1
S23225 - S23400	E4
S4D250-LH - S6D350-RH	E7
S55225 - S55350	E2
SM6201 - SM6401	E6
SM6250 - SM6308	E6
SS1200 - SS1450	E7

XL4000

Extended Life Saw Blades

A revolutionary technology

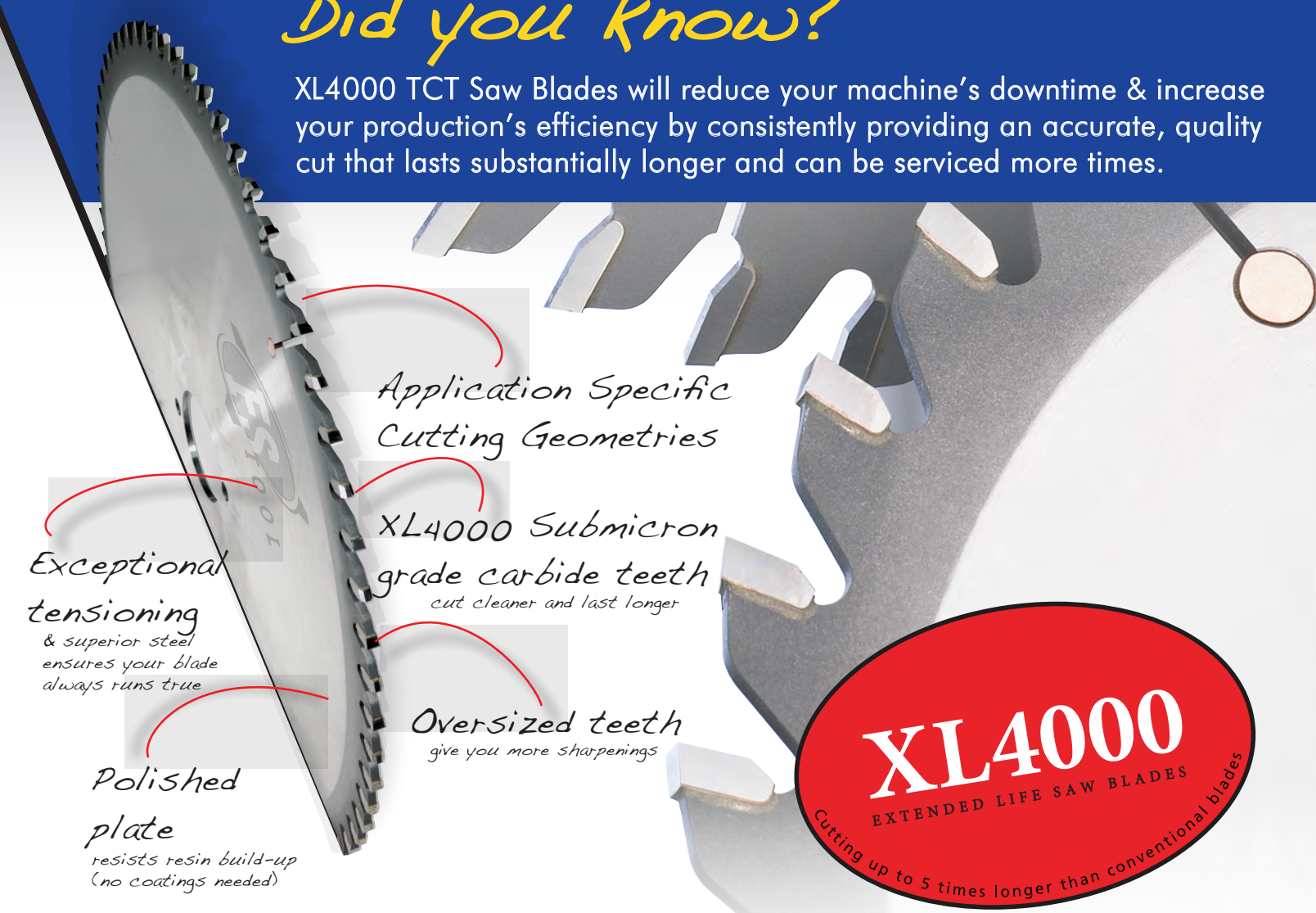
Over 40 years of continuous development has refined every aspect of our saw blade manufacturing, materials and geometries. Today we offer nearly 1,500 models all derived from the same engineering resources compiled over three decades of application experience. From plate to finished saw blade, each is manufactured using the latest technology. Once the plate has been transformed into the most formidable TCT saw blade on the market, it undergoes a nearly artisan, manual tensioning process.

Renowned as the premier saw blade available throughout our industry, the ***XL4000*** series with Submicron Corrosion Resistant Carbide Tips will provid measurable cost savings by Increased blade life, reduced machine downtime and by increasing your production's efficiency and quality of cut.

FS TOOL

Did you know?

XL4000 TCT Saw Blades will reduce your machine's downtime & increase your production's efficiency by consistently providing an accurate, quality cut that lasts substantially longer and can be serviced more times.



QUALITY • SERVICE • PRIDE • TRADITION • INNOVATION

S21 HEAVY DUTY RIP SAW BLADES
XL4000



TOOTH CONFIG: Flat Top



APPLICATION:
» Ripping

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Table saws
» Straight line rip saws
» Gang rip saws

CUTTING MATERIAL: *XL4000* Tungsten Carbide
EXPANSION SLOTS: Cu plugged

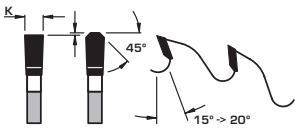
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	KEYWAYS	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
S21250	10"	.142"	.095"	5/8"	24	–	–	–	7,500	20°	Flat Top
S18300	12"	.160"	.110"	1"	24	–	–	–	6,250	20°	Flat Top
S21300	12"	.160"	.110"	1"	30	–	–	–	6,250	18°	Flat Top
S21300-80 •	300mm	3.4mm	2.2mm	80mm	28	4/6.4/95 + 2/12.9/100	DKN 18.6 x 4	Raimann	6,250	20°	Flat Top
S21350	14"	.170"	.118"	1"	30	–	–	–	5,000	20°	Flat Top

• 4 Cooling Slots

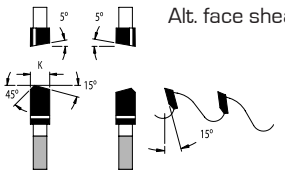
S22 GLUE LINE RIP SAW BLADES
XL4000



TOOTH CONFIG: TCG



TOOTH CONFIG: Modified ATB + Alt. face shear



APPLICATION:
» Ripping
» Extra smooth cut for gluing applications

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Table saws
» Straight line rip saws
» Gang rip saws

CUTTING MATERIAL: *XL4000* Tungsten Carbide
EXPANSION SLOTS: Cu plugged

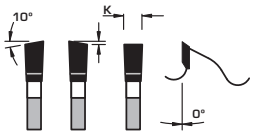
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	KEYWAYS	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
S22250	10"	.142"	.095"	5/8"	24	–	–	–	7,500	20°	TCG
S22252	10"	.126"	.087"	3-1/8"	42	–	–	Mereen - Johnson	7,500	15°	TCG
S22307-80	300mm	4.1mm	2.8mm	80mm	36	2/12.9/100 + 4/6.4/95	DKN 18.6 x 4	Raimann	6,250	15°	TCG
S22300-80	300mm	2.85mm	2.0mm	80mm	48	2/12.9/100 + 4/6.4/95	DKN 18.6 x 4	Raimann	6,250	15°	Modified ATB + Alt. face shear
S22302	12"	.126"	.083"	1"	36	–	–	–	6,250	20°	TCG
S22306	12"	.160"	.110"	1"	36	–	–	–	6,250	15°	TCG
S22306-2	12"	.160"	.110"	2"	36	1/(9/16")/5"	–	Diehl	6,250	15°	TCG
S22302-318	12"	.126"	.083"	3-1/8"	36	–	–	Mereen - Johnson	6,250	20°	TCG
S22306-318	12"	.160"	.110"	3-1/8"	36	–	–	Mereen - Johnson	6,250	15°	TCG
S22306-70	12"	.160"	.110"	70mm	36	–	DKN 20 x 5	SCM	6,250	15°	TCG
S22350	14"	.169"	.118"	1"	36	–	–	–	5,350	18°	TCG
S22350-2	14"	.169"	.118"	2"	36	1/(9/16")/5"	–	Diehl	5,350	18°	TCG
S22350-318	14"	.169"	.118"	3-1/8"	36	–	–	Mereen - Johnson	5,350	18°	TCG
S22350-312	14"	.169"	.118"	3-1/2"	36	–	–	Mereen - Johnson	5,350	18°	TCG
S22350-70	14"	.169"	.118"	70mm	36	–	DKN 20 x 5	SCM	5,350	18°	TCG

S07 RADIAL ARM SAW BLADES
XL4000

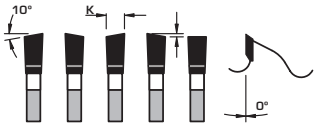


CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: 0° hook angle reduces the blade's tendency of grabbing the material

TOOTH CONFIG: 2 ATB + 1 Raker



TOOTH CONFIG: 4 ATB + 1 Raker



APPLICATION:
- Ripping
- General sizing cuts
- Cross-cutting

MATERIAL:
- Dry softwoods and hardwoods
- Plywood, OSB panel materials
- Wood veneered panel materials
- TFL Melamine, HPL panel materials
- MDF, HDF, Composite panel materials

MACHINE TYPE:
- Radial arm saws
- Other saws where the blade is above the work piece

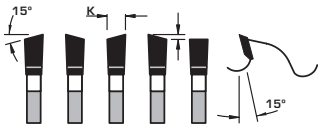
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
S07250	10"	.135"	.095"	5/8"	24	7,500	0°	2 ATB + 1 Raker
S07300	12"	.150"	.110"	1"	36	6,250	0°	2 ATB + 1 Raker
S07350	14"	.165"	.118"	1"	40	5,350	0°	4 ATB + 1 Raker

S55 COMBINATION SAW BLADES
XL4000



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: None
ADDITIONAL INFO: Design allows for deeper cuts and improved chip flow

TOOTH CONFIG: 4 ATB + 1 Raker



APPLICATION:
- Ripping
- Sizing cuts
- Cross-cutting
- Trimming

MATERIAL:
- Dry softwoods and hardwoods
- Plywood, OSB panel materials
- Wood veneered panel materials
- TFL Melamine panel materials
- MDF, HDF, Composite panel materials

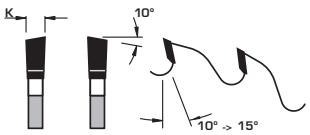
MACHINE TYPE:
- Table saws, Sliding table saws
- Cross-cut saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
S55225	9"	.125"	.087"	5/8"	40	8,000	15°	4 ATB + 1 Raker
S55250	10"	.138"	.095"	5/8"	50	7,500	15°	4 ATB + 1 Raker
S55300	12"	.155"	.110"	1"	60	6,250	15°	4 ATB + 1 Raker
S55350	14"	.165"	.118"	1"	70	5,350	15°	4 ATB + 1 Raker

S03/S09 CROSS-CUT SAW BLADES
XL4000



TOOTH CONFIG: ATB



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Ripping
» General sizing cuts
» Cross-cutting

MATERIAL:
» Dry softwoods and hardwoods
» Plywood, OSB panel materials
» Wood veneered panel materials

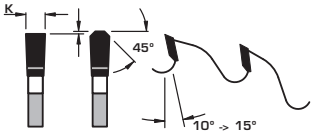
MACHINE TYPE:
» Table saws, Sliding table saws
» Vertical panel sizing saws
» Cross-cut saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
S03250	10"	.126"	.087"	5/8"	40	7,500	15°	ATB
S03300	12"	.135"	.095"	1"	48	6,250	15°	ATB
S09300	12"	.135"	.095"	1"	60	6,250	10°	ATB
S03350	14"	.155"	.110"	1"	60	5,350	10°	ATB
S03400	16"	.155"	.110"	1"	60	4,500	10°	ATB
S09400	16"	.155"	.110"	1"	80	4,500	10°	ATB

S19 CROSS-CUT SAW BLADES
XL4000



TOOTH CONFIG: TCG



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Ripping
» General sizing cuts
» Cross-cutting
» Chip-free cuts on double-sided or bottom faced materials using a pre-scoring unit

MATERIAL:
» TFL Melamine, HPL panel materials
» MDF, HDF, Composite panel materials
» Other hard, or laminated materials

MACHINE TYPE:
» Table saws, Sliding table saws
» Vertical panel sizing saws
» Cross-cut saws

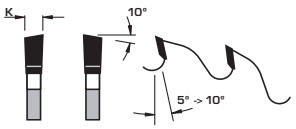
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
S19250	10"	.126"	.087"	5/8"	40	7,500	15°	TCG
S19300	12"	.135"	.095"	1"	60	6,250	10°	TCG
S19350	14"	.155"	.110"	1"	60	5,350	10°	TCG
S19400	16"	.155"	.110"	1"	80	4,500	10°	TCG

S04 STANDARD CROSS-CUT SAW BLADES
XL4000



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: ATB



APPLICATION:
» General sizing cuts
» Cross-cutting
» Trimming

MATERIAL:
» Dry softwoods and hardwoods
» Plywood, OSB panel materials
» Wood veneered panel materials

MACHINE TYPE:
» Table saws, Sliding table saws
» Vertical panel sizing saws
» Cross-cut saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
S04225	9"	.126"	.087"	5/8"	60	–	–	8,000	5°	ATB
S04250	10"	.126"	.087"	5/8"	60	–	–	7,500	10°	ATB
S04302	300mm	3.4mm	2.4mm	30mm	72	Universal	▲ See footnote	6,250	5°	ATB
S04300	12"	.135"	.095"	1"	80	–	–	6,250	5°	ATB
S04350	14"	.150"	.110"	1"	80	–	–	5,350	10°	ATB
S04400	16"	.160"	.118"	1"	100	–	–	4,500	5°	ATB

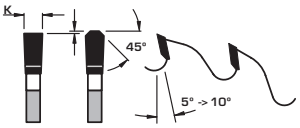
▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

S23 STANDARD CROSS-CUT SAW BLADES
XL4000



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: TCG



APPLICATION:
» General sizing cuts
» Cross-cutting
» Trimming
» Chip-free cuts on double-sided or bottom faced materials using a pre-scoring unit

MATERIAL:
» TFL Melamine, HPL panel materials
» MDF, HDF, Composite panel materials
» Other hard, or laminated materials

MACHINE TYPE:
» Table saws, Sliding table saws
» Vertical panel sizing saws
» Cross-cut saws

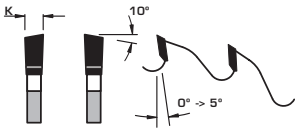
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
S23225	9"	.126"	.087"	5/8"	60	–	–	8,000	5°	TCG
S23250	10"	.126"	.087"	5/8"	60	–	–	7,500	10°	TCG
S23302	300mm	3.4mm	2.4mm	30mm	72	Universal	▲ See footnote	6,250	5°	TCG
S23300	12"	.135"	.095"	1"	80	–	–	6,250	5°	TCG
S23350	14"	.150"	.110"	1"	80	–	–	5,350	10°	TCG
S23352	350mm	3.5mm	2.5mm	30mm	80	2/10/60	–	5,350	10°	TCG
S23400	16"	.160"	.118"	1"	100	–	–	4,500	5°	TCG

▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

S06 FINE CROSS-CUT SAW BLADES
XL4000



TOOTH CONFIG: ATB



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Fine sizing cuts
» Fine cross-cutting
» Finishing trimming

MATERIAL:
» Dry softwoods and hardwoods
» Plywood, OSB panel materials
» Wood veneered panel materials

MACHINE TYPE:
» Table saws, Sliding table saws
» Vertical panel sizing saws
» Cross-cut saws

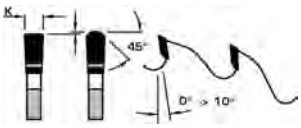
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
S06200	8"	.126"	.087"	5/8"	60	9,000	5°	ATB
S06250	10"	.126"	.087"	5/8"	80	7,500	5°	ATB
S06300	12"	.135"	.095"	1"	100	6,250	5°	ATB
S06350	14"	.150"	.110"	1"	100	5,350	5°	ATB
S06400CT •	16"	.160"	.118"	1"	120	4,500	0°	ATB

• Specifically designed for cutting kitchen counter tops

S10 FINE CROSS-CUT SAW BLADES
XL4000



TOOTH CONFIG: TCG



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Fine sizing cuts
» Fine cross-cutting
» Finished trimming cuts
» Chip-free cuts on double-sided or bottom faced materials using a pre-scoring unit

MATERIAL:
» TFL Melamine, HPL panel materials
» MDF, HDF, Composite panel materials
» Other hard or laminated materials

MACHINE TYPE:
» Table saws, Sliding table saws
» Vertical panel sizing saws
» Cross-cut saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
S10200	8"	.126"	.087"	5/8"	60	–	–	9,000	5°	TCG
S10220-H	220mm	3.2mm	2.2mm	30mm	64	Universal	▲ See footnote	8,800	10°	TCG
S10250	10"	.126"	.087"	5/8"	80	–	–	7,500	5°	TCG
S10300	12"	.135"	.095"	1"	100	–	–	6,250	5°	TCG
S10306	300mm	3.4mm	2.4mm	30mm	96	Universal	▲ See footnote	6,250	5°	TCG
S10350	14"	.150"	.110"	1"	100	–	–	5,350	5°	TCG
S10358	350mm	3.4mm	2.4mm	30mm	108	2/10/60	–	5,350	10°	TCG
S10400CT •	16"	.160"	.118"	1"	120	–	–	4,500	0°	TCG

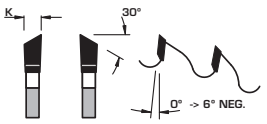
▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

• Specifically designed for cutting kitchen counter tops

SM6 30° CHIP-FREE MELAMINE TRIM BLADES
XL4000



TOOTH CONFIG: High ATB 30°



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
- Chip-free sizing cuts (on both sides) without the need for pre-scoring unit
- Extra fine cross-cutting
- Extra fine trimming cuts

MATERIAL:
- TFL Melamine panel materials
- Plywood, OSB panel materials
- Wood veneered panel materials

MACHINE TYPE:
- Table saws, Sliding table saws
- Vertical panel sizing saws

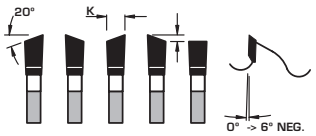
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
SM6201	8"	.118"	.087"	5/8"	60	–	–	9,000	0°	High ATB 30°
SM6221-H	220mm	3.2mm	2.4mm	30mm	64	Universal	▲ See footnote	8,000	2° Neg.	High ATB 30°
SM6251	10"	.118"	.087"	5/8"	80	–	–	7,500	2° Neg.	High ATB 30°
SM6251-30	250mm	3.0mm	2.2mm	30mm	80	2/7/42	Holz-Her	7,500	2° Neg.	High ATB 30°
SM6301-30	300mm	3.2mm	2.4mm	30mm	100	Universal	▲ See footnote	6,250	6° Neg.	High ATB 30°
SM6301	12"	.126"	.095"	1"	100	–	–	6,250	6° Neg.	High ATB 30°
SM6352	14"	.150"	.118"	1"	100	–	–	5,350	2° Neg.	High ATB 30°
SM6401	16"	.157"	.118"	1"	120	–	–	4,500	0°	High ATB 30°

▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

SM6 MITRE JOINT SAW BLADES
XL4000



TOOTH CONFIG: 4 ATB + 1 Raker



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: For aluminum cuts see L1A, L1B & L1C series on page E38 and E39

APPLICATION:
- Mitre joint cuts

MATERIAL:
- Dry softwoods and hardwoods
- Painted mouldings
- High-gloss and pre-finished picture frames and furniture mouldings
- PVC substrates
- TFL Melamine panel materials

MACHINE TYPE:
- Single or double mitre machines
- Radial arm saws

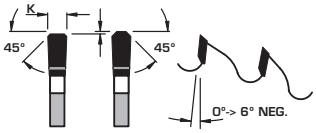
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
SM6250	10"	.112"	.087"	5/8"	80	–	7,500	2° Neg.	4 ATB + 1 Raker
SM6300	12"	.120"	.095"	1"	100	–	6,250	6° Neg.	4 ATB + 1 Raker
SM6308	12"	.135"	.110"	5/8"	100	Pistorius, CTD	6,250	0°	4 ATB + 1 Raker

SS1 SOLID SURFACE SAW BLADES
XL4000



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: TC2



APPLICATION:
» Fine sizing cuts
» Chip-free cuts on double-sided or bottom faced materials using a pre-scoring unit

MATERIAL:
» Solid surface materials such as Wilsonart®; Gibraltar®; SSV®; Corian®; Surell®; Avonite®; Fountainhead®; etc.
» TFL Melamine, HPL panel materials
» Other hard composite materials
» Plexiglass

MACHINE TYPE:
» Table saws, Sliding table saws
» Radial arm saws
» Vertical panel sizing saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
SS1200	8"	.126"	.087"	5/8"	60	–	–	9,000	0°	TC2
SS1220	220mm	3.4mm	2.4mm	30mm	64	Universal	▲ See footnote	8,000	2° Neg.	TC2
SS1249	10"	.126"	.087"	5/8"	60	–	–	7,500	2° Neg.	TC2
SS1250	10"	.126"	.087"	5/8"	80	–	–	7,500	2° Neg.	TC2
SS1299-30	300mm	3.4mm	2.4mm	30mm	80	Universal	▲ See footnote	6,250	2° Neg.	TC2
SS1300-30	300mm	3.4mm	2.4mm	30mm	100	Universal	▲ See footnote	6,250	6° Neg.	TC2
SS1299	12"	.135"	.095"	1"	80	–	–	6,250	2° Neg.	TC2
SS1300	12"	.135"	.095"	1"	100	–	–	6,250	6° Neg.	TC2
SS1350	14"	.158"	.118"	1"	100	–	–	5,350	2° Neg.	TC2
SS1400	16"	.160"	.118"	1"	120	–	–	4,500	0°	TC2
SS1450	18"	.185"	.138"	1"	120	–	–	4,500	2° Neg.	TC2

▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

S4D/S6D DOUBLE CUT-OFF SAW BLADES
XL4000

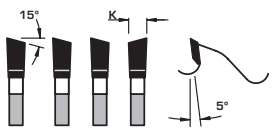


CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Used in pairs 1 LH & 1 RH

TOOTH CONFIG: 3+1 ATB LH



TOOTH CONFIG: 3+1 ATB RH



APPLICATION:
» Fine cut-off
» Mitre cuts
» Trimming

MATERIAL:
» Dry softwoods and hardwoods
» Plywood, OSB panel materials
» Wood veneered and laminated panels

MACHINE TYPE:
» Double cut-off machines
» Single or double end tenoners

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
S4D250-LH	10"	.165"	.118"	5/8"	60	7,500	5°	3+1 ATB LH
S4D250-RH	10"	.165"	.118"	5/8"	60	7,500	5°	3+1 ATB RH
S4D300-LH	12"	.160"	.118"	1"	80	6,350	5°	3+1 ATB LH
S4D300-RH	12"	.160"	.118"	1"	80	6,350	5°	3+1 ATB RH
S6D350-LH	14"	.181"	.138"	1"	100	5,000	5°	3+1 ATB LH
S6D350-RH	14"	.181"	.138"	1"	100	5,000	5°	3+1 ATB RH

A SAW BLADE FOR EVERY INDUSTRIAL WOODWORKING APPLICATION











FS Tool's offering of industrial saw blades represents the state-of-the-art answers for todays woodworking cutting applications on North American and European machinery.

Our product offering is the largest of its kind. Each saw blade has been developed to fulfill a specific cutting application.

Each model has been developed with its own grades of materials (carbide and saw plate), its own cutting geometry (grind, hook angle, kerf), and its own operational enhancements (copper noise reducing plugs, cooling slots).

There is a perfect FS Tool industrial saw blade for every industrial woodworking cutting application.

COMMITMENT TO DEVELOPMENT

Our commitment to development is that each product must meet the challenge of today's applications and materials. New materials such as melamine require the development of saw blades that preserve the efficiencies of large volume cutting of the new material.

COMMITMENT TO QUALITY

Our commitment to quality is founded on the critical manufacturing element; personal checking of saw blades at each step in our highly-automated manufacturing process. And final checking before they are packaged for shipment.

COMMITMENT TO VALUE

Our large volume manufacturing and material purchasing keep our costs in line without compromising quality. We will always be competitive in a demanding and dynamic industrial marketplace.

L13 GANG RIP SAW BLADES
WITH 2 RAKERS



TOOTH CONFIG: Flat Top



APPLICATION:
» Ripping

MATERIAL:
» Softwoods and hardwoods, dry up to 15% wood moisture

MACHINE TYPE:
» Gang rip saws with one or two shafts

CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Includes two Tungsten Carbide rakers

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	KEYWAYS	MAX. RPM	HOOK	TOOTH CONFIG
L13250	10"	.125"	.083"	2-3/8"	10+2	–	KN 9.53 x 7.6	7,500	25°	Flat Top
L13300 •	12"	.125"	.083"	2-15/16"	12+2	–	DKN 3/8 x 3/8" + KN 1/2" x 1/2"	6,250	25°	Flat Top
L13302 •	12"	.150"	.109"	2-15/16"	12+2	–	DKN 3/8 x 3/8" + KN 1/2" x 1/2"	6,250	25°	Flat Top
L13350 •	14"	.160"	.120"	2-1/2"	14+2	–	DKN 3/8 x 3/8" + KN 1/2" x 1/2"	5,350	30°	Flat Top
L13352	14"	.125"	.083"	4"	16+2	1/(7/16")/5	–	5,350	30°	Flat Top

• Rounded keyway(s)

Other sizes available on request

L14 GANG RIP SAW BLADES
WITH 2+2 RAKERS



TOOTH CONFIG: Flat Top



APPLICATION:
» Ripping

MATERIAL:
» Softwoods and hardwoods, wet or frozen

MACHINE TYPE:
» Single and gang rip saws with one or two shafts

CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Two Tungsten Carbide rakers and two Tungsten Carbide wiper slots

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	KEYWAYS	MAX. RPM	HOOK	TOOTH CONFIG
L14250	10"	.174"	.110"	2-3/8"	18+2+2	–	KN 3/8" x 3/8"	7,500	25°	Flat Top
L14300 •	12"	.197"	.125"	2-15/16"	20+2+2	–	DKN 3/8 x 3/8" + KN 1/2" x 1/2"	6,250	25°	Flat Top
L14350 •	14"	.197"	.125"	2-1/2"	24+2+2	–	DKN 3/8 x 3/8" + KN 1/2" x 1/2"	5,350	25°	Flat Top
L14352	14"	.197"	.125"	4"	24+2+2	1/(7/16")/5"	–	5,350	25°	Flat Top

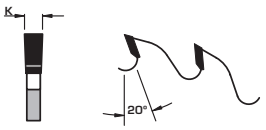
• Rounded keyway(s)

Other sizes available on request

L21TK RIP SAW BLADES
THIN KERF



TOOTH CONFIG: Flat Top



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Ripping

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Table saws
» Gang rip saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L21250TK	10"	.098"	.071"	5/8"	24	7,500	20°	Flat Top
L21251TK	10"	.134"	.087"	5/8"	24	7,500	20°	Flat Top

EXTRA THIN KERF SAW BLADES

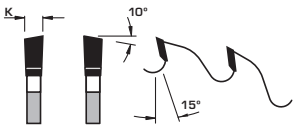
All custom manufactured for your specific application

» Glue-joint rip saw blades
» Gang rip saw blades
» Thin rim splitting saw blades (with double hub) for moulders

L03TK CROSS-CUT SAW BLADES
THIN KERF



TOOTH CONFIG: ATB



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Stabilizer flanges highly recommended when cutting stock over 3/4"

APPLICATION:
» Cross cutting
» Ripping

MATERIAL:
» Dry softwoods and hardwoods
» Plywood
» Veneered plywoods

MACHINE TYPE:
» Table saws
» Gang rip saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L03200TK	8"	.087"	.063"	5/8"	34	9,000	15°	ATB
L03250TK	10"	.087"	.063"	5/8"	40	7,500	15°	ATB
L03300TK	12"	.087"	.063"	1"	48	6,250	15°	ATB
L03350TK	14"	.087"	.063"	1"	54	5,350	15°	ATB

L18 RIP SAW BLADES
HEAVY DUTY



TOOTH CONFIG: Flat Top



APPLICATION:
» Ripping

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Table saws
» Gang rip saws with one or two shafts

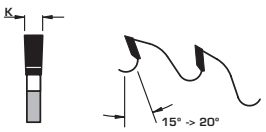
CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L18250	10"	.126"	.087"	5/8"	18	7,500	18°	Flat Top
L18300	12"	160"	.110"	1"	24	6,250	20°	Flat Top
L18350	14"	.170"	.118"	1"	24	5,350	20°	Flat Top
L18400	16"	.174"	.118"	1"	30	4,500	18°	Flat Top
L18450	18"	.193"	.138"	1"	40	4,000	15°	Flat Top

L21 RIP SAW BLADES
STANDARD



TOOTH CONFIG: Flat Top



APPLICATION:
» Ripping

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Table saws
» Gang rip saws with one or two shafts

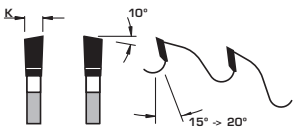
CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	KEYWAYS	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L21200	8"	.130"	.087"	5/8"	24	–	–	9,000	15°	Flat Top
L21225	9"	.130"	.087"	5/8"	24	–	–	8,000	15°	Flat Top
L21250	10"	.142"	.095"	5/8"	24	–	–	7,500	20°	Flat Top
L21300	12"	.160"	.110"	1"	30	–	–	6,250	18°	Flat Top
L21300-70	12"	.160"	.110"	70mm	30	DKN 20 x 5	SCM	6,250	18°	Flat Top
L21350	14"	.170"	.118"	1"	30	–	–	5,350	18°	Flat Top
L21350-70	14"	.170"	.118"	70mm	30	DKN 20 x 5	SCM	5,350	18°	Flat Top
L21400	16"	.170"	.118"	1"	36	–	–	4,500	18°	Flat Top

L2A GLUE LINE RIP SAW BLADES
ATB



TOOTH CONFIG: ATB



APPLICATION:
» Glue line ripping

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Table saws

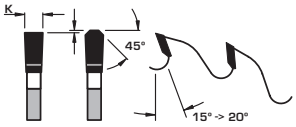
CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Extra smooth cut for gluing applications

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L2A200	8"	.130"	.087"	5/8"	24	9,000	15°	ATB
L2A225	9"	.135"	.087"	5/8"	24	8,000	15°	ATB
L2A250	10"	.138"	.095"	5/8"	24	7,500	20°	ATB

L22 GLUE LINE RIP SAW BLADES
TCG



TOOTH CONFIG: TCG



APPLICATION:
» Glue line ripping

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Straight line rip saws
» Table saws
» Gang rip saws

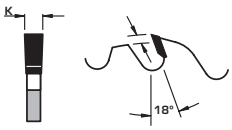
CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Extra smooth cut for gluing applications

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	KEYWAYS	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L22250	10"	.142"	.095"	5/8"	24	–	–	–	7,500	20°	TCG
L22306	12"	.160"	.110"	1"	36	–	–	–	6,250	15°	TCG
L22306-2	12"	.160"	.110"	2"	36	1/(9/16")/5"	–	Diehl	6,250	15°	TCG
L22306-318	12"	.160"	.110"	3-1/8"	36	–	–	Mereen-Johnson	6,250	15°	TCG
L22306-70	12"	.160"	.110"	70mm	36	–	DKN 20 x 5	SCM	6,250	15°	TCG
L22350	14"	.170"	.118"	1"	36	–	–	–	5,350	18°	TCG
L22350-2	14"	.169"	.118"	2"	36	1/(9/16")/5"	–	Diehl	5,350	18°	TCG
L22350-318	14"	.169"	.118"	3-1/8"	36	–	–	Mereen-Johnson	5,350	18°	TCG
L22350-312	14"	.169"	.118"	3-1/2"	36	–	–	Mereen-Johnson	5,350	18°	TCG
L22350-70	14"	.169"	.118"	70mm	36	–	DKN 20 x 5	SCM	5,350	18°	TCG
L22400	16"	.174"	.118"	1"	36	–	–	–	4,500	18°	TCG

L12 GANG RIP SAW BLADES
WITH CHIP LIMITERS



TOOTH CONFIG: Flat Top



APPLICATION:
» Ripping

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Gang rip saws

CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Saw body with chip thickness limiters
Plate thickness = 2.2mm

PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE MM	TEETH	KEYWAYS	MAX. RPM	HOOK	TOOTH CONFIG
L12250	250	3.2	2.2	70	24	DKN 20 x 5	7,500	18°	Flat Top
L12300	300	3.2	2.2	70	28	DKN 20 x 5	6,250	18°	Flat Top
L12350	350	3.2	2.2	70	24	DKN 20 x 5	5,350	18°	Flat Top

L02 RIP SAW BLADES
WITH CHIP LIMITERS



TOOTH CONFIG: Flat Top



APPLICATION:
» Ripping

MATERIAL:
» Dry softwoods and hardwoods

MACHINE TYPE:
» Table saws
» Sliding table saws
» Ideal for hand-fed operations

CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Saw body with chip thickness limiters

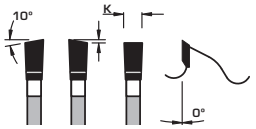
PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE	TEETH	MAX RPM.	HOOK	TOOTH CONFIG
L02250	250	3.2	2.2	5/8"	24	7,500	18°	Flat Top
L02300	300	3.4	2.4	1"	28	6,250	18°	Flat Top
L02350	350	3.8	2.8	1"	32	5,350	18°	Flat Top
L02400	400	3.8	2.8	1"	36	4,500	20°	Flat Top
L02450	450	4.0	2.8	1"	40	4,000	18°	Flat Top
L02500	500	4.2	3.0	1"	44	3,500	20°	Flat Top

L07 RADIAL ARM SAW BLADES

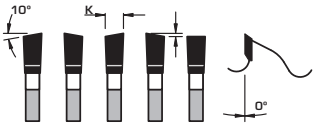


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: 0° hook angle reduces the tendency of the blade grabbing the material

TOOTH CONFIG: 2 ATB + 1 Raker



TOOTH CONFIG: 4 ATB + 1 Raker



APPLICATION:
- Cross cutting
- General sizing cuts
- Ripping

MATERIAL:
- Dry softwoods and hardwoods

MACHINE TYPE:
- Radial arm saws
- Other saws where the blade is above the work piece

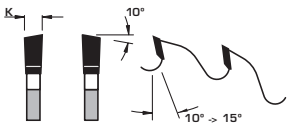
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L07250	10"	.135"	.095"	5/8"	24	7,500	0°	2 ATB + 1 Raker
L07300	12"	.150"	.110"	1"	36	6,250	0°	2 ATB + 1 Raker
L07350	14"	.165"	.118"	1"	40	5,350	0°	4 ATB + 1 Raker
L07400	16"	.165"	.118"	1"	40	4,500	0°	4 ATB + 1 Raker

L03 CROSS-CUT SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: ATB



APPLICATION:
- Cross-cutting
- Ripping

MATERIAL:
- Dry softwoods and hardwoods
- Plywoods
- Masonite
- Raw MDF materials

MACHINE TYPE:
- Table saws
- Sliding table saws
- Cut-off saws

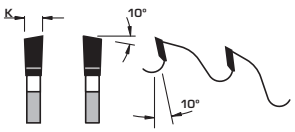
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L03150	6"	.125"	.087"	5/8"	30	12,000	10°	ATB
L03180	7"	.125"	.087"	5/8"	30	10,000	10°	ATB
L03200	8"	.125"	.087"	5/8"	40	9,000	10°	ATB
L03225	9"	.125"	.087"	5/8"	40	8,000	10°	ATB
L03250	10"	.125"	.087"	5/8"	40	7,500	15°	ATB
L03300	12"	.135"	.095"	1"	48	6,250	15°	ATB
L03350	14"	.155"	.110"	1"	60	5,350	10°	ATB
L03400	16"	.155"	.110"	1"	60	4,500	10°	ATB
L03450	18"	.185"	.138"	1"	60	4,000	10°	ATB
L03500	20"	.185"	.138"	1"	80	3,500	10°	ATB

L09 CROSS-CUT SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: ATB



APPLICATION:
» Cross-cutting
» Ripping

MATERIAL:
» Softwoods and hardwoods
» Plywood
» Masonite
» Raw MDF panels

MACHINE TYPE:
» Table saws
» Sliding table saws
» Cut-off saws

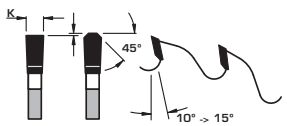
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L09300	12"	.135"	.095"	1"	60	6,250	10°	ATB
L09400	16"	.155"	.110"	1"	80	4,500	10°	ATB
L09450	18"	.185"	.138"	1"	80	4,000	10°	ATB
L09500	20"	.185"	.138"	1"	100	3,500	10°	ATB

L19 CROSS-CUT SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: TCG



APPLICATION:
» Cross-cutting
» Ripping

MATERIAL:
» Softwoods and hardwoods
» Composite materials plastic laminated single-sided

MACHINE TYPE:
» Table saws
» Sliding table saws
» Cut-off saws

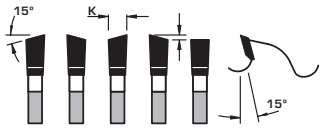
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L19225	9"	.126"	.087"	5/8"	40	8,000	10°	TCG
L19250	10"	.126"	.087"	5/8"	40	7,500	15°	TCG
L19301	12"	.134"	.095"	1"	48	6,250	15°	TCG
L19300	12"	.135"	.095"	1"	60	6,250	10°	TCG
L19350	14"	.155"	.110"	1"	60	5,350	10°	TCG
L19400	16"	.155"	.110"	1"	80	4,500	10°	TCG
L19450	18"	.185"	.138"	1"	80	4,000	10°	TCG
L19500	20"	.185"	.138"	1"	100	3,500	10°	TCG

L55 COMBINATION SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: None
ADDITIONAL INFO: Design allows for deeper cuts and improved chip flow

TOOTH CONFIG: 4 ATB + 1 Raker



APPLICATION:
- Cross-cutting
- Ripping
- Sizing cuts
- Trimming

MATERIAL:
- Dry softwoods and hardwoods
- Plywood
- Particleboard

MACHINE TYPE:
- Table saws
- Sliding table saws
- Cut-off saws

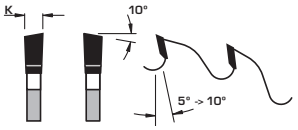
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L55180	7"	.125"	.087"	5/8"	40	10,000	15°	4 ATB + 1 Raker
L55200	8"	.125"	.087"	5/8"	40	9,000	15°	4 ATB + 1 Raker
L55225	9"	.125"	.087"	5/8"	40	8,000	15°	4 ATB + 1 Raker
L55250	10"	.138"	.095"	5/8"	50	7,500	15°	4 ATB + 1 Raker
L55300	12"	.155"	.110"	1"	60	6,250	15°	4 ATB + 1 Raker
L55350	14"	.165"	.118"	1"	70	5,350	15°	4 ATB + 1 Raker
L55400	16"	.165"	.118"	1"	80	4,500	15°	4 ATB + 1 Raker

L04 STANDARD CROSS-CUT SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: ATB



APPLICATION:
- General cut-off
- Trimming

MATERIAL:
- Softwoods and hardwoods
- Plywood and composite panel materials
- Wood veneered single-sided, or double-sided using a pre-scoring unit

MACHINE TYPE:
- Table saws
- Sliding table saws
- Cut-off saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L04180	7"	.125"	.087"	5/8"	40	–	–	10,000	10°	ATB
L04200	8"	.125"	.087"	5/8"	48	–	–	9,000	10°	ATB
L04225	9"	.126"	.087"	5/8"	60	–	–	8,000	5°	ATB
L04250	10"	.126"	.087"	5/8	60	–	–	7,500	10°	ATB
L04302	300mm	3.4mm	2.4mm	30mm	72	Universal	▲ See footnote	6,250	5°	ATB
L04300	12"	.135"	.095"	1"	80	–	–	6,250	5°	ATB
L04350	14"	.150"	.110"	1"	80	–	–	5,350	10°	ATB
L04400	16"	.160"	.118"	1"	100	–	–	4,500	5°	ATB
L04450	18"	.185"	.138"	1"	100	–	–	4,000	10°	ATB
L04500	20"	.185"	.138"	1"	120	–	–	3,500	10°	ATB

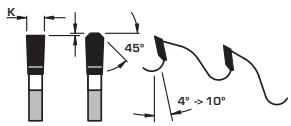
▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

L23 STANDARD CROSS-CUT SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: TCG



APPLICATION:
- General cut-off
- Trimming

MATERIAL:
- Plastic laminated materials single-sided, or double-sided using a pre-scoring unit

MACHINE TYPE:
- Table saws
- Sliding table saws
- Cut-off saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L23158	6-1/4"	.110"	.080"	2-11/16"	40	–	Modulus 2000	12,000	4°	TCG
L23200	8"	.126"	.087"	5/8"	48	–	–	9,000	10°	TCG
L23225	9"	.126"	.087"	5/8"	60	–	–	8,000	5°	TCG
L23250	10"	.126"	.087"	5/8"	60	–	–	7,500	10°	TCG
L23302	300mm	3.4mm	2.4mm	30mm	72	Universal	▲ See footnote	6,250	5°	TCG
L23300	12"	.135"	.095"	1"	80	–	–	6,250	5°	TCG
L23350	14"	.150"	.110"	1"	80	–	–	5,350	10°	TCG
L23400	16"	.160"	.118"	1"	100	–	–	4,500	5°	TCG
L23408	16"	.187"	.134"	1"	100	–	Midwest Automation	4,500	5°	TCG
L23450	18"	.185"	.138"	1"	100	–	–	4,000	10°	TCG
L23500	20"	.185"	.138"	1"	120	–	–	3,500	10°	TCG

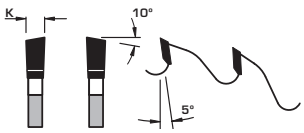
▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

L06 FINE CROSS-CUT SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: ATB



APPLICATION:
- Fine sizing cuts
- Fine cross-cutting
- Finishing, trimming

MATERIAL:
- Softwoods and hardwoods
- Plywood
- Wood veneered and plastic laminated panel materials

MACHINE TYPE:
- Table saws
- Sliding table saws
- Cut-off saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L06150	6"	.126"	.087"	5/8"	40	–	–	12,000	5°	ATB
L06180	7"	.126"	.087"	5/8"	60	–	–	10,000	5°	ATB
L06200	8"	.126"	.087"	5/8"	60	–	–	9,000	5°	ATB
L06250	10"	.126"	.087"	5/8"	80	–	–	7,500	5°	ATB
L06306	300mm	3.4mm	2.4mm	30mm	96	Universal	▲ See footnote	6,250	5°	ATB
L06300	12"	.135"	.095"	1"	100	–	–	6,250	5°	ATB
L06350	14"	.150"	.110"	1"	100	–	–	5,350	5°	ATB
L06400	16"	.160"	.118"	1"	120	–	–	4,500	5°	ATB
L06450	18"	.185"	.138"	1"	120	–	–	4,000	5°	ATB

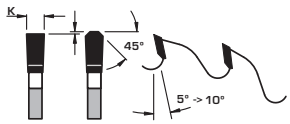
▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

L10 FINE CROSS-CUT SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: TCG



APPLICATION:

» Fine sizing cuts
» Chip-free cuts on double-sided or bottom faced materials using a pre-scoring unit

MATERIAL:

» Single-sided or double-sided melamine panels
» MDF
» OSB
» HDF panels

MACHINE TYPE:

» Table saws
» Sliding table saws
» Vertical panel sizing saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L10150	6"	.126"	.087"	5/8"	40	–	–	12,000	5°	TCG
L10180	7"	.126"	.087"	5/8"	60	–	–	10,000	5°	TCG
L10200	8"	.126"	.087"	5/8"	60	–	–	9,000	5°	TCG
L10220-H	220mm	3.2mm	2.2mm	30mm	64	Universal	▲ See footnote	8,800	10°	TCG
L10250	10"	.126"	.087"	5/8"	80	–	–	7,500	5°	TCG
L10254	10"	4.0mm	.087"	5/8"	80	–	–	7,500	5°	TCG
L10251	10"	.126"	.087"	5/8"	100	–	–	7,500	5°	TCG
L10306	300mm	3.4mm	2.4mm	30mm	96	Universal	▲ See footnote	6,250	5°	TCG
L10300	12"	.135"	.095"	1"	100	–	–	6,250	5°	TCG
L10350	14"	.150"	.110"	1"	100	–	–	5,350	5°	TCG
L10400	16"	.160"	.118"	1"	120	–	–	4,500	5°	TCG
L10450	18"	.185"	.138"	1"	120	–	–	4,000	5°	TCG

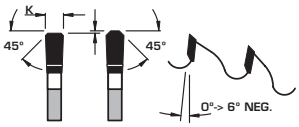
▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

L01 FINE CROSS-CUT SAW BLADES FOR PLASTIC



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: TC2



APPLICATION:

» Fine sizing cuts
» "Non-melt" saw blades see LNM series on page E22

MATERIAL:

» Single- sided or double-sided laminated panels
» Plexiglass
» Solid surface materials such as Wilsonart®; Gibraltar®; SSV®; Corian®; Surell®; Avonite®; Fountainhead®; etc.

MACHINE TYPE:

» Table saws
» Sliding table saws
» Radial arm saws
» Vertical panel sizing saws

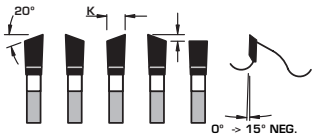
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L01200	8"	.126"	.087"	5/8"	60	9,000	0°	TC2
L01250	10"	.126"	.087"	5/8"	80	7,500	2° Neg.	TC2
L01300	12"	.135"	.095"	1"	100	6,250	6° Neg.	TC2
L01350	14"	.158"	.118"	1"	100	5,350	2° Neg.	TC2
L01400	16"	.160"	.118"	1"	120	4,500	0°	TC2
L01450	18"	.185"	.138"	1"	120	4,000	2° Neg.	TC2

LM4/LM6 MITRE JOINT SAW BLADES

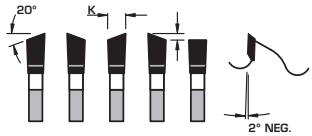


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: 4 ATB + 1 Raker



TOOTH CONFIG: 8 ATB + 1 Raker



APPLICATION:

» Mitre joint cuts

MATERIAL:

» Softwoods and hardwoods
» Painted mouldings
» Gesso and other high-gloss and pre-finished picture frames and furniture mouldings
» PVC Substrates
» For aluminum cuts see L1A, L1B and L1C series on page E38 and E39

MACHINE TYPE:

» Single or double cut-off mitre machines
» Radial arm saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
LM6200	8"	.112"	.087"	5/8"	60	–	–	9,000	0°	4 ATB + 1 Raker
LM4216	8-1/2"	.110"	.071"	5/8"	24	2/7/112	Elu, Hitachi	8,000	15° Neg.	10º ATB
LM6216	8-1/2"	.110"	.071"	5/8"	48	2/7/112	Elu, Hitachi	8,800	15° Neg.	10º ATB
LM4225	9"	.112"	.087"	5/8"	60	–	–	8,000	2° Neg.	4 ATB + 1 Raker
LM6225	9"	.112"	.087"	5/8"	72	–	–	8,000	2° Neg.	8 ATB + 1 Raker
LM4250	10"	.116"	.087"	5/8"	60	–	–	7,500	2° Neg.	4 ATB + 1 Raker
LM6250	10"	.112"	.087"	5/8"	80	–	–	7,500	2° Neg.	4 ATB + 1 Raker
LM4300	12"	.122"	.095"	1"	80	–	–	6,250	2° Neg.	4 ATB + 1 Raker
LM4308	12"	.122"	.110"	5/8"	80	–	Pistorius, CTD	6,250	2° Neg.	4 ATB + 1 Raker
LM6300	12"	.120"	.095"	1"	100	–	–	6,250	6° Neg.	4 ATB + 1 Raker
LM6308	12"	.134"	.110"	5/8"	100	–	Pistorius, CTD	6,250	0°	4 ATB + 1 Raker
LM6330	330mm	3.3mm	2.5mm	20mm	100	–	Wegoma, Haffner, Salvarani	5,750	2° Neg.	4 ATB + 1 Raker
LM6351	350mm	3.1mm	2.5mm	25mm	100	–	Makita	5,350	2° Neg.	4 ATB + 1 Raker
LM6350	14"	.142"	.118"	1"	100	–	–	5,350	2° Neg.	4 ATB + 1 Raker
LM6350-LS02 •	14"	.142"	.118"	1"	100	–	–	5,350	2° Neg.	4 ATB + 1 Raker
LM6350-32	355mm	3.6mm	3.0mm	32mm	100	4/12/92	Brevetti (355 Diam.)	5,350	2° Neg.	4 ATB + 1 Raker
LM6353	350mm	3.2mm	2.6mm	32mm	108	2/11/63	Brevetti	5,350	6° Neg.	8 ATB + 1 Raker
LM6358	14"	.150"	.118"	5/8"	100	–	Pistorius, CTD	5,350	2° Neg.	4 ATB + 1 Raker
LM6380	15"	.120"	.098"	1"	100	–	Hitachi	5,000	2° Neg.	4 ATB + 1 Raker

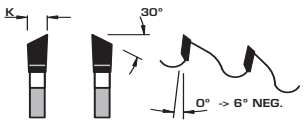
• Noise reduction laser slits

LM6 30° CHIP-FREE MELAMINE TRIM BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: High ATB 30°



APPLICATION:

» Chip-free sizing cuts (on both sides) without the need for pre-scoring unit
» Fine cross-cuts

MATERIAL:

» Melamine
» Wood veneered panels
» Solid woods

MACHINE TYPE:

» Table saws
» Sliding table saws
» Vertical panel sizing saws
» Cut-off saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
LM6201	8"	.118"	.087"	5/8"	60	–	–	9,000	0°	High ATB 30°
LM6221-H	220mm	3.2mm	2.4mm	30mm	64	Universal	▲ See footnote	8,000	2° Neg.	High ATB 30°
LM6251	10"	.118"	.087"	5/8"	80	–	–	7,500	2° Neg.	High ATB 30°
LM6251-30	250mm	3.0mm	2.2mm	30mm	80	2/7/42	Holz-Her, Striebig	7,500	2° Neg.	High ATB 30°
LM6301-30	300mm	3.2mm	2.4mm	30mm	100	Universal	▲ See footnote	6,250	6° Neg.	High ATB 30°
LM6301	12"	.126"	.095"	1"	100	–	–	6,250	6° Neg.	High ATB 30°
LM6352	14"	.150"	.118"	1"	100	–	–	5,350	2° Neg.	High ATB 30°
LM6401	16"	.157"	.118"	1"	120	–	–	4,500	0°	High ATB 30°

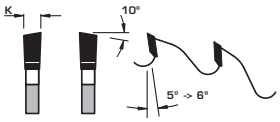
▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

LO5 THIN KERF SAW BLADES

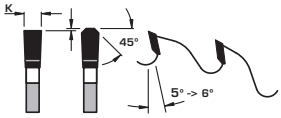


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Very stable body minimizes run-out

TOOTH CONFIG: ATB



TOOTH CONFIG: TCG



APPLICATION:

» Fine cross cuts

MATERIAL:

» Veneered panels
» Expensive woods and sheets
» Thin plexiglass
» Masonite
» Plastics

MACHINE TYPE:

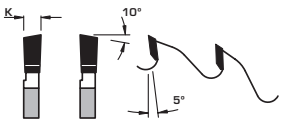
» Table saws
» Sliding table saws
» Vertical panel sizing saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LO5150	6"	.080"	.055"	5/8"	48	12,000	6°	ATB
LO5180	7"	.080"	.055"	5/8"	56	10,000	6°	ATB
LO5200	8"	.080"	.055"	5/8"	64	9,000	5°	ATB
LO5201	8"	.080"	.055"	5/8"	64	9,000	5°	TCG
LO5250	10"	.083"	.062"	5/8"	80	7,500	6°	ATB
LO5251	10"	.087"	.062"	5/8"	100	7,500	6°	ATB
LO5252	10"	.083"	.062"	5/8"	80	7,500	6°	TCG
LO5300	12"	.087"	.062"	1"	96	6,250	6°	ATB
LO5302	12"	.087"	.062"	1"	96	6,250	6°	TCG
LO5350	14"	.095"	.070"	1"	108	5,350	6°	ATB
LO5400	16"	.110"	.070"	1"	120	4,500	6°	ATB

L15 THIN RIM SAW BLADES



TOOTH CONFIG: ATB



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Collar width: 2"
Thin rimmed body (on left side) allows for thin kerf at teeth and stability during cutting operation

APPLICATION:
» Fine cross cuts

MATERIAL:
» Veneered panels
» Expensive woods and sheets
» Thin plexiglass
» Masonite
» Plastics

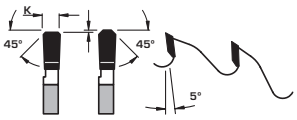
MACHINE TYPE:
» Table saws
» Sliding table saws

PART NO.	DIAM.	KERF	RIM	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L15200	8"	.092"	.063"	.095"	5/8"	60	9,000	5°	ATB
L15225	9"	.092"	.063"	.095"	5/8"	60	8,000	5°	ATB
L15250	10"	.092"	.063"	.095"	5/8"	80	6,500	5°	ATB
L15300	12"	.092"	.063"	.095"	1"	100	6,000	5°	ATB

L16 THIN RIM SAW BLADES



TOOTH CONFIG: TC2



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Collar width 2"
Thin rimmed body (on left side) allows for thin kerf at teeth and stability during cutting operation

APPLICATION:
» Fine cross cuts

MATERIAL:
» Acrylic sheets
» Thin plexiglass
» Masonite
» Plastics

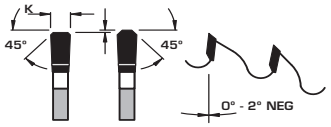
MACHINE TYPE:
» Table saws
» Sliding table saws

PART NO.	DIAM.	KERF	RIM	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L16200	8"	.092"	.063"	.095"	5/8"	60	9,000	5°	TC2
L16225	9"	.092"	.063"	.095"	5/8"	60	8,000	5°	TC2
L16250	10"	.092"	.063"	.095"	5/8"	80	6,500	5°	TC2
L16300	12"	.092"	.063"	.095"	1"	100	6,000	5°	TC2

LNM NON-MELT SAW BLADES



TOOTH CONFIG: TC2



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Tooth geometry designed to minimize "melting" of material

APPLICATION:
» "Non-melt" fine cuts

MATERIAL:
» Acrylic sheets
» Selrins
» ABS (cycolac)
» Styrenes
» PVC

MACHINE TYPE:
» Table saws
» Sliding table saws
» Vertical panel sizing saws

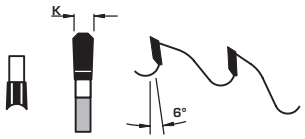
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
LNM200	8"	.100"	.071"	5/8"	60	–	–	9,000	0°	TC2
LNM220	220mm	3.2mm	2.4mm	30mm	64	Universal	▲ See footnote	8,000	2° Neg.	TC2
LNM250A	10"	.118"	.087"	5/8"	60	–	–	7,500	2° Neg.	TC2
LNM250	10"	.100"	.071"	5/8"	80	–	–	7,500	0°	TC2
LNM300A	12"	.125"	.095"	1"	80	–	–	6,250	2° Neg.	TC2
LNM300	12"	.125"	.095"	1"	100	–	–	6,250	0°	TC2
LNM350A	14"	.145"	.118"	1"	90	–	–	5,350	2° Neg.	TC2
LNM350	14"	.145"	.118"	1"	100	–	–	5,350	2° Neg.	TC2
LNM350-32	14"	.145"	.118"	32mm	100	4/12/92	–	5,350	2° Neg.	TC2

▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

L41 HOLLOW FACE SAW BLADES



TOOTH CONFIG: TCH



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Face hollow-ground tooth configuration

APPLICATION:
» For exceptionally smooth cuts (on both sides) without the need for pre-scoring

MATERIAL:
» Melamine
» Laminated panels

MACHINE TYPE:
» Table saws
» Sliding table saws
» Vertical panel sizing saws

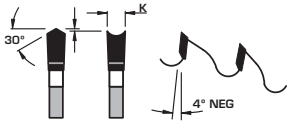
PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L41200	200	2.9	2.0	5/8"	48	9,000	6°	TCH
L41250	250	2.9	2.0	5/8"	60	7,500	6°	TCH
L41300	300	2.9	2.0	1"	72	6,250	6°	TCH
L41350	350	2.9	2.0	1"	84	5,350	6°	TCH

L42 HOLLOW FACE SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Inverted "V" (face hollow-ground) tooth configuration

TOOTH CONFIG: Inverted "V"



APPLICATION:

» For exceptionally smooth cuts (on both sides) without the need for pre-scoring
» Mitre cuts

MATERIAL:

» Melamine
» Laminated panels
» Wrapped styrene picture frames (mitre cuts)

MACHINE TYPE:

» Table saws
» Sliding table saws
» Vertical panel sizing saws
» Mitre saws

PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L42220-H	220	3.2	2.2	30mm	42	Universal	▲ See footnote	8,000	4˚Neg.	Inverted "V"
L42250	250	3.2	2.2	5/8"	48	–	–	7,500	4˚Neg.	Inverted "V"
L42251	250	3.2	2.2	30mm	48	2/7/42	Holz-Her, Striebig	7,500	4˚Neg.	Inverted "V"
L42300-58	300	3.2	2.2	5/8"	60	–	Pistorius	6,250	4˚Neg.	Inverted "V"
L42300	300	3.2	2.2	1"	60	–	–	6,250	4˚Neg.	Inverted "V"
L42350	350	3.2	2.2	1"	72	–	–	5,350	4˚Neg.	Inverted "V"

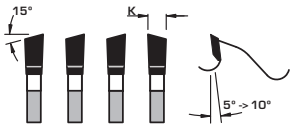
▲ Suitable for Altendorf, Felder, Holz-Her, Omga, SCMI, and Striebig machines

L4D/L6D DOUBLE CUT-OFF SAW BLADES

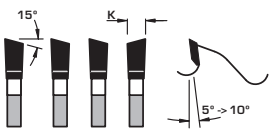


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Used in pairs 1 LH & 1 RH
Extra heavy plate for added stability

TOOTH CONFIG: 3+1 ATB LH



TOOTH CONFIG: 3+1 ATB RH



APPLICATION:

» Fine cut-off
» Mitre cuts
» Trimming

MATERIAL:

» Softwoods and hardwoods
» Plywood
» Wood veneered and plastic laminated panels single-sided, or double-sided using a pre-scoring unit

MACHINE TYPE:

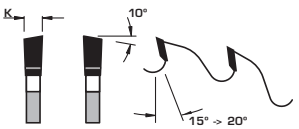
» Double cut-off machines
» Single or double end tenoners

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L4D300-LH	12"	.160"	.118"	1"	80	6,250	5˚	3+1 ATB LH
L4D300-RH	12"	.160"	.118"	1"	80	6,250	5˚	3+1 ATB RH
L4D350-LH	14"	.180"	.138"	1"	80	5,350	10˚	3+1 ATB LH
L4D350-RH	14"	.180"	.138"	1"	80	5,350	10˚	3+1 ATB RH
L6D350-LH	14"	.180"	.138"	1"	100	5,350	5˚	3+1 ATB LH
L6D350-RH	14"	.180"	.138"	1"	100	5,350	5˚	3+1 ATB RH
L6D400-LH	16"	.180"	.138"	1"	100	4,500	5˚	3+1 ATB LH
L6D400-RH	16"	.180"	.138"	1"	100	4,500	5˚	3+1 ATB RH

PANEL SIZING SAW BLADES
XL4000



TOOTH CONFIG: ATB



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Sizing cuts

MATERIAL:
» Veneered particleboard
» Hard fiberboard
» Raw MDF panels
» High-density plywood

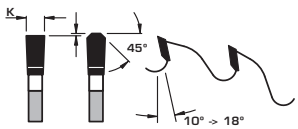
MACHINE TYPE:
» Panel sizing saws (beam saws)

PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE MM	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L5030048-30	305	4.4	3.0	30	48	–	Mayer, Panhans	6,250	15°	ATB
L5030272-30	300	4.55	3.2	30	72	–	Schelling Postforming FX-H430	6,250	15°	ATB
L5035054-30	355	4.4	3.0	30	54	2/10/60	SCM, Panhans, Mayer	5,350	15°	ATB
L5035154-30	350	3.6	2.5	30	54	–	Holz-Her	5,350	15°	ATB
L5035054-75	355	4.4	3.0	75	54	–	Giben Trend	5,350	15°	ATB
L5035072-30	355	4.4	3.0	30	72	–	SCM, Panhans, Mayer, Schelling	5,350	15°	ATB
L5035072-75	355	4.4	3.0	75	72	–	Giben	5,350	15°	ATB
L5035072-80	350	4.4	3.0	80	72	4/9/100 + 2/8/110	Gabbiani Casadei	5,350	15°	ATB
L5040060-30	400	4.4	3.2	30	60	–	Schelling, Mayer, Irion	4,500	15°	ATB
L5040060-75	400	4.4	3.2	75	60	–	Giben	4,500	15°	ATB
L5040060-80	400	4.4	3.2	80	60	4/9/100 + 2/8/110	Gabbiani	4,500	15°	ATB
L5040072-60	400	4.4	3.2	60	72	–	Anthon Holzma	4,500	15°	ATB
L5040072-75	400	4.4	3.2	75	72	–	Giben	4,500	15°	ATB
L5040072-80	400	4.4	3.2	80	72	4/9/100 + 2/8/110	Gabbiani	4,500	15°	ATB
L5043072-30	430	4.4	3.2	30	72	–	–	4,000	15°	ATB
L5043072-80	430	4.4	3.2	80	72	4/19/120 + 2/9/130	Selco	4,000	15°	ATB
L5045072-30	450	4.4	3.2	30	72	2/10/60	Irion, Panhans, Schelling	4,000	15°	ATB
L5045072-60	450	4.4	3.2	60	72	–	Holzma	4,000	15°	ATB
L5045072-80	450	4.4	3.2	80	72	4/19/120 + 2/9/130	Selco	4,000	15°	ATB
L5067060-40	670	6.2	4.2	40	60	2/12/120	Schelling	2,850	20°	ATB

PANEL SIZING SAW BLADES
XL4000



TOOTH CONFIG: TCG



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Sizing cuts

MATERIAL:
» Plastic laminated panels
» Plywood

MACHINE TYPE:
» Panel sizing saws (beam saws)

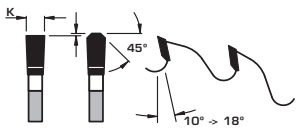
PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L5224054-30	240	3.2	2.2	30mm	54	2/6.8/42	Scheer FM10	8,000	15°	TCG
L5225072-30	250	3.2	2.2	30mm	72	2/7/42	Casadei Linea	7,500	15°	TCG
L5230160-30	305	3.4	2.4	30mm	60	–	Scheer FM16	6,250	10°	TCG
L5230048-30	305	4.4	3.0	30mm	48	–	Mayer, Panhans	6,250	15°	TCG
L5230060-30	305	4.4	3.0	30mm	60	–	Mayer, Panhans	6,250	15°	TCG
L5230060-65	300	4.4	3.2	65mm	60	2/9/110	Selco EB70	6,250	15°	TCG
L5230060-75	305	4.4	3.0	75mm	60		Giben Junior	6,250	15°	TCG
L5230072-80	300	4.4	3.0	80mm	72	2/14/110	SCM Sigma 65	6,250	15°	TCG
L5232072-50	320	4.4	3.2	50mm	72	3/12.5/80 + 4/12.5/80	Giben Smart 75	5,700	15°	TCG
L5232060-75	320	4.6	3.2	75mm	60	3/13/95	Giben	5,700	15°	TCG
L5235054-30	355	4.4	3.0	30mm	54	2/10/60	SCM, Panhans, Mayer	5,350	15°	TCG
L5235054-75	355	4.4	3.0	75mm	54	–	Giben Trend	5,350	15°	TCG
L5235072-30	355	4.4	3.0	30mm	72	–	SCM, Panhans, Mayer, Schelling	5,350	15°	TCG
L5235072-75	355	4.4	3.0	75mm	72	–	Giben	5,350	15°	TCG
L5235072-114	350	4.4	3.0	1-1/4"	72	–	SCMI	5,350	15°	TCG
L5235072-60	350	4.4	3.0	60mm	72	2/14/100	Holzma HPP350	5,350	15°	TCG
L5235072-80	350	4.4	3.0	80mm	72	4/9/100 + 2/8/110	Gabbiani Casadei	5,350	15°	TCG
L5235172-80	350	4.4	3.0	80mm	72	4/9/100 + 2/14/110	SCM Sigma 90	5,350	15°	TCG
L5235272-30	350	4.4	3.2	30mm	72	2/10/60 + 2/13/94	Schelling FX-H430	5,350	15°	TCG
L5235272-80	355	4.4	3.0	80mm	72	2/7/110 + 2/8.5/130	Selco EB90	5,350	15°	TCG
L5236072-50	360	4.4	3.2	50mm	72	4/13/80	Giben Smart 105 SPT	5,350	15°	TCG
L5236072-65	360	4.4	3.2	65mm	72	2/9/110	Selco EB100	5,350	15°	TCG
L5237072-30	370	4.4	3.2	30mm	72	–	Schelling	5,350	15°	TCG
L5238060-60	380	4.4	3.2	60mm	60	–	Holzma	5,000	15°	TCG
L5238072-50	380	4.4	3.2	50mm	72	4/12.5/80	Giben Icon 2	5,000	15°	TCG
L5238072-60	380	4.4	3.2	60mm	72	2/14/100	Holzma	5,000	15°	TCG
L5238872-50	380	4.8	3.5	50mm	72	4/12.5/80	Giben Icon 2	5,000	15°	TCG
L5238872-60	380	4.8	3.5	60mm	72	2/14/100	Holzma Series 82	5,000	15°	TCG
L5239072-50	390	4.4	3.2	50mm	72	4/12.5/80	Giben Onix H105	4,000	15°	TCG
L5239072-75	390	4.4	3.2	75mm	72	2/7/110	Giben Icon 1	4,900	15°	TCG
L5240060-30	400	4.4	3.2	30mm	60	–	Schelling, Mayer, Irion	4,500	15°	TCG
L5240060-75	400	4.4	3.2	75mm	60	–	Giben	4,500	15°	TCG
L5240060-80	400	4.4	3.2	80mm	60	4/9/100 + 2/8/110	Gabbiani	4,500	15°	TCG
L5240072-30	400	4.4	3.2	30mm	72	–	Schelling, Mayer, Irion	4,500	15°	TCG
L5240072-60	400	4.4	3.2	60mm	72	–	Anthon Holzma	4,500	15°	TCG

Continued to page E26...

PANEL SIZING SAW BLADES
XL4000



TOOTH CONFIG: TCG



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Sizing cuts

MATERIAL:
» Plastic laminated panels
» Plywood

MACHINE TYPE:
» Panel sizing saws (beam saws)

...Continued from page E25

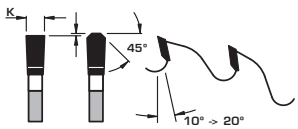
PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE MM	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L5240072-75	400	4.4	3.2	75	72	–	Giben	4,500	15°	TCG
L5240172-75	400	4.4	3.2	75	72	4/15/105	Giben Prismatic-1	4,500	15°	TCG
L5240072-80	400	4.4	3.2	80	72	4/9/100 + 2/8/110	Gabbiani	4,500	15°	TCG
L5240272-80	400	4.4	3.2	80	72	4/8.5/100 + 2/14/110	SCM Sigma 115	4,500	15°	TCG
L5240172-80	400	4.4	3.2	80	72	4/19/120 + 2/9/130	Selco	4,500	15°	TCG
L5240860-75	400	4.8	3.5	75	60	–	Giben	4,500	15°	TCG
L5241072-80	410	4.6	3.2	80	72	4/9.2/100	Gabbiani	4,500	15°	TCG
L5242072-60	420	4.4	3.2	60	72	–	Holzma	4,000	15°	TCG
L5242672-60	420	4.6	3.2	60	72	–	Holzma	4,000	15°	TCG
L5242860-60	420	4.8	3.5	60	60	2/10/80 + 2/14/125	Holzma	4,000	15°	TCG
L5242872-60	420	4.8	3.5	60	72	2/10/80 + 2/14/125	Holzma	4,000	15°	TCG
L5243072-30	430	4.4	3.2	30	72	–	–	4,000	15°	TCG
L5243072-60	430	4.4	3.2	60	72	4/16/105	Anthon	4,000	15°	TCG
L5243072-65	430	4.4	3.2	65	72	2/9/110	Selco WNT 6	4,000	15°	TCG
L5243072-75	430	4.4	3.2	75	72	4/15/105	Giben Prismatic-2	4,000	15°	TCG
L5243096-75	430	4.4	3.2	75	96	4/15/105	Giben Prismatic-2	4,000	15°	TCG
L5243072-80	430	4.4	3.2	80	72	4/19/120 + 2/9/130	Selco	4,000	15°	TCG
L5245072-30	450	4.4	3.2	30	72	2/10/60	Panhans, Irion, Schelling	4,000	15°	TCG
L5245072-60	450	4.4	3.2	60	72	–	Holzma	4,000	15°	TCG
L5245072-80	450	4.4	3.2	80	72	4/19/120 + 2/9/130	Selco	4,000	15°	TCG
L5245172-80	450	4.4	3.2	80	72	2/14/110	Gabbiani	4,000	15°	TCG
L5245672-80	450	4.6	3.2	80	72	4/19/120 + 2/9/130	Selco	4,000	15°	TCG
L5245872-60	450	4.8	3.5	60	72	2/14/125	Holzma	4,000	15°	TCG
L5245872-80	450	4.8	3.5	80	72	4/19/120 + 2/9/130	Selco	4,000	15°	TCG
L5246060-30	460	4.4	3.2	30	60	2/13/94	Schelling	4,000	15°	TCG
L5246072-30	460	4.4	3.2	30	72	2/13/94	Schelling	4,000	15°	TCG
L5247072-30	470	4.4	3.2	30	72	–	Schelling	4,000	15°	TCG
L5247096-75	470	4.4	3.2	75	96	4/15/105	Giben Prismatic-3	4,000	15°	TCG
L5248072-30	480	4.4	3.2	30	72	2/13/94	Schelling	4,000	15°	TCG
L5248872-30	480	4.8	3.5	30	72	2/13/94	Schelling fh6	4,000	15°	TCG
L5248072-80	480	4.4	3.2	80	72	4/19/120 + 2/9/130	Selco	4,000	15°	TCG
L5248872-80	480	4.8	3.5	80	72	4/19/120 + 2/9/130	Selco	4,000	15°	TCG

Continued to page E27...

PANEL SIZING SAW BLADES
XL4000



TOOTH CONFIG: TCG



CUTTING MATERIAL: *XL4000* Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Sizing cuts

MATERIAL:
» Plastic laminated panels
» Plywood

MACHINE TYPE:
» Panel sizing saws (beam saws)

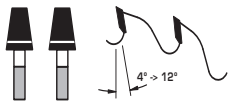
...Continued from page E26

PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE MM	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L5250060-30	500	4.4	3.2	30	60	–	Schelling, Irion	3.500	15°	TCG
L5250060-75	500	4.4	3.2	75	60	–	Giben	3.500	15°	TCG
L5250072-60	500	4.4	3.2	60	72	–	Holzma	3.500	15°	TCG
L5250072-75	500	4.4	3.2	75	72	–	Giben	3.500	15°	TCG
L5250860-60	500	4.8	3.5	60	60	–	Holzma Type 21	3.500	15°	TCG
L5250860-75	500	4.8	3.5	75	60	–	Giben	3.500	15°	TCG
L5250872-60	500	4.8	3.5	60	72	2/11/115 + 2/19/120	Holzma Type 22	3.500	15°	TCG
L5250872-75	500	4.8	3.5	75	72	–	Giben	3.500	15°	TCG
L5250872-80	500	4.8	3.5	80	72	2/8.2/110	Gabbiani	3.500	15°	TCG
L5250572-60	500	5.0	3.5	60	72	2/11/115	Holzma Type 22	3.500	15°	TCG
L5252060-60	520	4.8	3.5	60	60	–	Holzma	3,250	15°	TCG
L5252072-60	520	4.8	3.5	60	72	–	Holzma	3,250	15°	TCG
L5253060-30	530	5.0	3.5	30	60	–	Schelling	3,250	15°	TCG
L5253060-60	530	5.8	4.0	60	60	2/11/85	Anthon	3,250	15°	TCG
L5253072-75	530	4.8	3.5	75	72	2/7/110	Giben	3,250	10°	TCG
L5254060-60	540	4.8	3.5	60	60	2/11/115 + 2/20/120	Holzma	3,250	15°	TCG
L5254084-60	540	4.8	3.5	60	84	2/11/115 + 2/20/120	Holzma	3,250	15°	TCG
L5255060-40	550	5.0	3.5	40	60	2/12/90	Schelling	3,250	15°	TCG
L5255060-80	550	5.0	3.5	80	60	–	Teutomatic	3,250	12°	TCG
L5255272-100	550	5.2	3.5	100	72	–	Giben	3,250	15°	TCG
L5256560-100	565	5.0	3.5	100	60	–	Giben	3,250	18°	TCG
L5256572-100	565	5.0	3.5	100	72	–	Giben	3,250	18°	TCG
L5257060-60	570	4.8	3.5	60	60	2/11/115 + 2/19.5/120	Holzma	3,250	15°	TCG
L5257072-60	570	4.8	3.5	60	72	2/11/115 + 2/19.5/120	Holzma	3,250	15°	TCG
L5257860-60	570	5.8	4.3	60	60	2/19/120	Holzma	3,250	15°	TCG
L5258060-40	580	5.5	4.0	40	60	2/12.5/122	Schelling	3,250	15°	TCG
L5260060-60	600	5.8	4.2	60	60	2/11/115 + 2/19.5/120	Holzma	3,000	15°	TCG
L5260072-60	600	5.8	4.2	60	72	2/11/115 + 2/19.5/120	Holzma	3,000	15°	TCG
L5263060-40	630	6.2	4.2	40	60	–	Schelling	3,000	18°	TCG
L5265060-100	650	6.0	4.2	100	60	2/10/150	Giben	2,850	18°	TCG
L5267060-40	670	6.2	4.2	40	60	2/17/140	Schelling	2,850	20°	TCG
L5267060-60	670	6.0	4.0	60	60	2/12/120	Holzma	2,850	15°	TCG
L5267072-60	670	6.0	4.0	60	72	–	Holzma Type 61	2,850	15°	TCG
L5268060-40	680	6.2	4.2	40	60	2/12.5/140 + 2/18/140	Schelling	2,850	18°	TCG
L5268072-40	680	6.2	4.2	40	72	2/17/140	Schelling	2,850	20°	TCG

CONIC SCORING SAW BLADES
XL4000



TOOTH CONFIG: Conic



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide

EXPANSION SLOTS: Cu plugged

APPLICATION:
» Pre-scoring

MATERIAL:
» Plastic laminated sheets

MACHINE TYPE:
» Panel sizing saws with pre-scoring units
» Sliding table saws with pre-scoring units

PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
52705401 Δ	54	2.85/3.6	2.0	1"	14	–	For Modulus 2000	18,000	4°	Conic
52708001 Δ	80	3.1/4.1	2.2	20mm	20	–	For 10" Main	18,000	12°	Conic
52710000 Δ	100	3.1/4.1	2.4	1"	24	–	For 10" Main	18,000	8°	Conic
52710001 Δ	100	3.4/4.4	2.4	20mm	24	–	For 12" Main	18,000	8°	Conic
52710002 Δ	100	3.8/4.8	2.8	20mm	24	–	For 14"-16" Main	18,000	8°	Conic
52711001 Δ	110	3.4/4.4	2.4	20mm	24	–	For 12" Main	16,000	8°	Conic
52711002 Δ	110	3.8/4.8	2.8	20mm	24	–	For 14"-16" Main	16,000	8°	Conic
52711501 Δ	115	3.4/4.4	2.4	20mm	24	–	For 12" Main	16,000	12°	Conic
52711502 Δ	115	3.8/4.8	2.8	20mm	24	–	For 14"-16" Main	16,000	12°	Conic
52712001 Δ	120	3.4/4.4	2.4	20mm	24	–	For 12" Main	16,000	12°	Conic
52712001-34 Δ	120	3.4/4.4	2.4	3/4"	24	–	For 12" Main	16,000	12°	Conic
52712002 Δ	120	3.8/4.8	2.8	20mm	24	–	For 14"-16" Main	16,000	12°	Conic
52712002-34 Δ	120	3.8/4.8	2.8	3/4"	24	–	For 14"-16" Main	16,000	12°	Conic
52712500 Δ	125	3.2/4.2	2.4	20mm	24	–	Casadei Linea	16,000	8°	Conic
52712501-34 Δ	125	3.4/4.4	2.4	3/4"	24	–	For 12" Main	16,000	8°	Conic
52712501 Δ	125	3.4/4.4	2.4	20mm	24	–	For 12" Main	16,000	8°	Conic
52712501-22 Δ	125	3.4/4.4	2.4	22mm	24	–	For 12" Main	16,000	8°	Conic
52712502 Δ	125	3.8/4.8	2.8	20mm	24	–	For 14"-16" Main	16,000	5°	Conic
52712503 Δ	125	4.4/5.4	3.2	45mm	24	–	Giben	16,000	5°	Conic
52712503-22 Δ	125	4.4/5.4	3.2	22mm	24	–	Martin	16,000	5°	Conic
52712504 Δ	125	4.8/5.8	3.5	45mm	24	–	Giben	16,000	5°	Conic
52712701 Δ	127	4.4/5.4	3.2	45mm	24	–	Giben	16,000	5°	Conic
52714001 Δ	140	3.2/4.2	2.4	16mm	32	–	Scheer	13,500	5°	Conic
52714002 Δ	140	4.4/5.4	3.0	45mm	24	–	Euromac	13,500	5°	Conic
52715001 Δ	150	3.4/4.4	2.4	20mm	24	–	For 12" Main	12,000	5°	Conic
52715002 Δ	150	3.8/4.8	3.0	20mm	24	–	For 14"-16" Main	12,000	12°	Conic
52715003-20	150	4.4/5.4	3.0	20mm	24	–	Schelling	12,000	8°	Conic
52715003	150	4.4/5.4	3.0	30mm	24	–	Irion, Mayer	12,000	8°	Conic
52715003-114	150	4.4/5.4	3.0	1-1/4"	24	–	SCMI	12,000	8°	Conic
52715005	150	4.4/5.4	3.0	55mm	36	3/8.5/72	Gabbiani	12,000	5°	Conic
52716003	160	4.4/5.4	3.2	45mm	28	3/11/70	Giben Prismatic	12,000	5°	Conic
52716005	160	4.4/5.4	3.0	55mm	36	3/8/66 + 3/8.5/72	Gabbiani, SCM	12,000	5°	Conic
52716006	160	4.8/5.8	3.5	55mm	36	3/8/66	Gabbiani	12,000	5°	Conic
52717501	175	4.4/5.4	3.0	45mm	28	–	Holzma	10,000	5°	Conic
52717502	175	4.8/5.8	3.0	45mm	28	–	Holzma	10,000	5°	Conic
52718001-20	180	4.4/5.4	3.0	20mm	28	–	Schelling, Anthon	10,000	5°	Conic
52718001-30	180	4.4/5.4	3.0	30mm	28	–	Panhans	10,000	5°	Conic
52718001-45	180	4.4/5.4	3.0	45mm	28	–	Holzma	10,000	5°	Conic

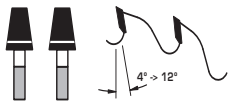
Δ Industrial Quality Saw Blades

Continued to page E29...

CONIC SCORING SAW BLADES
XL4000



TOOTH CONFIG: Conic



CUTTING MATERIAL: ***XL4000*** Tungsten Carbide
EXPANSION SLOTS: Cu plugged

APPLICATION:
» Pre-scoring

MATERIAL:
» Plastic laminated sheets

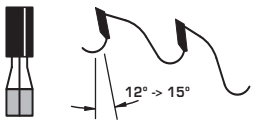
MACHINE TYPE:
» Panel sizing saws with pre-scoring units

...Continued from page E28

PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE MM	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
52718001-50	180	4.4/5.4	3.2	50	36	3/12.5/80	Giben Smart 75, Onix H105	10,000	5°	Conic
52718002	180	4.8/5.8	3.5	45	36	–	Holzma Series 82	10,000	5°	Conic
52718002-55	180	5.2/6.2	3.5	55	30	–	Giben	10,000	5°	Conic
52718003	180	5.8/6.8	4.0	20	30	–	Anthon	10,000	5°	Conic
52718004	180	6.2/7.2	4.4	20	30	–	Anthon	10,000	5°	Conic
52718005	180	4.5/5.4	3.2	50	44	4/12.5/80	Giben Smart 105 SPT	10,000	5°	Conic
52718501	185	4.8/5.8	3.4	45	30	–	Holzma	10,000	5°	Conic
52719001-50	190	4.45/5.45	3.2	50	32	2/7/80	Giben Icon 1	10,000	8°	Conic - 5° ATB
52720004	200	3.3/4.3	2.2	30	60	–	Scheer	9,000	5°	Conic
52720000-20	200	4.4/5.4	3.2	20	24	–	Schelling	9,000	5°	Conic
52720001-20	200	4.4/5.4	3.0	20	34	–	Schelling	9,000	5°	Conic
52720001-30	200	4.4/5.4	3.0	30	34	–	Panhans, Scheer	9,000	5°	Conic
52720001-45	200	4.4/5.4	3.0	45	34	–	Holzma	9,000	5°	Conic
52720001-65	200	4.4/5.4	3.2	65	34	2/9/110	Selco	9,000	5°	Conic
52720001-80	200	4.4/5.4	3.0	80	34	2/14/110	SCM Sigma	9,000	5°	Conic
52720005-65	200	4.4/5.4	3.5	65	34	2/9/100	Selco EB100/EB70	9,000	5°	Conic
52720006	200	4.6/5.6	3.5	45	34	–	Holzma	9,000	5°	Conic
52720006-50	200	4.6/5.6	3.6	50	44	3/13/80	Giben	9,000	5°	Conic
52720006-65	200	4.6/5.6	3.5	65	34	2/9/110	Selco	9,000	5°	Conic
52720002	200	4.8/5.8	3.5	45	34	–	Holzma	9,000	5°	Conic
52720002-20	200	4.8/5.8	3.5	20	34	–	Schelling fh6	9,000	5°	Conic
52720002-65	200	4.8/5.8	3.5	65	34	2/9/110	Selco	9,000	5°	Conic
52720003	200	5.0/6.0	3.5	20	34	–	Schelling	9,000	5°	Conic
52720005	200	5.5/6.5	4.0	20	36	–	Schelling	9,000	5°	Conic
52720007	200	5.8/6.8	4.2	45	24	–	Holzma	9,000	5°	Conic
52720008	200	5.8/6.8	4.2	45	34	–	Holzma	9,000	5°	Conic
52720008-50	200	4.8/5.8	3.5	50	44	3/13.2/80	Giben Icon 2	9,000	5°	Conic
52720009	200	6.2/7.2	4.2	20	34	–	Schelling	9,000	5°	Conic
52721501	215	4.4/5.4	3.2	50	42	3/15.2/80	Giben Prismatic	8,800	5°	Conic
52721508	215	4.8/5.8	3.5	50	42	2/7/80	Giben	8,800	10°	Conic
52725001	250	4.4/5.4	3.2	50	40	3/12.5/80	Giben Icon 2	7,500	5°	Conic
52728002	280	4.8/5.8	3.5	45	72	–	Holzma	7,500	5°	Conic
52729001	290	4.4/5.4	2.8	45	42	–	Holzma	6,250	5°	Conic
52729002	290	4.8/5.8	2.8	45	42	–	Holzma	6,250	5°	Conic
52730001-30	300	4.4/5.4	3.2	30	48	2/11/73 2/13/94	Schelling	6,250	8°	Conic
52730001	300	4.4/5.4	3.2	50	48	3/15/80	Giben Prismatic	6,250	5°	Conic
52730002	300	4.4/5.4	3.2	65	48	2/9/110	Selco	6,250	5°	Conic
52732001	320	4.4/5.4	3.5	45	48	–	Holzma	5,700	5°	Conic
52732002	320	4.8/5.8	3.5	45	48	–	Holzma	5,700	5°	Conic



TOOTH CONFIG: Flat Top



CUTTING MATERIAL: Tungsten Carbide

ADDITIONAL INFO: Two piece unit adjustable to the kerf of the main saw blade with the use of shims

APPLICATION:

» Pre-scoring

MATERIAL:

» Plastic laminated sheets

MACHINE TYPE:

» Table saws
» Sliding table saws
» Panel sizing saws with controllable pre-scoring units

PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
528080001-20	80	2.8/3.6	2.0	20mm	2x10	2/5/34	EMA Casadei, Minimax	18,000	12°	Flat Top
52810001-34	100	2.8/3.6	2.0	3/4"	2x12	2/5/34	SCMI, Delta	18,000	12°	Flat Top
52810001-20	100	2.8/3.6	2.0	20mm	2x12	2/5/34	Schelling	16,000	12°	Flat Top
52810001-22	100	2.8/3.6	2.0	22mm	2x12	2/5/34	Altendorf, Martin, Panhans	16,000	12°	Flat Top
52810001-1	100	2.8/3.6	2.0	1"	2x12	2/5/42	Delta	18,000	12°	Flat Top
52810501-20	105	2.8/3.6	2.0	20mm	2x12	2/5/34	Wadkin-CP320	18,000	12°	Flat Top
52812001-34	120	2.8/3.6	2.0	3/4"	2x12	2/5/34	SCMI	16,000	12°	Flat Top
52812001-20	120	2.8/3.6	2.0	20mm	2x12	2/5/34	SCM, Holz-Her	16,000	12°	Flat Top
52812001-22	120	2.8/3.6	2.0	22mm	2x12	2/5/34	Altendorf, Martin, Panhans	16,000	12°	Flat Top
52812001-50 • Δ	120	2.8/3.6	2.2	50mm	2x12	4-C/Sinks	Altendorf - Rapido	16,000	12°	Flat Top
52812001-1300 • Δ	120	2.8/3.6	2.2	50mm	2x12	4-C/Sinks	Casolin - Rapido	16,000	12°	Flat Top
52812501-22	125	2.8/3.6	2.0	22mm	2x12	2/5/34	Holz-Her	16,000	12°	Flat Top
52812501	125	2.8/3.6	2.0	30mm	2x12	2/5/34	Steton	16,000	12°	Flat Top
52815001-45	150	3.9/5.2	2.2	45mm	2x20	2/5/60	–	12,000	12°	Flat Top
52817501	175	4.4/5.0	2.0	45mm	2x20	–	Holzma	12,000	12°	Flat Top
52818001-30	180	4.4/5.0	2.0	30mm	2x18	2/5/42	Koelle	10,000	12°	Flat Top
52818001	180	4.4/5.2	2.0	45mm	2x20	–	Holzma	10,000	12°	Flat Top
52818002	180	4.8/5.4	2.0	45mm	2x20	2/5/60	Holzma	10,000	12°	Flat Top
52822001-20	220	4.4/5.6	2.2	20mm	2x24	2/4/42	Schelling	8,000	15°	Flat Top
52829001	290	4.4/5.6	2.8	45mm	2x24	–	Holzma (postforming)	6,250	12°	Flat Top
52832001	320	4.4/5.6	3.5	45mm	2x24	2/5/60	Holzma (postforming)	5,700	12°	Flat Top
52834001	340	4.4/5.6	3.5	45mm	2x24	2/5/60	Holzma (postforming)	5,500	12°	Flat Top

• Pin holes are countersunk for rapido system

Δ For machines with adjustable flange; no shims required

MAIN SAW							SCORING SAW					
MACHINE	PART NO.	DIAM. MM	KERF MM	BORE	TEETH	TOOTH CONFIG	PART NO.	DIAM. MM	KERF MM	BORE MM	TEETH	TOOTH CONFIG
ANTHON -> MODEL												
LNA	L5240072-60	400	4.4	60mm	72	TCG	52718001-20	180	4.4/5.4	20	28	Conic
LNA	L5040072-60	400	4.4	60mm	72	ATB	52718001-20	180	4.4/5.4	20	28	Conic
CP	L5243072-60	430	4.4	60mm	72	TCG	52718001-20	180	4.4/5.4	20	28	Conic
LNB	L5253060-60	530	5.8	60mm	60	TCG	52718003	180	5.8/6.8	20	30	Conic
LNC	L5270060-80	700	6.2	80mm	60	TCG	52718004	180	6.2/7.2	20	30	Conic
CASADEI -> MODEL												
LINEA	L5225072-30	250	3.2	30mm	72	TCG	52712500	125	3.2/4.2	20	24	Conic
GABBIANI -> MODEL												
	L5235072-80	350	4.4	80mm	72	TCG	52716005	160	4.4/5.4	55	36	Conic
	L5035072-80	350	4.4	80mm	72	ATB	52716005	160	4.4/5.4	55	36	Conic
	L5240060-80	400	4.4	80mm	60	TCG	52716005	160	4.4/5.4	55	36	Conic
	L5040060-80	400	4.4	80mm	60	ATB	52716005	160	4.4/5.4	55	36	Conic
	L5240072-80	400	4.4	80mm	72	TCG	52716005	160	4.4/5.4	55	36	Conic
	L5040072-80	400	4.4	80mm	72	ATB	52716005	160	4.4/5.4	55	36	Conic
GALAXY	L5245172-80	450	4.4	80mm	72	TCG	52720001-80	200	4.4/5.4	80	34	Conic
ELITE	L52451-72-80	450	4.4	80mm	72	TCG	52720001-80	200	4.4/5.4	80	34	Conic
	L5250060-80	500	4.4	80mm	60	TCG	52716005	160	4.4/5.4	55	36	Conic
	L5250872-80	500	4.8	80mm	72	TCG	52716006	160	4.8/5.8	55	36	Conic
GIBEN -> MODEL												
JUNIOR	L5230060-75	305	4.4	75mm	60	TCG	52712503	125	4.4/5.4	45	24	Conic
SMART 75	L5232072-50	320	4.4	50mm	72	TCG	52718001-50	180	4.4/5.4	50	36	Conic
SMART 75	L5232060-75	320	4.6	75mm	60	TCG	52720006-50	200	4.6/5.6	50	44	Conic
TREND	L5235054-75	355	4.4	75mm	54	TCG	52712503	125	4.4/5.4	45	24	Conic
TREND	L5035054-75	355	4.4	75mm	54	ATB	52712503	125	4.4/5.4	45	24	Conic
	L5235072-75	355	4.4	75mm	72	TCG	52712503	125	4.4/5.4	45	24	Conic
	L5035072-75	355	4.4	75mm	72	ATB	52712503	125	4.4/5.4	45	24	Conic
SMART 105SPT	L5236072-50	360	4.4	50mm	72	TCG	52718005	180	4.4/5.4	50	44	Conic
ICON 2	L5238072-50	380	4.4	50mm	72	TCG	52725001	250	4.4/5.4	50	40	Conic
ICON 2	L5638872-50	380	4.8	50mm	72	TCG	52720008-50	200	4.8/5.8	50	34	Conic
ONIX H105	L5239072-50	390	4.4	50mm	72	TCG	52718001-50	180	4.4/5.4	50	36	Conic
ICON 1	L5239072-75	390	4.4	75mm	72	TCG	52719001-50	190	4.4/5.4	50	32	Conic
	L5240060-75	400	4.4	75mm	60	TCG	52712503	125	4.4/5.4	45	24	Conic
	L5040060-75	400	4.4	75mm	60	ATB	52712503	125	4.4/5.4	45	24	Conic
	L5240860-75	400	4.8	75mm	60	TCG	52712504	125	4.8/5.8	45	24	Conic
	L5240072-75	400	4.4	75mm	72	TCG	52712503	125	4.4/5.4	45	24	Conic
	L5040072-75	400	4.4	75mm	72	ATB	52712503	125	4.4/5.4	45	24	Conic
PRISMATIC-1	L5240172-75	400	4.4	75mm	72	TCG	52716003	160	4.4/5.4	45	28	Conic
PRISMATIC-2	L5243072-75	430	4.4	75mm	72	TCG	52721501	215	4.4/5.4	50	42	Conic
PRISMATIC-2	L5243096-75	430	4.4	75mm	96	TCG	52721501	215	4.4/5.4	50	42	Conic
PRISMATIC-3	L5247096-75	470	4.4	75mm	96	TCG	52721501	215	4.4/5.4	50	42	Conic
	L5250060-75	500	4.4	75mm	60	TCG	52712503	125	4.4/5.4	45	24	Conic
	L5250072-75	500	4.4	75mm	72	TCG	52712701	127	4.4/5.4	45	24	Conic
	L5250860-75	500	4.8	75mm	60	TCG	52712504	125	4.8/5.8	45	24	Conic
	L5250872-75	500	4.8	75mm	72	TCG	52712504	125	4.8/5.8	45	24	Conic
	L5253072-75	530	4.8	75mm	72	TCG	52721508	215	4.5/5.8	50	42	Conic

Continued on page E32...

...Continued from page E31

	MAIN SAW						SCORING SAW					
MACHINE	**PART NO.**	**DIAM. MM**	**KERF MM**	**BORE**	**TEETH**	**TOOTH CONFIG**	**PART NO.**	**DIAM. MM**	**KERF MM**	**BORE MM**	**TEETH**	**TOOTH CONFIG**
GIBEN -> MODEL												
MATIC	**L5255272-100**	550	5.2	100mm	72	TCG	**52718002-55**	180	5.2/6.2	55	30	Conic
MATIC	**L5256560-100**	565	5.0	100mm	60	TCG	**52718002-55**	180	5.2/6.2	55	30	Conic
MATIC	**L5256572-100**	565	5.0	100mm	72	TCG	**52718002-55**	180	5.2/6.2	55	30	Conic
HOLZ-HER -> MODEL												
	L5035154-30	350	3.6	30mm	54	ATB	**52812501-22**	125	2.8/3.6	22	2x20	Split
HOLZMA -> MODEL												
HPP350	**L5235072-60**	350	4.4	60mm	72	TCG	**52718001-45**	180	4.4/5.4	45	28	Conic
	L5238060-60	380	4.4	60mm	60	TCG	**52720001-45**	200	4.4/5.4	45	34	Conic
	L5238072-60	380	4.4	60mm	72	TCG	**52720001-45**	200	4.4/5.4	45	34	Conic
	L5238872-60	380	4.8	60mm	72	TCG	**52718002**	180	4.8/5.8	45	36	Conic
	L5240072-60	400	4.4	60mm	72	TCG	**52720001-45**	200	4.4/5.4	45	34	Conic
	L5040072-60	400	4.4	60mm	72	ATB	**52720001-45**	200	4.4/5.4	45	34	Conic
	L5242072-60	420	4.4	60mm	72	TCG	**52720001-45**	200	4.4/5.4	45	34	Conic
	L5242672-60	420	4.6	60mm	72	TCG	**52720006**	200	4.6/5.6	45	34	Conic
	L5242860-60	420	4.8	60mm	60	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5242872-60	420	4.8	60mm	72	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5245072-60	450	4.4	60mm	72	TCG	**52720001-45**	200	4.4/5.4	45	34	Conic
	L5045072-60	450	4.4	60mm	72	ATB	**52720001-45**	200	4.4/5.4	45	34	Conic
	L5245872-60	450	4.8	60mm	72	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5245872-60	450	4.8	60mm	72	TCG	**52718002**	180	4.8/5.8	45	36	Conic
	L5250072-60	500	4.4	60mm	72	TCG	**52720001-45**	200	4.4/5.4	45	34	Conic
	L5250860-60	500	4.8	60mm	60	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5250872-60	500	4.8	60mm	72	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5250572-60	500	5.0	60mm	72	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5252060-60	520	4.8	60mm	60	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5252072-60	520	4.8	60mm	72	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5254060-60	540	4.8	60mm	60	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5254084-60	540	4.8	60mm	84	TCG	**52720002**	200	4.8/5.8	45	34	Conic
	L5257860-60	570	5.8	60mm	60	TCG	**52720008**	200	5.8/6.8	45	34	Conic
	L5260060-60	600	5.8	60mm	60	TCG	**52720008**	200	5.8/6.8	45	34	Conic
	L5260072-60	600	5.8	60mm	72	TCG	**52720008**	200	5.8/6.8	45	34	Conic
	L5267060-60	670	6.0	60mm	60	TCG	**52720008**	200	5.8/6.8	45	34	Conic
	L5267072-60	670	6.0	60mm	72	TCG	**52720008**	200	5.8/6.8	45	34	Conic
SCHELLING -> MODEL												
	L5235072-30	355	4.4	30mm	72	TCG	**52720001-20**	200	4.4/5.4	20	34	Conic
FX H430	**L5235272-30**	350	4.4	30mm	72	TCG	**L5030272-30**	300	4.55	30	72	ATB
	L5237072-30	370	4.4	30mm	72	TCG	**52720001-20**	200	4.4/5.4	20	34	Conic
	L5240060-30	400	4.4	30mm	60	TCG	**52720001-20**	200	4.4/5.4	20	34	Conic
	L5040060-30	400	4.4	30mm	60	ATB	**52720001-20**	200	4.4/5.4	20	34	Conic
	L5240072-30	400	4.4	30mm	72	TCG	**52720001-20**	200	4.4/5.4	20	34	Conic
	L5240072-30	400	4.4	30mm	72	TCG	**52715003-20**	150	4.4/5.4	20	24	Conic
	L5245072-30	450	4.4	30mm	72	TCG	**52720001-20**	200	4.4/5.4	20	34	Conic

Continued on page E33...

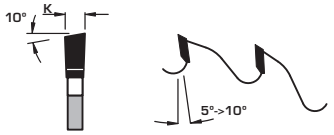
...Continued from page E32

	MAIN SAW						SCORING SAW					
MACHINE	**PART NO.**	**DIAM. MM**	**KERF MM**	**BORE**	**TEETH**	**TOOTH CONFIG**	**PART NO.**	**DIAM. MM**	**KERF MM**	**BORE**	**TEETH**	**TOOTH CONFIG**
SCHELLING -> MODELS (CONT'D)												
	L5045072-30	450	4.4	30mm	72	ATB	52720001-20	200	4.4/5.4	20mm	34	Conic
	L5246060-30	460	4.4	30mm	60	TCG	52720001-20	200	4.4/5.4	20mm	34	Conic
	L5246072-30	460	4.4	30mm	72	TCG	52720001-20	200	4.4/5.4	20mm	34	Conic
	L5247072-30	470	4.4	30mm	72	TCG	52720001-20	200	4.4/5.4	20mm	34	Conic
	L5248072-30	480	4.4	30mm	72	TCG	52720001-20	200	4.4/5.4	20mm	34	Conic
	L5248872-30	480	4.8	30mm	72	TCG	52720002-20	200	4.8/5.8	20mm	34	Conic
	L5250060-30	500	4.4	30mm	60	TCG	52718001-20	180	4.4/5.4	20mm	28	Conic
	L5253060-30	530	5.0	30mm	60	TCG	52720003	200	5.0/6.0	20mm	34	Conic
	L5255060-40	550	5.0	40mm	60	TCG	52720003	200	5.0/6.0	20mm	34	Conic
	L5258060-40	580	5.5	40mm	60	TCG	52720005 52822001-20	200 220	5.5/6.5 4.4/5.6	20mm 20mm	36 2x24	Conic Split
	L5263060-40	630	6.2	40mm	60	TCG	52720009	200	6.2/7.2	20mm	34	Conic
	L5267060-40	670	6.2	40mm	60	TCG	52720009	200	6.2/7.2	20mm	34	Conic
	L5067060-40	670	6.2	40mm	60	ATB	52720009	200	6.2/7.2	20mm	34	Conic
	L5268060-40	680	6.2	40mm	60	TCG	52720009	200	6.2/7.2	20mm	34	Conic
	L5268072-40	680	6.2	40mm	72	TCG	52720009	200	6.2/7.2	20mm	34	Conic
SCHEER -> MODEL												
	L5224054-30	240	3.2	30mm	54	TCG	52714001	140	3.2/4.2	16mm	32	Conic
	L5230160-30	305	3.4	30mm	60	TCG	52720004	200	3.3/4.3	30mm	60	Conic
SCM -> MODEL												
	L5235054-30	355	4.4	30mm	54	TCG	52716005	160	4.4/5.4	55mm	36	Conic
	L5035054-30	355	4.4	30mm	54	ATB	52716005	160	4.4/5.4	55mm	36	Conic
	L5235072-30	355	4.4	30mm	72	TCG	52716005	160	4.4/5.4	55mm	36	Conic
	L5035072-30	355	4.4	30mm	72	ATB	52716005	160	4.4/5.4	55mm	36	Conic
	L5235072-114	350	4.4	1-1/4"	72	TCG	52715003-114	150	4.4/5.4	1-1/4"	24	Conic
SIGMA 65	L5230072-80	300	4.4	80mm	72	TCG	52716005	160	4.4/5.4	55mm	36	Conic
SIGMA 65 NEW	L5230072-80	300	4.4	80mm	72	TCG	52720001-80	200	4.4/5.4	80mm	34	Conic
SIGMA 90	L5235172-80	350	4.4	80mm	72	TCG	52716005	160	4.4/5.4	55mm	36	Conic
SIGMA 90 NEW	L5235172-80	350	4.4	80mm	72	TCG	52720001-80	200	4.4/5.4	80mm	34	Conic
SIGMA 115	L5240272-80	400	4.4	80mm	72	TCG	52720001-80	200	4.4/5.4	80mm	34	Conic
SELCO -> MODEL												
EB70	L5230060-65	300	4.4	65mm	60	TCG	52720005-65	200	4.4/5.4	65mm	34	Conic
EB90	L5235272-80	355	4.4	80mm	72	TCG	52720001-65	200	4.4/5.4	65mm	34	Conic
EB100	L5236072-65	360	4.4	65mm	72	TCG	52720005-65	200	4.4/5.4	65mm	34	Conic
	L5240172-80	400	4.4	80mm	72	TCG	52720001-65	200	4.4/5.4	65mm	34	Conic
WNT 6	L5243072-65	430	4.4	65mm	72	TCG	52720001-65	200	4.4/5.4	65mm	34	Conic
	L5243072-80	430	4.4	80mm	72	TCG	52720001-65	200	4.4/5.4	65mm	34	Conic
	L5043072-80	430	4.4	80mm	72	ATB	52720001-65	200	4.4/5.4	65mm	34	Conic
	L5245072-80	450	4.4	80mm	72	TCG	52720001-65	200	4.4/5.4	65mm	34	Conic
	L5045072-80	450	4.4	80mm	72	ATB	52720001-65	200	4.4/5.4	65mm	34	Conic
	L5245672-80	450	4.6	80mm	72	TCG	52720006-65	200	4.6/5.6	65mm	34	Conic
	L5245872-80	450	4.8	80mm	72	TCG	52720002-65	200	4.8/5.8	65mm	34	Conic
	L5248072-80	480	4.4	80mm	72	TCG	52720001-65	200	4.4/5.4	65mm	34	Conic
	L5248872-80	480	4.8	80mm	72	TCG	52720002-65	200	4.8/5.8	65mm	34	Conic

529 LEFT-HAND SCORING SAW BLADES



TOOTH CONFIG: Bevel Left-Hand



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Bore size modified according to flange or spindle size of machine

APPLICATION:
» Pre-scoring

MATERIAL:
» Solid wood
» Veneered and plastic laminated sheets

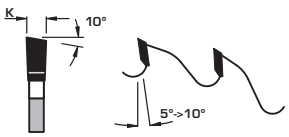
MACHINE TYPE:
» Single or double end tenoners with pre-scoring units, in combination with hogging units

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
529150	6"	.126"	.087"	5/8"	30	12,000	10°	Bevel Left-Hand
529154	6"	.126"	.087"	5/8"	40	12,000	5°	Bevel Left-Hand
529180	7"	.126"	.087"	5/8"	30	10,000	10°	Bevel Left-Hand
529184	7"	.126"	.087"	5/8"	40	10,000	10°	Bevel Left-Hand
529186	7"	.126"	.087"	5/8"	60	10,000	5°	Bevel Left-Hand
529200	8"	.126"	.087"	5/8"	40	9,000	10°	Bevel Left-Hand
529206	8"	.126"	.087"	5/8"	60	9,000	5°	Bevel Left-Hand

530 RIGHT-HAND SCORING SAW BLADES



TOOTH CONFIG: Bevel Right-Hand



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Bore size modified according to flange or spindle size of machine

APPLICATION:
» Pre-scoring

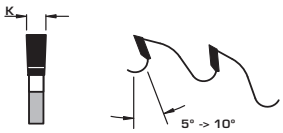
MATERIAL:
» Solid wood
» Veneered and plastic laminated sheets

MACHINE TYPE:
» Single or double end tenoners with pre-scoring units, in combination with hogging units

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
530150	6"	.126"	.087"	5/8"	30	12,000	10°	Bevel Right-Hand
530154	6"	.126"	.087"	5/8"	40	12,000	5°	Bevel Right-Hand
530180	7"	.126"	.087"	5/8"	30	10,000	10°	Bevel Right-Hand
530184	7"	.126"	.087"	5/8"	40	10,000	10°	Bevel Right-Hand
530186	7"	.126"	.087"	5/8"	60	10,000	5°	Bevel Right-Hand
530200	8"	.126"	.087"	5/8"	40	9,000	10°	Bevel Right-Hand
530206	8"	.126"	.087"	5/8"	60	9,000	5°	Bevel Right-Hand



TOOTH CONFIG: Flat Top



APPLICATION:

» Pre-scoring

MATERIAL:

» Plastic laminated sheets

MACHINE TYPE:

» Single or double end tenoners with pre-scoring units, in combination with hogging units

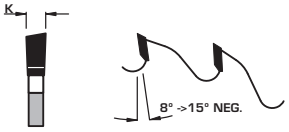
CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Bore size modified according to flange or spindle size of machine

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
531150	6"	.126"	.087"	5/8"	30	12,000	10°	Flat Top
531154	6"	.126"	.087"	5/8"	40	12,000	5°	Flat Top
531180	7"	.126"	.087"	5/8"	30	10,000	10°	Flat Top
531184	7"	.126"	.087"	5/8"	40	10,000	10°	Flat Top
531186	7"	.126"	.087"	5/8"	60	10,000	5°	Flat Top
531200	8"	.126"	.087"	5/8"	40	9,000	10°	Flat Top
531206	8"	.126"	.087"	5/8"	60	9,000	5°	Flat Top

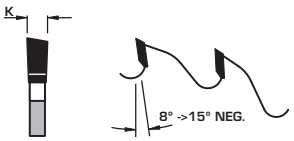


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: Bevel Left-Hand



TOOTH CONFIG: Bevel Right-Hand



APPLICATION:
» Trimming projecting edge bandings

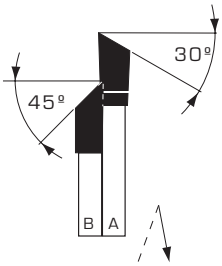
MATERIAL:
» Solid wood
» Wood veneer
» Plastics

MACHINE TYPE:
» Single-sided and double-sided edge-banding machines

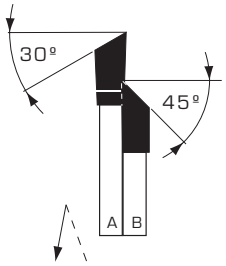
LEFT-HAND PART NO.	RIGHT-HAND PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE MM	TEETH	PIN HOLES	MAX. RPM	HOOK	BEV.	TOOTH CONFIG
560100L	560100R	100	3.0	2.0	32	20	–	18,000	5°	20°	One Side Bevel
560100L-32	560100R-32	100	3.2	2.2	32	20	–	18,000	6° Neg.	30°	One Side Bevel
560101L	560101R	100	3.0	2.0	32	20	–	18,000	15° Neg.	30°	One Side Bevel
560194L •	560194R •	100/92	5.6	2.5	32	20	2/3.8/44	15,000	15° Neg.	30°	Trimming Bevel Set
560195L •	560195R •	110/102	5.7	2.2	40	20	2/3.7/52 + 4/5.6/52	13,500	8°	30°	Trimming Bevel Set
560125L	560125R	125	3.2	2.2	20	40	–	16,000	5°	15°	One Side Bevel
560150L	560150R	150	3.5	2.3	22	30	–	12,000	5°	15°	One Side Bevel
560151L	560151R	150	3.5	2.3	22	30	–	12,000	15° Neg.	30°	One Side Bevel
560154L	560154R	150	3.5	2.3	20	36	–	12,000	5°	15°	One Side Bevel
570170L	570170R	170	3.2	2.2	20	48	–	10,000	5°	10°	One Side Bevel
570170L-30	570170R-30	170	3.2	2.2	30	48	–	10,000	5°	10°	One Side Bevel

• Pin holes are countersunk

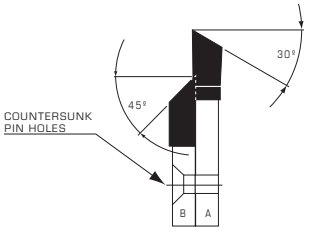
TRIMMING BEVEL SETS



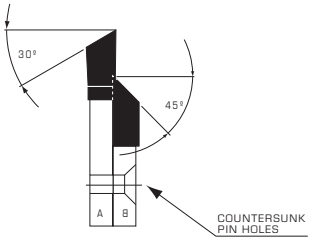
560194L
LEFT HAND SET



560194R
RIGHT HAND SET



560195L
LEFT HAND SET



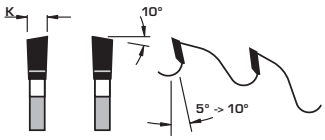
560195R
RIGHT HAND SET

EDGE BANDING SAW BLADES
ALTERNATING TOP BEVEL



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged

TOOTH CONFIG: ATB



APPLICATION:
» Trimming projecting edge bandings

MATERIAL:
» Solid wood
» Wood veneer
» Plastics

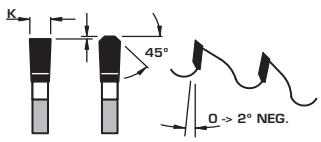
MACHINE TYPE:
» Single-sided and double-sided edge-banding machines

PART NO.	DIAM. MM	KERF MM	PLATE MM	BORE MM	TEETH	PIN HOLES	MAX. RPM	HOOK	BEV.	TOOTH CONFIG
560 090 A	90	3.0	2.0	30	24	–	18,000	12°	10°	ATB
560 100 A	100	3.6	2.6	32	20	–	18,000	12°	15°	ATB
560 110 A	110	3.6	2.6	32	20	–	16,000	10°	15°	ATB
560 110 A-22	110	3.6	2.6	22	20	–	16,000	10°	15°	ATB
560 120 A	120	3.2	2.2	20	24	–	16,000	10°	20°	ATB
560 150 A	150	3.5	2.3	22	48	–	12,000	10°	10°	ATB
560 160 A	160	2.8	2.0	30	24	2/7/42	10,000	10°	10°	ATB
560 160 B	160	3.2	2.2	20	48	–	10,000	5°	15°	ATB

L1A SAW BLADES FOR NON-FERROUS METALS



TOOTH CONFIG: TCG



APPLICATION:
» Splitting
» Mitre jointing

MATERIAL:
» Non-ferrous extrusions, sheets and light bars

MACHINE TYPE:
» Mitre jointers
» Splitters
» Trimmers
» Double cross-cutting machines
» Sizing machines

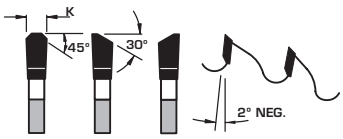
CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Material to be cut must be firmly clamped.
Use of spray lubrication recommended.

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L1A180	7"	.112"	.087"	5/8"	44	10,000	2° Neg.	TCG
L1A200	8"	.112"	.087"	5/8"	48	9,000	2° Neg.	TCG
L1A225	9"	.112"	.087"	5/8"	60	8,000	2° Neg.	TCG
L1A250	10"	.112"	.087"	5/8"	60	7,500	2° Neg.	TCG
L1A252	10"	.126"	.102"	5/8"	60	7,500	2° Neg.	TCG
L1A308	12"	.124"	.110"	5/8"	80	6,250	0°	TCG
L1A300	12"	.122"	.095"	1"	80	6,250	2° Neg.	TCG
L1A350	14"	.145"	.118"	1"	90	5,350	2° Neg.	TCG
L1A400	16"	.145"	.118"	1"	100	4,500	2° Neg.	TCG
L1A450	18"	.174"	.138"	1"	100	4,000	2° Neg.	TCG
L1A500	20"	.174"	.138"	1"	100	3,500	2° Neg.	TCG

L1C SAW BLADES FOR NON-FERROUS METALS



TOOTH CONFIG: TCGM



APPLICATION:
» Splitting
» Mitre jointing

MATERIAL:
» Non-ferrous extrusions, thin sheets and light non-ferrous bars

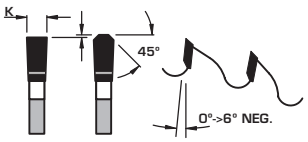
MACHINE TYPE:
» Mitre jointers
» Splitters
» Trimmers
» Double cross-cutters
» Sizers

CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Material to be cut must be firmly clamped.
Use of spray lubrication recommended.

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
L1C250	10"	.118"	.095"	5/8"	72	6,500	2° Neg.	TCGM
L1C300	12"	.126"	.102"	1"	90	6,000	2° Neg.	TCGM
L1C308	12"	.126"	.102"	5/8"	90	6,000	2° Neg.	TCGM



TOOTH CONFIG: TCG



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Material to be cut must be firmly clamped.
Use of spray lubrication recommended.

APPLICATION:

» Splitting
» Mitre jointing

MATERIAL:

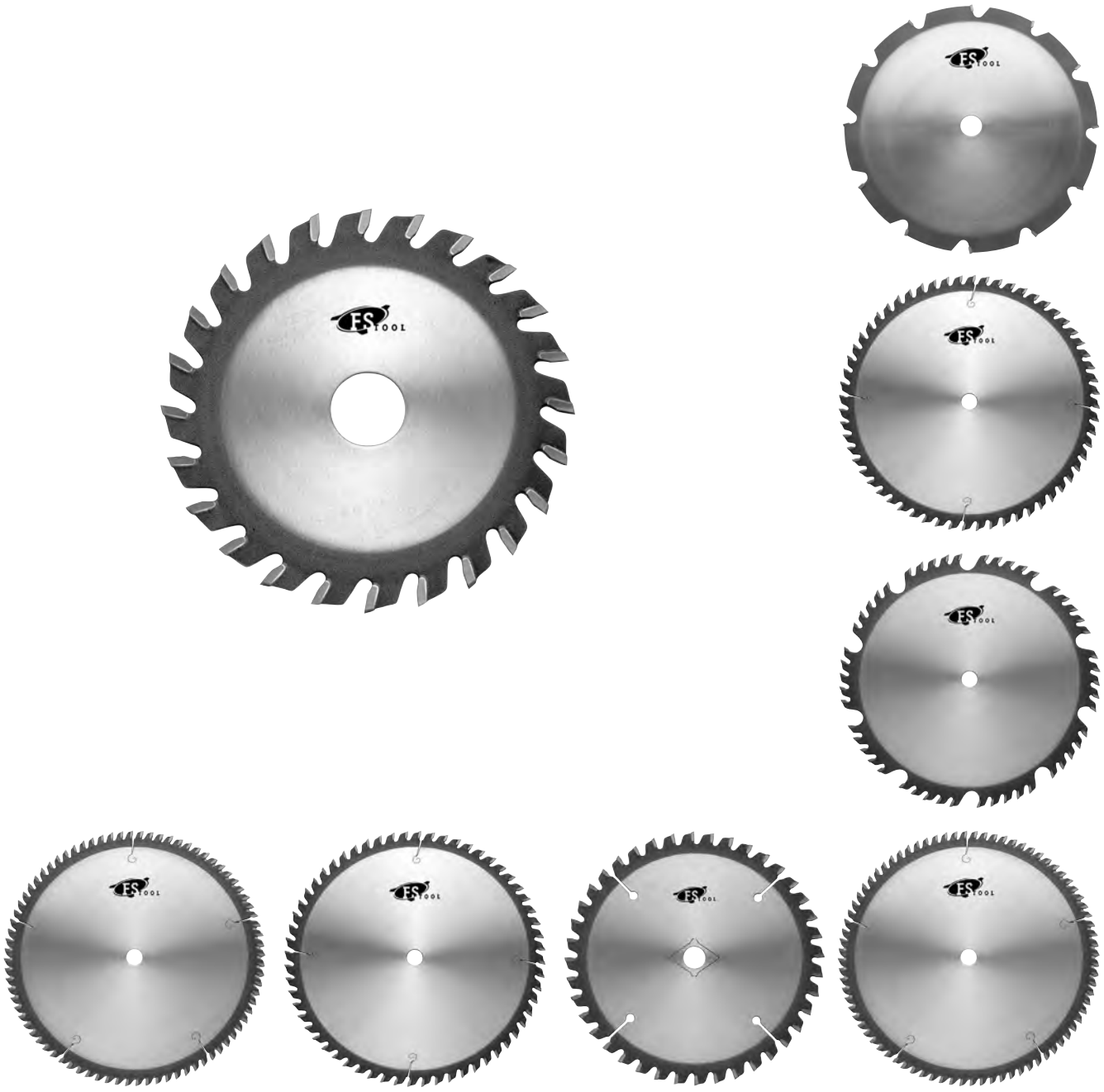
» Non-ferrous extrusions, thin sheets and light non-ferrous bars

MACHINE TYPE:

» Mitre jointers
» Splitters
» Trimmers
» Double cross-cutters
» Sizers

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	PIN HOLES	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
L1B200	8"	.112"	.087"	5/8"	60	–	–	9,000	0°	TCG
L1B250	10"	.112"	.087"	5/8"	80	–	–	7,500	2° Neg.	TCG
L1B252	10"	.126"	.102"	5/8"	80	–	–	7,500	2° Neg.	TCG
L1B251	10"	.112"	.087"	5/8"	100	–	–	7,500	2° Neg.	TCG
L1B306-30	300mm	3.2mm	2.6mm	30mm	96	2/10/60	–	6,250	6° Neg.	TCG
L1B308	12"	.134"	.110"	5/8"	100	–	Pistorius Mitre Saw	6,250	0°	TCG
L1B300	12"	.120"	.095"	1"	100	–	–	6,250	6° Neg.	TCG
L1B301	12"	.126"	.102"	1"	100	–	–	6,250	6° Neg.	TCG
L1B330-32	330mm	3.2mm	2.5mm	32mm	100	2/10/92	–	5,700	2° Neg.	TCG
L1B351	350mm	3.1mm	2.5mm	25mm	100	–	Makita Mitre Saw (with 25mm arbor)	5,350	2° Neg.	TCG
L1B350	14"	.145"	.118"	1"	100	–	–	5,350	2° Neg.	TCG
L1B353	350mm	3.3mm	2.6mm	32mm	108	–	–	5,350	6° Neg.	TCG
L1B358	14"	.146"	.118"	5/8"	100	–	Pistorius Mitre Saw	5,350	2° Neg.	TCG
L1B380	15"	.120"	.098"	1"	100	–	Hitachi Mitre Saw	5,000	2° Neg.	TCG
L1B400	16"	.145"	.118"	1"	120	–	–	4,500	2° Neg.	TCG
L1B500	20"	.174"	.138"	1"	120	–	–	3,500	2° Neg.	TCG
L1B501	500mm	4.4mm	3.8mm	30mm	120	–	–	3,500	2° Neg.	TCG

FS Tool's wide range of Pro-Line Saw Blades have been specifically designed for portable machines and stationary table saws. Our Pro-Line Saw Blades are manufactured using the same state of the art machinery used to manufacture our famous high quality industrial and ***XL4000*** extended life saw blades.



FEATURES:

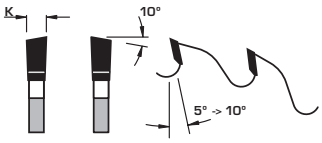
» Hardened, surface ground and roll-tensioned steel body
» Induction brazed tungsten carbide tips
» Precision ground
» Laser cut expansion slots, self-plugged for noise reduction
» Skill knockout where indicated

LHCS SAW BLADES FOR CORDLESS MACHINES

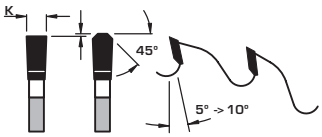


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: None

TOOTH CONFIG: ATB



TOOTH CONFIG: TCG



APPLICATION:
» Cross cutting

MATERIAL:
» Solid wood
» Veneered and plastic laminated sheets

MACHINE TYPE:
» Portable machines

PART NO.		DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LH424	•	4-3/8"	.115"	.070"	20mm	24	16,000	10°	ATB
LH426	•	4-3/8"	.115"	.070"	20mm	24	16,000	10°	TCG
LH440	•	4-3/8"	.115"	.070"	20mm	40	16,000	5°	ATB
LH442	•	4-3/8"	.115"	.070"	20mm	40	16,000	5°	TCG
LH530	Δ	5-1/2"	.115"	.070"	5/8"	40	13,500	5°	TCG

• For Porter cable, Makita, supplied with reducing bushing for 3/8" arbor

Δ For Makita and others, supplied with reducing bushing for 1/2" and 10mm arbors

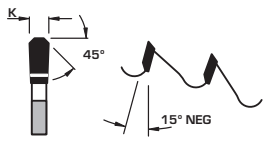
LHRS DEMOLITION
FIREMAN'S SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: None
ADDITIONAL INFO: Full-sized, elongated shoulders provides maximum impact resistance and stability in extreme applications.

Important! Due to the rough applications for which these blades may be used, they are not guaranteed.

TOOTH CONFIG: TCGN



APPLICATION:
» Demolition

MATERIAL:
» All materials

MACHINE TYPE:
» Gasoline powered machines

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LHR1212	12"	.165"	.093"	20mm	12	6,250	15° Neg.	TCGN
LHR1224	12"	.165"	.093"	20mm	24	6,250	15° Neg.	TCGN
LHR1212-78	12"	.165"	.093"	7/8"	12	6,250	15° Neg.	TCGN
LHR1212-1	12"	.165"	.093"	1"	12	6,250	15° Neg.	TCGN
LHR1224-1	12"	.165"	.093"	1"	24	6,250	15° Neg.	TCGN

LHGA GENERAL APPLICATION SAW BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged

APPLICATION:
» Ripping
» General cross cutting

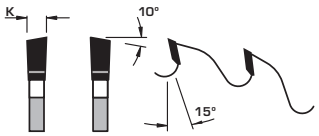
MATERIAL:
» Dry solid woods

MACHINE TYPE:
» Portable machines
» Table saws

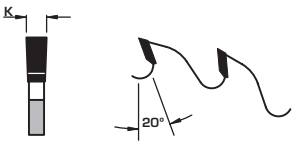
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LH624 ♦	6-1/2"	.115"	.070"	5/8"	24	12,000	15°	ATB
LH708 ♦	7-1/4"	.115"	.070"	5/8"	8	10,000	20°	Flat Top
LH712 ♦	7-1/4"	.115"	.070"	5/8"	12	10,000	20°	Flat Top
LH724 ♦	7-1/4"	.115"	.070"	5/8"	24	10,000	15°	ATB
LH726 ♦	7-1/4"	.115"	.070"	5/8"	24	10,000	15°	TCG
LH824 ♦	8"	.115"	.070"	5/8"	24	9,000	15°	ATB
LH924	9"	.125"	.080"	5/8"	24	8,000	15°	ATB
LH112	10"	.125"	.080"	5/8"	12	7,500	20°	Flat Top
LH118	10"	.125"	.080"	5/8"	18	7,500	20°	Flat Top
LH130	10"	.125"	.080"	5/8"	30	7,500	15°	ATB
LH1224	12"	.125"	.087"	1"	24	6,250	20°	Flat Top
LH1436	14"	.140"	.095"	1"	36	5,350	20°	Flat Top

♦ Diamond arbor knockout

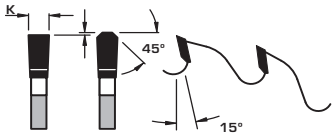
TOOTH CONFIG: ATB



TOOTH CONFIG: Flat Top



TOOTH CONFIG: TCG

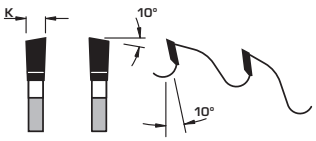


LHSC STANDARD CROSS-CUT SAW BLADES

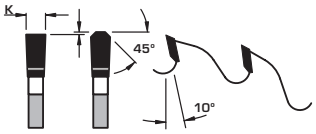


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged

TOOTH CONFIG: ATB



TOOTH CONFIG: TCG



APPLICATION:
» Cut-off
» Trimming

MATERIAL:
» Solid wood
» Plywood
» Plastic laminated sheets

MACHINE TYPE:
» Portable machines
» Table saws

PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LH640 ♦	6-1/2"	.115"	.070"	5/8"	40	12,000	10°	ATB
LH740 ♦	7-1/4"	.115"	.070"	5/8"	40	10,000	10°	ATB
LH742 ♦	7-1/4"	.115"	.070"	5/8"	40	10,000	10°	TCG
LH840 ♦	8"	.115"	.070"	5/8"	40	9,000	10°	ATB
LH842 ♦	8"	.115"	.070"	5/8"	40	9,000	10°	TCG

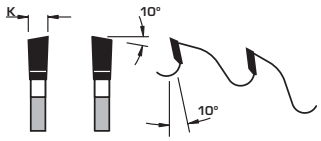
♦ Diamond arbor knockout

LHSC STANDARD CROSS-CUT SAW BLADES

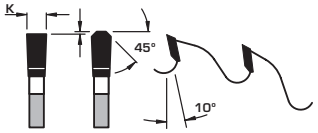


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged

TOOTH CONFIG: ATB



TOOTH CONFIG: TCG



APPLICATION:
- » Cut-off
- » Trimming

MATERIAL:
- » Solid wood
- » Plywood
- » Plastic laminated sheets

MACHINE TYPE:
- » Portable machines
- » Table saws

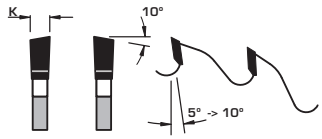
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LH940	9"	.125"	.080"	5/8"	40	8,000	10°	ATB
LH140	10"	.125"	.080"	5/8"	40	7,500	10°	ATB
LH160	10"	.125"	.080"	5/8"	60	7,500	10°	ATB
LH161	10"	.125"	.080"	5/8"	60	7,500	10°	TCG
LH1272	12"	.125"	.087"	1"	72	6,250	10°	ATB
LH1274	12"	.125"	.087"	1"	72	6,250	10°	TCG
LH1484	14"	.140"	.098"	1"	84	5,350	10°	ATB
LH1486	14"	.140"	.098"	1"	84	5,350	10°	TCG

LHFC FINE CROSS-CUT SAW BLADES

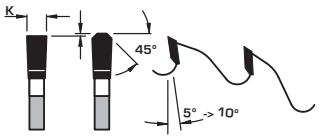


CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged

TOOTH CONFIG: ATB



TOOTH CONFIG: TCG



APPLICATION:
- » Fine cut-off
- » Trimming

MATERIAL:
- » Plywood
- » Wood veneered panels
- » Plastic laminated panel materials

MACHINE TYPE:
- » Portable machines
- » Table saws

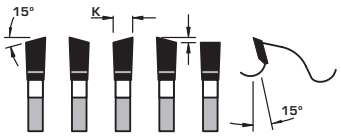
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LH860 ♦	8"	.115"	.070"	5/8"	60	9,000	5°	ATB
LH862 ♦	8"	.115"	.070"	5/8"	60	9,000	5°	TCG
LH960	9"	.125"	.080"	5/8"	60	8,000	10°	ATB
LH962	9"	.125"	.080"	5/8"	60	8,000	10°	TCG
LH180	10"	.125"	.080"	5/8"	80	7,500	5°	ATB
LH181	10"	.125"	.080"	5/8"	80	7,500	5°	TCG
LH12096	12"	.125"	.087"	1"	96	6,250	10°	ATB
LH12097	12"	.125"	.087"	1"	96	6,250	10°	TCG
LH14108	14"	.140"	.098"	1"	108	5,350	5°	ATB
LH14109	14"	.140"	.098"	1"	108	5,350	5°	TCG

♦ Diamond arbor knockout

LHCP COMBINATION/PLANER SAW BLADES



TOOTH CONFIG: 4 ATB + 1 Raker



APPLICATION:
» Cross cutting
» Ripping

MATERIAL:
» Dry softwoods and hardwoods
» Plywood
» Particleboard

MACHINE TYPE:
» Portable machines
» Table saws

CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: None
ADDITIONAL INFO: 4 ATB teeth and 1 Raker with deep gullet allow for deeper cuts and improved chip flow

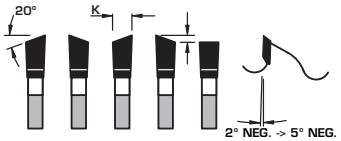
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LH407 ♦	7-1/4"	.120"	.070"	5/8"	40	10,000	15°	4 ATB + 1 Raker
LH408 ♦	8"	.120"	.070"	5/8"	40	9,000	15°	4 ATB + 1 Raker
LH409	9"	.125"	.080"	5/8"	40	8,000	15°	4 ATB + 1 Raker
LH501	10"	.135"	.087"	5/8"	50	7,500	15°	4 ATB + 1 Raker
LH502	12"	.135"	.087"	1"	60	6,250	15°	4 ATB + 1 Raker

♦ Diamond arbor knockout

LHMJ MITRE JOINT SAW BLADES



TOOTH CONFIG: 4 ATB + 1 Raker



APPLICATION:
» Mitre joint cuts

MATERIAL:
» Softwood and hardwood picture frames
» Softwood and hardwood furniture mouldings

MACHINE TYPE:
» Cut-off mitre machines
» Compound mitre machines
» Radial arm saws
» Table saws

CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged

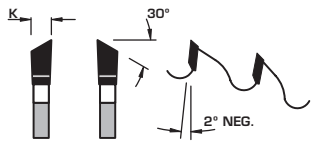
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
LH864	8-1/4"	.100"	.070"	5/8"	60	Black & Decker Mitre, Delta Compound Mitre, Ryobi Radial Arm	8,800	5° Neg.	4 ATB + 1 Raker
LH863	8-1/2"	.100"	.070"	5/8"	60	Elu Mitre, Hitachi Mitre	8,800	5° Neg.	4 ATB + 1 Raker
LH162	10"	.110"	.080"	5/8"	60	–	7,500	2° Neg.	4 ATB + 1 Raker
LH182	10"	.110"	.080"	5/8"	80	–	7,500	2° Neg.	4 ATB + 1 Raker

LHCF CHIP-FREE MELAMINE TRIM BLADES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged

TOOTH CONFIG: High ATB 30°



APPLICATION:

» Chip-free sizing cuts (on both sides), without the need for pre-scoring
» Fine cross-cuts (solid wood)

MATERIAL:

» Solid wood
» Melamine
» Wood veneered panels

MACHINE TYPE:

» Table saws
» Sliding table saws
» Vertical panel sizing saws
» Cut-off saws

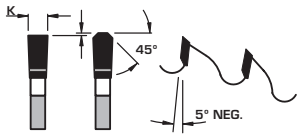
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
LH184	10"	.112"	.080"	5/8"	80	7,500	2° Neg.	High ATB 30°
LH1210	12"	.125"	.087"	1"	100	6,250	2° Neg.	High ATB 30°
LH3096	300mm	3.2mm	2.2mm	30mm	96	6,250	2° Neg.	High ATB 30°

LHNF SAW BLADES FOR NON-FERROUS METALS



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged
ADDITIONAL INFO: Material being cut must be clamped firmly
Use of spray lubrication recommended

TOOTH CONFIG: TCG



APPLICATION:

» Splitting
» Mitre jointing

MATERIAL:

» Non-ferrous extrusions, thin sheets and light non-ferrous bars

MACHINE TYPE:

» Mitre saws
» Compound mitre saws

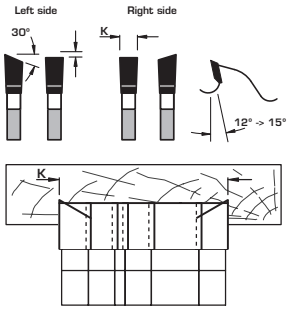
PART NO.	DIAM.	KERF	PLATE	BORE	TEETH	MACHINE	MAX. RPM	HOOK	TOOTH CONFIG
LH743 ♦	7-1/4"	.100"	.070"	5/8"	40	–	10,000	5° Neg.	TCG
LH866	8-1/4"	.100"	.070"	5/8"	60	Black & Decker Mitre, Delta Compound Mitre, Ryobi Radial Arm	8,800	5° Neg.	TCG
LH868	8-1/2"	.100"	.070"	5/8"	60	Elu Mitre, Hitachi Mitre	8,800	5° Neg.	TCG

♦ Diamond arbor knockout

53DL STANDARD DADO SETS



TOOTH CONFIG: 5 Bevel + 1 Raker



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: None
ADDITIONAL INFO: Standard set: two outside saw blades 1/8" kerf, one 1/4" chipper, two 1/8" chippers and one 1/16" chipper

APPLICATION:

» Cutting grooves and dados
» Groove widths adjustable from 1/4" to 13/16"; maximum width in 1/16" increments. Wider grooves can be achieved by adding spare chippers

MATERIAL:

» Softwoods and hardwoods
» Plywood
» Veneered panels

MACHINE TYPE:

» Table saws
» Sliding table saws
» Single or double end tenoners

PART NO.	DIAM.	MAX. KERF	BORE	TEETH	MAX. RPM	HOOK
53DL06	6"	13/16"	5/8"	24	6,500	12°
53DL08	8"	13/16"	5/8"	24	6,500	15°
53DL08-1	8"	13/16"	1"	24	6,500	15°
53DL10	10"	13/16"	5/8"	24	6,500	12°
53DL10-1	10"	13/16"	1"	24	6,500	12°
53DL12	12"	13/16"	1"	24	6,500	12°
53DL14 •	14"	13/16"	1"	40	5,350	12°

• 4 Bevel + 1 Raker

Refer to "Dado Shims" on page E48 for shim sets for fine adjustment

OUTSIDE SAW BLADES ONLY

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	DIAM.	KERF	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
53DL06-LH	53DL06-RH	6"	1/8"	5/8"	24	6,500	12°	5 Bevel + 1 Raker
53DL08-LH	53DL08-RH	8"	1/8"	5/8"	24	6,500	15°	5 Bevel + 1 Raker
53DL08-1-LH	53DL08-1-RH	8"	1/8"	1"	24	6,500	15°	5 Bevel + 1 Raker
53DL10-LH	53DL10-RH	10"	1/8"	5/8"	24	6,500	12°	5 Bevel + 1 Raker
53DL10-1-LH	53DL10-1-RH	10"	1/8"	1"	24	6,500	12°	5 Bevel + 1 Raker
53DL12-LH	53DL12-RH	12"	1/8"	1"	24	6,500	12°	5 Bevel + 1 Raker
53DL14-LH	53DL14-RH	14"	1/8"	1"	40	5,350	12°	4 Bevel + 1 Raker

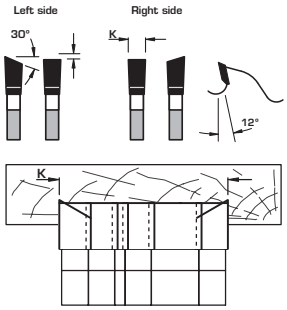
SPARE CHIPPERS

PART NO.	KERF	PART NO.	KERF	PART NO.	KERF	DIAM.	BORE	TEETH
5306-16	1/16"	5306-18	1/8"	5306-14	1/4"	6"	5/8"	2
5308-16	1/16"	5308-18	1/8"	5308-14	1/4"	8"	5/8"	2
5308-16-1	1/16"	5308-18-1	1/8"	5308-14-1	1/4"	8"	1"	2
5310-16	1/16"	5310-18	1/8"	5310-14	1/4"	10"	5/8"	2
5310-16-1	1/16"	5310-18-1	1/8"	5310-14-1	1/4"	10"	1"	2
5312-16	1/16"	5312-18	1/8"	5312-14	1/4"	12"	1"	2
5314-16	1/16"	5314-18	1/8"	5314-14	1/4"	14"	1"	2

53DLS SAFETY DADO SETS "ANTI-KICKBACK" DESIGN



TOOTH CONFIG: 5 Bevel + 1 Raker



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged
ADDITIONAL INFO: Standard set: two outside saw blades 1/8" kerf, one 1/4" chipper, two 1/8" chippers and one 1/16" chipper

APPLICATION:
- Cutting grooves and dados
- "Anti-kickback" design reduces the risk of kickback
- Groove widths adjustable from 1/4" to 13/16"; maximum width in 1/16" increments. Wider grooves can be obtained by adding spare chippers

MATERIAL:
- Softwoods and hardwoods
- Plywood
- Veneered panels
- Laminated panels

MACHINE TYPE:
- Table saws
- Sliding table saws

PART NO.	DIAM.	MAX. KERF	BORE	TEETH
53DL08S	8"	13/16"	5/8"	24

OUTSIDE SAW BLADES ONLY

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	DIAM.	KERF	BORE	TEETH
53DL08S-LH	53DL08S-RH	8"	1/8"	5/8"	24

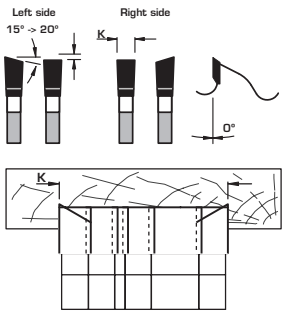
SPARE CHIPPERS 2-TEETH

PART NO.	KERF	PART NO.	KERF	PART NO.	KERF	DIAM.	BORE
5308-16S	1/16"	5308-18S	1/8"	5308-14S	1/4"	8"	5/8"

54DL FINE DADO SETS



TOOTH CONFIG: 4 Bevel + 1 Raker



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Cu plugged
ADDITIONAL INFO: Standard set: two outside saw blades 1/8" kerf, one 1/4" chipper, two 1/8" chippers and one 1/16" chipper

APPLICATION:
- Cutting grooves and dados
- 0° hook results in finer cuts and a superior finish
- Groove widths adjustable from 1/4" to 13/16" maximum width in 1/16" increments. Wider grooves can be obtained by adding spare chippers

MATERIAL:
- Softwoods and hardwoods
- Plywood
- Veneered panels
- Laminated panels

MACHINE TYPE:
- Table saws
- Sliding table saws
- Single or double end tenoners

PART NO.	DIAM.	MAX. KERF	BORE	TEETH
54DL08	8"	13/16"	5/8"	40
54DL08-1	8"	13/16"	1"	40
54DL10	10"	13/16"	5/8"	60
54DL10-1	10"	13/16"	1"	60

Refer to "Dado Shims" on page E48 for shim sets for fine adjustment

OUTSIDE SAW BLADES ONLY

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	DIAM.	KERF	BORE	TEETH
54DL08-LH	54DL08-RH	8"	1/8"	5/8"	40
54DL08-1-LH	54DL08-1-RH	8"	1/8"	1"	40
54DL10-LH	54DL10-RH	10"	1/8"	5/8"	60
54DL10-1-LH	54DL10-1-RH	10"	1/8"	1"	60

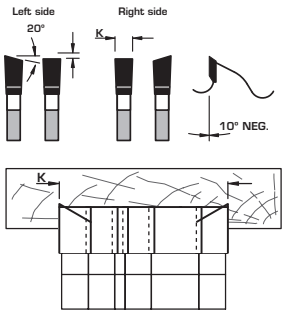
SPARE CHIPPERS

Refer to "Spare Chippers" table on page E46

55DL FINE DADO SETS WITH 4 WING CHIPPERS



TOOTH CONFIG: 5 Bevel + 1 Raker



CUTTING MATERIAL: Tungsten Carbide

EXPANSION SLOTS: Laser, self-plugged

ADDITIONAL INFO: Standard set: two outside saw blades 1/8" kerf, one 1/16" chipper, one 3/32" chipper, and four 1/8" chippers (four wing chippers)

APPLICATION:

- Cutting grooves and dados
- Neg 10˚ hook on outside blades and chippers provide superior chip-free finish
- Groove widths adjustable from 1/4" to 29/32" in 1/32" increments, wider grooves can be obtained by adding spare chippers

MATERIAL:

- Softwoods and hardwoods
- Plywood
- Veneered panels
- Laminated panels

MACHINE TYPE:

- Table saws
- Sliding table saws
- Single or double end tenoners

PART NO.	DIAM.	MAX. KERF	BORE	TEETH	MAX. RPM	HOOK
55DL08	8"	29/32"	5/8"	24	6,250	10˚ Neg.
55DL10	10"	29/32"	5/8"	24	6,250	10˚ Neg.
55DL10-1	10"	29/32"	1"	24	6,250	10˚ Neg.

Refer to "Dado Shims" on page E48 for shim sets for fine adjustment

OUTSIDE SAW BLADES ONLY

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	DIAM.	KERF	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
55DL08-LH	55DL08-RH	8"	1/8"	5/8"	24	6,250	10˚ Neg.	5 Bevel + 1 Raker
55DL10-LH	55DL10-RH	10"	1/8"	5/8"	24	6,250	10˚ Neg.	5 Bevel + 1 Raker
55DL10-1-LH	55DL10-1-RH	10"	1/8"	1"	24	6,250	10˚ Neg.	5 Bevel + 1 Raker

SPARE CHIPPERS - 4 WING

PART NO.	KERF	PART NO.	KERF	PART NO.	DIAM.	KERF	BORE	TEETH
5508-063	1/16"	5508-094	3/32"	5508-125	8"	1/8"	5/8"	4
5510-063	1/16"	5510-094	3/32"	5510-125	10"	1/8"	5/8"	4
5510-1-063	1/16"	5510-1-094	3/32"	5510-1-125	10"	1/8"	1"	4

53DSS DADO SHIMS



APPLICATION:

- Set of 14 dado shims. Made from durable plastic
- Shims are coloured coded according to thickness
- Outside diameter is 3"

PART NO.	SET INCLUDES:
53DSS14 (BORE SIZE 5/8")	4 Shims .05mm - Silver
	2 Shims .10mm - Yellow
	4 Shims .20mm - Clear
	4 Shims .40mm - White

PART NO.	SET INCLUDES:
53DSS14-1 (BORE SIZE 1")	6 Shims .05mm - Silver
	4 Shims .10mm - Clear
	4 Shims .20mm - White
	6 Shims .30mm - Clear

GROOVING SAW BLADES
IMPERIAL SIZES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged

TOOTH CONFIG: Flat Top



APPLICATION:
» Cutting grooves

MATERIAL:
» Solid wood
» Plywood
» Veneered panels
» Laminated panels

MACHINE TYPE:
» Table saws
» Sliding table saws
» Single or double end tenoners
» CNC routers

PART NO.	DIAM.	KERF	RIM	PLATE	BORE	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
5G6116	6"	1/16"	.040"	.087"	5/8"	12	12,500	5°	Flat Top
5G6332	6"	3/32"	.065"	.087"	5/8"	12	12,500	10°	Flat Top
5G6018	6"	1/8"	–	.087"	5/8"	12	12,000	10°	Flat Top
5G6316	6"	3/16"	–	.134"	5/8"	12	12,500	12°	Flat Top
5G6014	6"	1/4"	–	.180"	5/8"	12	12,500	12°	Flat Top
5G6516	6"	5/16"	–	.180"	5/8"	12	12,500	12°	Flat Top
5G6038	6"	3/8"	–	.250"	5/8"	12	12,500	12°	Flat Top
5G7332	7"	3/32"	.065"	.087"	5/8"	18	10,000	12°	Flat Top
5G7316	7"	3/16"	–	.134"	5/8"	18	10,000	12°	Flat Top
5G7014	7"	1/4"	–	.180"	5/8"	18	10,000	12°	Flat Top
5G7516	7"	5/16"	–	.180"	5/8"	18	10,000	12°	Flat Top
5G7038	7"	3/8"	–	.250"	5/8"	18	10,000	12°	Flat Top
5G8316	8"	3/16"	–	.134"	5/8"	24	8,000	12°	Flat Top
5G8014	8"	1/4"	–	.180"	5/8"	24	8,000	12°	Flat Top
5G8516	8"	5/16"	–	.180"	5/8"	24	8,000	12°	Flat Top
5G8038	8"	3/8"	–	.250"	5/8"	24	8,000	12°	Flat Top
5G0316	10"	3/16"	–	.134"	5/8"	24	6,500	12°	Flat Top
5G0014	10"	1/4"	–	.180"	5/8"	24	6,500	12°	Flat Top
5G0516	10"	5/16"	–	.180"	5/8"	24	6,500	12°	Flat Top
5G0038	10"	3/8"		.250"	5/8"	24	6,500	12°	Flat Top

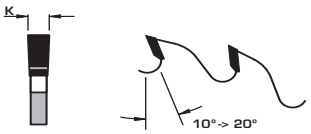
Other sizes manufactured to customer specifications

GROOVING SAW BLADES
METRIC SIZES



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: Laser, self-plugged

TOOTH CONFIG: Flat Top



APPLICATION:
» Cutting grooves

MATERIAL:
» Solid wood
» Plywood
» Veneered panels
» Laminated panels

MACHINE TYPE:
» Table saws
» Sliding table saws
» Single or double end tenoners
» CNC routers

PART NO.	DIAM. MM	KERF MM	RIM MM	PLATE MM	BORE MM	TEETH	MAX. RPM	HOOK	TOOTH CONFIG
5G4M32	100	3.2	–	2.2	20	20	18,000	20°	Flat Top
5G6M18	150	1.8	1.0	2.2	30	12	12,500	12°	Flat Top
5G6M25	150	2.5	1.6	2.2	30	12	12,500	12°	Flat Top
5G6M35	150	3.5	–	2.4	30	12	12,500	12°	Flat Top
5G6M50	150	5.0	–	3.8	30	12	12,500	12°	Flat Top
5G6M60	150	6.0	–	4.6	30	12	12,500	12°	Flat Top
5G6M70	150	7.0	–	4.6	30	12	12,500	12°	Flat Top
5G6M80	150	8.0	–	4.6	30	12	12,500	12°	Flat Top
5G7M25	180	2.5	1.6	2.2	30	18	10,000	12°	Flat Top
5G7M50	180	5.0	–	3.8	30	18	10,000	12°	Flat Top
5G7M60	180	6.0	–	4.6	30	18	10,000	12°	Flat Top
5G7M70	180	7.0	–	4.6	30	18	10,000	12°	Flat Top
5G7M80	180	8.0	–	4.6	30	18	10,000	12°	Flat Top
5G8M50	200	5.0	–	3.8	30	24	8,000	10°	Flat Top
5G8M60	200	6.0	–	4.6	30	24	8,000	12°	Flat Top
5G8M70	200	7.0	–	4.6	30	24	8,000	12°	Flat Top
5G8M80	200	8.0	–	4.6	30	24	8,000	12°	Flat Top
5G0M50	250	5.0	–	3.8	30	24	6,500	12°	Flat Top
5G0M60	250	6.0	–	4.6	30	24	6,500	12°	Flat Top
5G0M70	250	7.0	–	4.6	30	24	6,500	12°	Flat Top
5G0M80	250	8.0	–	4.6	30	24	6,500	12°	Flat Top
5G0M01	250	10.0	–	6.35	30	24	9,500	12°	Flat Top

Other sizes manufactured to customer specifications



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: None
ADDITIONAL INFO: Hogger body made of light alloy equipped with 4 or 6 segments and 1 saw blade (all TC tipped; replaceable and resharpenable)

APPLICATION:

» Chip-free sizing when used with pre-scoring unit
» Standard chipping width 30mm, wider chipping widths by ordering and assembling multiple hogging units

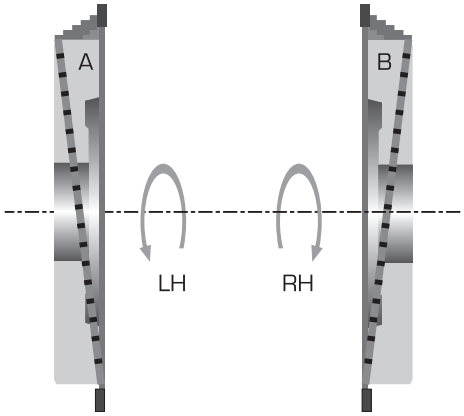
MATERIAL:

» Panel materials

MACHINE TYPE:

» Double-end tenoners
» Trimming machines

PART NO.	ROTATION	DIAM. MM	KERF MM	BORE MM	NO. TEETH SAWS	NO. TEETH SEGMENTS
1TL504	LH	255	30	60	40	4 x 8
1TL514	RH	255	30	60	40	4 x 8
1TL506	LH	255	30	60	60	4 x 8
1TL516	RH	255	30	60	60	4 x 8
1TL524	LH	255	30	80	40	4 x 8
1TL534	RH	255	30	80	40	4 x 8
1TL526	LH	255	30	80	60	4 x 8
1TL536	RH	255	30	80	60	4 x 8
1TL804	LH	300	30	60	48	6 x 7
1TL814	RH	300	30	60	48	6 x 7
1TL806	LH	300	30	60	72	6 x 7
1TL816	RH	300	30	60	72	6 x 7
1TL824	LH	300	30	80	48	6 x 7
1TL834	RH	300	30	80	48	6 x 7
1TL826	LH	300	30	80	72	6 x 7
1TL836	RH	300	30	80	72	6 x 7
1TL906	LH	350	30	60	84	6 x 8
1TL916	RH	350	30	60	84	6 x 8
1TL926	LH	350	30	80	84	6 x 8
1TL936	RH	350	30	80	84	6 x 8



REPLACEMENT PARTS

SAW BLADES

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	DIAM. MM	KERF MM	BORE MM	NO. TEETH	TOOTH CONFIG
525240	525340	255	4.2	155	40	One Side Bevel
525260	525360	255	4.2	155	60	One Side Bevel
530248	530348	300	4.2	155	48	One Side Bevel
530272	530372	300	4.2	155	72	One Side Bevel
535084	535384	350	4.2	200	84	One Side Bevel

SAW SEGMENTS

PART NO	DIAM. MM	NO. TEETH	TOOTH CONFIG
525008	245	8	Flat Top
530008	295	7	Flat Top
535008	345	8	Flat Top

SCREWS

DESCRIPTION	SCREW SAW BLADE	SCREW SEGMENTS
PART NO.	W500605	W500701
DIMENSIONS	M6x16mm	M8x20mm



CUTTING MATERIAL: Tungsten Carbide
EXPANSION SLOTS: None

APPLICATION:

» Chip-free sizing when used with pre-scoring units
» High tensile strength steel body with tungsten carbide reversible inserts
» Inserts have 4 cutting edges with chipbreaker
» Hogger set consists of elements which can be of three different diameters (234, 242 and 250mm). This allows for different profile solutions as per drawing examples
» Chipping width available from 19.2mm and wider (in increments of 15mm)

MATERIAL:

» Panel materials

MACHINE TYPE:

» Double-end tenoners
» Trimming machines

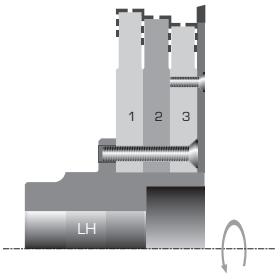
HOGGER ASSEMBLY

Components purchased separately

SAW BLADES

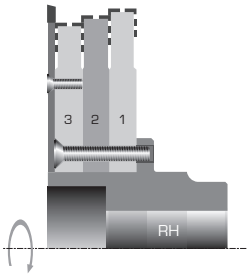
PART NO.	ROTATION	DIAM. MM	KERF MM	BORE MM	NO. TEETH	PIN HOLES	TOOTH CONFIG
1TL255LH	LH	255	4.2	80	56	8/8.3/195	LH Bevel + CB Cutters
1TL255RH	RH	255	4.2	80	56	8/8.3/195	RH Bevel + CB Cutters

Pin holes are countersunk



CUTTERS

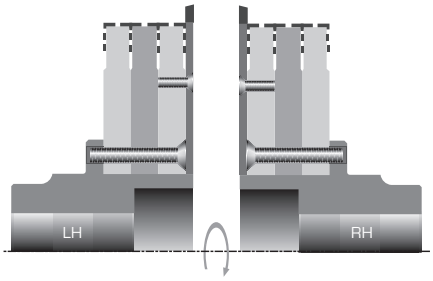
PART NO.	HOGGER NO.	ROTATION	DIAM. MM	KERF MM	BORE MM	NO. TEETH
1TL250LH	1	LH	250	15	80	8
1TL250RH	1	RH	250	15	80	8
1TL242LH	2	LH	242	15	80	8
1TL242RH	2	RH	242	15	80	8
1TL234LH	3	LH	234	15	80	8
1TL234RH	3	RH	234	15	80	8



SPACER

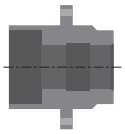
PART NO.	DIAM. MM	THICKNESS MM	BORE MM
1TL116	115	14	80





MECHANICAL SLEEVES

PART NO.	DIAM. MM	LENGTH MM	BORE MM	KEYWAY (ONE)
1TL115-35	115	92	35	10 x 4
1TL115-40	115	92	40	12 x 5



REPLACEMENT PARTS



DESCRIPTION	INSERT WITH CHIPBREAKER	MOUNTING BOLT - HOGGER BODY	MOUNTING BOLT - SAW BLADE	GIB - LH HOGGER BODY	GIB - RH HOGGER BODY	BOLT FOR GIBS
PART NO.	301505	W500601	W500605	W350064	W350065	W502402
DIMENSIONS	15x15x2mm	M8x50mm	M6x16mm	11mm Conic	11mm Conic	M7x21mm



ROUTER BITS

Standard & Solid surface / Insert router bits

INDEX ROUTER BITS - TABLE OF CONTENTS

PRODUCT CATEGORY	PAGE NO.
"BOX JOINT" SLOTTING CUTTER SET	F33
"V" GROOVING VEINING BITS	F25
"V" GROOVING BITS	F23 - F24
4 RABBETING DEPTH ROUTER BIT SETS	F13
7 RABBETING DEPTH ROUTER BIT SETS	F14
ADJUSTABLE 3-WING UPPER CHAMFERING SET	F78
ADJUSTABLE ROUNDING OVER SET	F77 - F78
ANGULAR TONGUE AND GROOVE CUTTER SET	F35
ARBOR FOR CNC ROUTERS	F118
ARBORS FOR ROUTER CUTTERS	F118
BALL GROOVING BITS	F27
BEAD AND COVE EDGE MOULDING BIT	F90
BEAD AND COVE MOULDING BITS	F91
BEAD AND COVE PROFILE	F53 - F54
BEAD AND COVE STILE AND RAIL	F66, F68
BEAD AND COVE WITH TOP BEAD MOULDING BIT	F90
BEAD PROFILE	F50 - F51
BEAD PROFILE WITH FLAT BOTTOM	F42
BEAD PROFILE WITH ROUND NOSE BOTTOM	F41, F58
BEAD STILE AND RAIL	F65, F71
BEAD WITH ELLIPSE OGEE MOULDING BIT	F89
BEADED CAVETTO ARCHITECTURAL MOULDING BIT	F99
BEADED CAVETTO EDGE MOULDING BIT	F88
BEADED CAVETTO WITH BEAK ARCHITECTURAL BIT	F98
BEADED CONGE ARCHITECTURAL MOULDING BIT	F98
BEADED EDGE MOULDING BIT	F87
BEADED SCOTIA WITH THUMB ARCHITECTURAL	F99
BEADED SPLAY HANDRAIL BIT	F103
BEADED VASE WITH THUMBNAIL ARCHITECTURAL	F98
BEVEL BITS	F75
BEVEL GLUE JOINTS BITS	F39
BEVEL HOB BITS - SOLID SURFACE	F108
BEVEL TRIM BIT	F20 - F21
BEVEL TRIM INSERT BITS	F23
BEVEL UNDERMOUNT BOWL BITS - SOLID SURFACE	F107
BOWL AND COUNTERTOP TRIM BIT - SOLID SURFACE	F110

PRODUCT CATEGORY	PAGE NO.
BOWL AND TRAY BITS	F28
CAVETTO HANDRAIL BIT	F102
CAVETTO WITH BEAD MOULDING BIT	F93
CHAMFER FINGER GRIP BIT	F74
CLASSICAL OGEE MOULDING BIT	F94
COMBINATION BEVEL AND FLUSH LAMINATE TRIM BITS	F20
CONVEX BEADING BITS	F82 - F83
CORE BOX BIT	F28
CORNER BEADING PROFILE	F81
CORNER COVE BITS - SOLID SURFACE	F109
CORNER ROUNDING BITS - SOLID SURFACE	F105
COUNTERTOP BITS - SOLID SURFACE	F106
COUNTERTOP EDGE BIT - SOLID SURFACE	F110
COVE AND BEAD PROFILE WITH FLAT BOTTOM	F58
COVE AND BEAD PROFILE WITHOUT FILLET	F54
COVE AND BEAD WITH TOP COVE MOULDING BIT	F94
COVE BEADING BITS	F82
COVE BIT	F109
COVE PROFILE	F52
COVE PROFILE FOR RAISED PANELS	F59 - F60, F62
COVE PROFILE WITH TOP AND BOTTOM FILLET	F53
COVE PROFILE WITHOUT FILLET	F52
COVE STYLE FINGER GRIP BITS	F74
COVED ASTRAGAL MOULDING BITS	F93
DOUBLE BEADED VASE ARCHITECTURAL MOULDING BIT	F99
DOUBLE BEADING PROFILE BIT	F85
DOUBLE ECHINUS CROWN MOULDING BIT	F97
DOUBLE LEAF-EDGE BEADING PROFILE BIT	F85
DOUBLE ROUND OVER/BEAD PROFILE WITH FILLET	F51
DOVETAIL BITS	F40
DOWNSHEAR ROUTER BITS	F8
DRAWER LOCK BITS	F38
DRAWING LINE BEADING PROFILE	F82
ECHINUS MOULDING BIT	F91
ECHINUS WITH COVE MOULDING BIT	F92
EDGE BEADING PROFILE	F82

PRODUCT CATEGORY	PAGE NO.
EDGE BEVEL COUNTERTOP BIT - SOLID SURFACE	F107
EDGE COVE TRIMMING BIT	F106
EDGE ROUND OVER BITS	F76
ELLIPSE OGEE PROFILE WITH FLAT BOTTOM	F42
ELLIPSE OGEE PROFILE WITH TOP FILLET	F56
EXTERNAL CIRCLIP	F117
FACE INLAY BITS	F111
FINGER GRIP BIT	F73
FINGER JOINT ROUTER CUTTER SET	F34
FLAT BOTTOM VEINING BITS	F26
FLAT/SPRING WASHERS	F116
FLUSH AND BEVEL TRIM BITS	F20
FLUSH TRIM BITS	F16 - F17
FLUSH TRIM INSERT ROUTER BITS	F17 - F19
FLUSH TRIM WITH PLUNGE POINT BITS	F16
FLUTED OGEE WITH BEAK CROWN MOULDING BIT	F95
GLUE JOINT BITS	F38
HALF-ROUND BITS	F80
HEX NUTS FOR ROUTER ARBORS	F116
INLAY FLUSH TRIMMING BITS 0-DEGREES	F111
INVERTED ROUNDING OVER BITS - SOLID SURFACE	F105
KEYHOLE BIT	F27
LEAF-EDGE BEADING PROFILE BITS	F86
LEFT-HAND ROUTER BITS	F6
LOCK MITER BITS 90° CORNER	F39
LOCK RINGS	F117
MATCHING COVE AND BEAD PROFILES	F48
MATCHING QUARTER ROUND AND COVE PROFILES	F47
MORTISING BITS	F10
MULTI-PURPOSE SLOTTING CUTTER SET	F33
MULTI-RABBETING ROUTER BIT SETS	F15
MULTI-PROFILE BIT	F49
NYLON INSERT LOCKNUT	F116
OGEE EDGE MOULDING BIT	F88 - F89
OGEE PROFILE FOR RAISED PANELS	F59 - F60, F63
OGEE PROFILE WITH FILLET	F56

PRODUCT CATEGORY	PAGE NO.
OGEE PROFILE WITH FLAT BOTTOM	F43
OGEE PROFILE WITH ROUND NOSE BOTTOM	F41
OGEE PROFILE WITHOUT FILLET	F56
OGEE STILE AND RAIL	F67, F69, F71
OGEE WITH BEAD EDGE MOULDING BIT	F89
OGEE WITH BEAK CROWN MOULDING BIT	F97
OGEE WITH FILLET MOULDING BIT	F95
OGEE WITH SPLAY EDGE MOULDING BIT	F88
OUTER EDGE DOOR TRIMMER BIT	F73
OVERHAND 1/6" 5° ROUGH-OUT BIT	F105
OVOLO CAVETTO WITH BEAK CROWN MOULDING BITS	F96
PANEL PILOT AND TRIM BITS	F18
PROVINCIAL PROFILE FOR RAISED PANELS	F59, F61, F64
PROVINCIAL PROFILE WITH COVE AND BEAD PROFILE	F61
PROVINCIAL STILE AND RAIL	F67, F70
PROVINCIAL PROFILE	F45, F55
QUARTER ROUND WITH OGEE HANDRAIL BIT	F101
RABBETING BITS	F12
RADIUS T-SLOT BITS	F30
RADIUSED EDGE BEADING PROFILE	F82
RAISED WASHERS (DUST SHIELDS)	F116
RIP AND SLOTTING BIT	F25
ROMAN OGEE BIT - SOLID SURFACE	F110
ROMAN OGEE PROFILE	F55
ROMAN OGEE STILE AND RAIL	F69
ROMAN OGEE UNDERMOUNT BOWL BITS - SOLID SURFACE	F109
ROMAN OGEE WINDOW SASH ASSEMBLY	F72
ROMAN OGEE WITH BEAD MOULDING BIT	F92
ROUND BOTTOM VEINING BITS	F25
ROUND NOSE BITS	F29
ROUND OVER STILE AND RAIL	F70
ROUND OVER WITH CAVETTO HANDRAIL BIT	F102
ROUNDING OVER AND BEAD PROFILE	F44
ROUNDING OVER BITS	F76
ROUNDING OVER BITS - SOLID SURFACE	F106
ROUNDING OVER PROFILE	F44

PRODUCT CATEGORY	PAGE NO.
ROUNDING OVER UNDERMOUNT BOWL BITS - SOLID SURFACE	F108
ROUTER BIT ADAPTORS	F118
SASH BAR JOINT BITS	F72
SCOTIA WITH FILLET HANDRAIL BIT	F103
SCREWS	F116
SHALLOW BEAD AND COVE STILE AND RAIL	F68
SLOTTING CUTTER ASSEMBLY	F32
SLOTTING CUTTERS ONLY	F31
SOLID CARBIDE ENGRAVING BITS	F24
SPACERS - FLAT SHIMS	F117
SPLAYED CAVETTO CROWN MOULDING BIT	F96
SPLINE GLUE JOINT BITS	F38
STAGGER TOOTH STRAIGHT ROUTER BITS	F9
STAGGERED TOOTH INSERT FLUSH TRIM BITS	F19
STRAIGHT INSERT ROUTER BITS	F6 - F7
STRAIGHT ROUTER BITS	F1 - F6
SUPER-GLIDE BALL BEARING GUIDES	F115
SUPER-GLIDE RADIUS BALL BEARING GUIDES	F115
TALL OGEE PROFILE WITH FLAT BOTTOM	F43
TEE/BUMPER MOULDING GROOVING BIT	F26 - F27
THREADED ARBOR	F10, F118
THUMBNAIL HANDRAIL BIT	F101
THUMBNAIL PROFILE	F46, F57
THUMBNAIL PROFILE WITH ROUND NOSE BOTTOM	F46
THUMBNAIL WITH QUARTER ROUND HANDRAIL BIT	F101
TONGUE AND GROOVE	F37
TONGUE AND GROOVE "V" PANEL BIT SET	F36
TONGUE AND GROOVE CUTTER SET	F34
TRADITIONAL WITH BEAD AND COVE EDGE MOULDING	F87
TRADITIONAL WITH DOUBLE BEAD EDGE MOULDING BIT	F87
TRIM CUTTER ASSEMBLIES	F22
TRIM CUTTER	F22
TRIPLE BEAD MOULDING BIT	F94
TRIPLE BEADING PROFILE BIT	F84 - F85
TRIPLE FLUTE COVE PROFILE BIT	F83
TRUE BULL NOSE BITS	F79

ROUTER BITS - TABLE OF CONTENTS

PRODUCT CATEGORY	PAGE NO.
T-SLOT BITS	F30
UNDERMOUNT BOWL BITS - SOLID SURFACE	F108
UNDERMOUNT PROFILE BOWL BITS - SOLID SURFACE	F107
VARIED BEAD PROFILE BIT	F84
WAVY EDGE BIT	F55

ROUTER BITS - ALPHA-NUMERIC INDEX

PART NO.	PAGE NO.
AR11 - AR23	F118
AR12MB - AR14MB	F10, F118
ARCNC	F118
B01 - B84	F115
D1A15A - D1A22A	F8
D1B22 - D1B45A	F21
D1C - D1CA	F17
D1D22 - D1D45A	F23
D1E - D1EA	F6
FRB01-5 - FRB01-6	F43
FRB01-7 - FRB01-8	F46
FRB02 - FRB04	F42
FRB05	F45
FRB05-1	F46
FRB05-3 - FRB05-4	F44
FRB06 - FRB09	F43
FRB10 - FRB13	F41
FRB100 - FRB102	F87
FRB104	F88
FRB105	F90
FRB106 - FRB107	F88
FRB108 - FRB109	F89
FRB110	F90
FRB111	F89
FRB113 - FRB114	F91
FRB115 - FRB116	F92
FRB117 - FRB120	F93
FRB121	F95
FRB122 - FRB124	F94
FRB14 - FRB17	F53
FRB150	F95
FRB151 - FRB152	F96
FRB153 - FRB154	F97
FRB160 - FRB164	F48
FRB170	F36
FRB171	F37

PART NO.	PAGE NO.
FRB174 - FRB179	F30
FRB18 - FRB20	F56
FRB180 - FRB182	F101
FRB183	F102
FRB190	F102
FRB191 - FRB192	F103
FRB195	F49
FRB200 - FRB202	F47
FRB21 - FRB23	F57
FRB212 - FRB213	F72
FRB215 - FRB217	F65
FRB218 - FRB223	F66
FRB224 - FRB235	F67
FRB23-1 - FRB23-2	F41
FRB23-5	F63
FRB23-6	F64
FRB23-7	F62
FRB24 - FRB24-1	F60
FRB25	F55
FRB25-1	F61
FRB25-2	F60
FRB25-3	F61
FRB25-4	F45
FRB25-5	F59
FRB25-6	F60
FRB25-7 - FRB25-8	F59
FRB27 - FRB28	F69
FRB30 - FRB31	F68
FRB31-1	F70
FRB31-2	F71
FRB31-3	F70
FRB31-4	F71
FRB31-5	F72
FRB31-6	F35
FRB31-7	F34
FRB31-8	F73

PART NO.	PAGE NO.
FRB33 - FRB40	F54
FRB400 - FRB401	F106
FRB40-1 - FRB40-2	F55
FRB402	F107
FRB403 - FRB404	F109
FRB405 - FRB406	F108
FRB407 - FRB408	F105
FRB41 - FRB44	F56
FRB410 - FRB413	F106
FRB416	F110
FRB418	F105
FRB420	F107
FRB424	F111
FRB426	F106
FRB431 - FRB432	F105
FRB436	F108
FRB438	F107
FRB440	F109
FRB442	F110
FRB448	F108
FRB45 - FRB48	F51
FRB460 - FRB468	F111
FRB470	F110
FRB49 - FRB52	F53
FRB53 - FRB56	F52
FRB57 - FRB59	F74
FRB60 - FRB62	F73
FRB63 - FRB66	F58
FRB66-1 - FRB66-2	F42
FRB66-5	F27
FRB67 - FRB69	F57
FRB72 - FRB72-3	F38
FRB73 - FRB73-2	F39
FRB74 - FRB74-6	F81
FRB76 - FRB76-2	F86
FRB76-3	F85

PART NO.	PAGE NO.
FRB76-4 - FRB76-5	F84
FRB76-7	F83
FRB76-9 - FRB77	F82
FRB77-1 - FRB77-4	F82
FRB77-5 - FRB77-8	F85
FRB77-9	F84
FRB78-1 - FRB78-3	F98
FRB78-4 - FRB78-6	F99
R1000 - R2008-6	F1
R1100 - R1310	F1
R2009-1 - R2033	F2
R2034 - R2043-7	F3
R2044 - R2056	F4
R2057-0 - R2101	F5
R2110 - R2113	F8
R2150 - R2160	F6
R2200S - R2203-1	F8
R2206 - R2207	F9
R2211 - R2223	F6
R2232 - R2254	F9
R2300 - R2314	F10
R2320A - R2326	F11
R2400 - R2416	F29
R2406-9	F28
R2420 - R2423	F28
R2430 - R2434	F82
R2436 - R2444	F83
R2450 - R2452	F11
R2455 - R2461	F27
R2500-1 - R2511-1	F80
R2514 - R2517	F80
R2519 - R2521	F79
R2525 - R2526	F77
R2530	F78
R2535	F78
R2541 - R2560	F24

ROUTER BITS - ALPHA-NUMERIC INDEX

PART NO.	PAGE NO.
R2550	F23
R2600 - R2620	F40
R2630 - R2631	F26
R2632	F27
R2700 - R2707	F18
R2710	F24
R2800-1 - R2810	F52
R2900 - R2908	F12
R2950 - R2951	F13
R2960 - R2961	F14
R2970 - R2972	F15
R3000-1 - R3013	F76
R3020-1 - R3029	F76
R3030 - R3036	F51
R3100-1 - R3114	F50
R3200 - R3203	F55
R3300 - R3307	F75
R3310 - R3313	F22
R3320 - R3325	F21
R3330-1 - R3332	F75
R3400-1 - R3409	F17
R3500 - R3504	F17
R3510 - R3512	F16
R3520 - R3521	F19
R3600 - R3611	F22
R3700-1 - R3703	F19
R3801 - R3805	F20
R3840 - R3844	F21
R3900 - R3904	F31
R4000A - R4007	F31
R4100 - R4106	F31
R4120-12 - R4152-14	F32
R4160	F34
R4162 - R4164	F33
R4165	F38
R4167 - R4169	F39

PART NO.	PAGE NO.
R5000 - R5003-1	F16
R5001 - R5002	F20
R5004	F25
R6001 - R6003	F26
R6005 - R6009	F25
RD2062 - RD2087	F7
RD2067L - RD2069L	F7
RD2203 - RD2204	F19
RD3300 - RD3302	F23
RD3400 - RD3408	F18
RM100 - RM122	F2
RM130 - RM156	F4
W01 - W04	F117
W103214	F116
WA1214 - WA3814	F117
WC01 - WC02	F117
WF501 - WF618	F117
WFS500 - WFS510	F116
WN1024	F116
WNC338 - WNC2732	F116
WNF516 - WNF1012	F116
WR12 - WR59	F116

ROUTER BITS - IMAGE INDEX

STRAIGHT BITS

PAGE F1



PAGES F2 - F3



PAGES F4 - F5



PAGES F6 - F7



PAGE F8



...Continued
STRAIGHT BITS

PAGE F9



MORTISING BITS

PAGES F10 - F11



RABBETING BITS

PAGE F12



PAGE F13



...Continued
RABBETING BITS

PAGE F14



PAGE F15



TRIMMING BITS

PAGES F16 - F17



PAGES F18 - F19



...Continued
TRIMMING BITS

PAGES F20 - F21



PAGES F22 - F23



GROOVING/ENGRAVING BITS

PAGES F24



ROUTER BITS - IMAGE INDEX

SPECIALITY VEINING/SLOTTING/GROOVING BITS

PAGE F25 | PAGES F26 - F27 | PAGE F28



ROUND NOSE BITS

PAGE F29



T-SLOTTING BITS

PAGES F30 - F31



SLOTTING CUTTERS

PAGES F32 - F33



FINGER JOINT CUTTERS

PAGE F34



TONGUE AND GROOVE BITS

PAGES F34 - F35



...Continued

TONGUE AND GROOVE BITS

PAGES F36 - F37



GLUE JOINT/LOCK MITRE BITS

PAGES F38 - F39



DOVETAIL BITS

PAGE F40



PROFILING BITS - PLUNGE TYPE

PAGE F41 | PAGES F42 - F43 | PAGE F44



...Continued
PROFILING BITS - PLUNGE TYPE

PAGE F45



PAGE F46



PROFILING BITS - BALL BEARING GUIDE

PAGE F47



PAGES F48 - F49



...Continued
PROFILING BALL BEARING BITS

PAGES F50 - F51



PAGES F52 - F53



PAGES F54 - F55



...Continued
PROFILING BALL BEARING BITS

PAGES F56 - F57



PAGE F58



VERTICAL RAISED PANEL BITS

PAGES F59 - F60



RAISED PANEL BITS

PAGES F60 - F61



PAGES F62 - F63



...Continued

RAISED PANEL BITS

PAGE F64



STILE AND RAIL BITS

PAGE F65



PAGE F66



PAGE F67



...Continued

STILE AND RAIL BITS

PAGE F67



PAGES F68 - F69



PAGE F70



...Continued

STILE AND RAIL BITS

PAGE F70



PAGE F71



WINDOW SASH BITS

PAGE F72



DOOR EDGE/FINGER GRIP BITS

PAGE F73



PAGE F74



BEVEL BITS

PAGE F75



ROUNDING OVER BITS

PAGES F76 - F77



ROUTER BITS - IMAGE INDEX

CHAMFERING/ROUNDING OVER BITS
PAGE F78



BULLNOSE BITS
PAGE F79



HALF ROUND BITS
PAGES F80 - F81



BEADING/FLUTING BITS
PAGE F82



...Continued
BEADING/FLUTING BITS
PAGE F83



PAGES F84 - F86



EDGE MOULDING BITS
PAGES F87



...Continued
EDGE MOULDING BITS
PAGES F88 - F89



PAGE F90



...Continued
EDGE MOULDING BITS
PAGE F91



PAGES F92 - F93



PAGE F94



...Continued
EDGE MOULDING BITS

PAGE F95



CROWN MOULDING BITS

PAGES F95 - F97



ARCHITECTURAL MOULDING BITS

PAGE F98



...Continued
ARCHITECTURAL MOULDING BITS

PAGE F99



HANDRAIL BITS

PAGE F101



PAGE F102



...Continued
HANDRAIL BITS

PAGE F103



SOLID SURFACE BITS

PAGE F105



PAGE F106



...Continued
SOLID SURFACE BITS

PAGE F107



PAGES F108 - F109



...Continued

SOLID SURFACE BITS

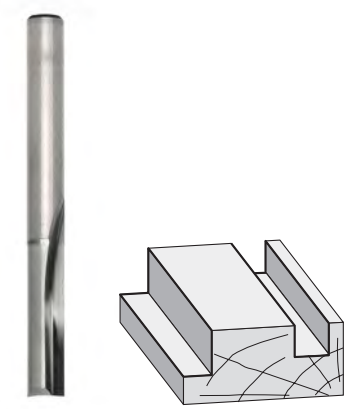
PAGE F110



PAGE F111

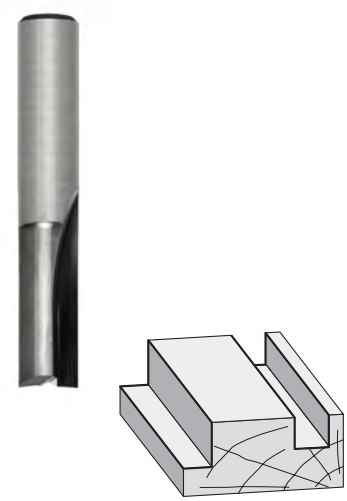


R1000 STRAIGHT ROUTER BITS, Z1
SOLID CARBIDE



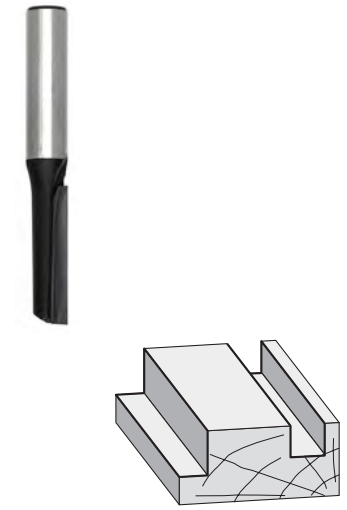
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R1000	1/8"	3/8"	1/4"	1"	1-1/2"	1
R1008	7/32"	3/4"	1/4"	1"	2"	1

R1100 STRAIGHT ROUTER BITS, Z2
SOLID CARBIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R1100	1/8"	3/8"	1/4"	1"	1-1/2"	2
R1104	5/32"	5/8"	1/4"	7/8"	1-1/2"	2
R1106	3/16"	5/8"	1/4"	1-1/4"	2"	2
R1108	7/32"	3/4"	1/4"	1-1/4"	2"	2
R1110	1/4"	3/4"	1/4"	1-1/4"	2"	2
R1112	1/4"	1"	1/4"	1-1/4"	2-1/2"	2
R1302	3/8"	1"	3/8"	1-3/4"	3"	2
R1304	1/4"	3/4"	1/2"	1-1/4"	3"	2
R1306	1/4"	1"	1/2"	2"	3"	2
R1308	5/16"	1"	1/2"	2"	3"	2
R1310	1/2"	1-1/4"	1/2"	1-1/2"	3"	2

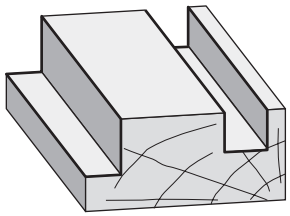
R2000 STRAIGHT ROUTER BITS, Z1
1/4" SHANK



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2000	1/8"	7/16"	1/4"	1-1/4"	2"	1
R2000-1	5/32"	7/16"	1/4"	1-5/16"	2"	1
R2001 •	3/16"	7/16"	1/4"	1-1/4"	2"	1
R2003	1/4"	1/2"	1/4"	1-5/16"	2"	1
R2004	1/4"	3/4"	1/4"	1-1/4"	2"	1
R2005 •	1/4"	1"	1/4"	1-1/4"	2-1/4"	1
R2006	9/32"	3/4"	1/4"	1"	2"	1
R2008	5/16"	1"	1/4"	1"	2-1/4"	1
R2008-1	3/8"	3/4"	1/4"	1"	1-15/16"	1
R2008-3	1/2"	3/4"	1/4"	1"	1-3/4"	1
R2008-4	1/2"	1"	1/4"	1"	2-1/8"	1
R2008-5	5/8"	3/4"	1/4"	1"	1-15/16"	1
R2008-6	3/4"	3/4"	1/4"	1"	1-3/4"	1

• Not guaranteed due to extreme length and/or fragility





METRIC SIZES - 1/4" SHANK

PART NO.	CUTTING DIAM.	CUTTING LENGTH	OVERALL LENGTH	NO. FLUTES
RM100	3mm	3/8"	2"	2
RM101	4mm	7/16"	2"	2
RM102	5mm	7/16"	2"	2
RM103	6mm	3/4"	2"	2
RM104	7mm	3/4"	2"	2
RM105	8mm	3/4"	2"	2
RM106	8mm	1"	2-1/4"	2
RM107	9mm	3/4"	2"	2
RM108	10mm	3/4"	2"	2
RM109	11mm	3/4"	2"	2
RM110	12mm	3/4"	2"	2
RM112	14mm	3/4"	2"	2
RM113	15mm	3/4"	2"	2
RM114	16mm	3/4"	2"	2
RM115	16mm	1-1/4"	2-1/4"	2
RM116	17mm	3/4"	2"	2
RM117	18mm	3/4"	2"	2
RM118	19mm	3/4"	2"	2
RM119	20mm	3/4"	2"	2
RM121	22mm	3/4"	2"	2
RM122	25mm	3/4"	2"	2

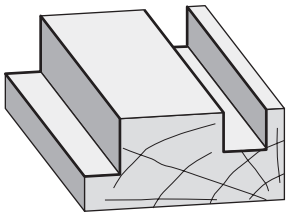
INCH SIZES - 1/4" SHANK

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2009-1 •	1/16"	3/16"	1-3/8"	1-5/8"	2
R2009-2	3/32"	1/4"	1-5/8"	1-7/8"	2
R2010	1/8"	7/16"	1-1/4"	2"	2
R2010-1	5/32"	7/16"	1-5/16"	2"	2
R2011	3/16"	7/16"	1-1/4"	2"	2
R2011-1	3/16"	5/8"	1-1/8"	2-1/8"	2
R2011-2	7/32"	3/4"	1-1/8"	1-7/8"	2
R2012	1/4"	1/2"	1-1/4"	2"	2
R2013	1/4"	3/4"	1-1/4"	2"	2
R2014 •	1/4"	1"	1-1/4"	2-1/4"	2
R2017	9/32"	3/4"	1-1/4"	2"	2
R2017-1	9/32"	1"	1-1/8"	2-1/4"	2
R2018	5/16"	3/4"	1-1/8"	2"	2
R2019	5/16"	1"	1-1/4"	2-1/4"	2
R2021	3/8"	3/4"	1-1/4"	2"	2
R2022	3/8"	1"	1-1/4"	2-1/4"	2
R2023	3/8"	1-1/4"	1-1/4"	2-1/2"	2
R2024	7/16"	1"	1-1/8"	2-1/4"	2
R2025	1/2"	3/4"	1-1/4"	2"	2
R2026	1/2"	1"	1"	2-1/4"	2
R2026-1	1/2"	1-1/4"	1-1/8"	2-1/2"	2
R2027	9/16"	3/4"	1-1/4"	2-1/8"	2
R2028	5/8"	3/4"	1-1/4"	2"	2
R2028-1	5/8"	1"	1-1/8"	2-1/4"	2
R2029	11/16"	3/4"	1-1/4"	2"	2
R2029-1	11/16"	1"	1-1/8"	2-1/4"	2
R2030	3/4"	3/4"	1"	2"	2
R2030-1	3/4"	1"	1-1/8"	2-1/4"	2
R2031	13/16"	3/4"	1-1/4"	2"	2
R2032	7/8"	3/4"	1-1/4"	2"	2
R2033	1"	3/4"	1-1/4"	2"	2

• Not guaranteed due to extreme length and/or fragility

R2034 STRAIGHT ROUTER BITS, Z1
3/8" SHANK



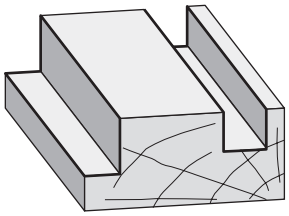


3/8" SHANK

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2034	1/4"	3/4"	3/8"	1-1/4"	2-1/4"	1
R2034-1	3/8"	1"	3/8"	1-1/4"	2-11/16"	1
R2034-2	3/8"	1-1/4"	3/8"	1-1/4"	2-5/8"	1

R2035 STRAIGHT ROUTER BITS
3/8" SHANK

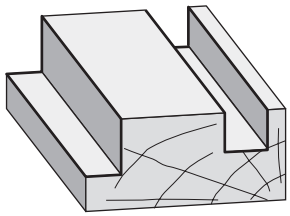




PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2035	1/8"	7/16"	3/8"	1-1/4"	2"	2
R2035-1	5/32"	7/16"	3/8"	1-1/4"	2"	2
R2037	1/4"	3/4"	3/8"	1-3/8"	2-1/4"	2
R2038	5/16"	1"	3/8"	1-3/8"	2-1/2"	2
R2038-1	3/8"	3/4"	3/8"	1-1/2"	2-1/4"	2
R2039	3/8"	1"	3/8"	1-3/8"	2-1/2"	2
R2040	3/8"	1-1/4"	3/8"	1-3/8"	2-3/4"	2
R2042	7/16"	1"	3/8"	1-1/4"	2-1/2"	2
R2043	1/2"	1"	3/8"	1-1/4"	2-1/2"	2
R2043-1	1/2"	1-1/4"	3/8"	1-1/4"	2-1/2"	2
R2043-3	5/8"	3/4"	3/8"	1-1/4"	2-1/4"	2
R2043-5	13/16"	3/4"	3/8"	1-1/4"	2-1/4"	2
R2043-6	7/8"	3/4"	3/8"	1-1/4"	2-1/4"	2
R2043-7	1"	3/4"	3/8"	1-1/4"	2-1/4"	2

R2044 STRAIGHT ROUTER BITS, Z1
INCH SIZES, 1/2" SHANK



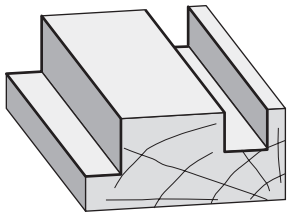


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2044 •	1/4"	3/4"	1/2"	1-3/8"	2-1/2"	1
R2045 •	1/4"	1"	1/2"	1-1/4"	2-1/2"	1
R2047	5/16"	1"	1/2"	1-1/2"	2-3/4"	1
R2049	3/8"	1"	1/2"	1-3/8"	2-1/2"	1
R2050 •	3/8"	1-1/4"	1/2"	1-3/8"	2-3/4"	1
R2051	1/2"	1"	1/2"	1-1/4"	2-1/2"	1
R2052	1/2"	1-1/4"	1/2"	1-3/8"	2-7/8"	1
R2054	1/2"	1-1/2"	1/2"	1-3/8"	3-1/8"	1
R2055	1/2"	2"	1/2"	1-7/8"	4-1/4"	1
R2056	9/16"	1-1/4"	1/2"	1-1/4"	2-7/8"	1

• Not guaranteed due to extreme length and/or fragility

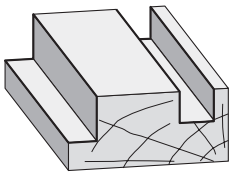
RM130 STRAIGHT ROUTER BITS
METRIC SIZES, 1/2" SHANK





PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RM130	6mm	3/4"	1/2"	2-1/2"	2
RM131	8mm	1"	1/2"	2-3/4"	2
RM132	10mm	1"	1/2"	2-1/2"	2
RM133	10mm	1-1/4"	1/2"	3"	2
RM134	12mm	1"	1/2"	2-5/8"	2
RM135	12mm	1-1/4"	1/2"	2-7/8"	2
RM136	12mm	1-1/2"	1/2"	3"	2
RM137	12mm	2"	1/2"	4-1/4"	2
RM138	14mm	1"	1/2"	2-5/8"	2
RM140	16mm	1"	1/2"	2-5/8"	2
RM141	16mm	1-1/4"	1/2"	2-7/8"	2
RM142	16mm	1-1/2"	1/2"	3-1/8"	2
RM143	18mm	1-1/4"	1/2"	2-7/8"	2
RM144	19mm	1"	1/2"	2-5/8"	2
RM145	19mm	1-1/4"	1/2"	2-7/8"	2
RM146	19mm	1-1/2"	1/2"	3-1/8""	2
RM147	20mm	1"	1/2"	2-5/8"	2
RM148	20mm	1-1/4"	1/2"	2-7/8"	2
RM149	22mm	1"	1/2"	2-5/8"	2
RM150	25mm	1-1/4"	1/2"	2-7/8"	2
RM152	27mm	1-1/4"	1/2"	2-7/8"	2
RM153	30mm	1"	1/2"	2-5/8"	2
RM155	40mm	1-1/4"	1/2"	2-7/8"	2
RM156	51mm	1-1/4"	1/2"	2-7/8"	2



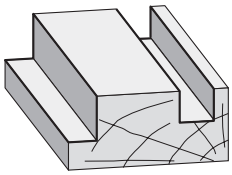


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2057-0	15/64"	3/4"	1/2"	1-3/8"	2-1/2"	2
R2057-1 •	1/4"	1/2"	1/2"	1-3/8"	2"	2
R2058 •	1/4"	3/4"	1/2"	1-3/8"	2-1/2"	2
R2058-1 •	1/4"	1"	1/2"	1-3/8"	2-3/4"	2
R2059	5/16"	3/4"	1/2"	1-3/8"	2-1/2"	2
R2060 •	5/16"	1"	1/2"	1-3/8"	2-3/4"	2
R2061	3/8"	3/4"	1/2"	1-3/8"	2-1/2"	2
R2062	3/8"	1"	1/2"	1-3/8"	2-3/4"	2
R2063 •	3/8"	1-1/4"	1/2"	1-3/8"	3"	2
R2063A	13/32"	1"	1/2"	1-3/8"	2-3/4"	2
R2064	7/16"	1"	1/2"	1-1/4"	2-5/8"	2
R2065	7/16"	1-1/4"	1/2"	1-3/8"	3"	2
R2065-1	31/64"	1"	1/2"	1-3/8"	2-5/8"	2
R2066	1/2"	1"	1/2"	1-3/8"	2-5/8"	2
R2067	1/2"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2069	1/2"	1-1/2"	1/2"	1-3/8"	3"	2
R2070	1/2"	1-1/2"	1/2"	2-1/2"	4-1/4"	2
R2071 •	1/2"	2"	1/2"	1-7/8"	4-1/4"	2
R2072 •	1/2"	2-1/2"	1/2"	1-7/8"	4-1/2"	2
R2074	17/32"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2075	9/16"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2076	5/8"	1"	1/2"	1-3/8"	2-5/8"	2
R2077	5/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2078	5/8"	1-1/2"	1/2"	1-3/8"	3"	2
R2079	5/8"	2"	1/2"	1-1/4"	3-5/8"	2
R2081	21/32"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2083	11/16"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2083-1	23/32"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2084	3/4"	1"	1/2"	1-3/8"	2-5/8"	2
R2085	3/4"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2086	3/4"	1-1/2"	1/2"	1-3/8"	3"	2
R2087	3/4"	2"	1/2"	1-3/8"	3-5/8"	2
R2088	25/32"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2090	13/16"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2090-1	7/8"	1"	1/2"	1-3/8"	2-5/8"	2
R2091	7/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2092-1	1"	1"	1/2"	1-3/8"	3"	2
R2093	1"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2093-1	1"	1-1/2"	1/2"	1-1/4"	3"	2
R2093-2	1"	2"	1/2"	1-3/8"	3-5/8"	2
R2094	1-1/16"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2096	1-1/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2097	1-1/4"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2098	1-3/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2099	1-1/2"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2099-1	1-5/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2100	1-3/4"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2100-1	1-7/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2101	2"	1-1/4"	1/2"	1-3/8"	2-7/8"	2

• Not guaranteed due to extreme length and/or fragility

R2210 LEFT-HAND ROUTER BITS
1/2" SHANK

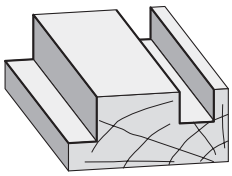




PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2211	5/16"	1"	1/2"	1-3/8"	2-3/4"	2
R2212	3/8"	1"	1/2"	1-3/8"	2-3/4"	2
R2214	1/2"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2215	1/2"	1-1/2"	1/2"	1-3/8"	3"	2
R2216	1/2"	2"	1/2"	1-7/8"	4-1/4"	2
R2218	5/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2219	3/4"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2220	3/4"	2"	1/2"	1-3/8"	3-5/8"	2
R2221	13/16"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2222	7/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2223	1"	1-1/4"	1/2"	1-3/8"	2-7/8"	2

R2150 STRAIGHT ROUTER BITS
3/4" SHANK

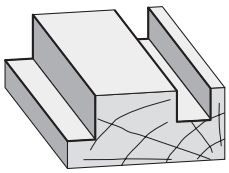




PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2150	3/4"	1-1/4"	3/4"	1-1/2"	3"	2
R2151	3/4"	1-1/2"	3/4"	1-1/2"	3-1/4"	2
R2152	3/4"	2"	3/4"	1-3/4"	4"	2
R2153	3/4"	2-1/2"	3/4"	2"	4-1/2"	2
R2158	1"	1-1/2"	3/4"	1-1/2"	3-1/4"	2
R2160	1"	2"	3/4"	2"	4-1/4"	2

D1E STRAIGHT INSERT ROUTER BITS
WITH TWO WINGS





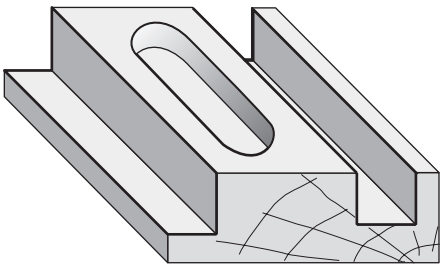
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. WINGS
D1E	19mm	12mm	6mm	45mm	2
D1EA	19mm	12mm	1/4"	1-3/4"	2

REPLACEMENT PARTS

INSERT	INSERT SCREW
301200	D1V

RD2062 STRAIGHT INSERT ROUTER BITS, Z1
WITH REVERSIBLE KNIVES





PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. WINGS
RD2062	3/8"	1"	1/2"	3-1/8"	1
RD2066	1/2"	1"	1/2"	3-3/8"	1
RD2067	1/2"	1-1/4"	1/2"	3-1/2"	1
RD2067S ▲	1/2"	1-1/4"	1/2"	3-1/2"	1
RD2068 •	1/2"	1-1/4"	1/2"	3-1/2"	1
RD2069	1/2"	1-1/2"	1/2"	4"	1
RD2069S ▲	1/2"	1-1/2"	1/2"	4"	1
RD2070 •	1/2"	1-1/2"	1/2"	4"	1
RD2071	1/2"	2"	1/2"	4-1/8"	1
RD2077	5/8"	1-1/4"	1/2"	3-1/2"	1
RD2080 •	5/8"	2"	5/8"	4-3/8"	1
RD2084	3/4"	1"	1/2"	3-3/8"	1
RD2086 •	3/4"	1-1/2"	3/4"	4"	1
RD2087 •	3/4"	2"	3/4"	4-3/8"	1

• With carbide plunge point

▲ Standard type without reinforcing ring

LEFT-HAND ROTATION

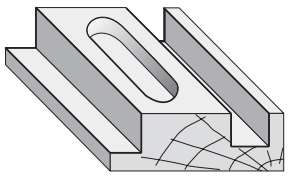
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. WINGS
RD2067L	1/2"	1-1/4"	1/2"	3-1/2"	1
RD2069L	1/2"	1-1/2"	1/2"	4"	1

REPLACEMENT PARTS

TOOL NO.	KNIFE	WEDGE	SET SCREW	WRENCH	LOOSENING JIG
RD2062	303511M	W2062	WM303	WT015	W0001
RD2066	303011M	W2066	WM303	WT015	W0001
RD2067	303511M	W2062	WM303	WT015	W0001
RD2067L	303511M	W2062L	WM303	WT015	W0001
RD2068	303511M	W2068	WM303	WT015	W0001
RD2069	304511M	W2069	WM303	WT015	W0001
RD2069L	304511M	W2069L	WM303	WT015	W0001
RD2070	304511M	W2070	WM303	WT015	W0001
RD2071	306011M	W2071	WM303	WT015	W0001
RD2077	303511M	W2077	WM306	WT025	-
RD2080	306011M	W2087	WM308	WT025	-
RD2084	303011M	W2084	WM308	WT025	-
RD2086	304511M	W2086	WM308	WT025	-
RD2087	306011M	W2087	WM308	WT025	-

R2110 DOWNSHEAR ROUTER BITS
1/2" SHANK

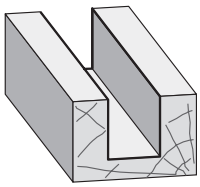




PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2110	3/8"	1"	1/2"	1-1/2"	2-3/4"	2
R2111	1/2"	1-1/4"	1/2"	1-1/4"	2-7/8"	2
R2112	1/2"	1-1/2"	1/2"	1-3/8"	3-1/8"	2
R2113	1/2"	2"	1/2"	2"	4-1/4"	2

R2200 STAGGER TOOTH STRAIGHT ROUTER BITS, Z1+1
WITH NO SHEAR

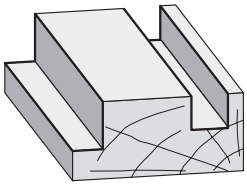




PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2200S	1/4"	1"	1/4"	1-1/2"	2-1/4"	1+1
R2200	3/8"	1-3/8"	3/8"	1-1/4"	3"	1+1
R2201	3/8"	1-1/2"	1/2"	1-3/8"	3-1/8"	1+1
R2202	1/2"	1-1/2"	1/2"	1-3/8"	3-1/8"	1+1
R2203	1/2"	2"	1/2"	1-5/8"	4-1/4"	1+1
R2203-1	1/2"	2-1/8"	1/2"	1-5/8"	4-1/4"	1+1

D1A STAGGERED TOOTH INSERT ROUTER BITS, Z1+1
WITH PLUNGE POINT





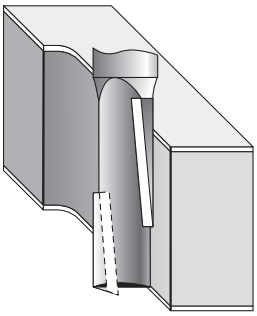
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. OF WINGS
D1A15A	15mm	20mm	1/4"	30mm	2"	1+1
D1A16A	16mm	20mm	1/4"	30mm	2"	1+1
D1A18A	18mm	20mm	1/4"	30mm	2"	1+1
D1A20A	20mm	20mm	1/4"	30mm	2"	1+1
D1A22A	22mm	20mm	1/4"	30mm	2"	1+1

REPLACEMENT PARTS

INSERT	INSERT SCREW
301200	D1V

R2206 STAGGER TOOTH STRAIGHT ROUTER BITS, Z1+1
WITH COMPRESSION SHEAR

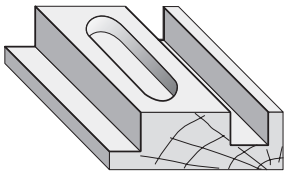




PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2206	1/2"	1-1/2"	1/2"	1-5/8"	3-1/8"	1+1
R2207	1/2"	2"	1/2"	2"	4-1/4"	1+1

R2232 PLUNGE POINT ROUTER BITS
WITH TWO FLUTES





1/4" SHANK

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2232	3/8"	1"	1/4"	1-1/8"	2-1/4"	2
R2233	1/2"	3/4"	1/4"	1-1/8"	2"	2
R2234	1/2"	1"	1/4"	1-1/8"	2-1/8"	2
R2235	5/8"	3/4"	1/4"	1-3/8"	2-1/8"	2
R2236	7/8"	3/4"	1/4"	1-1/8"	2"	2

All above bits supplied with bottom carbide for plunging operations

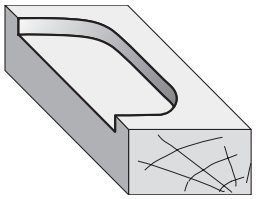
1/2" SHANK

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2240	5/16"	3/4"	1/2"	1-3/8"	2-1/2"	2
R2241	3/8"	1-1/4"	1/2"	1-1/2"	3"	2
R2243	1/2"	1"	1/2"	1-3/8"	2-5/8"	2
R2244	1/2"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2245	1/2"	1-1/2"	1/2"	1-3/8"	3-1/8"	2
R2246	1/2"	2"	1/2"	1-7/8"	4-1/4"	2
R2247	5/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2248	5/8"	2"	1/2"	1-7/8"	3-3/4"	2
R2249	3/4"	1"	1/2"	1-3/8"	2-5/8"	2
R2250	7/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2251	1"	1"	1/2"	1-3/8"	2-5/8"	2
R2252	1-5/8"	1"	1/2"	1-3/8"	2-5/8"	2
R2253	1-3/4"	1-1/4"	1/2"	1-3/8"	2-7/8"	2
R2254	1-7/8"	1-1/4"	1/2"	1-3/8"	2-7/8"	2

All above bits supplied with bottom carbide for plunging operations

R2300 MORTISING ROUTER BITS
BOTTOM CUTTING

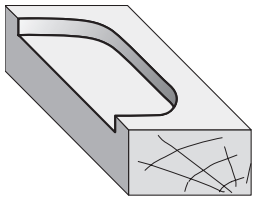




PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
R2300	1/2"	3/4"	1/4"	1-1/4"	2"	2
R2301	5/8"	3/4"	1/4"	1-1/4"	2"	2
R2302	3/4"	3/4"	1/4"	1-1/4"	2"	2
R2303	1"	3/4"	1/4"	1-1/8"	2"	2
R2304	1-1/4"	1/2"	1/4"	1-1/4"	1-3/4"	2
R2305	1-1/4"	1-1/4"	1/2"	1-1/4"	2-7/8"	2

R2310 MORTISING CUTTERS ONLY
SCREW TYPE





PART NO.	CUTTING DIAM.	TYPE OF THREAD	CUTTING LENGTH	NO. FLUTES
R2310	3/4"	1/4-28	1/2"	2
R2311	7/8"	1/4-28	1/2"	2
R2312	1"	1/4-28	1/2"	2
R2313	1-1/8"	1/4-28	9/16"	2
R2314	1-1/4"	1/4-28	5/8"	2

AR12MB THREADED ARBOR
FOR MORTISING BITS

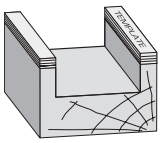


PART NO.	SHANK DIAM.	TYPE OF THREAD	OVERALL LENGTH
AR12MB	1/2"	1/4-28	2-3/8"
AR14MB	1/4"	1/4-28	1-3/4"

Fits R2310 to R2314 mortising bits (screw type)

R2450 BOTTOM CLEANING ROUTER BITS
WITH UPPER BALL BEARING





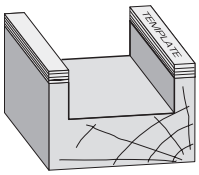
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2450	3/4"	7/16"	1/4"	2-3/16"	2
R2451	1"	7/16"	1/2"	2-17/32"	2
R2452	1-1/2"	5/8"	1/2"	2-3/4"	2

REPLACEMENT PARTS

TOOL NO.	BALL BEARING	LOCK RING	SCREW
R2450	B4	W01	WNC525
R2451	B6-1B	W04	WNC518
R2452	B10	W03	WNC518

R2320 STRAIGHT PLUNGE ROUTER BITS
WITH UPPER BALL BEARING GUIDE





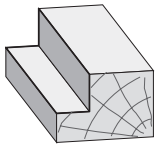
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2320A	1/2"	1/4"	1/4"	1-5/8"	2
R2320	1/2"	1"	1/4"	2-1/2"	2
R2320-1	1/2"	1-1/4"	1/4"	2-3/4"	2
R2320-2	1/2"	1/2"	1/4"	2"	2
R2321	5/8"	1"	1/4"	2-1/2"	2
R2322	3/4"	1"	1/4"	2-1/2"	2
R2322-1	3/4"	1"	1/2"	3"	2
R2322-2	3/4"	2"	1/2"	3-5/8"	2
R2323	1"	1"	3/8"	2-3/4"	2
R2324	1"	1-3/4"	1/2"	3-3/4"	2
R2325	1-1/8"	1-1/2"	1/2"	3-5/8"	2
R2326	1-1/4"	1-3/4"	1/2"	3-15/16"	2

REPLACEMENT PARTS

TOOL NO.	BALL BEARING	LOCK RING	SCREW
R2320A	B3-1	W01	WNC525
R2320	B3-1	W01	WNC525
R2320-1	B3-1	W01	WNC525
R2320-2	B3-1	W01	WNC525
R2321	B3-3	W01	WNC525
R2322	B4	W01	WNC525
R2322-1	B4-1A	W04	WNC518
R2322-2	B4-1A	W04	WNC518
R2323	B6-1	W02	WNC525
R2324	B6-1B	W04	WNC518
R2325	B6-4	W03	WNC518
R2326	B6-5	W03	WNC518

R2900 RABBETING ROUTER BITS
WITH 1/2" DIAMETER BALL BEARING GUIDE





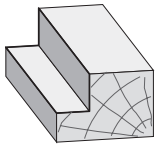
PART NO.	LARGE DIAM.	RABBET DEPTH	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2900	1-1/4"	3/8"	1/2"	1/4"	2"	2
R2901	1-1/4"	3/8"	1/2"	1/2"	2-3/8"	2
R2902	1-3/8"	7/16"	1/2"	1/4"	2"	2
R2903	1-3/8"	7/16"	1/2"	1/2"	2-3/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

R2905 RABBETING ROUTER BITS
WITH 3/8" DIAMETER BALL BEARING GUIDE





PART NO.	LARGE DIAM.	RABBET DEPTH	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2905	1-1/4"	7/16"	1/2"	1/4"	2"	2
R2906	1-1/4"	7/16"	1/2"	1/2"	2-3/8"	2
R2907	1-3/8"	1/2"	1/2"	1/4"	2"	2
R2908	1-3/8"	1/2"	1/2"	1/2"	2-3/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B2	WFS500	WFS506	WNC538



COMPLETE SET

PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2950	1-3/8"	1/2"	1/4"	2"	2
R2951	1-3/8"	1/2"	1/2"	2-3/8"	2

TYPICAL ASSEMBLY

RABBET DEPTH	PART NO.	DESCRIPTION
1/2"	**WFS500**	Flat Washer 5/16" - 3/16"
	B2	Ball Bearing 3/8" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
7/16"	**WR58**	Raised Washer 1/2" - 3/16"
	B3	Ball Bearing 1/2" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
3/8"	**WR59**	Raised Washer 16mm - 5mm
	B3-2	Ball Bearing 5/8" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
5/16"	**WR59**	Raised Washer 16mm - 5mm
	B3-5	Ball Bearing 3/4" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"

R2960 7 RABBETING DEPTH ROUTER BIT SETS
WITH BALL BEARING GUIDES



COMPLETE SET

PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2960	1-3/8"	1/2"	1/4"	2"	2
R2961	1-3/8"	1/2"	1/2"	2-3/8"	2

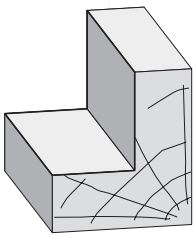
TYPICAL ASSEMBLY

RABBET DEPTH	PART NO.	DESCRIPTION
1/2"	WFS500	Flat Washer 5/16" - 3/16"
	B2	Ball Bearing 3/8" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
7/16"	WR58	Raised Washer 1/2" - 3/16"
	B3	Ball Bearing 1/2" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
3/8"	WR59	Raised Washer 16mm - 5mm
	B3-2	Ball Bearing 5/8" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
5/16"	WR59	Raised Washer 16mm - 5mm
	B3-5	Ball Bearing 3/4" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
1/4"	WR59	Raised Washer 16mm - 5mm
	B6	Ball Bearing 7/8" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
1/8"	WR59	Raised Washer 16mm - 5mm
	B6-2	Ball Bearing 1-1/8" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"
FLUSH	WR59	Raised Washer 16mm - 5mm
	B8	Ball Bearing 1-3/8" - 3/16"
	WFS506	Spring Washer 1/4" - 1/8"
	WNC512	Screw NC5 - 1/2"

R2970 MULTI-RABBETING ROUTER BIT SETS
WITH BALL BEARING GUIDE AND COLLARS

PART NO.	NO. PIECES	RABBET DEPTHS	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2970	6	1/8" 1/4" 3/8" 1/2" 5/8" 3/4"	2"	7/8"	1/2"	3-5/64"	2
R2971	12	1/16" 1/8" 3/16" 1/4" 5/16" 3/8" 7/16" 1/2" 9/16" 5/8" 11/16" 3/4"	2"	7/8"	1/2"	3-5/64"	2
R2972	17	1/16" 1/8" 3/16" 15/64" 1/4" 5/16" 23/64" 3/8" 7/16" 15/32" 1/2" 9/16" 19/32" 5/8" 11/16" 23/32" 3/4"	2"	7/8"	1/2"	3-5/64"	2





MULTI-RABBETING ROUTER BIT SET

This set produces rabbet cuts from 1/16" through 3/4" in 1/16" increments, plus five rabbet depths for undersized panels in 1/64" and 1/32" increments.

REPLACEMENT PARTS

PART NO.	DESCRIPTION
R2973	Rabbeting bit with two 1/2" bearings
B3-1	Ball Bearing
WFS506	Spring Washer
WRS220	Spacer 2.2mm
WNC512	Screw

REPLACEMENT PARTS

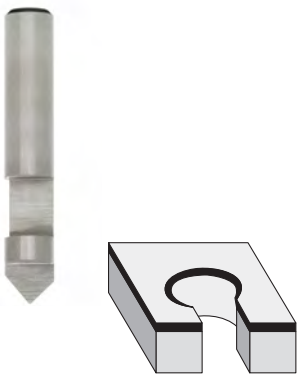
PART NO.	DESCRIPTION	DEPTH OF RABBET
WRC476	Collar 47.6mm Diam.	1/16"
WRC444	Collar 44.4mm Diam.	1/8"
WRC413	Collar 41.3mm Diam.	3/16"
WRC399	Collar 39.9mm Diam.	15/64"
WRC381	Collar 38.1mm Diam.	1/4"
WRC349	Collar 34.9mm Diam.	5/16"
WRC325	Collar 32.5mm Diam.	23/64"
WRC317	Collar 31.7mm Diam.	3/8"
WRC286	Collar 28.6mm Diam.	7/16"
WRC270	Collar 27.0mm Diam.	15/32"
WRC254	Collar 25.4mm Diam.	1/2"
WRC222	Collar 22.2mm Diam.	9/16"
WRC206	Collar 20.6mm Diam.	19/32"
WRC190	Collar 19.0mm Diam.	5/8"
WRC159	Collar 15.9mm Diam.	11/16"
WRC143	Collar 14.3mm Diam.	23/32"
B3-1	Bearing 1/2" Diam.	3/4"

R5000 FLUSH TRIM BITS
SOLID CARBIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	TYPE OF CUT	NO. FLUTES
R5000	1/4"	3/8"	1/4"	1-1/2"	Flush	1
R5000-1	1/4"	1/4"	1/4"	1-1/2"	Flush	1

R5003 FLUSH TRIM WITH PLUNGE POINT BITS
SOLID CARBIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R5003	1/4"	1/4"	1/4"	1-1/2"	1
R5003-1	1/4"	3/8"	1/4"	1-1/2"	1

R3510 FLUSH TRIM BITS
WITH DOUBLE BALL BEARING GUIDE

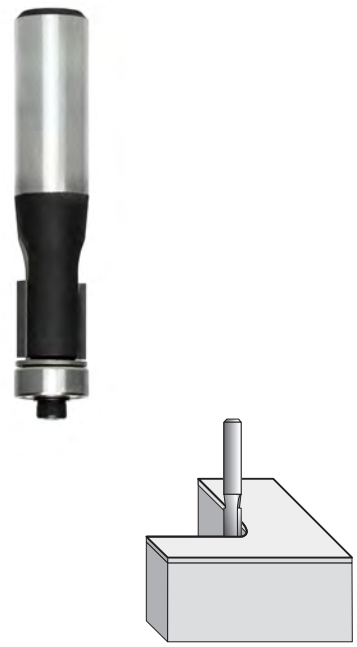


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3510	1/2"	1-1/2"	1/2"	4-1/16"	2
R3511	1/2"	2"	1/2"	4-1/2"	2
R3512	1/2"	1-1/2"	1/2"	4-1/16"	3

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	NYLON LOCK NUT
B3	WR58	WFS508	WN1024

R3400 FLUSH TRIM BITS
WITH BALL BEARING GUIDE



TWO FLUTES

PART NO.	TOOL TYPE	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3400-1	E	1/4"	1/2"	1/4"	2"	2
R3400-2	E	1/4"	1"	1/4"	2-1/2"	2
R3400	A	3/8"	1"	1/4"	2-5/8"	2
R3401	A	3/8"	1/2"	1/4"	2-1/4"	2
R3402	B	1/2"	1"	1/4"	2-5/8"	2
R3403	B	1/2"	1/2"	1/4"	2-1/4"	2
R3403-1	C	5/8"	5/8"	1/4"	2-1/4"	2
R3404	B	1/2"	1"	3/8"	2-3/4"	2
R3404-1	B	1/2"	1/2"	1/2"	2-1/2"	2
R3405	B	1/2"	1"	1/2"	3-1/4"	2
R3407	B	1/2"	1-1/2"	1/2"	3-7/8"	2
R3408	B	1/2"	2"	1/2"	4-1/4"	2
R3409	F	3/4"	1"	1/2"	3"	2

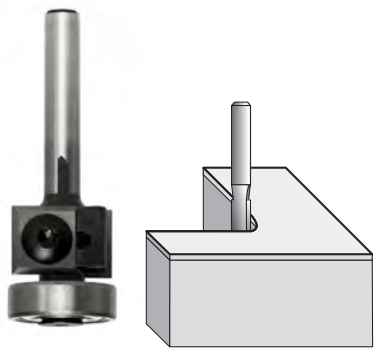
REPLACEMENT PARTS

TOOL TYPE	BALL BEARING
A	B2
B	B3
C	B3-4
D	B4-1
E	B01
F	B4

THREE FLUTES

PART NO.	TOOL TYPE	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3500	B	1/2"	1"	1/4"	2-5/8"	3
R3501	B	1/2"	1/2"	1/4"	2-1/4"	3
R3502	B	1/2"	1"	1/2"	3-1/4"	3
R3503	B	1/2"	1/2"	1/2"	2-3/4"	3
R3504	B	1/2"	1-1/2"	1/2"	3-7/8"	3

D1C FLUSH TRIM INSERT ROUTER BITS
WITH BALL BEARING GUIDE

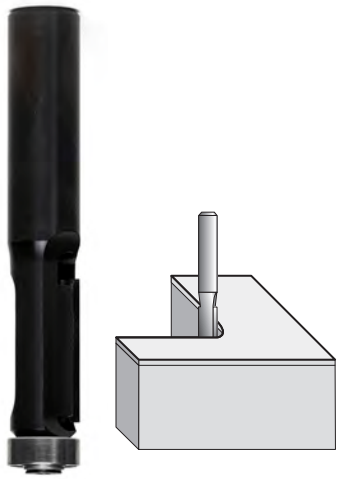


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. WINGS
D1C	19mm	12mm	6mm	55mm	1+1
D1CA	19mm	12mm	1/4"	2-3/16"	1+1

REPLACEMENT PARTS

INSERT	INSERT SCREW	BALL BEARING	SCREW FOR BEARING
301200	D1V	B3-6	D1V5

RD3400 FLUSH TRIM INSERT ROUTER BITS
WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. WINGS
RD3400	3/8"	1"	1/4"	2-5/8"	1
RD3401	3/8"	1/2"	1/4"	2-1/8"	1
RD3402	1/2"	1"	1/4"	2-5/8"	1
RD3403	1/2"	1-1/2"	1/4"	2-1/8"	1
RD3405	1/2"	1"	1/2"	2-3/4"	1
RD3407	1/2"	1-1/2"	1/2"	3-5/8"	1
RD3408	1/2"	1"	1/2"	4-1/4"	1

REPLACEMENT PARTS

TOOL NO.	KNIFE	WEDGE	BALL BEARING	SNAP RING	SET SCREW	WRENCH	LOOSENING JIG
RD3400	302511M	W3400	BD2	WC050	WM303	WT015	-
RD3401	301211M	W3401	BD2	WC050	WM303	WT015	W0001
RD3402	302511M	W3400	BD3	WC060	WM303	WT015	W0001
RD3403	304011M	W3403	BD3	WC060	WM303	WT015	W0001
RD3405	302511M	W3400	BD3	WC060	WM303	WT015	W0001
RD3407	304011M	W3403	BD3	WC060	WM303	WT015	W0001
RD3408	305011M	W3408	BD3	WC060	WM303	WT015	W0001

R2700 PANEL PILOT AND TRIM BITS
WITH PLUNGE POINT



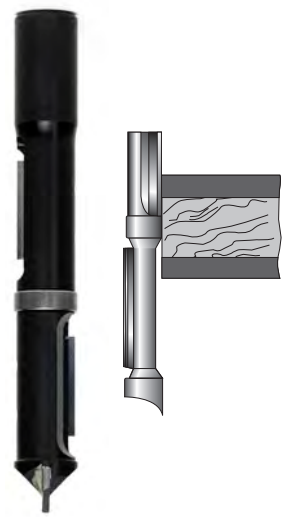
ONE FLUTE

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2700	1/4"	3/4"	1/4"	2-1/2"	1
R2701	3/8"	1"	3/8"	3"	1
R2702	1/2"	1-3/16"	1/2"	3-1/2"	1
R2703	1/2"	2"	1/2"	4-1/2"	1

TWO FLUTES

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2704	3/8"	1"	1/4"	3"	2
R2705	3/8"	1"	3/8"	3"	2
R2706	1/2"	1-1/4"	1/2"	3-3/4"	2
R2707	1/2"	2"	1/2"	4-1/2"	2

RD2203 STAGGERED TOOTH INSERT FLUSH TRIM BITS
WITH CENTER BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. WINGS
RD2203	1/2"	3/4"+3/4"	1/2"	3-7/8"	1+1
RD2204 •	1/2"	3/4"+3/4"	1/2"	3-7/8"	1+1

• With carbide plunge point

REPLACEMENT PARTS

TOOL NO.	KNIFE	UPPER WEDGE	LOWER WEDGE	BALL BEARING	SET SCREW	WRENCH	LOOSENING JIG
RD2203	302011M	W2200	W2203	BD4	WM303	WT015	W0001
RD2204	302011M	W2200	W2204	BD4	WM303	WT015	W0001

R3520 FLUSH TRIM "V" GROOVE BITS
WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3520	5/8"	1"	1/4"	2-1/2"	2
R3521	5/8"	1"	1/2"	3-1/4"	2

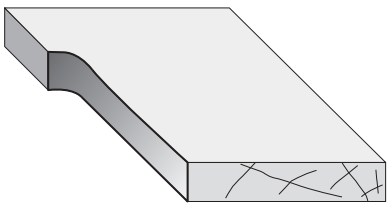
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

R3700 HELIX LAMINATE TRIM BITS
WITH BALL BEARING GUIDE



PART NO.	TOOL TYPE	CUTTING DIAM.	TYPE OF CUT	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3700-1	A	5/8"	Flush	5/8"	1/4"	2-3/16"	2
R3700	B	3/4"	Flush	5/8"	1/4"	2-3/8"	2
R3700-2	B	3/4"	Flush	1"	1/4"	2-7/8"	2
R3701	B	3/4"	Flush	5/8"	1/2"	2-1/2"	2
R3703	B	3/4"	15°	3/8"	1/2"	2-1/4"	2

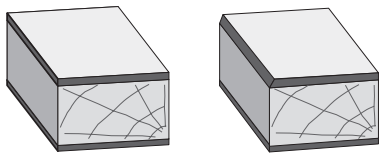


REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SCREW
A	B3-3	-	W103214
B	B4	WFS500	WNF1012

R5002 FLUSH AND BEVEL COMBINATION TRIM BIT
SOLID CARBIDE

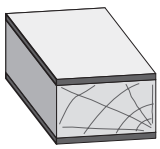




PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	DEGREE OF BEVEL	NO. FLUTES
R5002	1/4"	3/8"	1/4"	1-1/2"	7°	1

R3800 FLUSH AND BEVEL COMBINATION TRIM BIT
1/4" SHANK

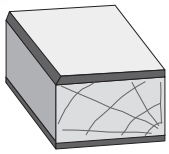




PART NO.	CUTTING DIAM.	CARBIDE LENGTH	DEGREE BEVEL	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3801	3/8"	1/2"	23°	1/4"	1-5/8"	2
R3802	1/2"	1/2"	23°	1/4"	1-5/8"	2
R3803	1/2"	1/2"	30°	1/4"	1-5/8"	2
R3804	1/2"	1/2"	35°	1/4"	1-5/8"	2
R3805	1/2"	1/2"	45°	1/4"	1-5/8"	2

R5001 BEVEL TRIM BIT
SOLID CARBIDE





PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	DEGREE OF BEVEL	NO. FLUTES
R5001	1/4"	1/4"	1/4"	1-1/2"	7°	1

R3840 BEVEL TRIM BITS
WITH TWO FLUTES



PART NO.	DEGREE BEVEL	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3840	7°	1/2"	1/4"	2"	2
R3841	15°	1/2"	1/4"	2"	2
R3842	15°	1/2"	1/2"	2"	2
R3843	25°	1/2"	1/4"	2"	2
R3844	25°	1/2"	1/2"	2"	2

D1B BEVEL TRIM INSERT ROUTER BITS
WITHOUT GUIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	DEGREE OF CUT	OVERALL LENGTH	NO. WINGS
D1B22	24mm	12mm	6mm	22°	45mm	2
D1B22A	24mm	12mm	1/4"	22°	1-3/4"	2
D1B30	26mm	12mm	6mm	30°	45mm	2
D1B30A	26mm	12mm	1/4"	30°	1-3/4"	2
D1B45	29mm	12mm	6mm	45°	45mm	2
D1B45A	29mm	12mm	1/4"	45°	1-3/4"	2

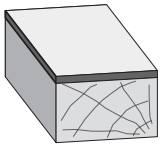
REPLACEMENT PARTS

INSERT	INSERT SCREW
301200	D1V

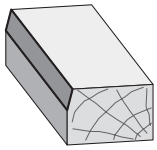
R3320 BEVEL TRIM BITS, Z2
WITH BALL BEARING GUIDE



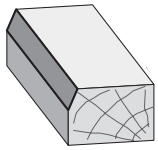
PART NO.	TOOL TYPE	CUTTING DIAM.	CARBIDE HEIGHT	DEGREE BEVEL	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3320	A	1/2"	1/4"	0°	1/4"	2-1/8"	2
R3321	A	5/8"	1/4"	15°	1/4"	2-1/8"	2
R3322	A	3/4"	1/4"	25°	1/4"	2-1/8"	2
R3323	A	1"	1/4"	45°	1/4"	2-1/8"	2
R3324	B	1"	3/8"	15°	1/4"	2"	2
R3325	C	5/8"	1/2"	15°	1/4"	2"	2



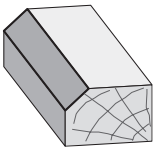
R3320



R3321
R3324
R3325



R3322



R3323

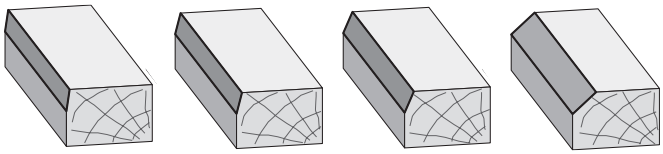
REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	SCREW
A	B3	WR58	WFS506	WNC538
B	B4	-	WFS508	WNF1012
C	B1	WR12	WFS504	WNC338

R3310 BEVEL TRIM BITS, Z3
WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	DEGREE BEVEL	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3310	3/4"	3/8"	10°	1/4"	1-7/8"	3
R3311	13/16"	3/8"	15°	1/4"	1-7/8"	3
R3312	15/16"	3/8"	25°	1/4"	1-7/8"	3
R3313	1-7/16"	3/8"	45°	1/4"	1-7/8"	3



R3310 R3311 R3312 R3313

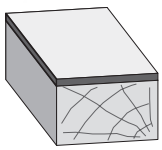
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

R3600 TRIM CUTTER ASSEMBLIES, Z4
WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAMETER	CARBIDE HEIGHT	TYPE OF CUT	SHANK DIAM.	NO. WINGS
R3600	7/8"	1/4"	Flush	1/4"	4
R3602	7/8"	1/4"	Flush	1/2"	4
R3603	1"	1/4"	15°	1/4"	4
R3605	1"	1/4"	15°	1/2"	4
R3606	1-1/16"	1/4"	25°	1/4"	4
R3608	1-1/16"	1/4"	25°	1/2"	4



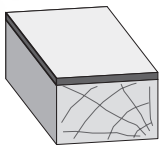
REPLACEMENT PARTS

BALL BEARING	ARBOR 1/4" SHANK	ARBOR 3/8" SHANK	ARBOR 1/2" SHANK	SPRING WASHER	NUT
B5	AR14	AR13	AR12	WF608	WNF516

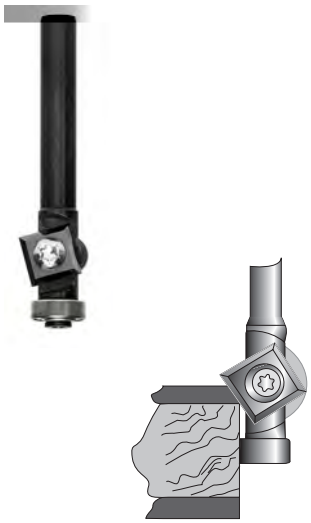
R3609 TRIM CUTTER, Z4
CUTTER ONLY



PART NO.	CUTTING DIAMETER	CARBIDE HEIGHT	TYPE OF CUT	NO. WINGS
R3609	7/8"	1/4"	Flush	4
R3610	1"	1/4"	15°	4
R3611	1-1/16"	1/4"	25°	4



RD3300 BEVEL TRIM INSERT BITS
BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	DEG. BEVEL	OVERALL LENGTH	NO. FLUTES
RD3300	3/8"	3/8"	1/4"	15°	2-1/8"	1
RD3302	3/8"	3/8"	1/4"	45°	2-1/8"	1

REPLACEMENT PARTS

KNIFE	BALL BEARING	SNAP RING	SET SCREW	WRENCH
300911M	BD2	WC050	WM306	W400401

D1D BEVEL TRIM INSERT ROUTER BITS
WITH BALL BEARING GUIDE

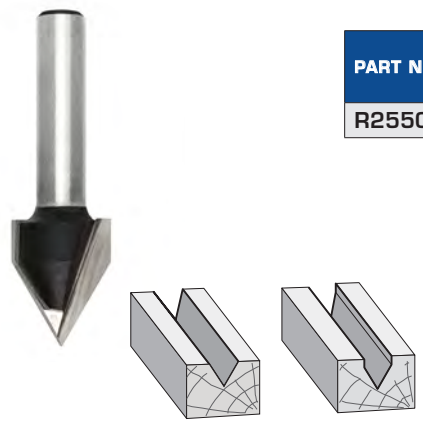


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	ANGLE	OVERALL LENGTH	NO. WINGS
D1D22	24mm	12mm	6mm	22°	55mm	2
D1D22A	24mm	12mm	1/4"	22°	2-3/16"	2
D1D30	26mm	12mm	6mm	30°	55mm	2
D1D30A	26mm	12mm	1/4"	30°	2-3/16"	2
D1D45	29mm	12mm	6mm	45°	55mm	2
D1D45A	29mm	12mm	1/4"	45°	2-3/16"	2

REPLACEMENT PARTS

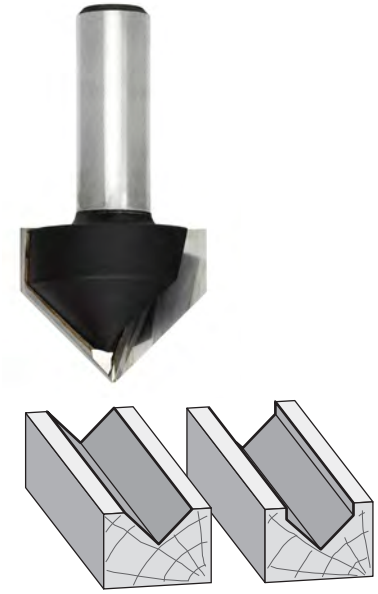
INSERT	INSERT SCREW	BALL BEARING	SCREW FOR BEARING
301200	D1V	B3-6	D1V5

R2550 "V" GROOVING BITS
60° INCLUDED ANGLE



PART NO.	CUTTING DIAM.	INCLUDED ANGLE	CARBIDE HEIGHT	V-POINT DEPTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2550	1/2"	60°	5/8"	13/32"	1/4"	1-3/4"	2

R2541 "V" GROOVING BITS
90° INCLUDED ANGLE

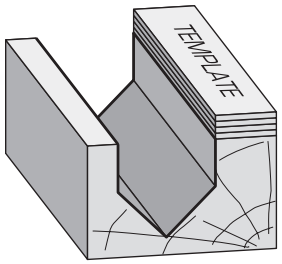


PART NO.	CUTTING DIAM.	INCLUDED ANGLE	CARBIDE HEIGHT	V-POINT DEPTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2541	3/8"	90°	3/8"	3/16"	1/4"	1-5/8"	2
R2541-1	3/8"	90°	15/32"	1/4"	1/2"	1-3/4"	2
R2542	1/2"	90°	7/16"	1/4"	1/4"	1-3/4"	2
R2542-1	1/2"	90°	7/16"	5/16"	1/4"	2-1/8"	2
R2543	5/8"	90°	15/32"	5/16"	1/4"	1-3/4"	2
R2543-1	5/8"	90°	1/2"	3/8"	1/2"	2-1/8"	2
R2543-2	3/4"	90°	5/8"	3/8"	1/4"	1-3/4"	2
R2544	3/4"	90°	5/8"	7/16"	1/2"	2-1/4"	2
R2544-1	7/8"	90°	23/32"	7/16"	1/4"	2"	2
R2544-2	7/8"	90°	23/32"	1/2"	1/2"	2-1/4"	2
R2545	1"	90°	5/8"	1/2"	1/4"	1-3/4"	2
R2545-1	1"	90°	3/4"	5/8"	1/2"	2-3/8"	2
R2546	1-1/4"	90°	1"	3/4"	1/2"	2-1/2"	2
R2547	1-1/2"	90°	1-1/4"	7/8"	1/2"	2-3/4"	2
R2548	1-3/4"	90°	1-1/2"	1"	1/2"	3"	2
R2549	2"	90°	1-3/4"	1/4"	1/2"	3"	2

R2560 "V" GROOVING BITS
90° INCLUDED ANGLE WITH BEARING GUIDE



SCALE 1:1



PART NO.	CUTTING DIAM.	INCLUDED ANGLE	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2560	1/2"	90°	1/2"	1/4"	2"	2

REPLACEMENT PARTS

BALL BEARING	LOCK RING	SCREW
B3-1	W01	WNC525

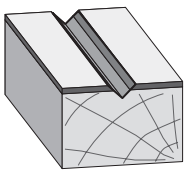
R2710 SOLID CARBIDE ENGRAVING BITS
60° INCLUDED ANGLE



PART NO.	CUTTING DIAM.	INCLUDED ANGLE	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2710	9/16"	60°	7/8"	1/4"	2-1/4"	3

R6005 "V" GROOVING VEINING BIT
SOLID CARBIDE

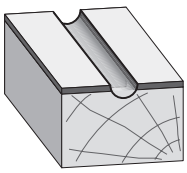




PART NO.	CUTTING DIAM.	INCLUDED ANGLE	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R6005	1/4"	90°	1/4"	1-1/2"	1

R6007 ROUND BOTTOM VEINING BITS
SOLID CARBIDE

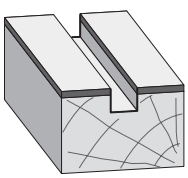




PART NO.	CUTTING DIAM.	RADIUS	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R6007	1/8"	1/16"	1/4"	2"	2
R6008	3/16"	3/32"	1/4"	2"	2
R6009	1/4"	1/8"	1/4"	2"	2

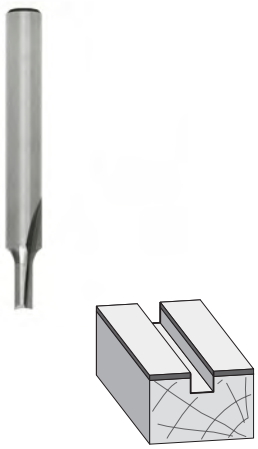
R5004 RIP AND SLOTTING BIT
SOLID CARBIDE





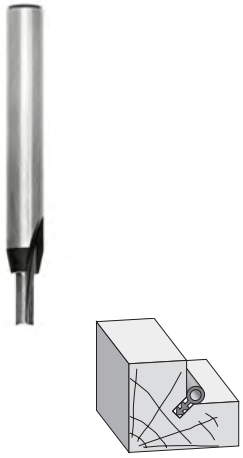
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R5004	1/4"	3/8"	1/4"	1-1/2"	1

R6001 FLAT BOTTOM VEINING BITS
SOLID CARBIDE



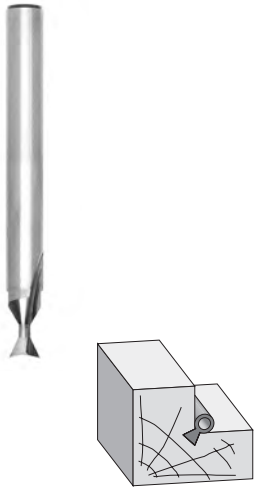
PART NO.	CUTTING DIAMETER	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R6001	1/8"	1/4"	1/4"	2"	2
R6002	3/16"	3/8"	1/4"	2"	2
R6003	1/4"	1/2"	1/4"	2"	2

R2630 TEE/BUMPER MOULDING GROOVING BIT
SOLID CARBIDE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2630	1/8"	5/16"	1/4"	2-3/16"	2

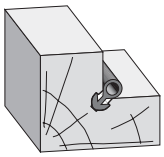
R2631 TEE/BUMPER MOULDING GROOVING BIT
SOLID CARBIDE



PART NO.	LARGE DIAM.	DEGREES EA. SIDE	DEPTH OF CUT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2631	13/64"	25°	5/32"	1/4"	2-3/8"	2

R2632 TEE/BUMPER MOULDING GROOVING BIT
TWO FLUTES





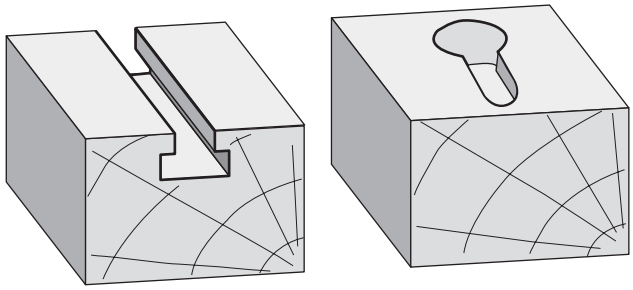
PART NO.	LARGE DIAM.	SMALL DIAM.	DEGREES EA. SIDE	DEPTH OF CUT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2632	7/32"	5/64"	38°	5/16"	1/4"	2-9/16"	2

FRB66-5 KEYHOLE BIT
ONE FLUTE



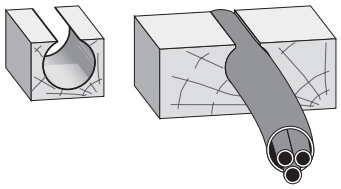
PART NO.	LARGE DIAM.	SMALL DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB66-5	3/8"	3/16"	3/8"	1/4"	1-1/2"	1

SCALE 1:1



R2455 BALL GROOVING BITS
TWO FLUTES

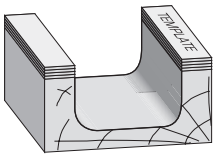




PART NO.	LARGE DIAM.	SMALL DIAM.	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2455	1/2"	1/4"	1/2"	2-1/4"	2
R2456	5/8"	9/32"	1/2"	2-7/16"	2
R2457	3/4"	5/16"	1/2"	2-1/2"	2
R2459	1"	11/32"	1/2"	2-3/4"	2
R2460	1-1/8"	13/32"	1/2"	2-7/8"	2
R2461	1-1/4"	7/16"	1/2"	3"	2

R2420 BOWL AND TRAY BITS
WITH UPPER BALL BEARING





PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2420	1/2"	1/8"	1/2"	1/4"	2-1/8"	2
R2421	3/4"	1/4"	5/8"	1/4"	2-5/16"	2
R2422	3/4"	1/4"	5/8"	1/2"	2-5/16"	2
R2423	1-1/8"	1/4"	5/8"	1/2"	2-5/8"	2

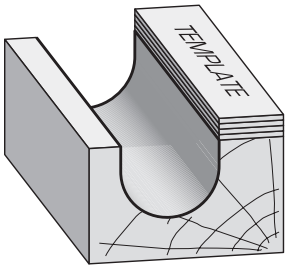
REPLACEMENT PARTS

TOOL NO.	BALL BEARING	LOCK RING	SCREW
R2420	B3-1	W01	WNC525
R2421	B4	W01	WNC525
R2422	B4-1A	W04	WNC518
R2423	B6-4	W03	WNC518

R2406-9 CORE BOX BIT
WITH BEARING GUIDE



SCALE 1:1



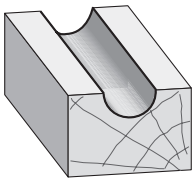
PART NO.	CUTTING DIAM.	RADIUS	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2406-9	1/2"	1/4"	1/2"	1/4"	2"	2

REPLACEMENT PARTS

TOOL NO.	BALL BEARING	LOCK RING	SCREW
R2406-9	B3-1	W01	WNC525

R2400 ROUND NOSE BITS
SHALLOW PROFILE

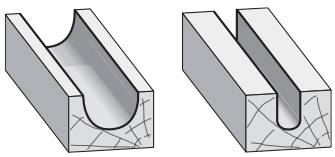




PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2400	1/8"	1/16"	3/8"	1/4"	1-3/4"	2
R2401	3/16"	3/32"	1/2"	1/4"	1-3/4"	2
R2402	1/4"	1/8"	1/2"	1/4"	1-3/4"	2
R2402-1	5/16"	5/32"	1/2"	1/4"	1-1/2"	2
R2403	3/8"	3/16"	1/4"	1/4"	1-1/2"	2
R2403-1	3/8"	3/16"	1/4"	1/2"	2"	2
R2403-2	7/16"	7/32"	5/8"	1/4"	1-3/4"	2
R2403-3	7/16"	7/32"	5/8"	1/2"	2-3/8"	2
R2404	1/2"	1/4"	5/16"	1/4"	1-1/2"	2
R2404-1	1/2"	1/4"	5/16"	1/2"	2"	2
R2405	5/8"	5/16"	3/8"	1/4"	1-1/2"	2
R2405-1	5/8"	5/16"	3/8"	1/2"	2"	2
R2406	3/4"	3/8"	1/2"	1/4"	1-1/2"	2
R2406-1	3/4"	3/8"	1/2"	1/2"	2"	2
R2406-2	7/8"	7/16"	5/8"	1/4"	1-3/4"	2
R2406-3	7/8"	7/16"	5/8"	1/2"	2"	2
R2406-4	1"	1/2"	5/8"	1/4"	1-3/4"	2
R2406-5	1"	1/2"	5/8"	1/2"	2-3/16"	2
R2406-6	1-1/4"	5/8"	1-1/4"	1/2"	2-3/4"	2

R2407 ROUND NOSE BITS
DEEP PROFILE

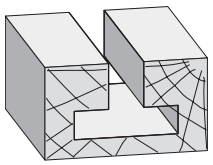




PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2407	3/8"	3/16"	1"	1/2"	2-3/4"	2
R2408	1/2"	1/4"	1-1/4"	1/2"	2-3/4"	2
R2409	9/16"	9/32"	1-1/4"	1/2"	2-3/4"	2
R2410	5/8"	5/16"	1-1/4"	1/2"	2-3/4"	2
R2411	3/4"	3/8"	1-1/4"	1/2"	2-3/4"	2
R2412	7/8"	7/16"	1-1/4"	1/2"	2-3/4"	2
R2413	1"	1/2"	1-1/4"	1/2"	2-3/4"	2
R2414	1-1/4"	5/8"	1-1/4"	1/2"	2-3/4"	2
R2415	1-1/2"	3/4"	1-1/4"	1/2"	2-3/4"	2
R2416	2"	1"	1-1/4"	1/2"	2-3/4"	2

FRB177 T-SLOT BITS
TWO WINGS PLUS TWO SLOTTING WINGS

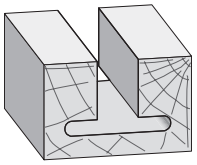




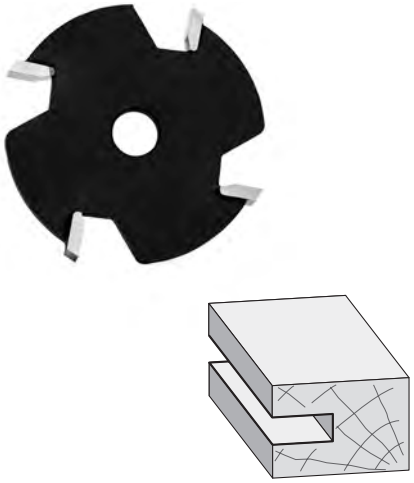
PART NO.	LARGE DIAM.	SMALL DIAM.	GROOVE HEIGHT	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB177	1-3/32"	3/8"	5/16"	13/16"	1/2"	2-5/8"	2
FRB178	1-3/32"	3/8"	5/16"	13/16"	3/8"	2-3/8"	2
FRB179	1-3/8"	1/2"	3/8"	7/8"	1/2"	2-9/16"	2

FRB174 RADIUS T-SLOT BITS
TWO WINGS PLUS ONE SLOTTING WING





PART NO.	LARGE DIAM.	SMALL DIAM.	GROOVE HEIGHT	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB174	1-1/8"	7/16"	5/32"	5/64"	13/16"	3/8"	2-1/16"	2
FRB175	1-1/8"	7/16"	5/32"	5/64"	13/16"	1/2"	2-5/32"	2
FRB176	1-39/64"	3/8"	5/32"	5/64"	13/16"	3/8"	2-1/16"	2



2 WING CUTTERS

PART NO.	CUTTING DIAM.	KERF	KERF MM	BORE DIAM.	NO. WINGS
R3900	1-7/8"	1/16"	1.6	5/16"	2
R3900-3	1-7/8"	.075"	1.9	5/16"	2
R3901	1-7/8"	5/64"	1.98	5/16"	2
R3902	1-7/8"	3/32"	2.4	5/16"	2
R3902-1	1-7/8"	.110"	2.8	5/16"	2
R3903	1-7/8"	1/8"	3.2	5/16"	2
R3903-1	1-7/8"	5/32"	4.0	5/16"	2
R3903-2	1-7/8"	3/16"	4.8	5/16"	2
R3904	1-7/8"	1/4"	6.35	5/16"	2

3 WING CUTTERS

PART NO.	CUTTING DIAM.	KERF	KERF MM	BORE DIAM.	NO. WINGS
R4000A	1-7/8"	.055"	1.4	5/16"	3
R4000	1-7/8"	1/16"	1.6	5/16"	3
R4001	1-7/8"	.070"	1.8	5/16"	3
R4001-1	1-7/8"	.075"	1.9	5/16"	3
R4002	1-7/8"	5/64"	1.98	5/16"	3
R4002-1	1-7/8"	.085"	2.16	5/16"	3
R4003	1-7/8"	3/32"	2.4	5/16"	3
R4003-1	1-7/8"	.110"	2.8	5/16"	3
R4005	1-7/8"	1/8"	3.2	5/16"	3
R4005-A	1-7/8"	.140"	3.6	5/16"	3
R4005-1	1-7/8"	5/32"	4.0	5/16"	3
R4006	1-7/8"	3/16"	4.8	5/16"	3
R4007	1-7/8"	1/4"	6.35	5/16"	3

4 WING CUTTERS

PART NO.	CUTTING DIAM.	KERF	KERF MM	BORE DIAM.	NO. WINGS
R4100	1-7/8"	1/16"	1.6	5/16"	4
R4101	1-7/8"	.070"	1.8	5/16"	4
R4102	1-7/8"	.080"	2.0	5/16"	4
R4103	1-7/8"	3/32"	2.4	5/16"	4
R4104	1-7/8"	1/8"	3.2	5/16"	4
R4105	1-7/8"	3/16"	4.8	5/16"	4
R4106	1-7/8"	1/4"	6.35	5/16"	4



2 WING ASSEMBLIES

1/4" SHANK PART NO.	3/8" SHANK PART NO.	1/2" SHANK PART NO.	CUTTING DIAM.	KERF (MM)	KERF (INCH)	BORE DIAM.	NO. WINGS
R4120-14	R4120-13	R4120-12	1-7/8"	1/16"	1.6	5/16"	2
R4121-14	R4121-13	R4121-12	1-7/8"	.065"	1.65	5/16"	2
R4121-2-14	R4121-2-13	R4121-2-12	1-7/8"	.075"	1.9	5/16"	2
R4122-14	R4122-13	R4122-12	1-7/8"	5/64"	1.98	5/16"	2
R4124-14	R4124-13	R4124-12	1-7/8"	3/32"	2.4	5/16"	2
R4125-14	R4125-13	R4125-12	1-7/8"	.110"	2.8	5/16"	2
R4126-14	R4126-13	R4126-12	1-7/8"	1/8"	3.2	5/16"	2
R4128-14	R4128-13	R4128-12	1-7/8"	5/32"	4.0	5/16"	2
R4130-14	R4130-13	R4130-12	1-7/8"	3/16"	4.8	5/16"	2
R4132-14	R4132-13	R4132-12	1-7/8"	1/4"	6.35	5/16"	2

3 WING ASSEMBLIES

1/4" SHANK PART NO.	3/8" SHANK PART NO.	1/2" SHANK PART NO.	CUTTING DIAM.	KERF (MM)	KERF (INCH)	BORE DIAM.	NO. WINGS
R4140-14	R4140-13	R4140-12	1-7/8"	1/16"	1.6	5/16"	3
R4141-14	R4141-13	R4141-12	1-7/8"	.065"	1.65	5/16"	3
R4141-1-14	R4141-1-13	R4141-1-12	1-7/8"	.070"	1.8	5/16"	3
R4141-2-14	R4141-2-13	R4141-2-12	1-7/8"	.075"	1.9	5/16"	3
R4142-14	R4142-13	R4142-12	1-7/8"	5/64"	1.98	5/16"	3
R4143-14	R4143-13	R4143-12	1-7/8"	.085"	2.16	5/16"	3
R4144-14	R4144-13	R4144-12	1-7/8"	3/32"	2.4	5/16"	3
R4145-14	R4145-13	R4145-12	1-7/8"	.110"	2.8	5/16"	3
R4146-14	R4146-13	R4146-12	1-7/8"	1/8"	3.2	5/16"	3
R4147-14	R4147-13	R4147-12	1-7/8"	.140"	3.6	5/16"	3
R4148-14	R4148-13	R4148-12	1-7/8"	5/32"	4.0	5/16"	3
R4150-14	R4150-13	R4150-12	1-7/8"	3/16"	4.8	5/16"	3
R4152-14	R4152-13	R4152-12	1-7/8"	1/4"	6.35	5/16"	3

R4162 MULTI-PURPOSE SLOTTING CUTTER SET
COMPLETE ASSEMBLY



PART NO.	CUTTING DIAM.	MIN. WOOD THICKNESS	MAX. WOOD THICKNESS	SHANK DIAM.	NO. OF TEETH
R4162	1-7/8"	1/8"	23/32"	1/2"	2

Multi-purpose cutter set with four cutters and bearing guide enables you to cut grooves and dados from 1/8" to 23/32" wide, in increments of 0.1mm (0.004")

Tongue and groove can also be achieved with proper set-up

STANDARD SET CONTENTS:

FOUR SINGLE CUTTERS MARKED:

A - width 1/8" (3.2mm)	R3903
B - width 5/32" (4.0mm)	R3903-1
C - width 3/16" (4.8mm)	R3903-2
D - width 1/4" (6.35mm)	R3904
Arbor with nut (1 piece)	AR11
Ball bearing	B5

SPACERS, WASHERS AND SHIMS:

Spacer 6.0mm (3 pieces)	WF618
Spacer 1.0mm (5 pieces)	WF608
Shim 0.5mm (4 pieces)	WF606
Shim 0.1mm (10 pieces)	WF604

» All washers and shims are 5/8" diam. x 5/16" bore
» A full 3/4" cut can be achieved using one additional cutter 5/32" width (cutter B) R3903-1 (sold separately)

R4164 "BOX JOINT" SLOTTING CUTTER SET
COMPLETE ASSEMBLY



PART NO.	CUTTING DIAM.	GROOVE WIDTH	SHANK DIAM.	NO. OF TEETH
R4164	1-7/8"	5/32"	1/2"	3

New "Box Joint" cutter set is ideally suited for producing instrument cases, jewelry boxes, drawers, etc.,

Maximum material width 1-9/16"

Three ball bearing guides offer alternative cutting depths

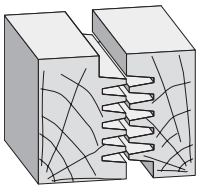
Each set is supplied with an instruction sheet

STANDARD SET CONTENTS

Cutters (5 pieces)	R4005-1
Arbor with nut (1 piece)	AR20
Washer (1 piece)	WR59
Spacer 5.5mm (4 pieces)	WF616
Spacer 1.0mm (1 piece)	WF608
Shim 0.5mm (1 piece)	WF606
Super glide bearing 28mm (1 piece)	B28
Super glide bearing 29mm (1 piece)	B32
Super glide bearing 34mm (1 piece)	B34

R4160 FINGER JOINT ROUTER CUTTER SET
COMPLETE ASSEMBLY





PART NO.	CUTTING DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	NO. OF TEETH
R4160	1-9/16"	1-3/8"	1/2"	2

Cutter assembly allows you to cut from one-finger to five-fingers in one pass and above five-fingers in multiple passes

Both cuts are performed with same router setting. Simply turn over the counter-cut for a perfect fit (see diagram)

Cutters feature style "4 Miters" allowing for a safer cut

STANDARD SET CONTENTS:

Arbor with nut (1 piece)	AR20
Ball bearing (1 piece)	B6-3
Finger joint cutter (5 pieces)	R4160-1
Straight cutter (1 piece)	R4160-2
Spacer 3.4mm (6 pieces)	WF612
Washer 1.0mm (2 pieces)	WF608
Shim 0.5mm (1 piece)	WF606
Shim 0.1mm (10 pieces)	WF604

FRB31-7 TONGUE AND GROOVE CUTTER SET
COMPLETE ASSEMBLY

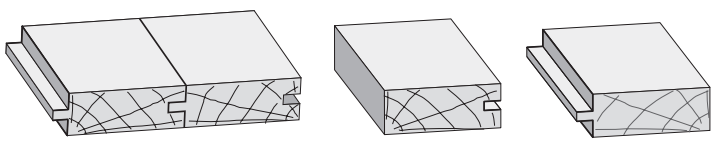


PART NO.	CUTTING DIAM.	GROOVE WIDTH	GROOVE DEPTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB31-7	1-7/8"	5/64"	1/8"	1/2"	3"	3

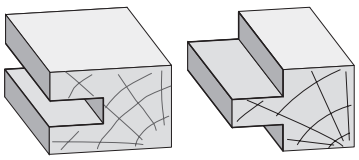
Maximum wood thickness 3/8"

STANDARD SET CONSISTS OF:

Arbor and nut (1 piece)	AR11
Groover 5/64" (1 piece)	R4005-1
Rabbeting Cutter 5.32" (2 pieces)	R4002
Super Glide Bearing 40.8mm	B36
Super Glide Bearing 43mm	B38
Spacer 6.0mm (1 piece)	WF618
Spacer 3.15mm (1 piece)	WF611
Spacer 1.0mm (2 pieces)	WF608
Shim 0.1mm (1 piece)	WF604
Shim 0.05mm (1 piece)	WF600







PART NO.	LARGE DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB31-6	1-5/8"	3/4"	1/2"	3"	2

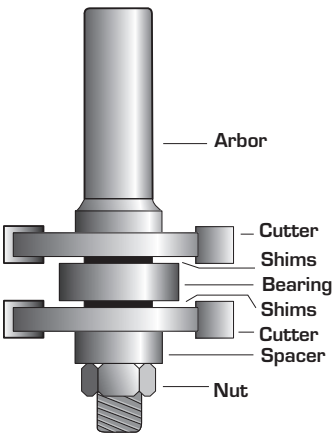
STANDARD SET CONSISTS OF:

Arbor and nut	AR11
Ball Bearing	B5
Spacers 6.0mm (2 pieces)	WF618
Washer 1.0mm (1 piece)	WF608
Shims 0.5mm (2 pieces)	WF606
Shims 0.1mm (4 pieces)	WF604
Cutters 1-5/8" diam.	
1/4" kerf x 2 teeth (2 pieces)	FRB28G

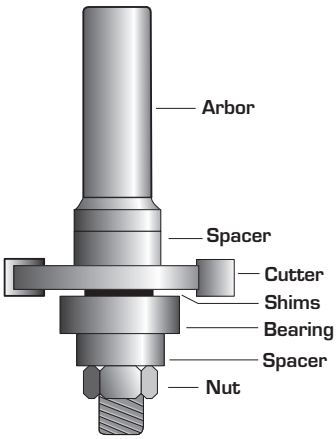
ANGULAR TONGUE AND GROOVE CUTTER SET

This Tongue and Groove Cutter enables perfect results in stock up to 18mm (apx. 3/4"). The groove is of 1/4" (6.35mm) in width and of 3/8" (9.5mm) in depth. When changing over from assembly (A) to assembly (B), according to the drawings below, the centre of the groove is automatically adjusted and there is no need to raise or lower the router. With the aid of the supplied shims, there is always the possibility to achieve the required tightness of the joint, even after resharpening groovers.

Typical Assembly (tongue)



Typical Assembly (groove)



FRB170 TONGUE AND GROOVE CUTTER SET
"V" PANEL PROFILE



PART NO.	LARGE DIAM.	DEG. BEVEL	GROOVE WIDTH	GROOVE DEPTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB170	1-13/16"	45°	5/32"	1/4"	1/2"	3"	2

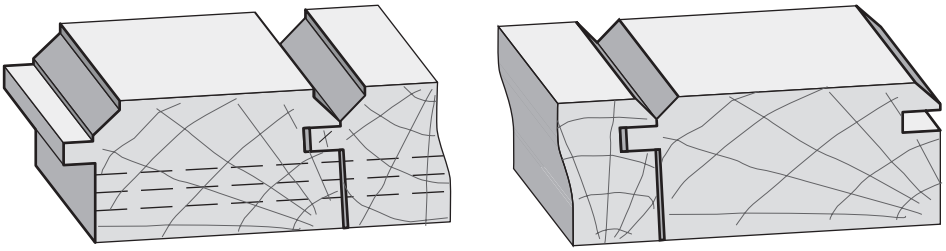
Minimum wood thickness 1/2"

Maximum wood thickness 1"

STANDARD SET CONTENTS:

Arbor with nut (1 piece)	AR21
Ball bearing (1 piece)	B5
Ball bearing (1 piece)	B6-6
Profile cutter (1 piece)	FRB170PC
Rabeting cutter (1 piece)	FRB170RC
Grooving cutter (1 piece)	FRB170GC
Spacer 3.0mm (3 pieces)	WF610
Spacer 1.0mm (3 pieces)	WF608
Shim 0.5mm (1 piece)	WF606
Shim 0.4mm (1 piece)	WF605
Shim 0.1mm (3 pieces)	WF604
Shim 0.05mm (1 piece)	WF600

SCALE 1:1



FRB171 TONGUE AND GROOVE SET
RADIUS PANEL PROFILE



PART NO.	LARGE DIAM.	RADIUS	GROOVE WIDTH	GROOVE DEPTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB171	1-13/16"	15/64"	5/32"	1/4"	1/2"	3"	2

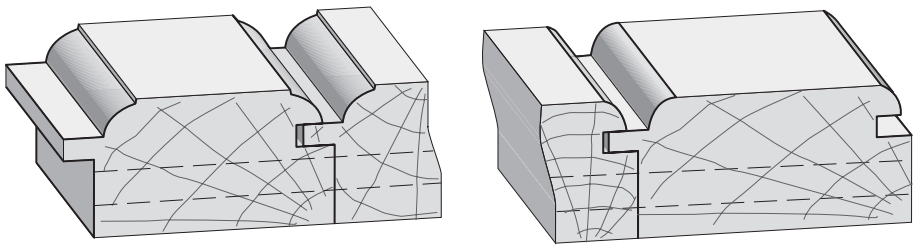
Minimum wood thickness 1/2"

Maximum wood thickness 1"

STANDARD SET CONTENTS:

Arbor with nut (1 piece)	AR21
Ball bearing (1 piece)	B5
Ball bearing (1 piece)	B6-6
Profile cutter (1 piece)	FRB171PC
Rabeting cutter (1 piece)	FRB170RC
Grooving cutter (1 piece)	FRB171GC
Spacer 3.0mm (3 pieces)	WF610
Spacer 1.0mm (3 pieces)	WF608
Shim 0.5mm (1 piece)	WF606
Shim 0.4mm (1 piece)	WF605
Shim 0.1mm (3 pieces)	WF604
Shim 0.05mm (1 piece)	WF600

SCALE 1:1



R4165 SPLINE GLUE JOINT BITS
TWO FLUTES



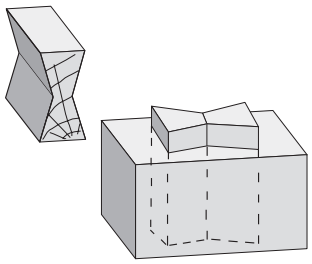
R4165



R2609-1

PART NO.	CUTTING DIAM.	CUTTING LENGTH	DEGREE EA. SIDE	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R4165 •	1-7/64"	1-13/16"	14°	1/2"	3-5/16"	2
R2609-1	7/8"	7/8"	14°	1/2"	2-5/8"	2

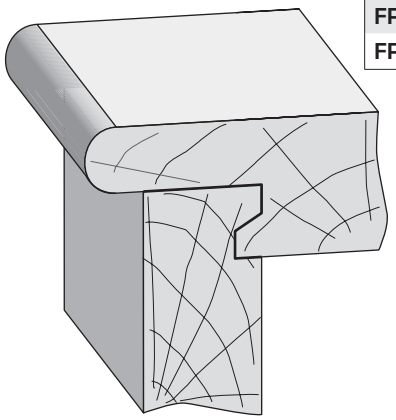
• Above bit can be used with other Dovetail bits R2602, R2606, R2608-1, R2610 (page F40)



FRB72-1 DRAWER LOCK BITS
TWO FLUTES



SCALE 1:1



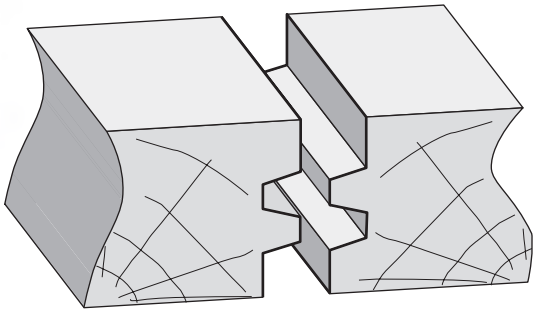
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB72-1	3/4"	1/2"	1/4"	1-7/8"	2
FRB72-3	1"	1/2"	1/2"	1-7/8"	2

FRB72 GLUE JOINT BITS
TWO FLUTES



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB72	1-29/64"	1-1/8"	1/2"	2-5/8"	2

SCALE 1:1

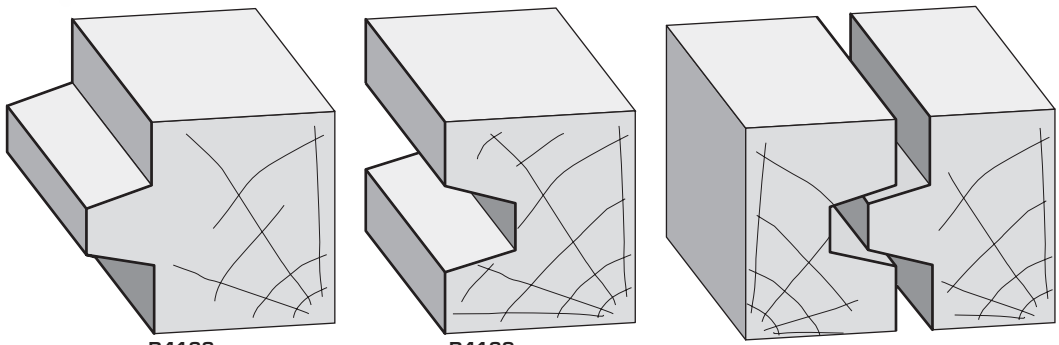


R4167 BEVEL GLUE JOINT BITS
TWO FLUTES



PART NO.	CUTTING DIAM.	CUTTING LENGTH	DEGREE EA. SIDE	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R4167	Complete Set (2 Bits)					
R4168	1-1/4"	1-1/4"	15°	1/2"	2-3/4"	2
R4169	1-1/4"	1-1/4"	15°	1/2"	2-3/4"	2

SCALE 1:1



R4168 R4169

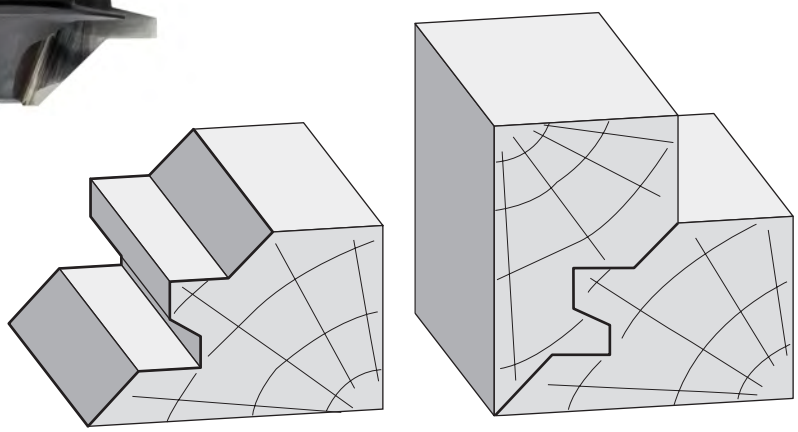
FRB73 LOCK MITER BITS
90° CORNER



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB73-2	1-3/4"	3/4"	1/2"	2-1/4"	2
FRB73	2-23/32"	1-3/16"	1/2"	3-1/8"	2

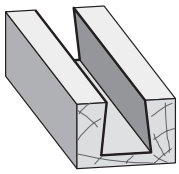
Max. RPM: 18,000

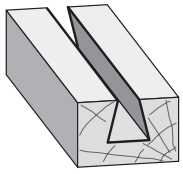
SCALE 1:1

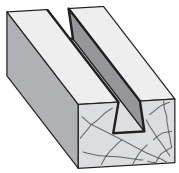


R2600 DOVETAIL BITS
WITHOUT GUIDE









PART NO.	DEGREE EA. SIDE	LARGE DIAM.	DEPTH OF CUT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2600	9°	5/16"	3/8"	1/4"	2-1/2"	2
R2600-1	25°	13/64"	5/32"	1/4"	2-3/8"	2
R2600-2	7.5°	1/4"	5/16"	1/4"	2-1/2"	2
R2601	9°	3/8"	3/8"	1/4"	2"	2
R2602	14°	1/2"	1/2"	1/4"	2"	2
R2602-1	14°	17/32"	1/2"	1/4"	1-3/4"	2
R2603	9°	3/8"	3/8"	3/8"	2"	2
R2604	7°	1/2"	1/2"	3/8"	2"	2
R2604-1	9°	5/16"	3/8"	1/2"	2-1/2"	2
R2605	9°	3/8"	3/8"	1/2"	1-5/8"	2
R2606	14°	1/2"	1/2"	1/2"	2-1/8"	2
R2607	7°	5/8"	7/8"	1/2"	2-1/16"	2
R2608	7°	3/4"	7/8"	1/2"	2-1/2"	2
R2608-1	14°	3/4"	3/4"	1/2"	2-1/2"	2
R2609	7°	7/8"	7/8"	1/2"	2-3/8"	2
R2609-1	14°	7/8"	7/8"	1/2"	2-5/8"	2
R2610	14°	1"	1"	1/2"	2-5/8"	2
R2610-1	7°	1-1/8"	3/4"	1/2"	2-3/8"	2
R2611	14°	1-1/4"	1"	1/2"	2-5/16"	2

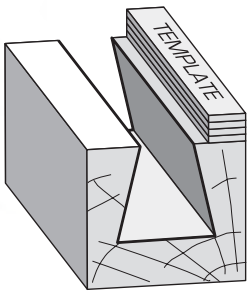
LEFT-HAND DOVETAIL BITS

PART NO.	DEGREE EA. SIDE	LARGE DIAM.	DEPTH OF CUT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2600L	9°	5/16"	3/8"	1/4"	2-1/2"	2
R2605L	9°	3/8"	3/8"	1/2"	1-5/8"	2
R2606L	14°	1/2"	1/2"	1/2"	2-1/4"	2
R2607L	7°	5/8"	7/8"	1/2"	2-1/16"	2
R2608L	7°	3/4"	7/8"	1/2"	2-1/2"	2
R2609L	7°	7/8"	7/8"	1/2"	2-3/8"	2
R2609-1L	14°	7/8"	7/8"	1/2"	2-5/8"	2
R2610L	14°	1"	1"	1/2"	2-5/8"	2

R2620 DOVETAIL BIT
WITH BEARING GUIDE



SCALE 1:1



PART NO.	DEGREE EA. SIDE	CUTTING DIAM.	CUTTING DEPTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2620	14°	1/2"	1/2"	1/4"	2-1/4"	2

REPLACEMENT PARTS

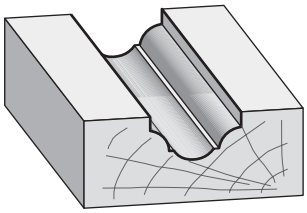
BALL BEARING	LOCK RING	SCREW
B3-1	W01	WNC525

FRB10 BEAD PROFILE WITH ROUND NOSE BOTTOM
PLUNGE TYPE

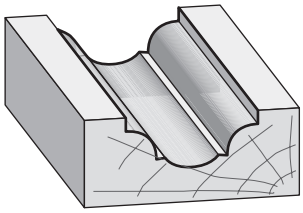


PART NO.	LARGE DIAM.	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB10	1/2"	3/8"	1/4"	2
FRB11	3/4"	1/2"	1/4"	2
FRB12	3/4"	1/2"	1/2"	2
FRB13	1"	5/8"	1/2"	2

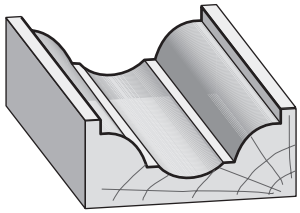
SCALE 1:1



FRB10



FRB11
FRB12



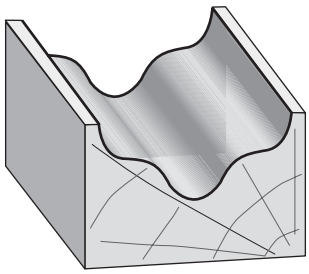
FRB13

FRB23-1 OGEE PROFILE WITH ROUND NOSE BOTTOM
PLUNGE TYPE



PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB23-1	1-1/16"	15/64"	7/16"	1/4"	2
FRB23-2	1-1/16"	15/64"	7/16"	1/2"	2

SCALE 1:1

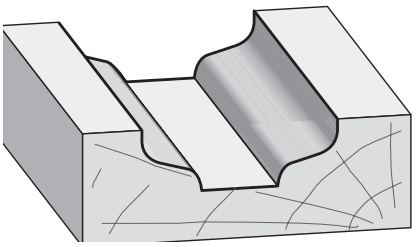


FRB66-1 ELLIPSE OGEE PROFILE WITH FLAT BOTTOM
PLUNGE TYPE

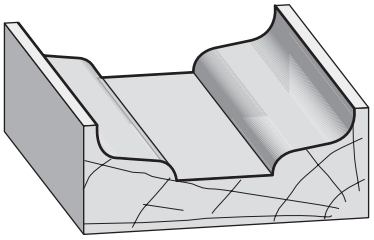


PART NO.	CUTTING DIAM.	CUTTING LENGTH	RADIUS	SHANK DIAM.	OVERALL LENGTH
FRB66-1	1"	3/8"	1/8"	1/4"	2"
FRB66-2	1-3/8"	3/8"	1/8"	1/2"	2-1/4"

SCALE 1:1



FRB66-1



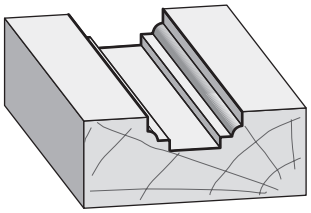
FRB66-2

FRB02 BEAD PROFILE WITH FLAT BOTTOM
PLUNGE TYPE

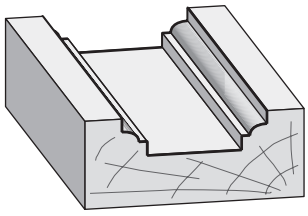


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB02	1/2"	3/64"	3/8"	1/4"	2
FRB03	3/4"	1/16"	7/16"	1/4"	2
FRB04	3/4"	1/16"	7/16"	1/2"	2

SCALE 1:1



FRB02



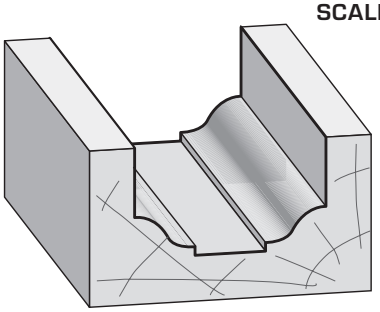
FRB03
FRB04

FRB01-5 OGEE PROFILE WITH FLAT BOTTOM
PLUNGE TYPE

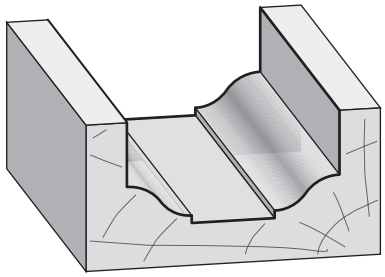


PART NO.	LARGE DIAM.	SMALL DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB01-5	1"	3/8"	19/32"	1/2"	2-3/32"	2
FRB01-6	1-3/16"	15/32"	19/32"	1/2"	2-3/32"	2

SCALE 1:1



FRB01-5



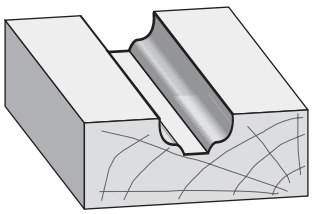
FRB01-6

FRB06 TALL OGEE PROFILE WITH FLAT BOTTOM
PLUNGE TYPE

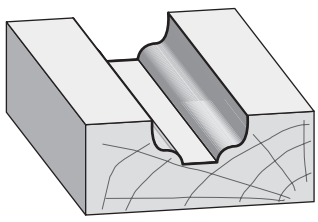


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB06	3/8"	1/16"	5/16"	1/4"	2
FRB07	1/2"	5/64"	3/8"	1/4"	2
FRB08	3/4"	1/8"	7/16"	1/4"	2
FRB09	3/4"	1/8"	7/16"	1/2"	2

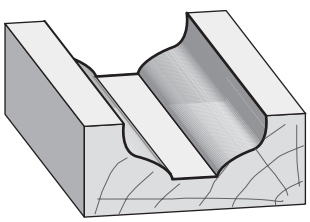
SCALE 1:1



FRB06



FRB07



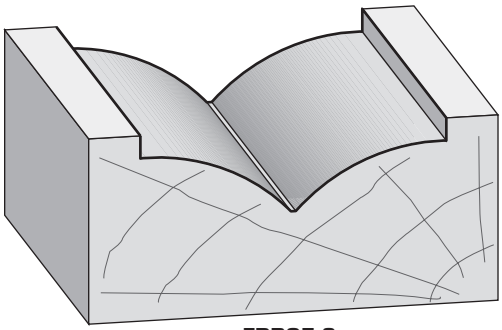
FRB08
FRB09

FRB05-3 ROUNDING OVER PROFILE
PLUNGE TYPE

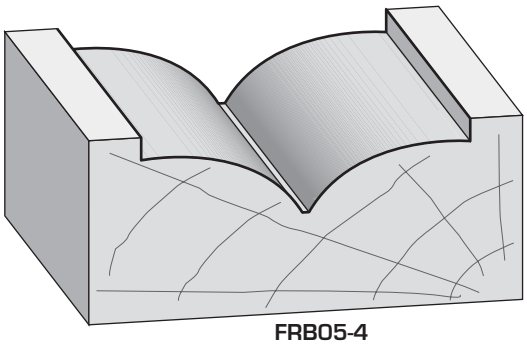


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB05-3	1-3/4"	23/32"	23/32"	1/2"	2-7/32"	2
FRB05-4	1-5/8"	1"	23/32"	1/2"	2-7/32"	2

SCALE 1:1



FRB05-3



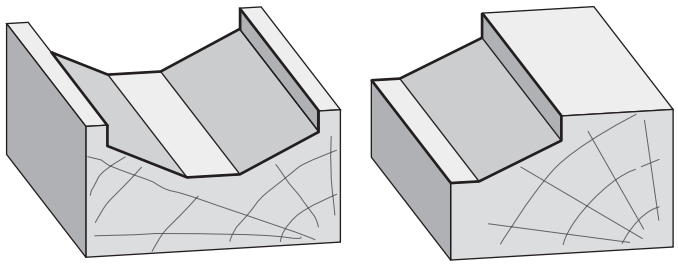
FRB05-4

FRB05 PROVINCIAL PROFILE
PLUNGE TYPE WITH RAISED PANEL



PART NO.	LARGE DIAM.	CARBIDE HEIGHT	SHANK DIAM.	DEGREE BEVEL	OVERALL LENGTH	NO. FLUTES
FRB05	1-1/8"	1/2"	1/2"	30°	2-3/4"	2

SCALE 1:1



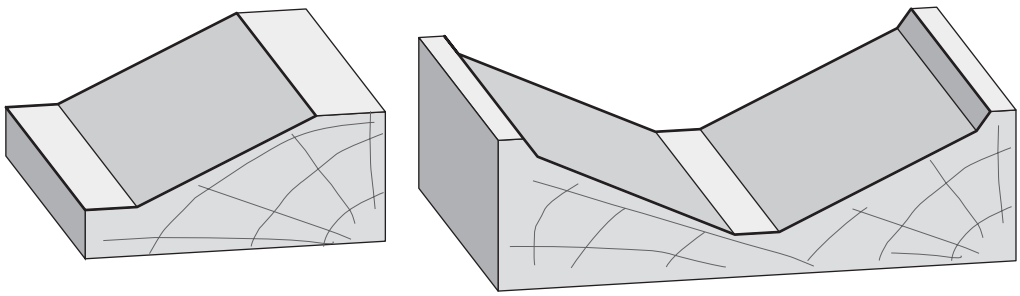
FRB25-4 PROVINCIAL PROFILE
PLUNGE TYPE WITH RAISED PANEL



PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	DEGREE BEVEL	OVERALL LENGTH	NO. FLUTES
FRB25-4 •	2-3/4"	3/4"	1/2"	25°	2-1/4"	2

• Max. RPM: 18,000

SCALE 1:1

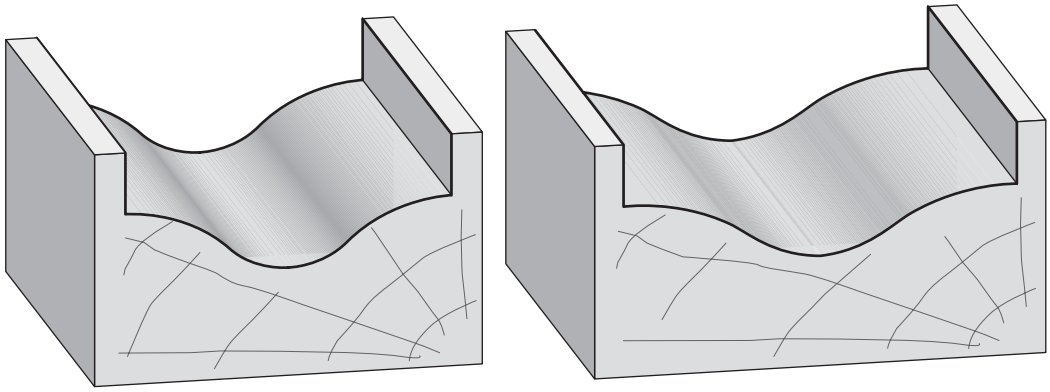


FRB01-7 THUMBNAIL PROFILE
PLUNGE TYPE



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB01-7	1-5/8"	23/32"	1/2"	2-13/64"	2
FRB01-8	1-31/32"	23/32"	1/2"	2-13/64"	2

SCALE 1:1



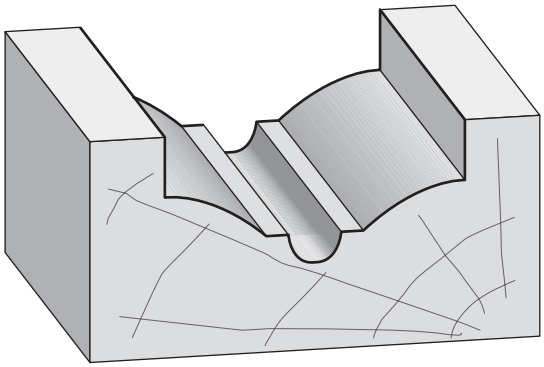
FRB01-7 FRB01-8

FRB05-1 THUMBNAIL PROFILE WITH ROUND NOSE BOTTOM
PROFILE TYPE



PART NO.	LARGE DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB05-1	1-9/16"	25/32"	1/2"	2-9/32"	2

SCALE 1:1



FRB200 MATCHING QUARTER ROUND AND COVE PROFILES
WITH UPPER AND LOWER BALL BEARING GUIDES

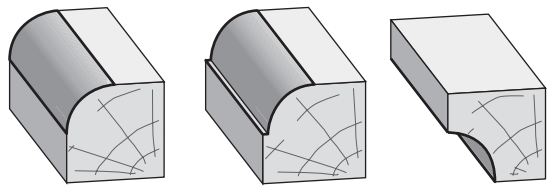


APPLICATION:

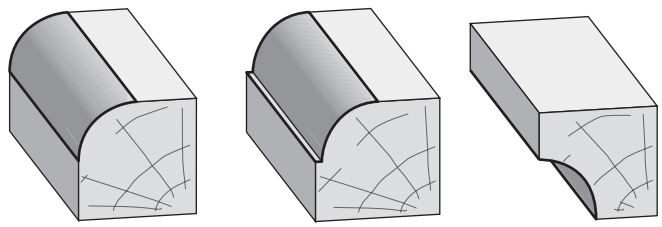
» This unique router bit with two flutes and double ball bearing guides performs two machining cuts; rounding over and cove
» To achieve beading cuts, use additional Ball Bearing part No.B3-1B

PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB200	1-1/8"	1/4"	35/64"	1/4"	2-19/32"	2
FRB201	1-1/4"	5/16"	43/64"	1/4"	2-23/32"	2
FRB202	1-3/8"	3/8"	51/64"	1/4"	2-27/32"	2

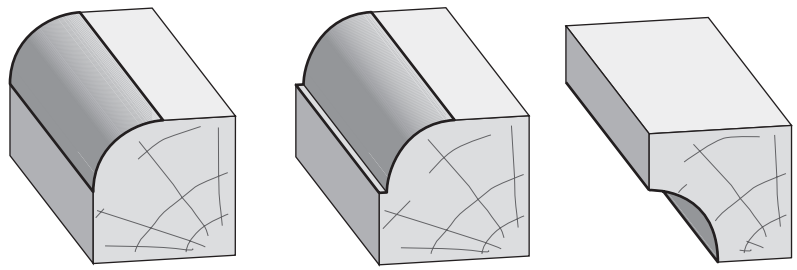
SCALE 1:1



FRB200



FRB201



FRB202

REPLACEMENT PARTS

BALL BEARING	EXTERNAL CIRCLIP	SCREW	WASHER
B3-4A	WC01	WNF1012	WFS500

FRB160 MATCHING COVE AND BEAD PROFILES
WITH BALL BEARING GUIDE

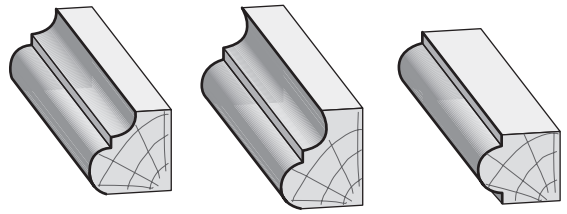


PART NO.	TOOL TYPE	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB160	A	1"	1/8"	5/8"	1/4"	2-1/4"	2
FRB161	A	1"	1/8"	5/8"	1/2"	2-5/8"	2
FRB162	A	1-1/4"	3/16"	1"	1/4"	2-5/8"	2
FRB163	A	1-1/4"	3/16"	1"	1/2"	2-7/8"	2
FRB164	B	2"	1/4"	1-1/4"	1/2"	3-1/8"	2

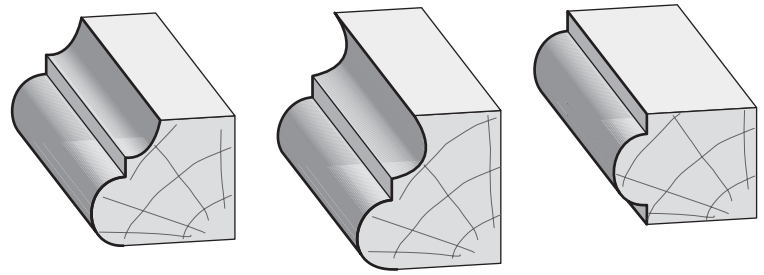
REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	SCREW
A	B3	WR58	WFS506	WNC538
B	B3-4	WR59	WFS506	WNC538

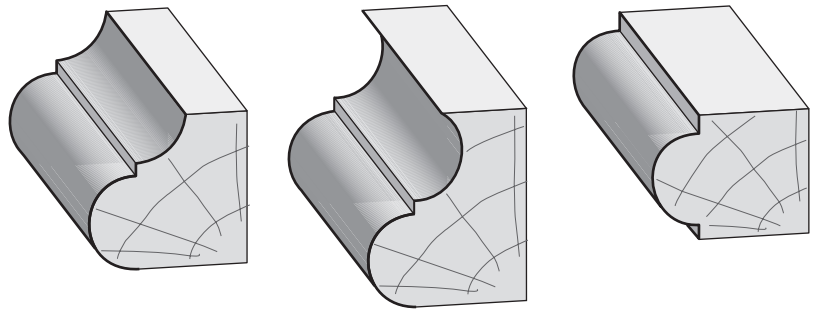
SCALE 1:1



FRB160
FRB161



FRB162
FRB163



FRB164

FRB195 MULTI-PROFILE BIT
WITH BALL BEARING GUIDE



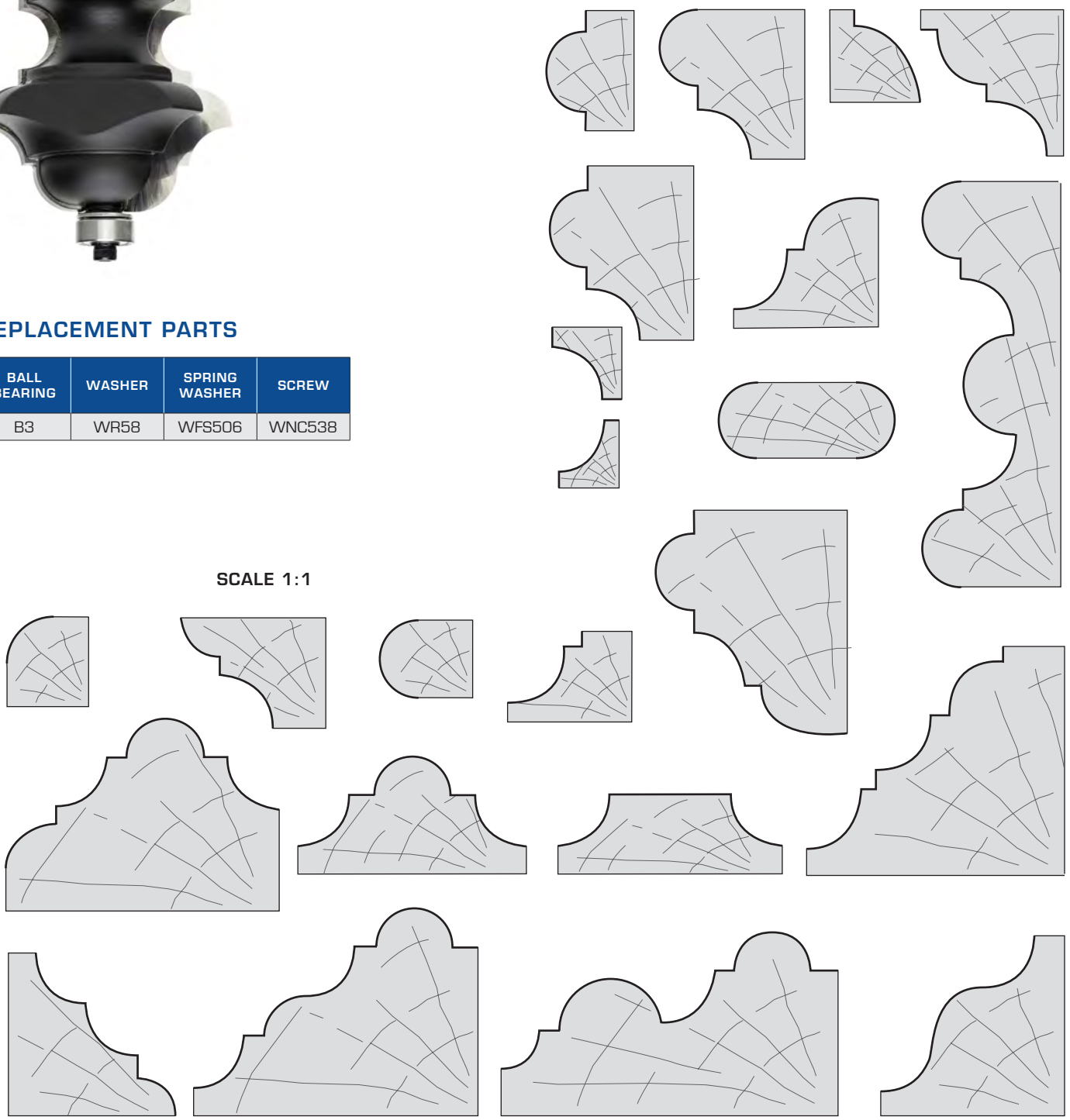
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB195	2-1/8"	1-7/8"	1/2"	3-3/4"	2

Max. RPM: 18,000

REPLACEMENT PARTS

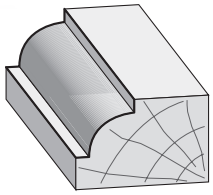
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

SCALE 1:1



R3100 BEAD PROFILE
WITH BALL BEARING GUIDE





PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
R3100-1	5/8"	1/16"	5/16"	1/4"	2
R3100-2	3/4"	1/8"	3/8"	1/4"	2
R3100-3	3/4"	5/32"	3/8"	1/4"	2
R3100	7/8"	3/16"	1/2"	1/4"	2
R3101	1"	1/4"	1/2"	1/4"	2
R3102	1-1/8"	5/16"	1/2"	1/4"	2
R3103	1-1/4"	3/8"	5/8"	1/4"	2
R3104	1-1/2"	1/2"	3/4"	1/4"	2
R3105-1	5/8"	1/16"	5/16"	1/2"	2
R3105-2	3/4"	1/8"	3/8"	1/2"	2
R3105-3	3/4"	5/32"	3/8"	1/2"	2
R3105	7/8"	3/16"	1/2"	1/2"	2
R3106	1"	1/4"	1/2"	1/2"	2
R3107	1-1/8"	5/16"	1/2"	1/2"	2
R3108	1-1/4"	3/8"	5/8"	1/2"	2
R3109	1-1/2"	1/2"	3/4"	1/2"	2
R3109-1	1-3/4"	5/8"	7/8"	1/2"	2
R3110	2"	3/4"	1"	1/2"	2
R3111	2-1/4"	7/8"	1-1/4"	1/2"	2
R3112	2-1/2"	1"	1-1/4"	1/2"	2
R3112-1 ▲	2-3/4"	1-1/8"	1-3/8"	1/2"	2
R3113 ▲	3"	1-1/4"	1-1/2"	1/2"	2
R3113-1 •	3-1/4"	1-3/8"	1-9/16"	1/2"	2
R3114 •	3-1/2"	1-1/2"	1-3/4"	1/2"	2

• Max RPM: 16,000

▲ Max RPM: 18,000

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B2	WFS500	WFS506	WNC538

FRB45 DOUBLE ROUND OVER/BEAD PROFILE
WITH BALL BEARING GUIDE



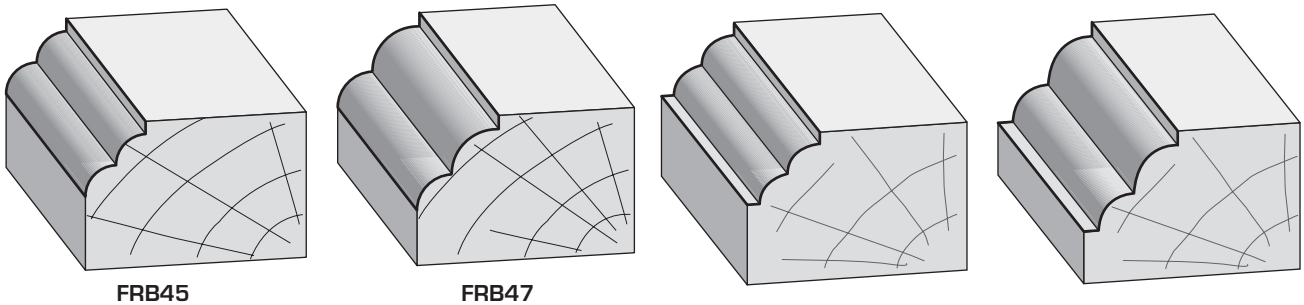
PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB45	1-1/8"	5/32"	1/2"	1/4"	2
FRB46	1-1/8"	5/32"	1/2"	1/2"	2
FRB47	1-3/8"	1/4"	11/16"	1/4"	2
FRB48	1-3/8"	1/4"	11/16"	1/2"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

ADDITIONAL PROFILES: Bottom Fillet added to profile using 3/8" Ball Bearing (Part No. B2) and Washer (WFS500)

SCALE 1:1

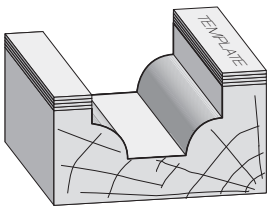


FRB45
FRB46

FRB47
FRB48

R3030 BEAD PROFILE
PLUNGE TYPE WITH UPPER BALL BEARING





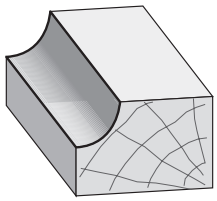
PART NO.	LARGE DIAM.	RADIUS	SMALL DIAM.	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
R3030	1/2"	1/8"	1/4"	3/8"	1/4"	2
R3032	3/4"	1/8"	1/2"	3/8"	1/4"	2
R3034	7/8"	5/16"	1/2"	1/2"	1/4"	2
R3036	1-1/8"	5/16"	1/2"	9/16"	1/2"	2

REPLACEMENT PARTS

TOOL NO.	BALL BEARING	LOCK RING	SCREW
R3030	B3-1	W01	WNC525
R3032	B4	W01	WNC525
R3034	B5	W01	WNC525
R3036	B6-4	W03	WNC518

R2800 COVE PROFILE WITHOUT FILLET
WITH BALL BEARING GUIDE





PART NO.	TOOL TYPE	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
R2800-1	A	1/2"	1/16"	1/2"	1/4"	2
R2800-2	A	1/2"	1/16"	1/2"	1/2"	2
R2800-3	A	5/8"	1/8"	1/2"	1/4"	2
R2800-4	A	5/8"	1/8"	1/2"	1/2"	2
R2800-A	A	3/4"	3/16"	9/16"	1/4"	2
R2803-A	A	3/4"	3/16"	9/16"	1/2"	2
R2800	A	7/8"	1/4"	9/16"	1/4"	2
R2803	A	7/8"	1/4"	9/16"	1/2"	2
R2803-1	A	1"	5/16"	9/16"	1/4"	2
R2803-2	A	1"	5/16"	9/16"	1/2"	2
R2801	A	1-1/8"	3/8"	9/16"	1/4"	2
R2804	A	1-1/8"	3/8"	9/16"	1/2"	2
R2802	A	1-3/8"	1/2"	3/4"	1/4"	2
R2805	A	1-3/8"	1/2"	3/4"	1/2"	2
R2806	A	1-5/8"	5/8"	3/4"	1/2"	2
R2807	B	1-7/8"	3/4"	1"	1/2"	2
R2808	B	2-3/8"	7/8"	1-1/4"	1/2"	2
R2809	B	2-3/8"	1"	1-1/4"	1/2"	2
R2810 •	B	3"	1-1/4"	1-1/2"	1/2"	2

• Max. RPM: 18,000

REPLACEMENT PARTS

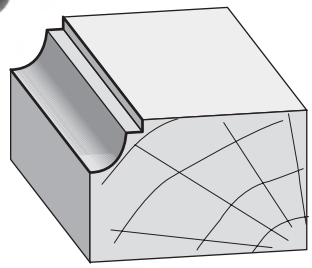
TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	SCREW
A	B1	WR12	WFS504	WNC338
B	B3	WR58	WFS506	WNC538

FRB53 COVE PROFILE
WITH BALL BEARING GUIDE

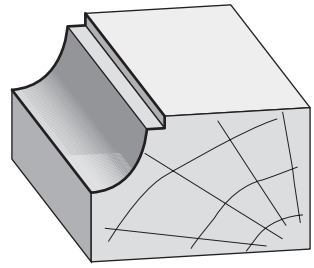


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB53	1-1/8"	3/16"	1/2"	1/4"	2
FRB54	1-1/8"	3/16"	1/2"	1/2"	2
FRB55	1-3/8"	5/16"	5/8"	1/4"	2
FRB56	1-3/8"	5/16"	5/8"	1/2"	2

SCALE 1:1



FRB53
FRB54



FRB55
FRB56

REPLACEMENT PARTS

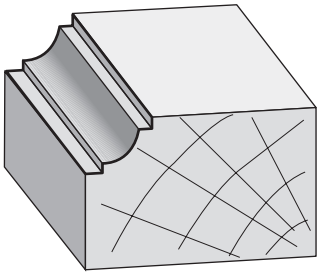
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB49 COVE PROFILE WITH TOP AND BOTTOM FILLET
WITH BALL BEARING GUIDE

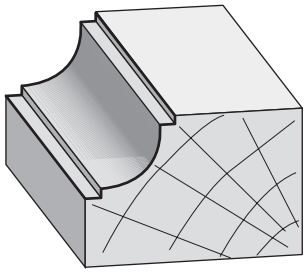


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB49	1-1/8"	3/16"	1/2"	1/4"	2
FRB50	1-1/8"	3/16"	1/2"	1/2"	2
FRB51	1-3/8"	5/16"	5/8"	1/4"	2
FRB52	1-3/8"	5/16"	5/8"	1/2"	2

SCALE 1:1



FRB49
FRB50



FRB51
FRB52

REPLACEMENT PARTS

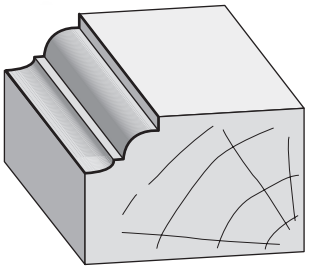
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB14 BEAD AND COVE PROFILE
WITH BALL BEARING GUIDE

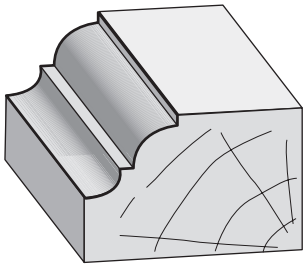


PART NO.	LARGE DIAM.	RADIUS R1	RADIUS R2	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB14	1-1/4"	3/16"	1/16"	1/2"	1/4"	2
FRB15	1-1/4"	3/16"	1/16"	1/2"	1/2"	2
FRB16	1-1/2"	15/64"	9/64"	5/8"	1/4"	2
FRB17	1-1/2"	15/64"	9/64"	5/8"	1/2"	2

SCALE 1:1



FRB14
FRB15



FRB16
FRB17

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB37 BEAD AND COVE PROFILE
WITH BALL BEARING GUIDE

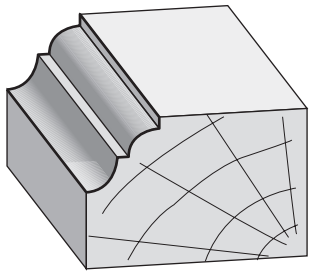


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB37	1"	5/32"	5/8"	1/4"	2
FRB38	1"	5/32"	5/8"	1/2"	2
FRB39	1-3/8"	1/4"	3/4"	1/4"	2
FRB40	1-3/8"	1/4"	3/4"	1/2"	2

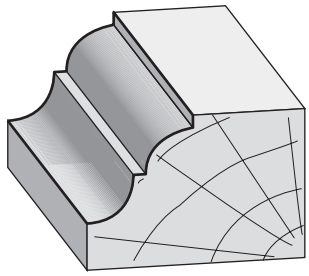
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B1	WR12	WFS504	WNC538

SCALE 1:1



FRB37
FRB38



FRB39
FRB40

FRB33 COVE AND BEAD PROFILE WITHOUT FILLET
WITH BALL BEARING GUIDE

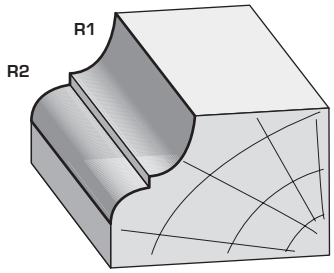


PART NO.	LARGE DIAM.	RADIUS R1	RADIUS R2	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB33	1-1/8"	5/32"	5/32"	1/2"	1/4"	2
FRB34	1-1/8"	5/32"	5/32"	1/2"	1/2"	2
FRB35	1-3/8"	1/4"	3/16"	11/16"	1/4"	2
FRB36	1-3/8"	1/4"	3/16"	11/16"	1/2"	2

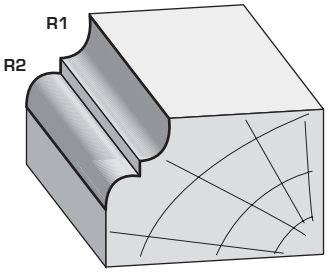
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

SCALE 1:1

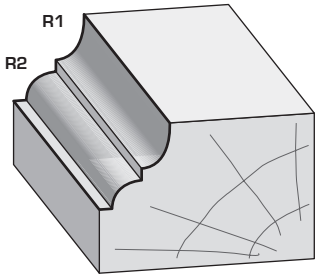


FRB33
FRB34

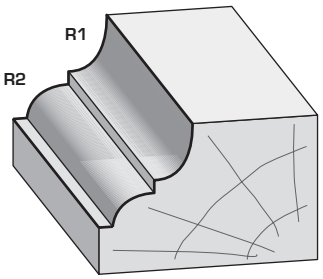


FRB35
FRB36

ADDITIONAL PROFILES: Bottom Fillet added to profile using 3/8" Ball Bearing (Part No. B2) and Washer (WFS500)



FRB33
FRB34

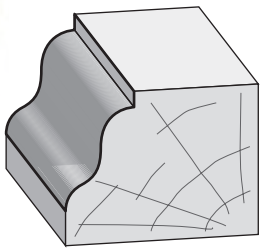


FRB35
FRB36

FRB40-1 WAVY EDGE BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB40-1	1-1/4"	5/32"	11/16"	1/4"	2
FRB40-2	1-1/4"	5/32"	11/16"	1/2"	2

REPLACEMENT PARTS

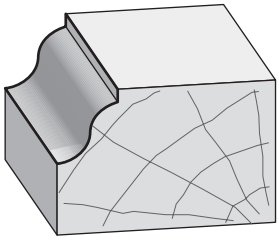
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS504	WNC538

R3200 ROMAN OGEE PROFILE
WITH BALL BEARING GUIDE

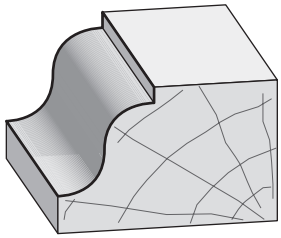


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
R3200	1"	5/32"	5/8"	1/4"	2
R3201	1-3/8"	1/4"	3/4"	1/4"	2
R3202	1"	5/32"	5/8"	1/2"	2
R3203	1-3/8"	1/4"	3/4"	1/2"	2

SCALE 1:1



R3200
R3202



R3201
R3203

REPLACEMENT PARTS

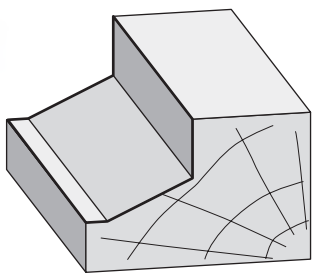
BALL BEARING	WASHER	SPRING WASHER	SCREW
B1	WR12	WFS504	WNC538

FRB25 PROVINCIAL PROFILE
WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	DEGREE BEVEL	NO. FLUTES
FRB25	1-5/8"	1/2"	1/2"	2-1/2"	25°	2

SCALE 1:1



REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB41 OGEE PROFILE WITHOUT FILLET
WITH BALL BEARING GUIDE

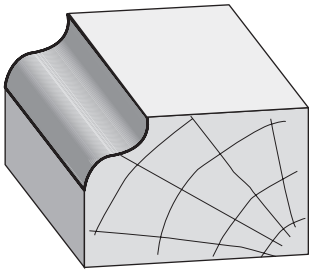


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB41	1-1/8"	5/32"	1/2"	1/4"	2
FRB42	1-1/8"	5/32"	1/2"	1/2"	2
FRB43	1-3/8"	1/4"	11/16"	1/4"	2
FRB44	1-3/8"	1/4"	11/16"	1/2"	2

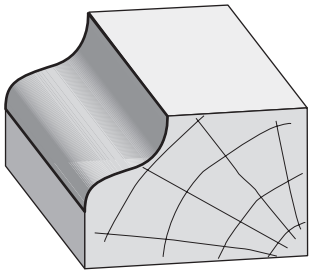
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

SCALE 1:1

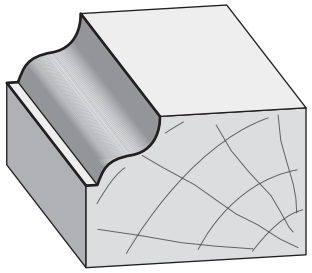


FRB41
FRB42

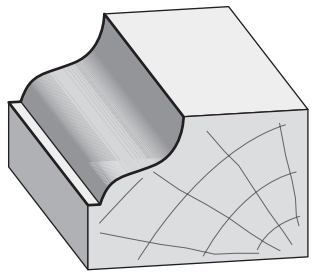


FRB43
FRB44

ADDITIONAL PROFILES: Bottom Fillet added to profile using 3/8" Ball Bearing (Part No. B2) and Washer (WFS500)



FRB41
FRB42



FRB43
FRB44

FRB18 ELLIPSE OGEE PROFILE
WITH BALL BEARING GUIDE

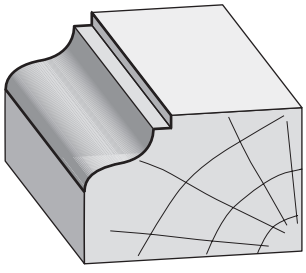


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB18	1-3/8"	5/32"	9/16"	1/4"	2
FRB19	1-3/8"	5/32"	9/16"	1/2"	2
FRB20	1-5/8"	1/4"	3/4"	1/2"	2

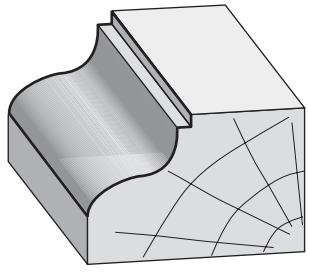
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

SCALE 1:1



FRB18
FRB19



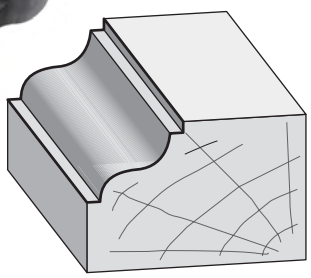
FRB20

FRB21 OGEE PROFILE WITH TOP AND BOTTOM FILLET
WITH BALL BEARING GUIDE

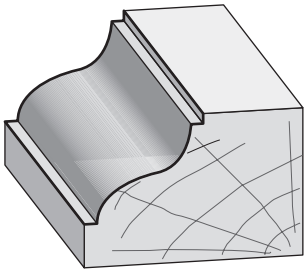


PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB21	1-3/8"	5/32"	9/16"	1/4"	2
FRB22	1-3/8"	5/32"	9/16"	1/2"	2
FRB23	1-5/8"	1/4"	3/4"	1/2"	2

SCALE 1:1



FRB21
FRB22



FRB23

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B2	WFS500	WFS506	WNC538

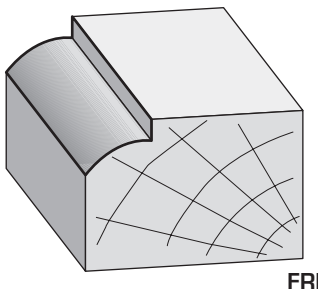
FRB67 THUMBNAIL PROFILE
WITH BALL BEARING GUIDE

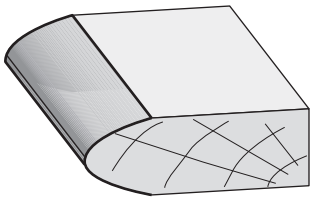


PART NO.	CUTTING DIAM.	RADIUS	CUTTING HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB67	1-3/16"	15/32"	3/8"	1/4"	2-1/16"	2
FRB68	1-3/16"	15/32"	3/8"	1/2"	2-1/16"	2
FRB69 •	2-3/4"	1-7/8"	11/16"	1/2"	2-7/8"	2

• Max. RPM: 18,000

SCALE 1:1



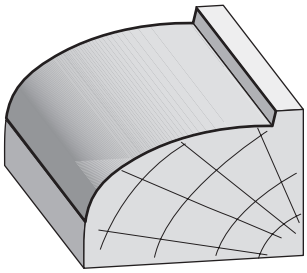


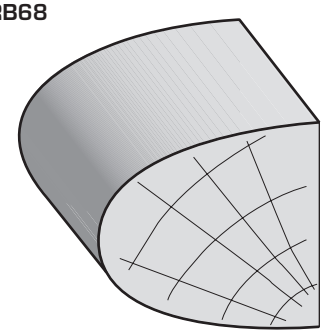
FRB67
FRB68

REPLACEMENT PARTS

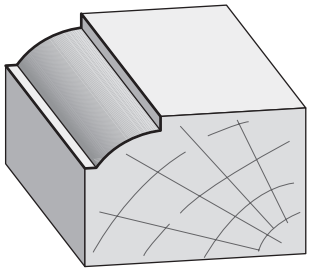
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

ADDITIONAL PROFILES: Bottom Fillet added to profile using 3/8" Ball Bearing (Part No. B2) and Washer (WFS500)

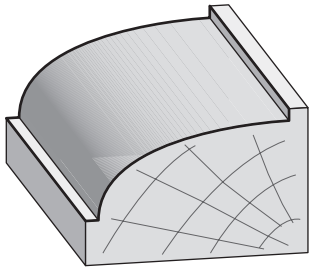




FRB69



FRB67
FRB68



FRB69

FRB63 BEAD PROFILE WITH ROUND NOSE BOTTOM
WITH UPPER BALL BEARING GUIDE

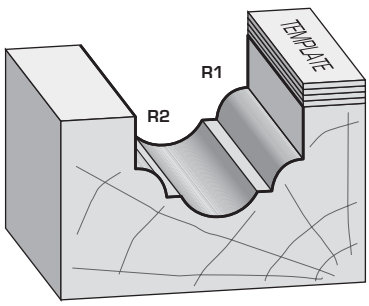


PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB63	7/8"	5/32"	7/32"	1/2"	1/4"	2"	2
FRB64	1-3/8"	1/4"	13/32"	9/16"	1/2"	2-5/8"	2

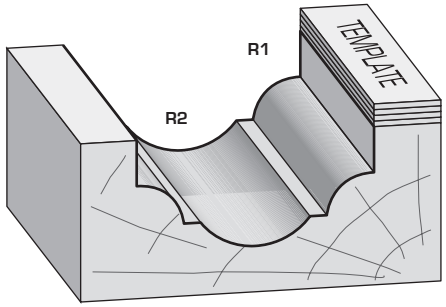
REPLACEMENT PARTS

TOOL NO.	BALL BEARING	EXTERNAL CIRCLIP
FRB63	B5	WC01
FRB64	B7	WC02

SCALE 1:1



FRB63



FRB64

FRB65 COVE AND BEAD PROFILE WITH FLAT BOTTOM
PLUNGE TYPE WITH UPPER BALL BEARING GUIDE

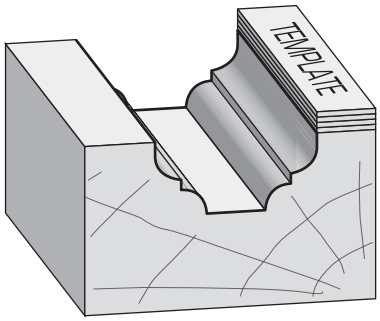


PART NO.	LARGE DIAM.	SMALL DIAM.	RADIUS R	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB65	7/8"	0.319"	9/64"	3/8"	1/4"	2"	2
FRB66	1-3/8"	0.522"	13/64"	9/16"	1/2"	2-5/8"	2

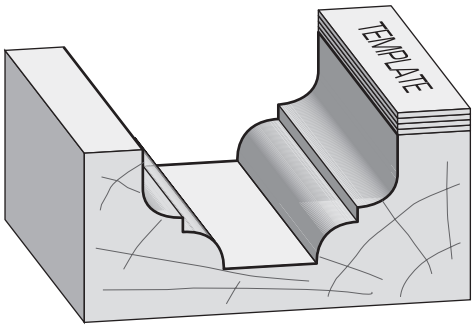
REPLACEMENT PARTS

TOOL NO.	BALL BEARING	EXTERNAL CIRCLIP
FRB65	B5	WC01
FRB66	B7	WC02

SCALE 1:1

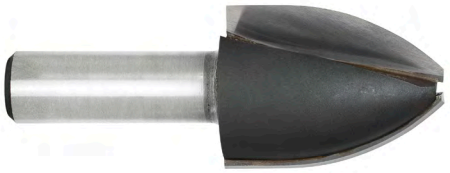


FRB65



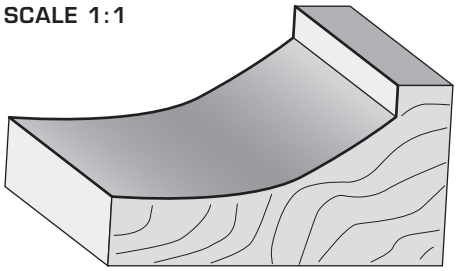
FRB66

FRB25-7 COVE PROFILE FOR RAISED PANELS
FOR VERTICAL OR 5-AXIS USE

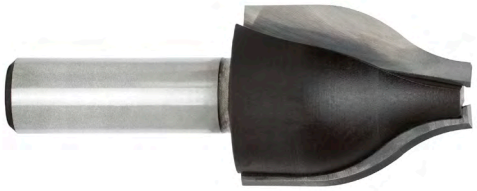


PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB25-7	1-1/8"	1-1/2"	1/2"	2-7/8"	2

SCALE 1:1

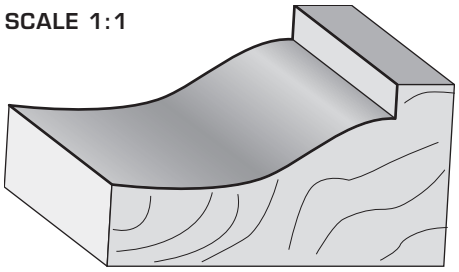


FRB25-8 OGEE PROFILE FOR RAISED PANELS
FOR VERTICAL OR 5-AXIS USE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB25-8	1-3/16"	1-1/2"	1/2"	2-7/8"	2

SCALE 1:1

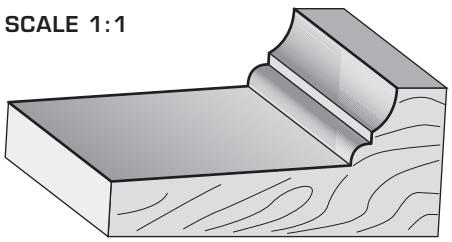


FRB25-5 PROVINCIAL PROFILE FOR RAISED PANELS
FOR VERTICAL OR 5-AXIS USE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB25-5	1"	1-1/2"	1/2"	2-7/8"	2

SCALE 1:1

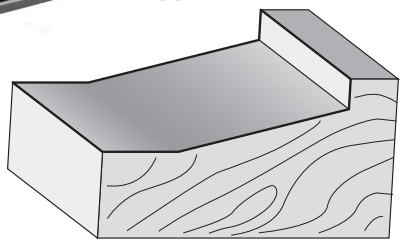


FRB25-6 PROVINCIAL PROFILE FOR RAISED PANELS
FOR VERTICAL OR 5-AXIS USE



PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB25-6	1-1/8"	1-1/2"	1/2"	2-7/8"	2

SCALE 1:1



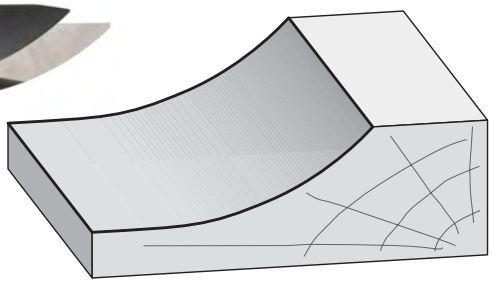
FRB25-2 COVE PROFILE FOR RAISED PANELS
WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	RADIUS	NO. FLUTES
FRB25-2	3-3/8"	1/2"	1/2"	2-3/8"	1-9/16"	2

Max. RPM: 16,000

SCALE 1:1



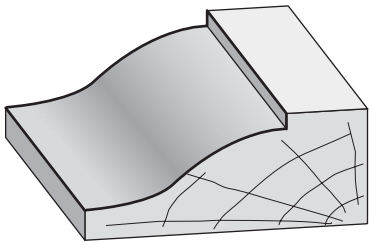
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB24 OGEE PROFILE FOR RAISED PANELS
WITH BALL BEARING GUIDE



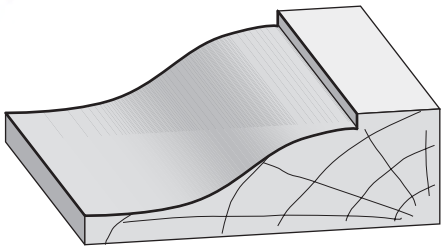
SCALE 1:1



FRB24

PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
FRB24	2-5/8	11/16"	1/2"	2
FRB24-1	3-3/8"	5/8"	1/2"	2

Max. RPM: 16,000



FRB24-1

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB25-3 PROVINCIAL PROFILE FOR RAISED PANELS
WITH BALL BEARING GUIDE



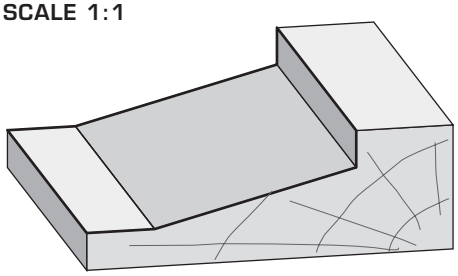
PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	DEGREE BEVEL	NO. FLUTES
FRB25-3	3-3/8"	1/2"	1/2"	2-3/8"	15°	2

Max. RPM: 16,000

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

SCALE 1:1



FRB25-1 COVE AND BEAD PROFILE FOR RAISED PANELS
WITH BALL BEARING GUIDE

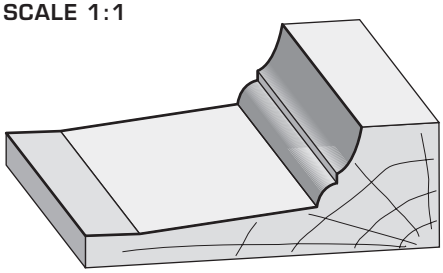


PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	RADIUS	NO. FLUTES
FRB25-1	2-1/2"	1/2"	1/2"	2-3/8"	1/4"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

SCALE 1:1



FRB23-7 COVE PROFILE FOR RAISED PANELS
WITH BACK CUTTER



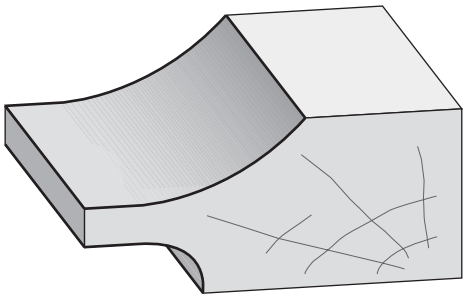
PART NO.	LARGE DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH
FRB23-7	3-3/8"	1-1/16"	1/2"	2-15/16"

Max. RPM 12,000

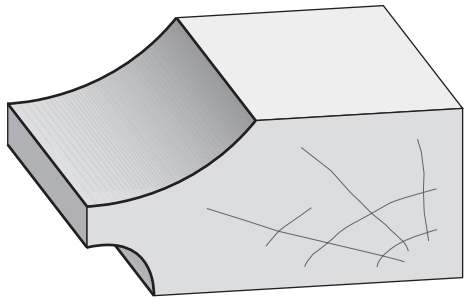
STANDARD SET CONSISTS OF:

Raised Panel Bit	FRB23-7RP
Back Cutter	FRB23-5BC
Ball Bearing 16 x 8 x 5mm	B3-4A
Ball Bearing 1-1/4" x 8 x 5mm	B6-5A
Washer 12 x 8 x 1.0mm	WF510
Shim 12 x 8 x 0.1mm (2 pieces)	WF501
Shim 12 x 8 x 0.2mm (2 pieces)	WF502
Lock Washer	WFS510
Nut NF5/16	WNF516

SCALE 1:1



Use Ball Bearing B3-4A



Use Ball Bearing B6-5A

FRB23-5 OGEE PROFILE FOR RAISED PANELS WITH BACK CUTTER



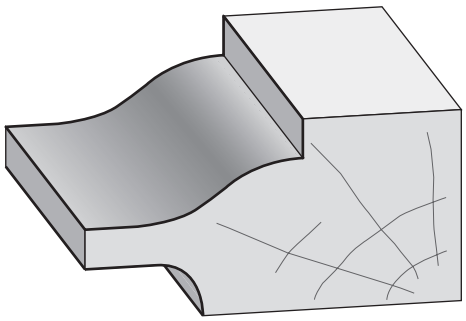
PART NO.	LARGE DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH
FRB23-5	3-3/8"	1-3/16"	1/2"	3-1/16"

Max. RPM: 12,000

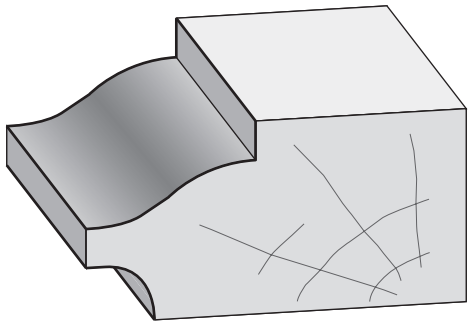
STANDARD SET CONSISTS OF:

Raised Panel Bit	FRB23-5RP
Back Cutter	FRB23-5BC
Ball Bearing 16 x 8 x 5mm	B3-4A
Ball Bearing 1-1/4" x 8 x 5mm	B6-5A
Washer 12 x 8 x 1.0mm	WF510
Shim 12 x 8 x 0.1mm (2 pieces)	WF501
Shim 12 x 8 x 0.2mm (2 pieces)	WF502
Lock Washer	WFS510
Nut NF5/16	WNF516

SCALE 1:1



Use Ball Bearing B3-4A



Use Ball Bearing B6-5A

FRB23-6 PROVINCIAL PROFILE FOR RAISED PANELS
WITH BACK CUTTER



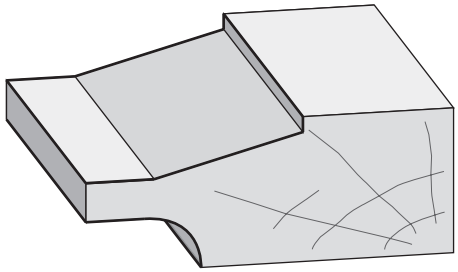
PART NO.	LARGE DIAM.	MAX. WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH
FRB23-6	3-3/8"	1-1/16"	1/2"	2-15/16"

Max. RPM: 12,000

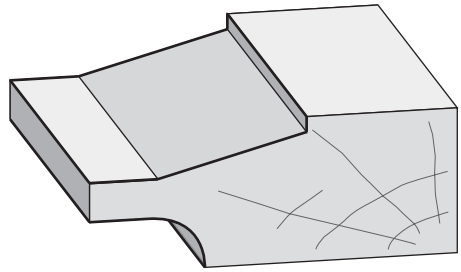
STANDARD SET CONSISTS OF:

Raised Panel Bit	FRB23-6RP
Back Cutter	FRB23-5BC
Ball Bearing 16 x 8 x 5mm	B3-4A
Ball Bearing 1-1/4" x 8 x 5mm	B6-5A
Washer 12 x 8 x 1.0mm	WF510
Shim 12 x 8 x 0.1mm (2 pieces)	WF501
Shim 12 x 8 x 0.2mm (2 pieces)	WF502
Lock Washer	WFS510
Nut NF5/16	WNF516

SCALE 1:1



Use Ball Bearing B3-4A



Use Ball Bearing B6-5A

FRB214 BEAD STILE AND RAIL
WITH BALL BEARING GUIDE

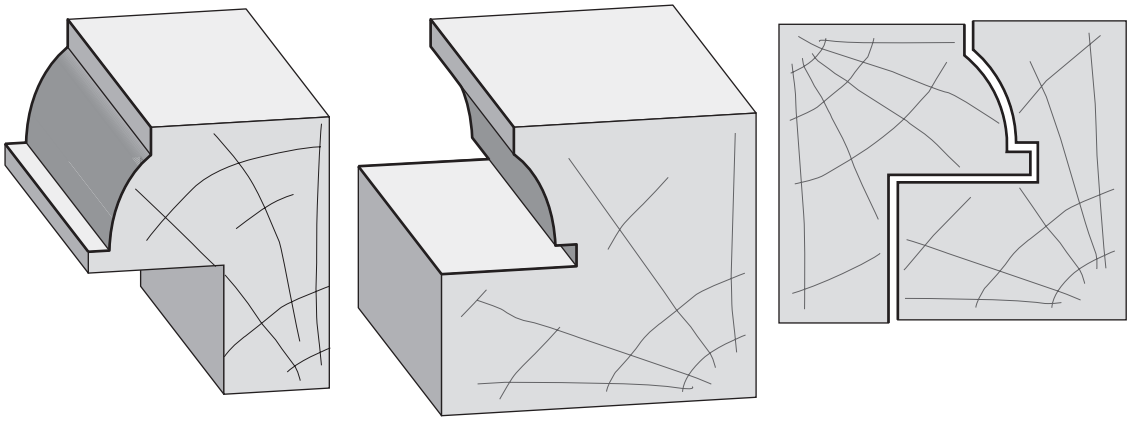


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB215	1-5/16"	11/32"	19/32"	1/4"	2-1/4"	2
FRB216	1-3/16"	43/64"	5/8"	1/4"	2-1/16"	2
FRB217	1-7/16"	11/32"	15/32"	1/4"	2-1/16"	2

REPLACEMENT PARTS

TOOL NO.	BALL BEARING	WASHER	SPRING WASHER	LOCK RING	SCREW
FRB214	B2	WFS500	WFS506	-	WNC538
FRB215	B2	WFS500	WFS506	-	WNC538
FRB216	B3-1	-	-	W01	WNC525
FRB217	B3-1	-	-	W01	WNC525

SCALE 1:1



FRB215

FRB216
FRB217

FRB218 BEAD AND COVE STILE AND RAIL
WITH BALL BEARING GUIDE, 2PC SET

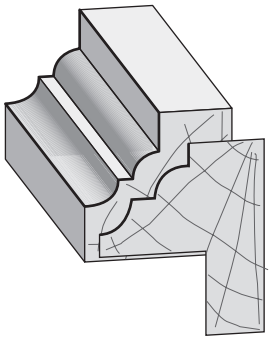


PART NO.	TOOL TYPE	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB218	Complete Set (2 bits)						
FRB219	A	1-5/64"	9/64"	1/2"	1/4"	2"	2
FRB220	B	1-13/64"	9/64"	23/64"	1/4"	2"	2

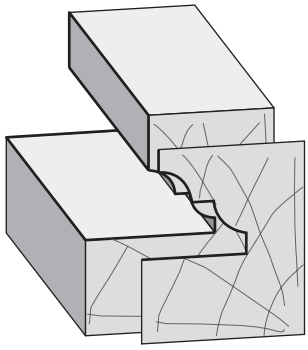
REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	LOCK RING	SCREW
A	B2	WFS500	WFS506	-	WNC538
B	B3-1	-	-	W01	WNC525

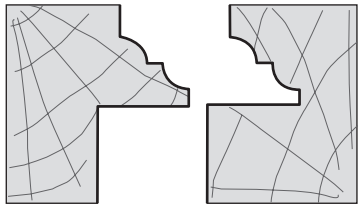
SCALE 1:1



FRB219



FRB220



FRB218 (SETS)

FRB224 OGEE STILE AND RAIL
WITH BALL BEARING GUIDE, 2PC SET

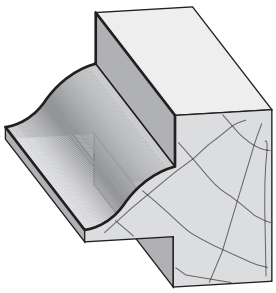


PART NO.	TOOL TYPE	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB224	Complete Set (2 bits)						
FRB225	A	1-5/16"	21/64"	35/64"	1/4"	2-3/64"	2
FRB226	B	1-7/16"	21/64"	25/64"	1/4"	2"	2
FRB227	Complete Set (2 bits)						
FRB228	A	1-15/16"	21/64"	35/64"	1/4"	2-3/64"	2
FRB229	B	1-39/64"	21/64"	7/16"	1/4"	2"	2

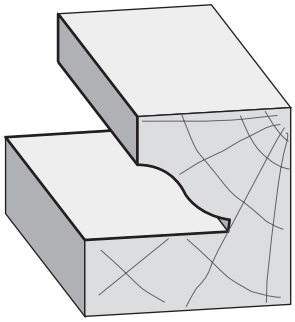
REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	LOCK RING	SCREW
A	B2	WFS500	WFS506	-	WNC538
B	B3-1	-	-	W01	WNC525

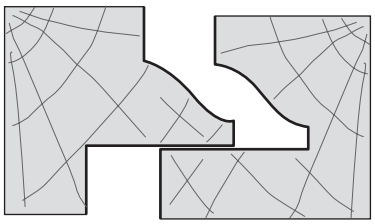
SCALE 1:1



FRB225
FRB228



FRB226
FRB229



FRB224
FRB227 (SETS)

FRB233 PROVINCIAL STILE AND RAIL
WITH BALL BEARING GUIDE, 2PC SET

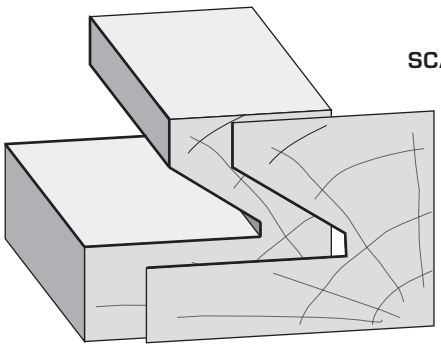


PART NO.	TOOL TYPE	LARGE DIAM.	DEGREE BEVEL	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH
FRB233	Complete Set (2 bits)					
FRB234	A	1-9/16"	32°	43/64"	1/4"	2-1/8"
FRB235	B	1-11/16"	32°	31/64"	1/4"	2"

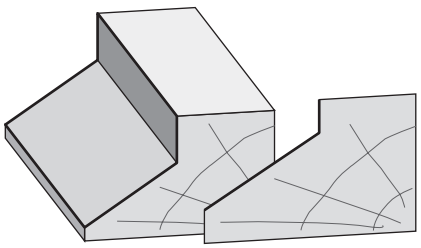
REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	LOCK RING	SCREW
A	B2	WFS500	WFS506	-	WNC538
B	B3-1	-	-	W01	WNC525

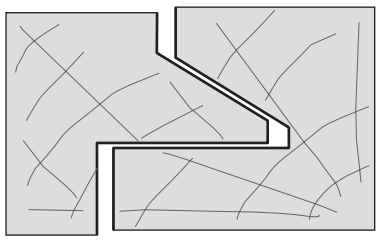
SCALE 1:1



FRB235



FRB234



FRB233 (SETS)

FRB30 SHALLOW BEAD AND COVE STILE AND RAIL
REVERSIBLE COPE AND STICK, 1PC SET

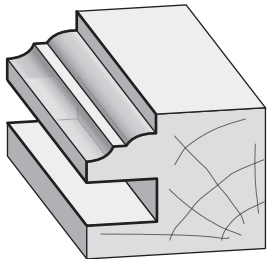


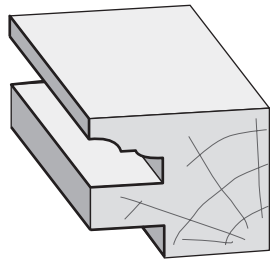
PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH	OVERALL LENGTH	NO. FLUTES
FRB30	1-5/8"	3/4" to 7/8"	1/2"	1/4"	3/8"	3"	2

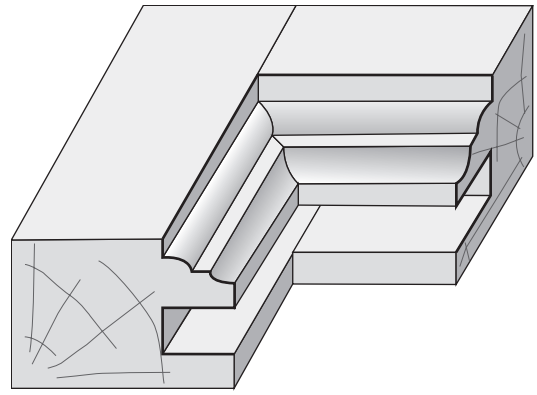
REPLACEMENT PARTS

PROFILE CUTTER ONLY	GROOVER ONLY	ARBOR AND NUT	NUT ONLY	BALL BEARING	WASHER	SPACER 0.05 MM	SPACER 0.01 MM
FRB30P	FRB28G	AR11	WNF516	B5	WF608	WF600	WF604

SCALE 1:1







FRB31 BEAD AND COVE STILE AND RAIL
REVERSIBLE COPE AND STICK, 1PC SET

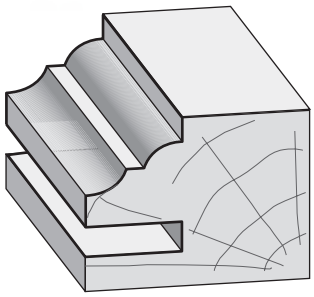


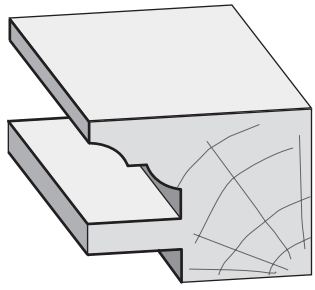
PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH	OVERALL LENGTH	NO. FLUTES
FRB31	1-13/16"	3/4" to 7/8"	1/2"	5/32"	1/2"	3"	2

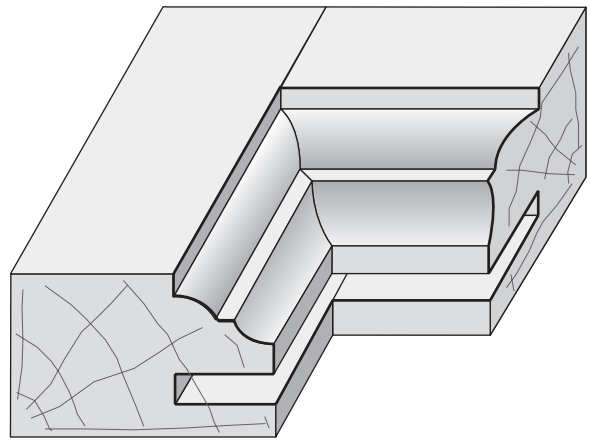
REPLACEMENT PARTS

PROFILE CUTTER ONLY	GROOVER ONLY	ARBOR AND NUT	NUT ONLY	BALL BEARING	WASHER	SPACER 0.05 MM	SPACER 0.01 MM
FRB31P	FRB27G	AR11	WNF516	B5	WF608	WF600	WF604

SCALE 1:1







FRB27 OGEE STILE AND RAIL
1/2" GROOVE REVERSIBLE COPE AND STICK, 1PC SET

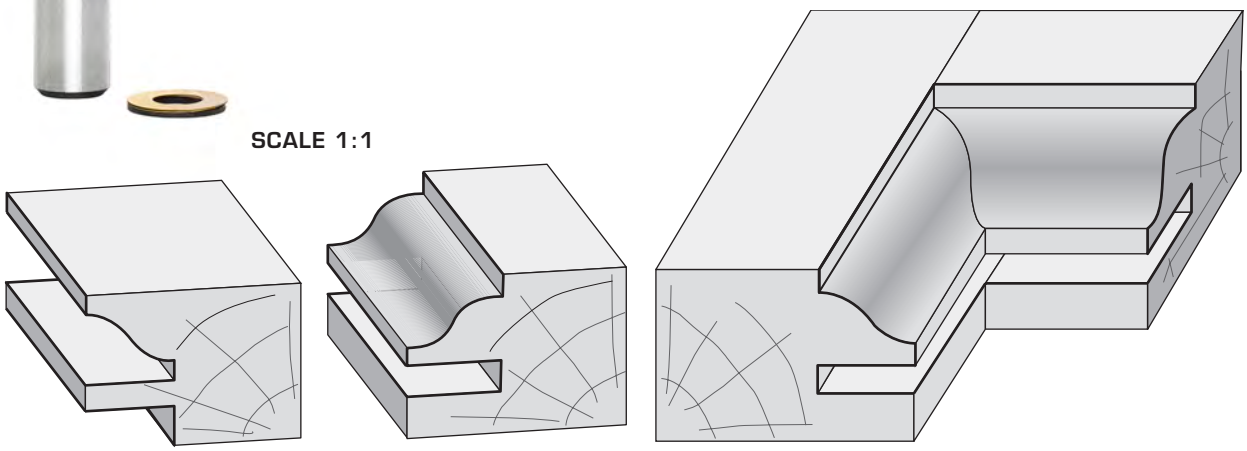


PART NO.	LARGE DIAM.	WOOD THICKNESS	OVERALL LENGTH	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH	NO. FLUTES
FRB27	1-13/16"	3/4" to 7/8"	3"	1/2"	5/32"	1/2"	2

REPLACEMENT PARTS

PROFILE CUTTER ONLY	GROOVER ONLY	ARBOR AND NUT	NUT ONLY	BALL BEARING	WASHER	SPACER 0.05MM	SPACER 0.01MM
FRB27P	FRB27G	AR11	WNF516	B5	WF608	WF600	WF604

SCALE 1:1



FRB28 OGEE STILE AND RAIL
3/8" GROOVE REVERSIBLE COPE AND STICK, 1PC SET

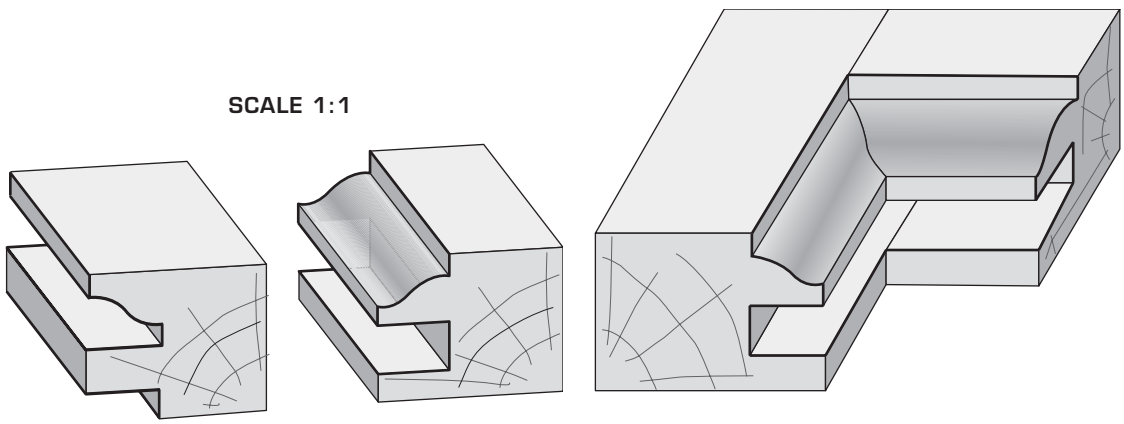


PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH	OVERALL LENGTH	NO. FLUTES
FRB28	1-5/8"	3/4" to 7/8"	1/2"	1/4"	3/8"	3"	2

REPLACEMENT PARTS

PROFILE CUTTER ONLY	GROOVER ONLY	ARBOR AND NUT	NUT ONLY	BALL BEARING	WASHER	SPACER 0.05MM	SPACER 0.01MM
FRB28P	FRB28G	AR11	WNF516	B5	WF608	WF600	WF604

SCALE 1:1



FRB31-1 PROVINCIAL STILE AND RAIL
REVERSIBLE COPE AND STICK, 1PC SET

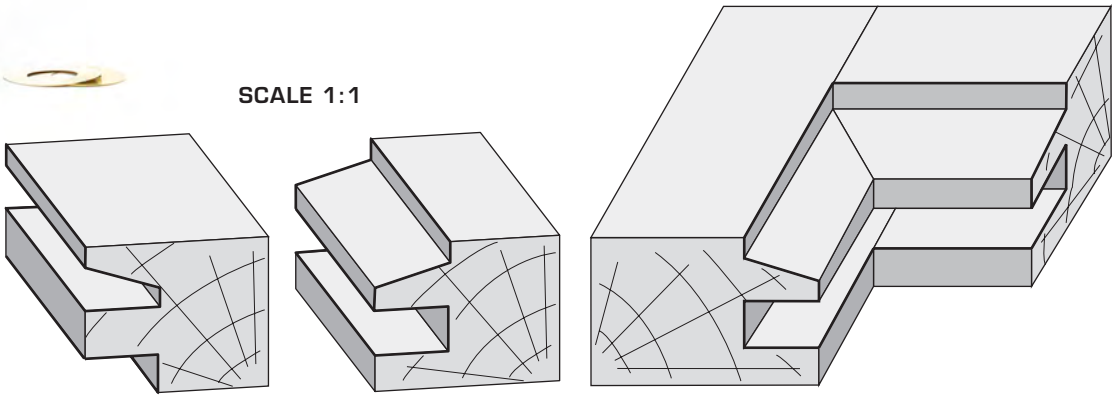


PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH	OVERALL LENGTH	NO. FLUTES
FRB31-1	1-5/8"	3/4" to 7/8"	1/2"	1/4"	3/8"	3"	2

REPLACEMENT PARTS

PROFILE CUTTER ONLY	GROOVER ONLY	ARBOR AND NUT	NUT ONLY	BALL BEARING	WASHER	SPACER 0.05MM	SPACER 0.01MM
FRB31-1P	FRB28G	AR11	WNF516	B5	WF608	WF600	WF604

SCALE 1:1

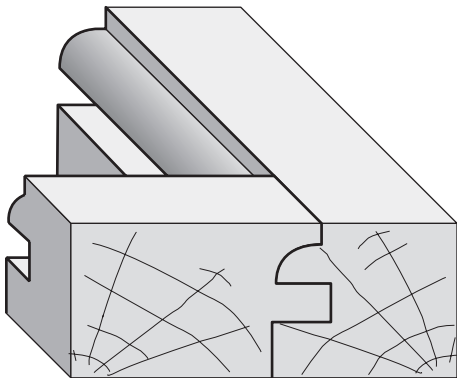


FRB31-3 ROUND OVER STILE AND RAIL
COPE AND STICK, 2PC SET



PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH	OVERALL LENGTH	NO. FLUTES
FRB31-3	1-5/8"	3/4" to 1"	1/2"	1/4"	3/8"	3-5/16"	2

SCALE 1:1



REPLACEMENT PARTS

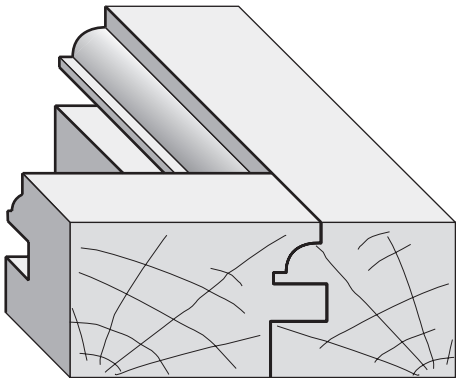
DESCRIPTION	PROFILE CUTTER	GROOVER/ RABBETING CUTTER	STRAIGHT CUTTER	ARBOR AND NUT	NUT ONLY	BALL BEARING	SPACERS 1.0 MM	SHIMS 0.1 MM	SHIMS 0.05 MM
STILE	FRB31-3P	FRB28G	FRB31-2C	AR23	WNF516	B5	WF608	WF604	WF600
QUANTITY	1pc	1pc	1pc	1pc	1pc	1pc	2pcs	3pcs	1pc
RAIL	FRB31-3PR	FRB31-2R	FRB31-2CR	AR23	WNF516	B5	WF608	WF604	WF600
QUANTITY	1pc	1pc	1pc	1pc	1pc	1pc	4pcs	2pcs	2pcs

FRB31-4 BEAD STILE AND RAIL
COPE AND STICK,2PC SET



PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH	OVERALL LENGTH	NO. FLUTES
FRB31-4	1-5/8"	3/4" to 1"	1/2"	1/4"	3/8"	3-5/16"	2

SCALE 1:1



REPLACEMENT PARTS

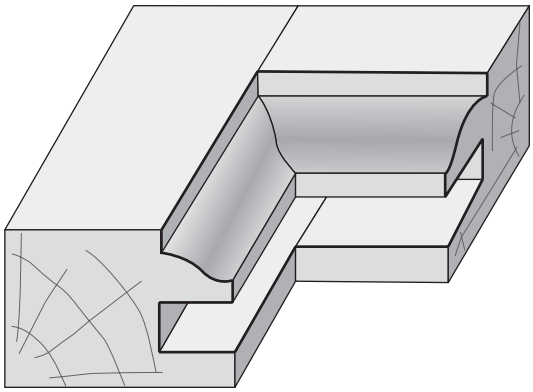
DESCRIPTION	PROFILE CUTTER	GROOVER/ RABBETING CUTTER	STRAIGHT CUTTER	ARBOR AND NUT	NUT ONLY	BALL BEARING	SPACERS 1.0 MM	SHIMS 0.1 MM	SHIMS 0.05 MM
STILE	FRB31-4P	FRB28G	FRB31-2C	AR23	WNF516	B5	WF608	WF604	WF600
QUANTITY	1pc	1pc	1pc	1pc	1pc	1pc	2pcs	3pcs	1pc
RAIL	FRB31-4PR	FRB31-2R	FRB31-2CR	AR23	WNF516	B5	WF608	WF604	WF600
QUANTITY	1pc	1pc	1pc	1pc	1pc	1pc	4pcs	2pcs	2pcs

FRB31-2 OGEE STILE AND RAIL
COPE AND STICK,2PC SET



PART NO.	LARGE DIAM.	WOOD THICKNESS	SHANK DIAM.	GROOVE WIDTH	GROOVE DEPTH	OVERALL LENGTH	NO. FLUTES
FRB31-2	1-5/8"	3/4" to 1"	1/2"	1/4"	3/8"	3-5/16"	2

SCALE 1:1



REPLACEMENT PARTS

DESCRIPTION	PROFILE CUTTER	GROOVER/ RABBETING CUTTER	STRAIGHT CUTTER	ARBOR AND NUT	NUT ONLY	BALL BEARING	SPACERS 1.0 MM	SHIMS 0.1 MM	SHIMS 0.05 MM
STILE	FRB28P	FRB28G	FRB31-2C	AR23	WNF516	B5	WF608	WF604	WF600
QUANTITY	1pc	1pc	1pc	1pc	1pc	1pc	2pcs	3pcs	1pc
RAIL	FRB31-2PR	FRB31-2R	FRB31-2CR	AR23	WNF516	B5	WF608	WF604	WF600
QUANTITY	1pc	1pc	1pc	1pc	1pc	1pc	4pcs	2pcs	2pcs

FRB31-5 ROMAN OGEE WINDOW SASH ASSEMBLY
REVERSIBLE WITH BACK CUTTER, 1PC SET



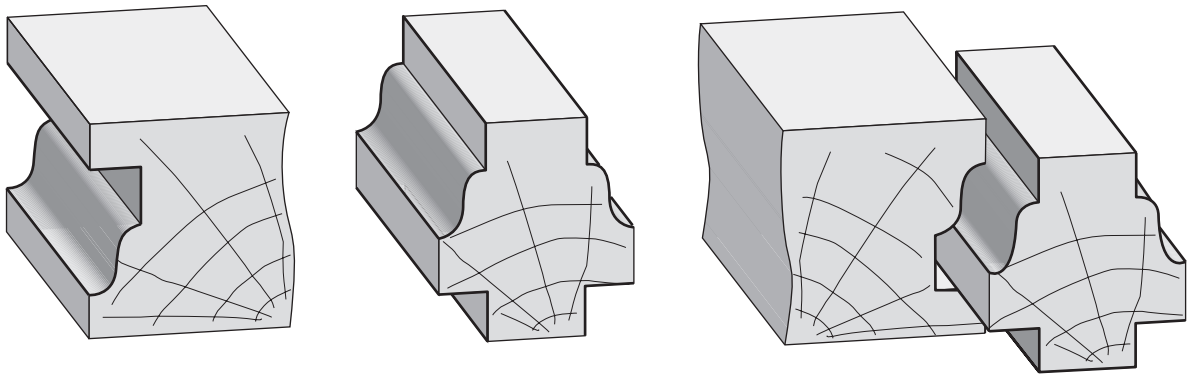
PART NO.	LARGE DIAM. D1	WOOD THICKNESS	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB31-5	1-3/8"	1-1/8" to 1-3/4"	1/2"	3-3/4"	2

REPLACEMENT PARTS

DESCRIPTION	PROFILE CUTTER	RABBETING CUTTER	ARBOR AND NUT	NUT ONLY	BALL BEARING
PART NO.	FRB31-5C	FRB31-5R	AR20	WNF516	B5
QUANTITY	1pc	1pc	1pc	1pc	1pc

DESCRIPTION	SPACERS 6.0 MM	SPACER 3.0 MM	SPACER 1.0 MM	SPACERS 0.5 MM	SPACERS 0.1 MM
PART NO.	WF618	WF610	WF608	WF606	WF604
QUANTITY	3pcs	1pc	1pc	2pcs	3pcs

SCALE 1:1



FRB212 SASH BAR JOINT BITS
TWO FLUTES

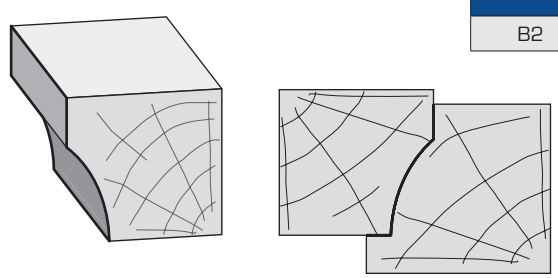


PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB212	1-7/64"	43/64"	27/32"	1/4"	2-1/16"	2
FRB213	1-7/64"	43/64"	27/32"	1/2"	2-5/16"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B2	WFS500	WFS506	WNC538

SCALE 1:1



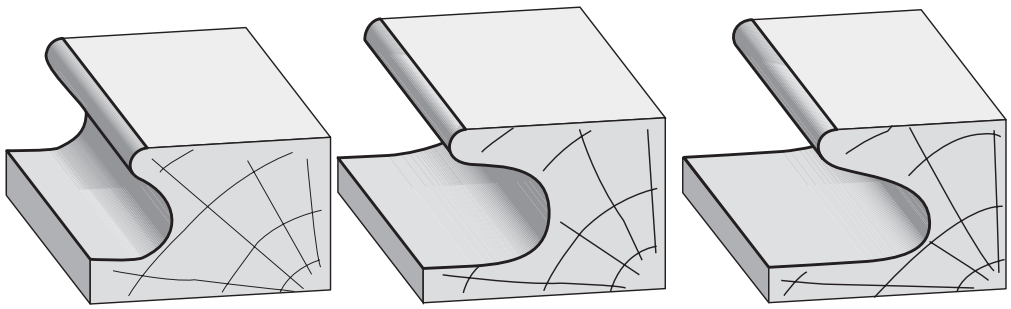
FRB212
FRB213

FRB60 FINGER GRIP BIT
TWO FLUTES



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB60	3/4"	3/32"	3/16"	3/4"	1/2"	2-3/8"	2
FRB61	1-1/2"	5/64"	15/64"	13/16"	1/2"	2-5/16"	2
FRB62	1-3/4"	3/32"	3/16"	13/16"	1/2"	2-5/16"	2

SCALE 1:1



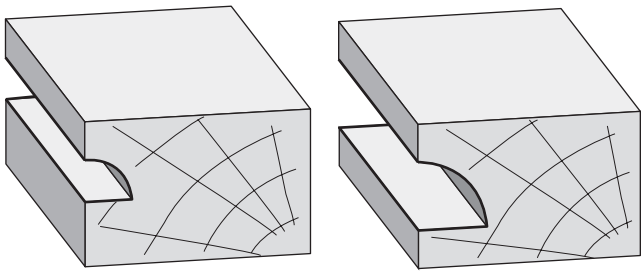
FRB60 **FRB61** **FRB62**

FRB57 COVE STYLE FINGER GRIP BITS
TWO FLUTES



PART NO.	CUTTING DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB57	3/4"	1/4"	1/4"	1/4"	1-3/4"	2
FRB58	1"	3/8"	3/8"	1/4"	1-3/4"	2

SCALE 1:1



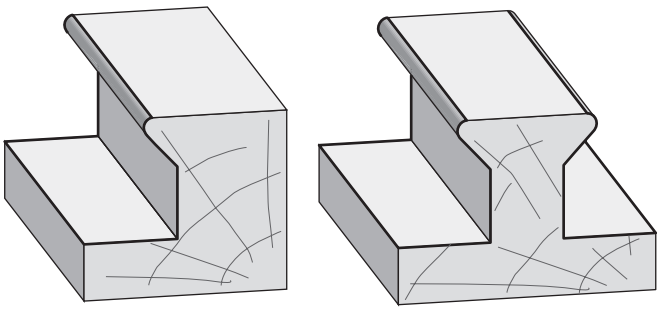
FRB57 FRB58

FRB59 CHAMFER STYLE FINGER GRIP BIT
TWO FLUTES



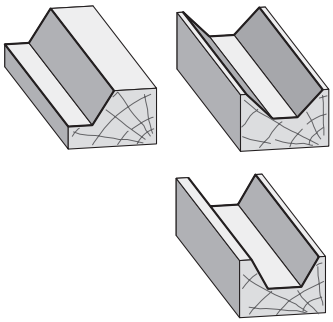
PART NO.	CUTTING DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB59	7/8"	1/16"	13/16"	1/2"	2-5/16"	2

SCALE 1:1



R3330-1 BEVEL BITS
PLUNGE TYPE





PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	DEGREE BEVEL	OVERALL LENGTH	NO. FLUTES
R3330-1	9/16"	5/8"	1/4"	10°	1-3/4"	2
R3330-2	1/2"	1/2"	1/4"	15°	2"	2
R3330	7/8"	3/8"	1/4"	23°	1-5/8"	2
R3331	1"	3/8"	1/4"	30°	1-5/8"	2
R3332	1-3/8"	3/8"	1/4"	45°	1-5/8"	2

R3300 BEVEL BITS
WITH BALL BEARING GUIDE



PART NO.	TOOL TYPE	CUTTING DIAM.	DEGREE BEVEL	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R3300	A	1/2"	15°	1/4"	1/4"	1-3/4"	2
R3300-1	A	17/32"	15°	1/2"	1/4"	2-1/16"	2
R3301	A	27/32"	25°	1/2"	1/4"	2"	2
R3302	B	1-1/2"	45°	1/2"	1/4"	2-1/8"	2
R3302-1	C	1-1/4"	45°	1/2"	1/4"	2"	2
R3303	B	3/4"	15°	1/2"	1/2"	2-3/8"	2
R3304	B	1"	25°	1/2"	1/2"	2-3/8"	2
R3304-1	C	1-1/4"	45°	1/2"	1/2"	2-3/8"	2
R3305	B	1-1/2"	45°	1/2"	1/2"	2-3/8"	2
R3305-1	B	2"	45°	3/4"	1/2"	2-5/8"	2
R3306	B	2-1/2"	45°	1"	1/2"	2-13/16"	2
R3307 •	B	3-1/64"	45°	1-1/4"	1/2"	3-1/8"	2

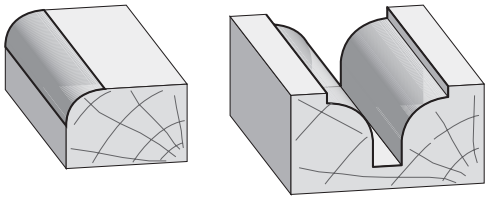
• Max. RPM: 13,500

REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	SCREW
A	B2	WFS500	WFS506	WM308
B	B3	WR58	WFS506	WNC538
C	B1	WR58	WFS506	WNC338

R3020 ROUNDING OVER BITS
PLUNGE TYPE

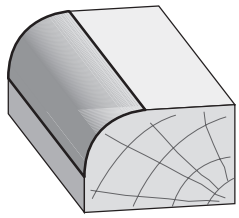




PART NO.	LARGE DIAM.	RADIUS	SMALL DIAM.	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
R3020-1	3/8"	1/8"	1/8"	5/16"	1/4"	2
R3020	5/8"	3/16"	1/4"	5/16"	1/2"	2
R3021	3/4"	1/4"	1/4"	1/2"	1/4"	2
R3022	3/4"	1/4"	1/4"	1/2"	1/2"	2
R3023	7/8"	5/16"	1/4"	9/16"	1/4"	2
R3024	7/8"	5/16"	1/4"	9/16"	1/2"	2
R3025	1"	3/8"	1/4"	5/8"	1/4"	2
R3026	1"	3/8"	1/4"	5/8"	1/2"	2
R3027	1-3/8"	1/2"	3/8"	1"	1/2"	2
R3028	1-3/4"	5/8"	1/2"	1-1/4"	1/2"	2
R3029	2"	3/4"	1/2"	1-7/16"	1/2"	2

R3000 ROUNDING OVER BITS
WITH BALL BEARING GUIDE





PART NO.	LARGE DIAM.	RADIUS	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
R3000-1	5/8"	1/16"	5/16"	1/4"	2
R3000-2	3/4"	1/8"	3/8"	1/4"	2
R3000-3	3/4"	5/32"	3/8"	1/4"	2
R3000	7/8"	3/16"	1/2"	1/4"	2
R3001	1"	1/4"	1/2"	1/4"	2
R3002	1-1/8"	5/16"	1/2"	1/4"	2
R3003	1-1/4"	3/8"	5/8"	1/4"	2
R3004	1-1/2"	1/2"	3/4"	1/4"	2
R3004-1	1-3/4"	5/8"	7/8"	1/4"	2
R3005-1	5/8"	1/16"	5/16"	1/2"	2
R3005-2	3/4"	1/8"	3/8"	1/2"	2
R3005-3	3/4"	5/32"	3/8"	1/2"	2
R3005	7/8"	3/16"	1/2"	1/2"	2
R3006	1"	1/4"	1/2"	1/2"	2
R3007	1-1/8"	5/16"	1/2"	1/2"	2
R3008	1-1/4"	3/8"	5/8"	1/2"	2
R3009	1-1/2"	1/2"	3/4"	1/2"	2
R3009-1	1-3/4"	5/8"	7/8"	1/2"	2
R3010	2"	3/4"	1"	1/2"	2
R3010-1	2-1/4"	7/8"	1-1/4"	1/2"	2
R3011	2-1/2"	1"	1-1/4"	1/2"	2
R3011-1 •	2-3/4"	1-1/8"	1-3/8"	1/2"	2
R3012 •	3"	1-1/4"	1-1/2"	1/2"	2
R3012-1 ▲	3-1/4"	1-3/8"	1-9/16"	1/2"	2
R3013 ▲	3-1/2"	1-1/2"	1-3/4"	1/2"	2

• Max RPM: 18,000

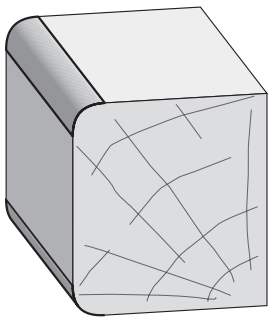
▲ Max RPM: 16,000

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

R2525 ADJUSTABLE ROUNDING OVER SET
THREE WINGS





PART NO.	LARGE DIAM.	RADIUS	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2525	1-1/2"	3/16"	1/2"	3-5/8"	2
R2526	1-5/8"	1/4"	1/2"	3-5/8"	2

Fully adjustable set for corner rounding top and bottom in just one pass

R 3/16" Adjustable from 3/8" to 1-1/4" material thickness

R 1/4" Adjustable from 1/2" to 1-1/4" material thickness

R 3/8" Adjustable from 3/4" to 1-1/4" material thickness

REPLACEMENT PARTS

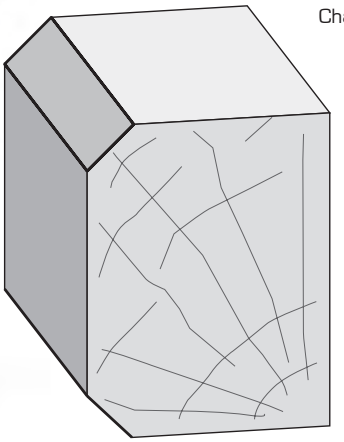
TOOL NO.	DESCRIPTION	TOP CUTTER	BOTTOM CUTTER
R2525	PART NO.	R2525CR	R2525CL
	DIMENSIONS	R = 3/16"	R = 3/16"
R2526	PART NO.	R2526CR	R2526CL
	DIMENSIONS	R = 1/4"	R = 1/4"

DESCRIPTION	BALL BEARING	ARBOR & NUT	NUT ONLY	SPACER A	SPACER B	SPACER C	SPACER D	SPACER E
PART NO.	B6-3	AR20	WNF516	WF618	WF610	WF608	WF606	WF604
DESCRIPTION	-	-	-	6.0mm	3.0mm	1.0mm	0.5mm	0.1mm
QUANTITY	-	-	-	2pcs	1pc	2pcs	2pcs	6pcs

R2535 ADJUSTABLE 3-WING CHAMFERING SET
DOUBLE ANGLE



SCALE 1:1



Profile:
45° chamfer
1-1/2" material thickness

PART NO.	LARGE DIAM.	DEGREES BEVEL-1	DEGREES BEVEL-2	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2535	1-3/8"	30°	45°	1/2"	4-1/4"	2

Fully adjustable set for corner chamfer top and bottom in just one pass

Chamfer 30° Adjustable from 3/8" to 1-3/8" material thickness

Chamfer 45° Adjustable from 1/2" to 1-5/8" material thickness

REPLACEMENT PARTS

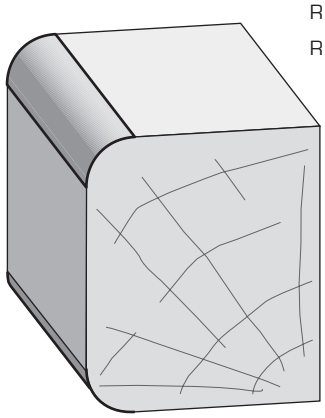
TOOL NO.	TOP CUTTER	BOTTOM CUTTER
R2535	R2535CR	R2535CL

DESCRIPTION	BALL BEARING	ARBOR & NUT	NUT ONLY	SPACER A	SPACER B	SPACER C	SPACER D	SPACER E
PART NO.	B5	AR22	WNF516	WF618	WF610	WF608	WF606	WF604
DESCRIPTION	-	-	-	6.0mm	3.0mm	1.0mm	0.5mm	0.1mm
QUANTITY	-	-	-	2pcs	2pcs	3pcs	1pcs	4pcs

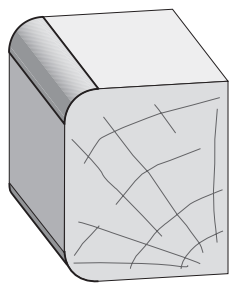
R2530 ADJUSTABLE ROUNDING OVER SET
3 WINGS DOUBLE RADIUS



SCALE 1:1



RADIUS 1/4"



RADIUS 3/16"

PART NO.	LARGE DIAM.	RADIUS R1	RADIUS R2	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2530	1-3/8"	1/4"	3/16"	1/2"	4-1/4"	2

Fully adjustable set for corner rounding top and bottom in just one pass

R 3/16" Adjustable from 3/8" to 1-3/8" wood thickness

R 1/4" Adjustable from 1/2" to 1-1/2" wood thickness

REPLACEMENT PARTS

TOOL NO.	TOP CUTTER	BOTTOM CUTTER
R2530	R2530CR	R2530CL

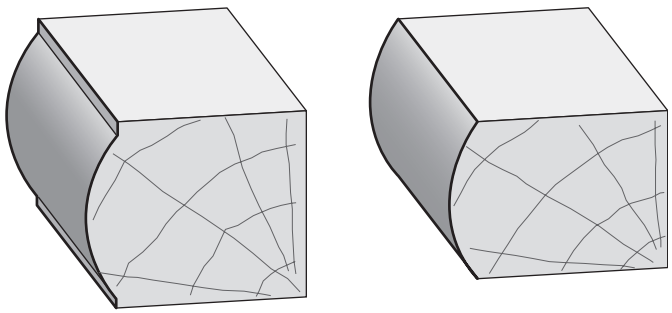
DESCRIPTION	BALL BEARING	ARBOR & NUT	NUT ONLY	SPACER A	SPACER B	SPACER C	SPACER D	SPACER E
PART NO.	B5	AR22	WNF516	WF618	WF610	WF608	WF606	WF604
DESCRIPTION	-	-	-	6.0mm	3.0mm	1.0mm	0.5mm	0.1mm
QUANTITY	-	-	-	2pcs	2pcs	3pcs	1pcs	4pcs

R2520 TRUE BULL NOSE BITS
TWO FLUTES



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2520	13/16"	23/32"	1-1/4"	1/4"	2-1/2"	2
R2521	13/16"	23/32"	1-1/4"	1/2"	2-3/4"	2

SCALE 1:1



R2519 TRUE BULL NOSE BIT
WITH UPPER BEARING - PLUNGE TYPE

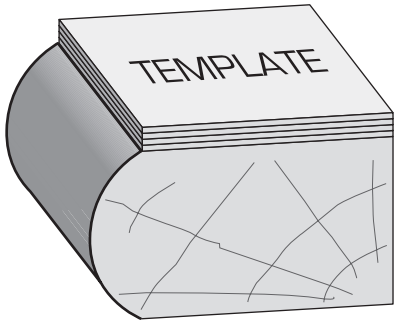


PART NO.	LARGE DIAM.	RADIUS	CUTTER OPENING	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2519	1-1/8"	1/2"	7/8"	1-9/16"	1/2"	3-5/8"	2

REPLACEMENT PARTS

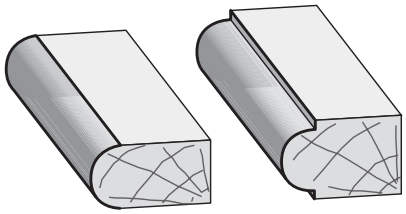
BALL BEARING	LOCK RING	SCREW
B6-4	W03	WNC518

SCALE 1:1



R2500 HALF ROUND BITS
BULL NOSE



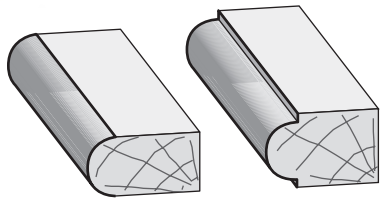


PART NO.	LARGE DIAM.	RADIUS	CUTTER OPENING	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
R2500-1	17/32"	5/64"	5/32"	1/2"	1/4"	2
R2500-2	17/32"	5/64"	5/32"	1/2"	1/2"	2
R2500	19/32"	7/64"	7/32"	1/2"	1/4"	2
R2501	21/32"	9/64"	9/32"	3/4"	1/4"	2
R2502	7/8"	13/64"	13/32"	3/4"	1/4"	2
R2503	1-1/32"	17/64"	35/64"	1"	1/4"	2
R2504	19/32"	7/64"	7/32"	1/2"	1/2"	2
R2505	21/32"	9/64"	9/32"	3/4"	1/2"	2
R2506	7/8"	13/64"	13/32"	3/4"	1/2"	2
R2507	1-1/32"	17/64"	35/64"	1"	1/2"	2
R2507-1	1-1/16"	5/16"	5/8"	1-1/8"	1/2"	2
R2508	1-5/16"	3/8"	3/4"	1-3/8"	1/2"	2
R2509	1-11/16"	1/2"	1"	1-9/16"	1/2"	2
R2510	2"	5/8"	1-1/4"	2"	1/2"	2
R2511	2-3/8"	3/4"	1-1/2"	2"	1/2"	2
R2511-1 •	2-3/8"	3/4"	1-1/2"	2"	1/2"	3

- Max. RPM: 16,000
- 3 flutes and is suitable for cutting solid surface materials and composite materials

R2514 HALF ROUND BITS
BULLNOSE WITH BALL BEARING GUIDE





PART NO.	TOOL TYPE	LARGE DIAM.	RADIUS	CUTTER OPENING	CARBIDE HEIGHT	SHANK DIAM.	NO. FLUTES
R2514	A	1-1/32"	17/64"	35/64"	1"	1/2"	2
R2515	B	1-3/8"	3/8"	3/4"	1-1/4"	1/2"	2
R2517	C	2"	5/8"	1-1/4"	2"	1/2"	2

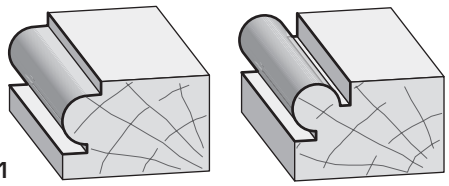
TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	SCREW
A	B3	WR58	WFS506	WNC538
B	B3-4	WR59	WFS506	WNC512
C	B4	WR59	WFS508	WNF1012

FRB74 CORNER BEADING PROFILE
WITH BALL BEARING GUIDE

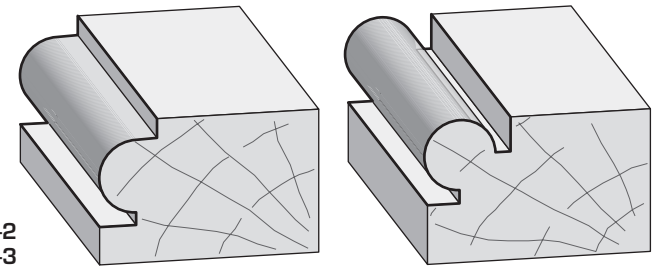


PART NO.	TOOL TYPE	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB74	A	7/8"	1/8"	9/16"	1/4"	2-1/8"	2
FRB74-1	A	7/8"	1/8"	9/16"	1/2"	2-1/2"	2
FRB74-2	B	1-1/16"	3/16"	5/8"	1/4"	2-1/4"	2
FRB74-3	B	1-1/16"	3/16"	5/8"	1/2"	2-5/8"	2
FRB74-4	B	1-1/4"	1/4"	3/4"	1/4"	2-3/8"	2
FRB74-5	B	1-1/4"	1/4"	3/4"	1/2"	2-5/8"	2
FRB74-6	B	1-1/2"	3/8"	1"	1/2"	3"	2

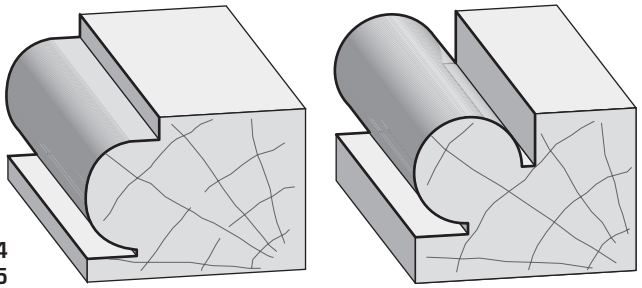
SCALE 1:1



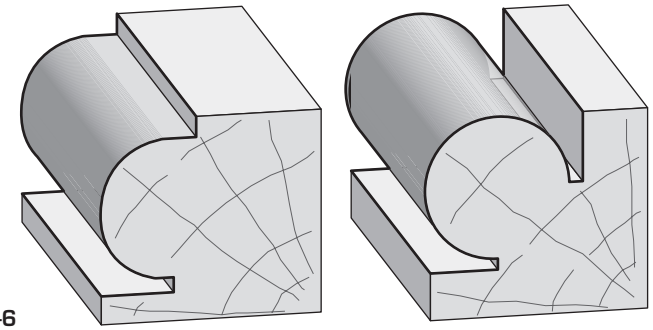
FRB74
FRB74-1



FRB74-2
FRB74-3



FRB74-4
FRB74-5



FRB74-6

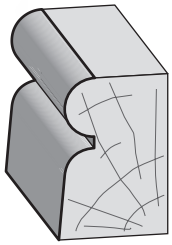
REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SPRING WASHER	SCREW
A	B3	WR58	WFS506	WNC538
B	B3-4	WR59	WFS506	WNC538

FRB76-9 EDGE BEADING PROFILE
TWO FLUTES



SCALE 1:1



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB76-9	7/8"	5/32"	1-1/32"	1/4"	2-5/16"	2
FRB77	7/8"	5/32"	1-1/32"	1/2"	2-1/2"	2

FRB77-1 DRAWING LINE BEADING PROFILE
WITH BALL BEARING GUIDE

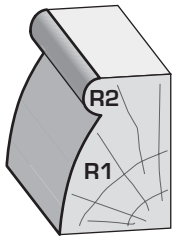


PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB77-1	1"	1"	3/32"	7/8"	1/2"	2-3/4"	2
FRB77-4	1"	3/8"	3/16"	7/8"	1/2"	2-3/4"	2

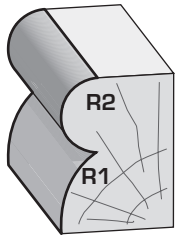
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

SCALE 1:1



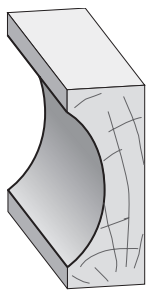
FRB77-1



FRB77-4

R2430 CONVEX BEADING BITS
WITH BEARING GUIDE





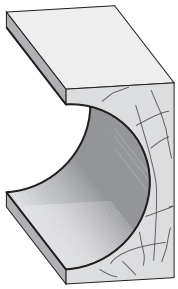
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2430	3/4"	3/16"	3/8"	1/2"	2-5/8"	2
R2431	3/4"	5/16"	1/2"	1/2"	2-3/4"	2
R2432	7/8"	15/32"	3/4"	1/2"	3-1/16"	2
R2433	7/8"	3/4"	1"	1/2"	3-3/8"	2
R2434	1"	1-1/4"	1-1/2"	1/2"	3-7/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

R2440 CONVEX BEADING BITS
WITH BALL BEARING GUIDE,





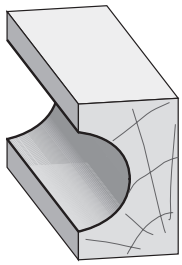
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2440	13/16"	5/32"	5/16"	1/4"	1-7/8"	2
R2441	7/8"	3/16"	3/8"	1/4"	2"	2
R2442	31/32"	15/64"	15/32"	1/4"	2"	2
R2444	1-1/4"	25/64"	25/32"	1/2"	3"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

R2436 CONVEX BEADING BITS
WITH UPPER AND LOWER BALL BEARINGS





PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R2436	3/4"	1/8"	1/4"	1/4"	2-1/4"	2
R2437	7/8"	13/64"	25/64"	1/4"	2-3/8"	2

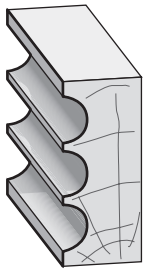
REPLACEMENT PARTS

LOCK RING	WASHER	SPRING WASHER	CENTRE BALL BEARING	LOWER BALL BEARING	SCREW FOR BEARING
W01	WR58	WFS506	B3-1	B3	WNC538

FRB76-7 TRIPLE FLUTE CONVEX PROFILE BIT
R=1/8" WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB76-7	7/8"	1/8"	1"	1/4"	2-1/2"	2

REPLACEMENT PARTS

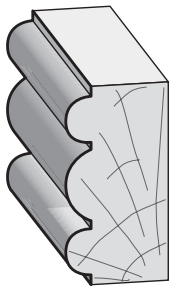
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

FRB76-4 TRIPLE BEADING PROFILE BIT
R=1/4",R=5/64",R=1/4"



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB76-4	3/4"	5/64"	1/4"	1"	1/4"	2-1/8"	2

SCALE 1:1

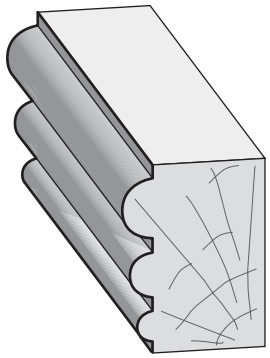


FRB76-5 VARIED BEAD PROFILE BIT
R=5/32",R=1/8",R=5/64"



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	RADIUS R3	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB76-5	7/8"	5/32"	1/8"	5/64"	1-1/8	1/4"	2-1/4"	2

SCALE 1:1

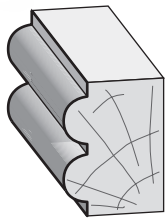


FRB77-9 DOUBLE BEADING PROFILE BIT
R=1/8" WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB77-9	7/8"	1/8"	3/4"	1/2"	2-5/8"	2

SCALE 1:1



REPLACEMENT PARTS

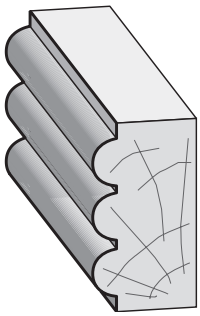
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

FRB77-5 TRIPLE BEADING PROFILE BITS
R=1/8" WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB77-5	7/8"	1/8"	1"	1/4"	2-1/2"	2

SCALE 1:1



REPLACEMENT PARTS

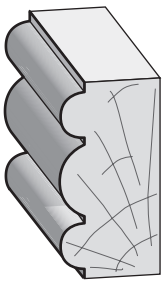
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

FRB77-7 TRIPLE BEADING PROFILE BITS
R=1/8",R=3/16",R=1/8" WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB77-7	1"	1/8"	3/16"	1"	1/4"	2-1/4"	2
FRB77-8	1"	1/8"	3/16"	1"	1/2"	2-1/4"	2

SCALE 1:1



REPLACEMENT PARTS

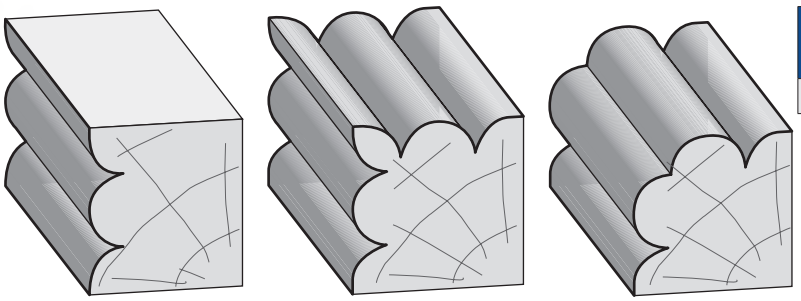
BALL BEARING	WASHER	SPRING WASHER	SCREW
B4	WFS500	WFS506	WNC538

FRB76-3 DOUBLE LEAF-EDGE BEADING PROFILE BIT
WITH BALL BEARING GUIDES



PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB76-3	1"	3/16"	7/8"	1/4"	3"	2

SCALE 1:1



REPLACEMENT PARTS

BALL BEARING	LOCK RING	SCREW
B3-3	W01	WNF1012



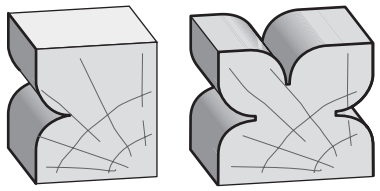
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB76	1"	3/16"	1/2"	1/4"	2-1/2"	2
FRB76-1	1-1/8"	1/4"	5/8"	1/4"	2-5/8"	2
FRB76-2	1-3/8"	3/8"	7/8"	1/4"	2-7/8"	2

REPLACEMENT PARTS

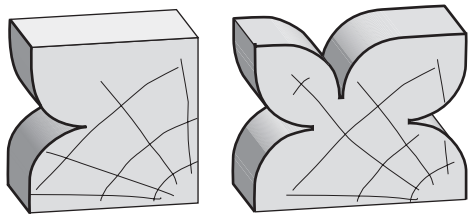
BALL BEARING	LOCK RING	LOCK RING SCREW	SCREW
B3-3	W01	WNC525	WNF1012

SCALE 1:1

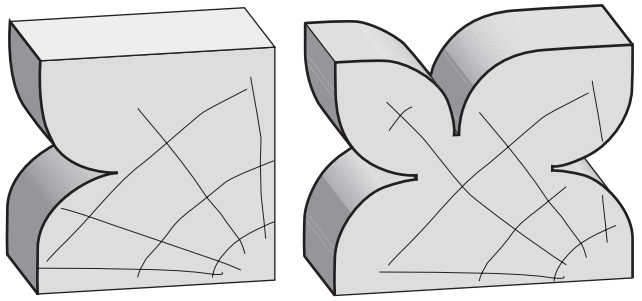
FRB76



FRB76-1



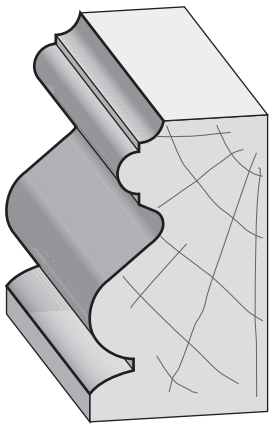
FRB76-2



FRB101 TRADITIONAL BEAD & COVE EDGE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB101	1-3/8"	1-5/8"	1/2"	3-1/2"	2

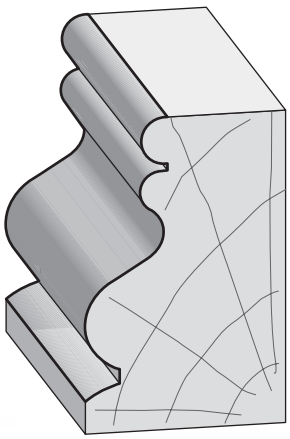
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB100 TRADITIONAL BIT DOUBLE BEAD EDGE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB100	1-3/8"	1-5/8"	1/2"	3-1/2"	2

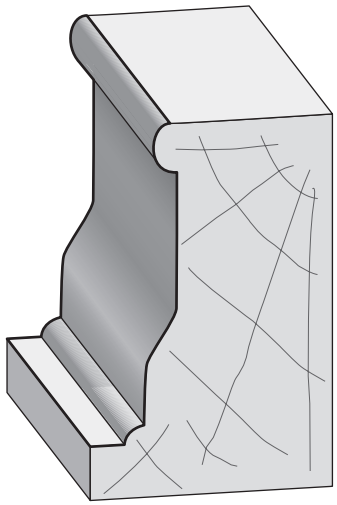
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB102 BEADED EDGE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB102	1-3/8"	1-3/4"	1/2"	3-5/8"	2

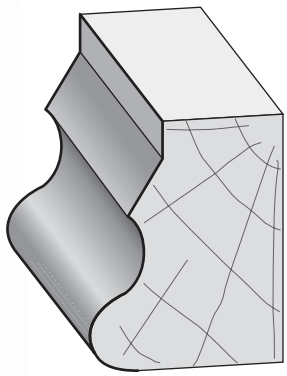
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB104 OGEE WITH SPLAY EDGE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB104	1-3/8"	1-1/2"	1/2"	3-3/8"	2

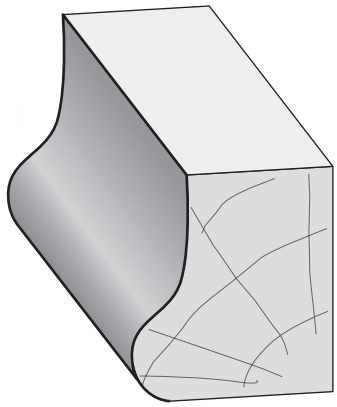
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

FRB106 OGEE EDGE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB106	1-3/16"	1-3/8"	1/2"	3-1/4"	2

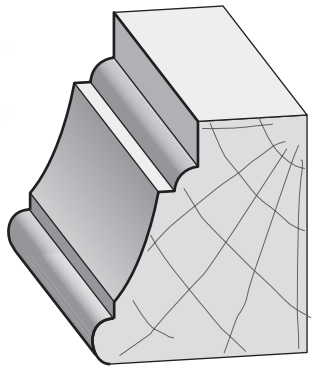
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

FRB107 BEADED CAVETTO EDGE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB107	1-3/4"	1-1/2"	1/2"	3-7/16"	2

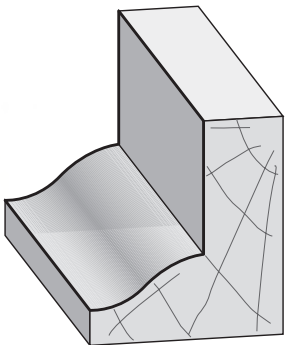
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

FRB108 OGEE EDGE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB108	1-3/4"	1"	1/2"	3"	2

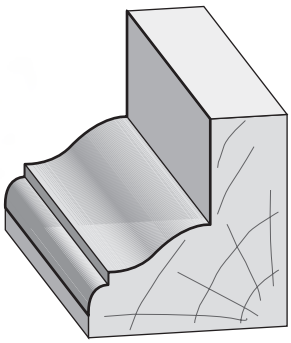
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-2	WR59	WFS506	WNC538

FRB109 OGEE WITH BEAD EDGE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB109	1-3/4"	1"	1/2"	3"	2

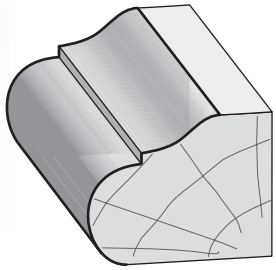
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB111 BEAD WITH ELLIPSE OGEE MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB111	2"	1"	1/2"	2-7/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB105 BEAD AND COVE EDGE MOULDING BIT
WITH BALL BEARING GUIDE

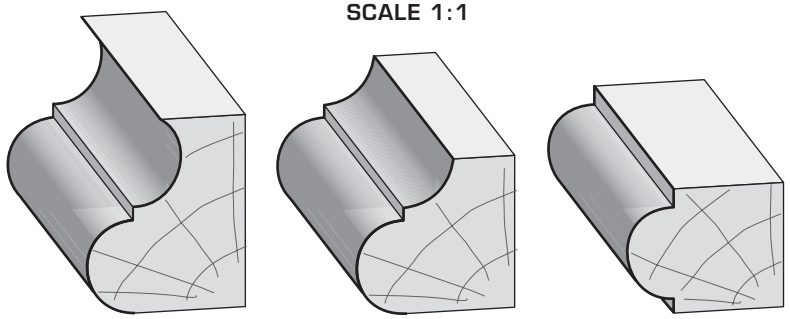


PART NO.	LARGE DIAM.	CUTTING LENGTH	RADIUS	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB105	2"	1-1/4"	1/4"	1/2"	3-1/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

SCALE 1:1



FRB110 BEAD AND COVE WITH TOP BEAD MOULDING BIT
WITH BALL BEARING GUIDE

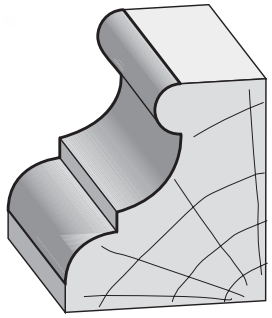


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB110	1-5/8"	1-1/8"	1/2"	3"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

SCALE 1:1



FRB113 BEAD AND COVE MOULDING BITS
WITH BALL BEARING GUIDE

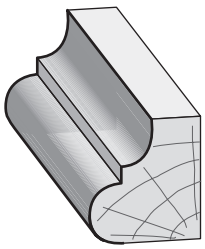


PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB113-1	1-1/4"	5/32"	5/32"	7/8"	1/2"	2-3/4"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

SCALE 1:1



FRB113-1

FRB114 ECHINUS MOULDING BIT
WITH BALL BEARING GUIDE

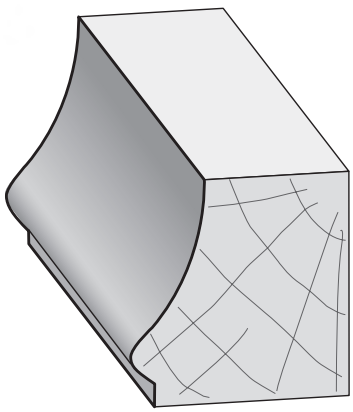


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB114	1-1/2"	1-3/16"	1/2"	3-1/4"	2

REPLACEMENT PARTS

BALL BEARING	SPRING WASHER	SCREW
B4	WFS500	WNF1012

SCALE 1:1



FRB116 ROMAN OGEE WITH BEAD MOULDING BIT
WITH BALL BEARING GUIDE

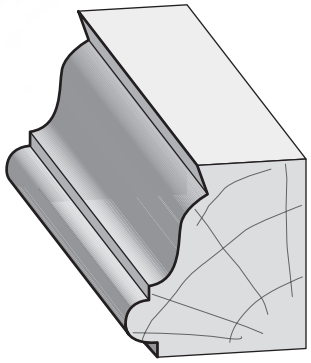


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB116	1-1/2"	1-3/16"	1/2"	3-1/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

SCALE 1:1



FRB115 ECHINUS WITH COVE MOULDING BIT
WITH BALL BEARING GUIDE

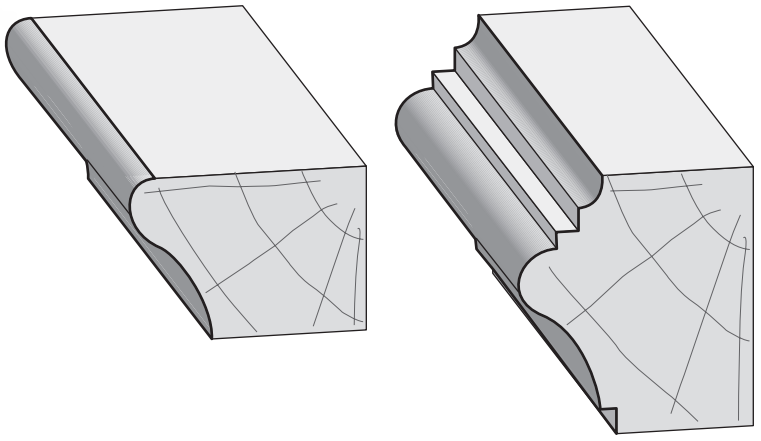


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB115	1-21/32"	1-9/16"	1/2"	3-1/2"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

SCALE 1:1



FRB117 COVED ASTRAGAL MOULDING BITS
WITH BALL BEARING GUIDE

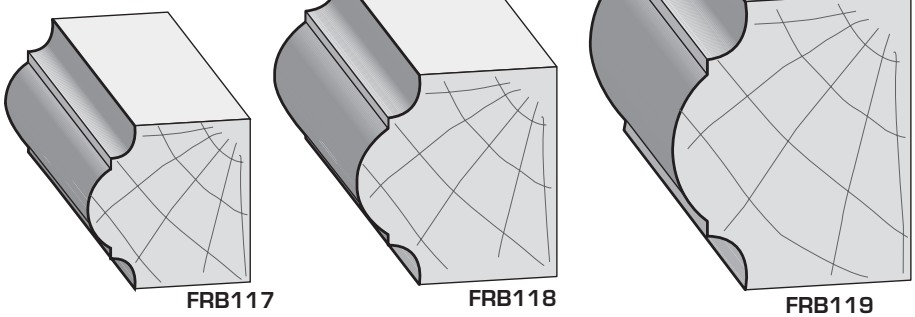


PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB117	1-1/8"	15/64"	1"	1/2"	2-7/8"	2
FRB118	1-1/4"	5/16"	1-3/16"	1/2"	3-1/8"	2
FRB119	1-3/8"	33/64"	1-9/16"	1/2"	3-1/2"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

SCALE 1:1



FRB117 FRB118 FRB119

FRB120 CAVETTO WITH BEAD MOULDING BIT
WITH BALL BEARING GUIDE

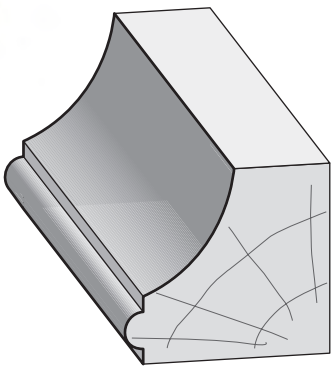


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB120	1-3/4"	1-3/16"	1/2"	3-1/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

SCALE 1:1

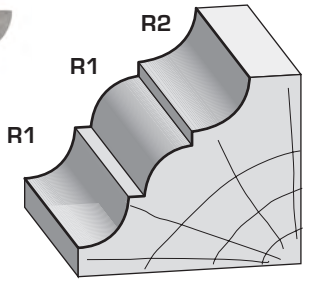


FRB124 COVE AND BEAD WITH TOP COVE MOULDING BIT
WITH BALL BEARING GUIDE



PART NO.	LARGE DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB124	2-5/16"	1/4"	19/64"	7/8"	1/2"	2-3/4"	2

SCALE 1:1



REPLACEMENT PARTS

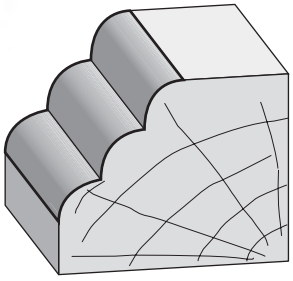
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB123 TRIPLE BEAD MOULDING BIT
WITH BALL BEARING GUIDE



PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB123	1-7/8"	15/64"	15/16"	1/2"	2-7/8"	2

SCALE 1:1



REPLACEMENT PARTS

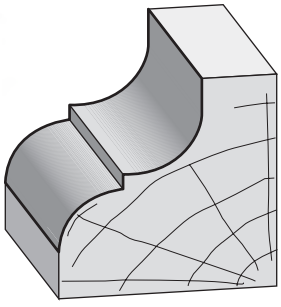
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB122 CLASSICAL OGEE MOULDING BIT
WITH BALL BEARING GUIDE



PART NO.	LARGE DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB122	2"	21/64"	1-7/32"	1/2"	3-1/8"	2

SCALE 1:1



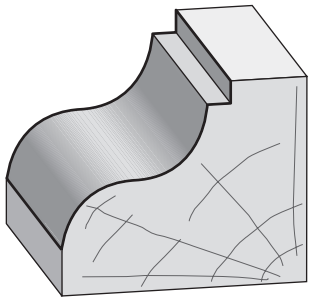
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB121 OGEE WITH FILLET MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB121	2-1/4"	1"	1/2"	2-7/8"	2

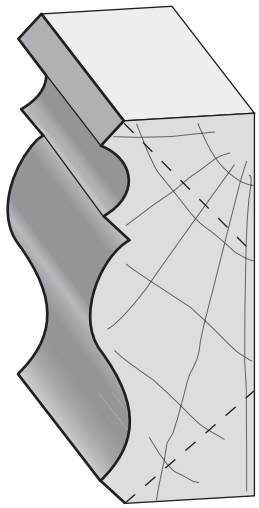
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB150 FLUTED OGEE WITH BEAK CROWN MOULDING BIT
TWO FLUTES



SCALE 1:1

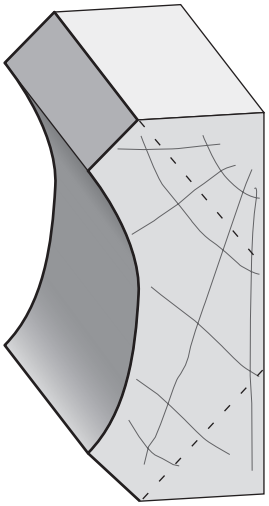


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB150	1-1/4"	2-1/4"	1/2"	3-3/4"	2

FRB151 SPLAYED CAVETTO CROWN MOULDING BIT
TWO FLUTES



SCALE 1:1

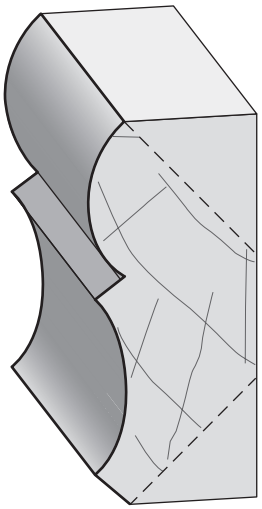


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB151	1-1/4"	2-1/4"	1/2"	3-3/4"	2

FRB152 OVOLO CAVETTO WITH BEAK CROWN MOULDING BIT
TWO FLUTES



SCALE 1:1

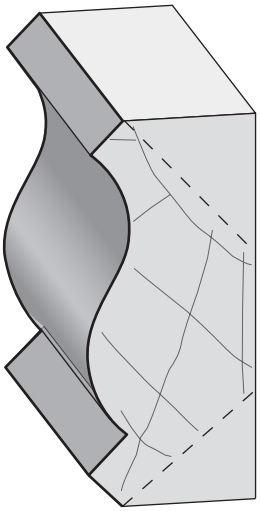


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB152	1-1/4"	2-1/4"	1/2"	3-3/4"	2

FRB153 OGEE WITH BEAK CROWN MOULDING BIT
TWO FLUTES



SCALE 1:1

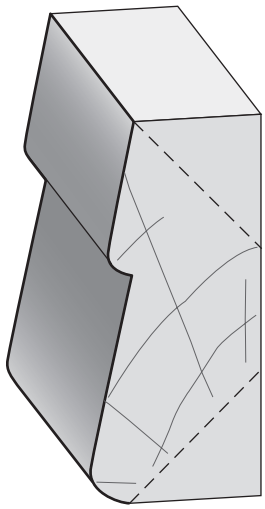


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB153	1-1/4"	2-1/4"	1/2"	3-3/4"	2

FRB154 DOUBLE ECHINUS CROWN MOULDING BIT
TWO FLUTES



SCALE 1:1

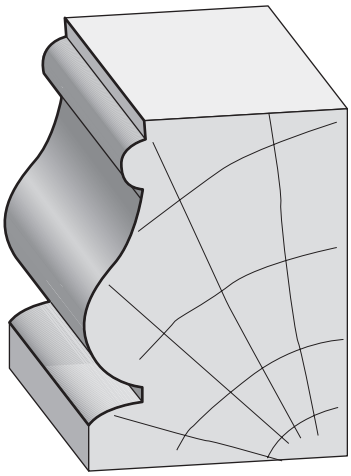


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB154	1-1/4"	2-1/4"	1/2"	3-3/4"	2

FRB78-1 BEADED VASE ARCHITECTURAL MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB78-1	1-1/16"	1-3/4"	1/2"	3-3/4"	2

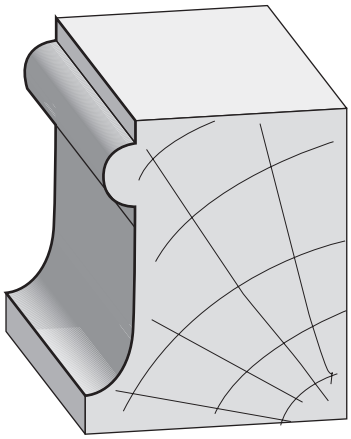
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB78-2 BEADED CONGE ARCHITECTURAL MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB78-2	1"	1-1/2"	1/2"	3-3/8"	2

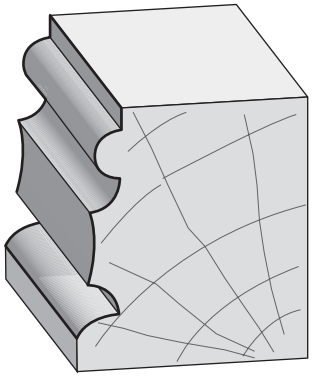
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB78-3 BEADED CAVETTO WITH BEAK ARCHITECTURAL BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB78-3	1"	1-1/2"	1/2"	3-1/2"	2

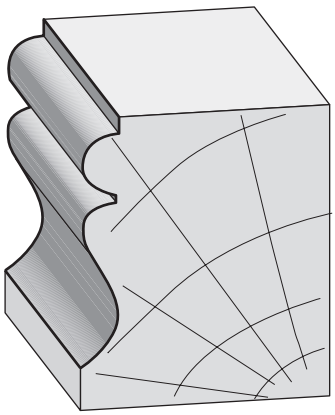
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB78-4 BEADED SCOTIA ARCHITECTURAL MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB78-4	7/8"	1-1/2"	1/2"	3-3/8"	2

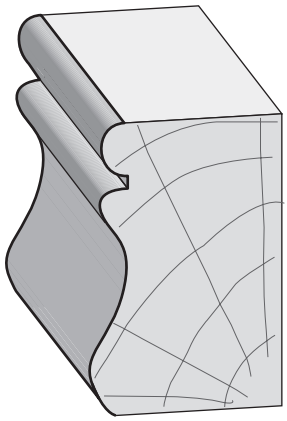
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB78-5 BEADED VASE ARCHITECTURAL MOULDING BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB78-5	1"	1-3/4"	1/2"	3-3/4"	2

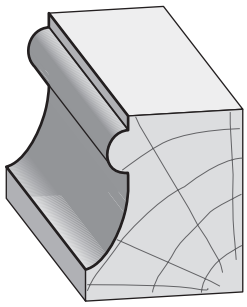
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB78-6 BEADED CAVETTO ARCHITECTURAL MOULDING BIT
WITH BALL BEARING GUIDE



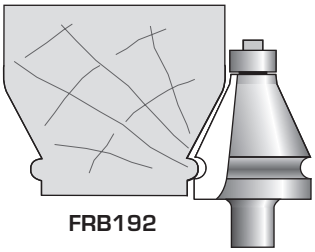
SCALE 1:1



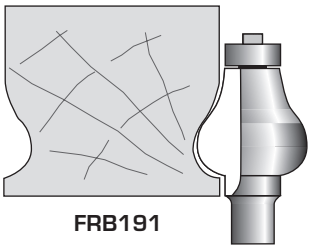
PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB78-6	1"	1"	1/2"	2-7/8"	2

REPLACEMENT PARTS

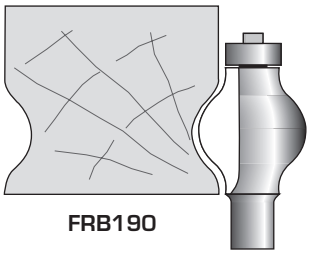
BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538



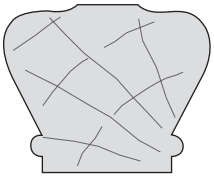
FRB192



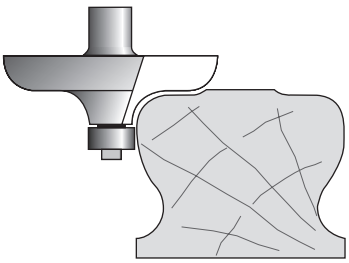
FRB191



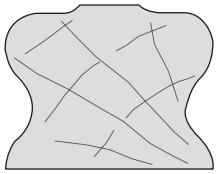
FRB190



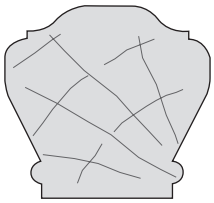
FRB183
FRB192



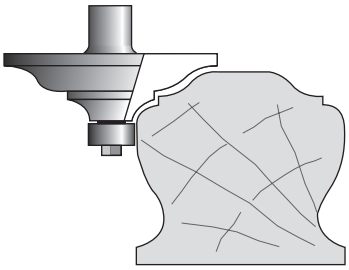
FRB183
FRB191



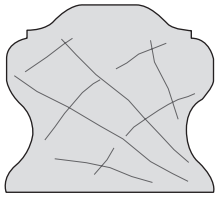
FRB183
FRB190



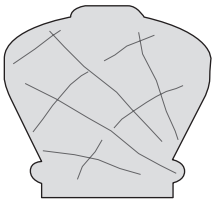
FRB181
FRB192



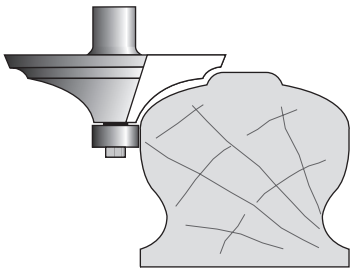
FRB181
FRB191



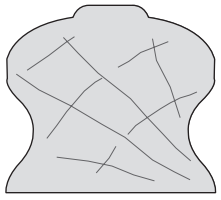
FRB181
FRB190



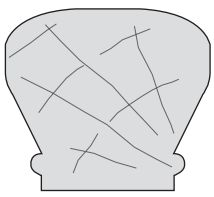
FRB182
FRB192



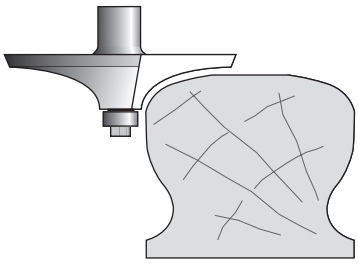
FRB182
FRB191



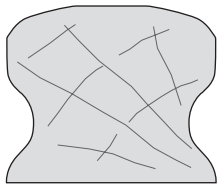
FRB182
FRB190



FRB180
FRB192



FRB180
FRB191



FRB180
FRB190

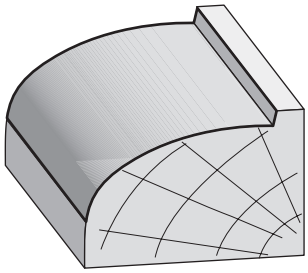
FRB180 THUMBNAIL HANDRAIL BIT
WITH BALL BEARING GUIDE



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO FLUTES
FRB180 •	2-3/4"	11/16"	1/2"	2-1/2"	2

• Max. RPM: 18,000

SCALE 1:1



REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

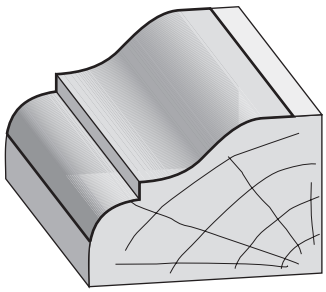
FRB181 QUARTER ROUND WITH OGEE HANDRAIL BIT
WITH BALL BEARING GUIDE



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO FLUTES
FRB181 •	2-1/2"	25/32"	1/2"	2-3/4"	2

• Max. RPM: 18,000

SCALE 1:1



REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

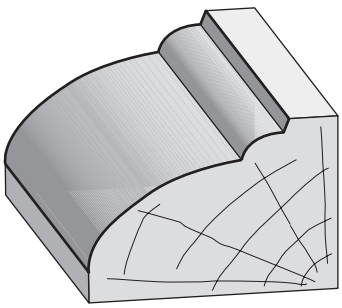
FRB182 THUMBNAIL WITH QUARTER ROUND HANDRAIL BIT
WITH BALL BEARING GUIDE



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO FLUTES
FRB182 •	2-5/8"	3/4"	1/2"	2-5/8"	2

• Max. RPM: 18,000

SCALE 1:1

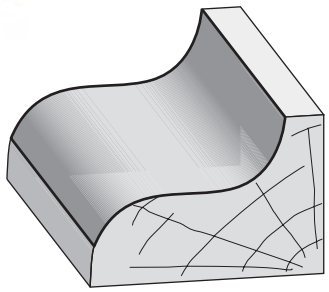


REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB183 ROUND OVER WITH CAVETTO HANDRAIL BIT
WITH BALL BEARING GUIDE





SCALE 1:1

PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO FLUTES
FRB183 •	2-1/2"	25/32"	1/2"	2-3/4"	2

• Max. RPM: 18,000

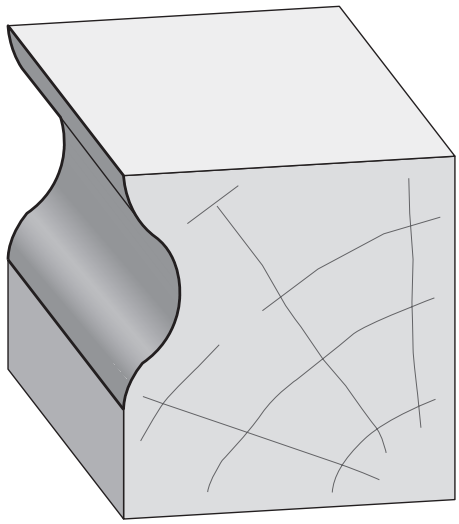
REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

FRB190 CAVETTO HANDRAIL BIT
WITH BALL BEARING GUIDE



SCALE 1:1



PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB190	1-1/4"	1-1/2"	1/2"	3-3/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

FRB191 SCOTIA WITH FILLET HANDRAIL BIT
WITH BALL BEARING GUIDE

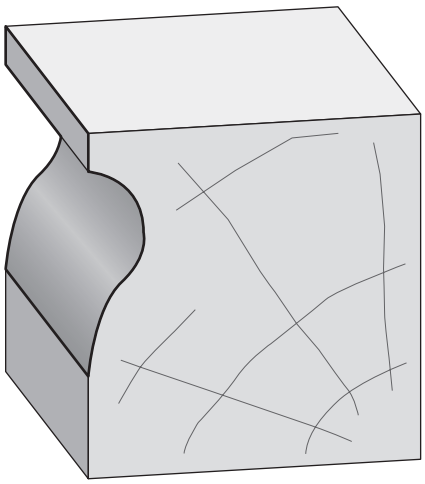


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB191	1-1/4"	1-1/2"	1/2"	3-3/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3-4	WR59	WFS506	WNC538

SCALE 1:1



FRB192 BEADED SPLAY HANDRAIL BIT
WITH BALL BEARING GUIDE

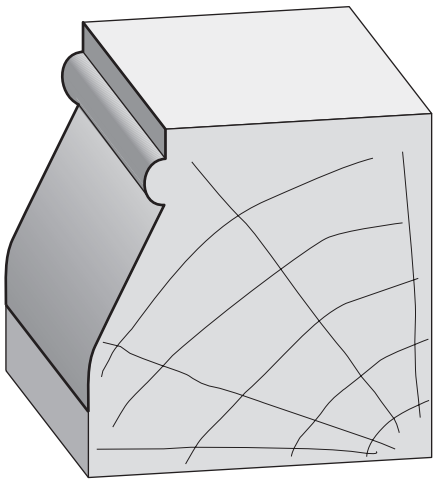


PART NO.	LARGE DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB192	1-3/8"	1-1/2"	1/2"	3-3/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SPRING WASHER	SCREW
B3	WR58	WFS506	WNC538

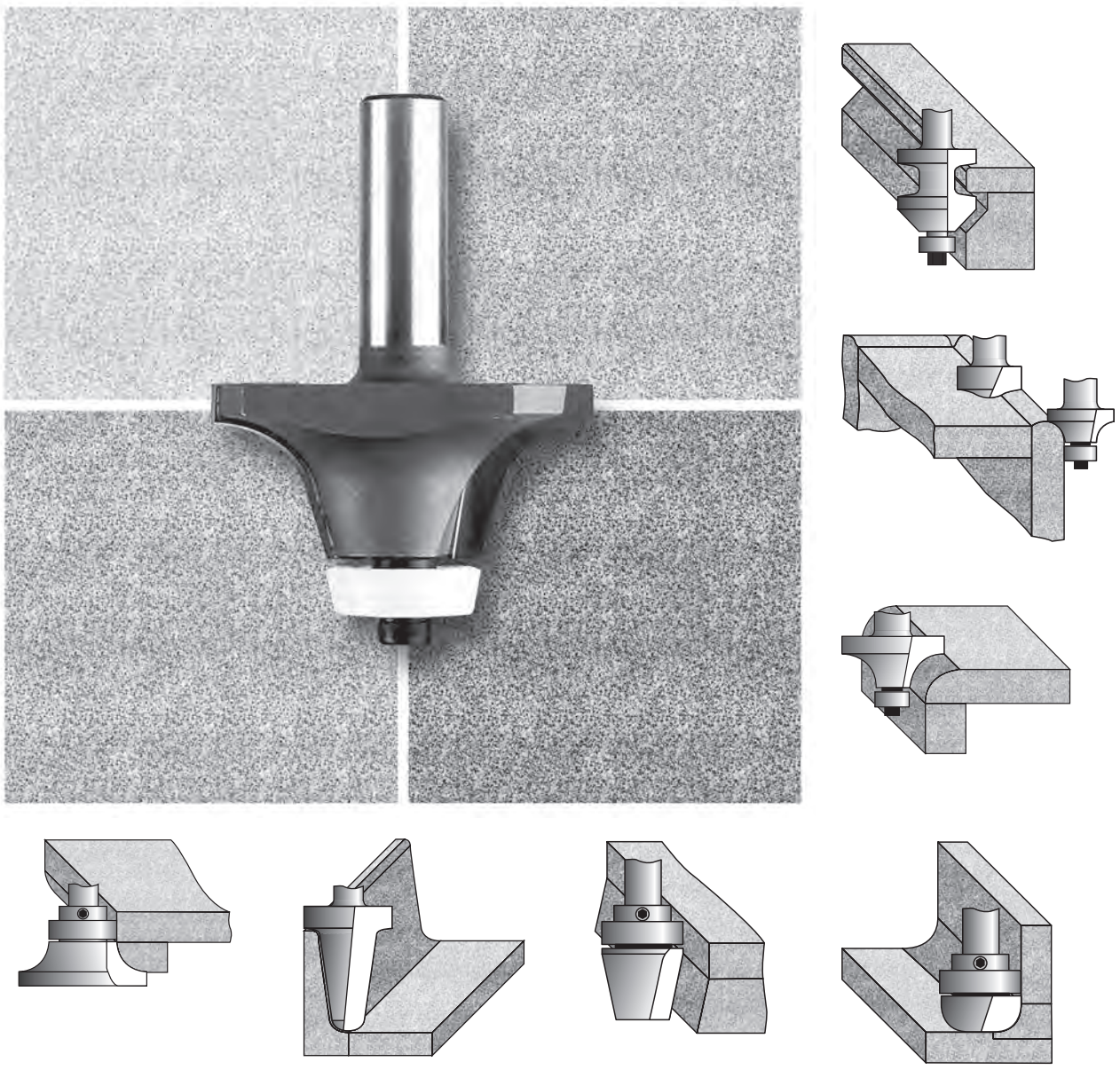
SCALE 1:1



SPECIAL ROUTER BITS FOR FABRICATING

SOLID SURFACE MATERIALS

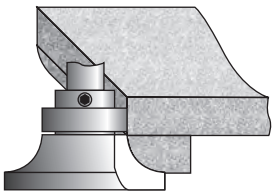
WILSONART® GIBRALTAR®, SSV®; CORIAN®;
SURELL®; AVONITE®; FOUNTAINHEAD®, etc.



FS Tool Router Bits have been specifically engineered for the fabrication of **solid surface materials**. Tough carbide grades and specific tool geometry ensures extended tool life. Ball bearing guides, where possible, have a nylon shield to prevent marking of the workpiece. See page E7 for solid surface circular saw blades.

FRB407 INVERTED ROUNDING OVER BITS
WITH "NO MARK" BALL BEARING GUIDE





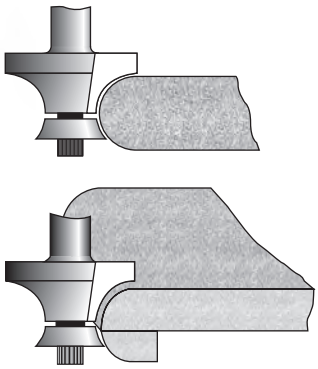
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB407	2-1/8"	1/2"	3/4"	1/2"	2-7/8"	2
FRB408	2-5/8"	3/4"	1"	1/2"	3"	2

REPLACEMENT PARTS

BALL BEARING	LOCK RING	SCREW
B30	W03	WNC518

FRB432 CORNER ROUNDING BITS
WITH RADIUS "NO MARK" BALL BEARING





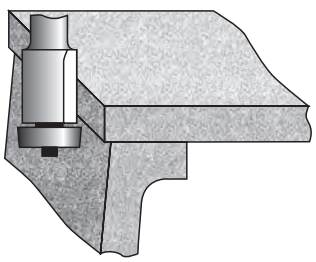
PART NO.	LARGE DIAM.	SMALL DIAM	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB432	2-5/8"	5/8"	1"	1-15/64"	1/2"	3-3/16"	2

REPLACEMENT PARTS

TOOL NO.	BALL BEARING	WASHER	SCREW
FRB432	B84	WFS500	WNF1012

FRB418 1/16" OVERHANG ROUGH-OUT BIT
"NO-DRIP" DESIGN WITH 5° "NO MARK" BALL BEARING GUIDE





APPLICATION:

» Using a template, this tool will "rough-out" the sink cut-out
» A second tool (flush trim FRB424) will finish the cut flush

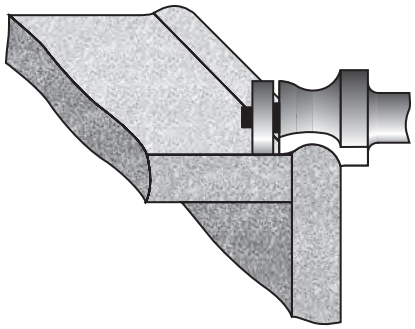
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB418	3/4"	1"	1/2"	3-1/4"	2

REPLACEMENT PARTS

BALL BEARING	SCREW
B26	WNF1012

FRB400 COUNTERTOP BITS
WITH "NO MARK" BALL BEARING GUIDE





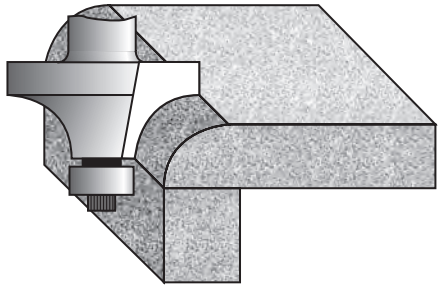
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB400	1"	5/16"	7/8"	1/2"	2-7/8"	2
FRB401	1"	5/16"	1-1/8"	1/2"	3-1/16"	2

REPLACEMENT PARTS

BALL BEARING	SPRING WASHER	SCREW
B22	WFS508	WNF1012

FRB410 ROUNDING OVER BITS
WITH "NO MARK" BALL BEARING GUIDE





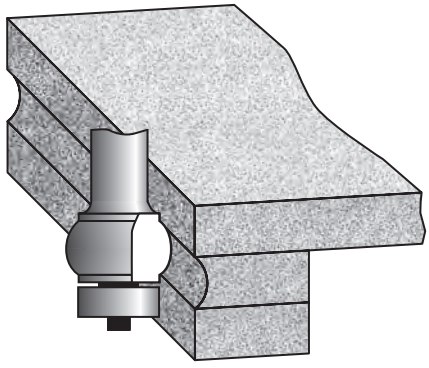
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB410	1-1/8"	5/16"	1/2"	1/2"	2-5/16"	2
FRB411	1-1/4"	3/8"	5/8"	1/2"	2-7/16"	2
FRB412	1-1/2"	1/2"	3/4"	1/2"	2-9/16"	2
FRB413	2"	3/4"	1"	1/2"	2-3/4"	2

REPLACEMENT PARTS

BALL BEARING	SPRING WASHER	SCREW
B20	WFS500	WNC538

FRB426 EDGE COVE TRIMMING BIT
WITH "NO MARK" BALL BEARING GUIDE





PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB426	1"	5/16"	5/8"	1/2"	2-5/8"	2

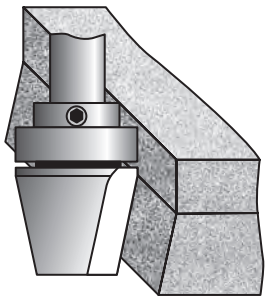
REPLACEMENT PARTS

BALL BEARING	SCREW
B22	WNF1012

FRB420 EDGE BEVEL COUNTERTOP BIT
WITH BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	DEG. BEVEL	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB420	1-1/8"	12°	1"	1/2"	3-1/8"	2



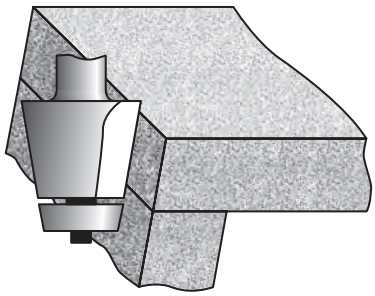
REPLACEMENT PARTS

BALL BEARING	LOCK RING	SCREW
B6-4	W03	WNC518

FRB402 BEVEL UNDERMOUNT BOWL BITS
WITH "NO MARK" BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	DEG. BEVEL	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB402	1-1/4"	12°	1"	1/2"	3-3/16"	2



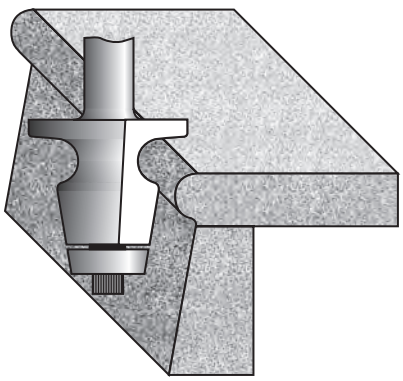
REPLACEMENT PARTS

BALL BEARING	SPRING WASHER	SCREW
B24	WFS508	WNF1012

FRB438 UNDERMOUNT PROFILE BOWL BITS
WITH "NO MARK" BALL BEARING GUIDE



PART NO.	LARGE DIAM.	SMALL DIAM.	DEG. BEVEL	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB438	1-21/32"	7/8"	10°	15/64"	1-5/16"	1/2"	3-5/16"	2

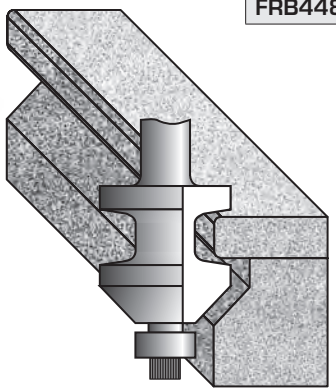


REPLACEMENT PARTS

BALL BEARING	WASHER	SCREW
B24	WFS500	WNF1012

FRB448 BEVEL HOB BITS
TWO FLUTES





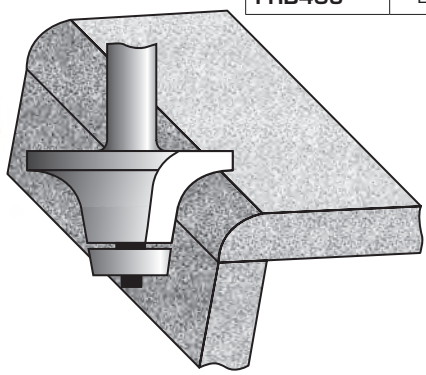
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB448	1-3/8"	1/8"	1-7/16"	1/2"	2-7/8"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SCREW
B3-3	WFS502	WNF1012

FRB405 ROUNDING OVER UNDERMOUNT BOWL BITS
WITH "NO MARK" BALL BEARING GUIDE





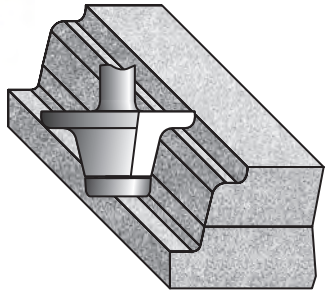
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB405	2-1/8"	1/2"	1"	1/2"	3-1/8"	2
FRB406	2-1/4"	9/16"	1-1/4"	1/2"	3-1/4"	2

REPLACEMENT PARTS

BALL BEARING	SPRING WASHER	SCREW
B24	WFS508	WNF1012

FRB436 UNDERMOUNT BOWL BITS
WITH "NO MARK" BALL BEARING GUIDE





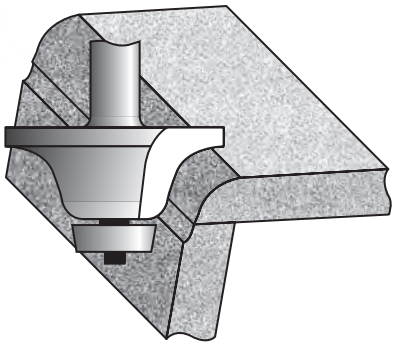
PART NO.	LARGE DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB436	2-1/4"	13/64"	5/32"	15/16"	1/2"	2-3/4"	2

REPLACEMENT PARTS

BALL BEARING	WASHER	SCREW
B21	WFS500	W103214

FRB403 ROMAN OGEE UNDERMOUNT BOWL BITS
WITH "NO MARK" BALL BEARING GUIDE





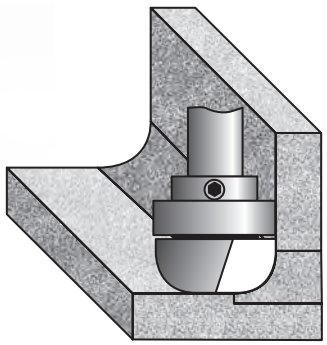
PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB403	2-1/8"	1/2"	1"	1/2"	3"	2
FRB404	2-3/8"	9/16"	1-1/4"	1/2"	3-3/8"	2

REPLACEMENT PARTS

BALL BEARING	SPRING WASHER	SCREW
B24	WFS508	WNF1012

FRB440 CORNER COVE BIT
WITH CENTRE "NO MARK" BALL BEARING GUIDE





PART NO.	CUTTING DIAM.	RADIUS	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB440	1-1/8"	25/64"	1/2"	1/2"	2-7/8"	2

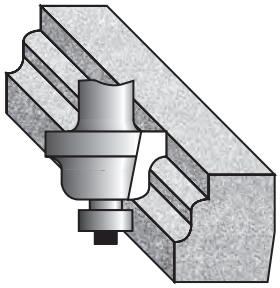
REPLACEMENT PARTS

BALL BEARING	LOCK RING	SCREW
B30	W03	WNC518

FRB442 ROMAN OGEE BIT
WITH "NO MARK" BALL BEARING GUIDE



PART NO.	CUTTING DIAM.	RADIUS R1	RADIUS R2	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB442	1-1/8"	1/8"	5/32"	5/8"	1/2"	2-9/16"	2



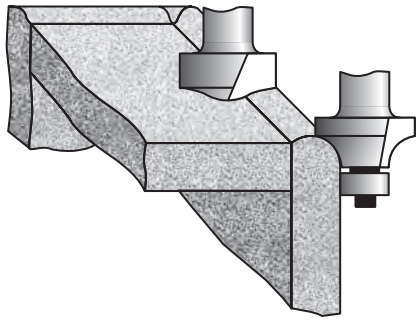
REPLACEMENT PARTS

BALL BEARING	WASHER	SCREW
B20	WFS500	WNC538

FRB416 COUNTERTOP EDGE BIT
"NO-DRIP" DESIGN



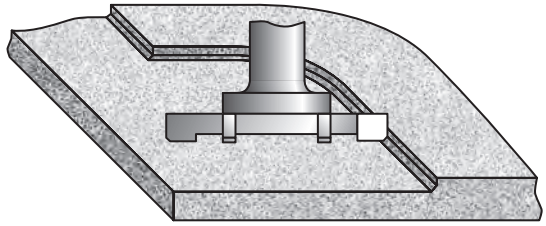
PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB416	1"	1/2"	1/2"	2-1/8"	2



FRB470 BOWL AND COUNTERTOP TRIM BIT
SIX WING FACE CUTTING



PART NO.	CUTTING DIAM.	CARBIDE HEIGHT	SHANK DIAM.	OVERALL LENGTH	NO. WINGS
FRB470	2-1/16"	1/4"	1/2"	3-5/16"	6

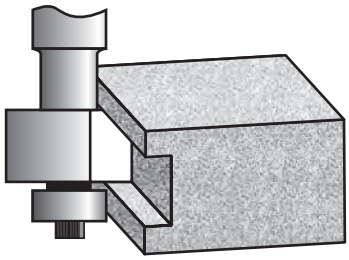


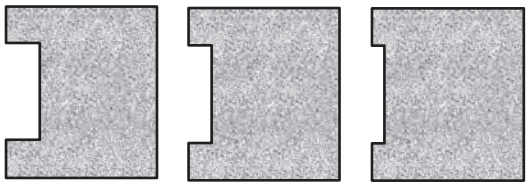
FRB460 FACE INLAY BITS
WITH BALL BEARING GUIDE



PART NO.	TOOL TYPE	CUTTING DIAM.	CUTTING HEIGHT	DEPTH OF INLAY	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB460	A	7/8"	1/4"	1/16"	1/2"	3"	2
FRB461	B	7/8"	1/4"	1/8"	1/2"	3"	2
FRB462	C	7/8"	1/4"	3/16"	1/2"	3"	2
FRB463	A	7/8"	1/2"	1/16"	1/2"	3-1/2"	2
FRB464	B	7/8"	1/2"	1/8"	1/2"	3-1/2"	2
FRB466	A	7/8"	3/4"	1/16"	1/2"	3-1/2"	2
FRB467	B	7/8"	3/4"	1/8"	1/2"	3-1/2"	2
FRB468	C	7/8"	3/4"	3/16"	1/2"	3-1/2"	2

SCALE 1:1





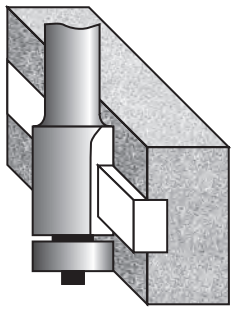
3/16" Depth of Inlay | 1/8" Depth of Inlay | 1/16" Depth of Inlay

REPLACEMENT PARTS

TOOL TYPE	BALL BEARING	WASHER	SCREW
A	B4	WFS500	WNF1012
B	B3-3	WFS500	WNF1012
C	B3-1	WFS500	WNF1012

FRB424 INLAY FLUSH TRIMMING BITS
WITH "NO MARK" BALL BEARING GUIDE





PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
FRB424	3/4"	1"	1/2"	3"	2

REPLACEMENT PARTS

BALL BEARING	SCREW
B22	WNF1012

ROUTER BIT REPLACEMENT PARTS INDEX

										
ROUTER BIT PART NO.	CAT. PAGE	BALL BEARING(S)	FLAT/SPRING WASHER	RAISED WASHER	SCREW	EXTERNAL CIRCLIP	LOCK RING	LOCK RING SCREW	HEX NUT
FRB14 TO FRB17	F53	B3	WFS506	WR58	WNC538	-	-	-	-
FRB18 TO FRB20	F56	B3	WFS506	WR58	WNC538	-	-	-	-
FRB21 TO FRB23	F57	B2	WFS500, WFS506	-	WNC538	-	-	-	-
FRB23-5	F63	see page F63	-	-	-	-	-	-	-
FRB23-6	F64	see page F64	-	-	-	-	-	-	-
FRB23-7	F62	see page F62	-	-	-	-	-	-	-
FRB24 TO FRB24-1	F60	B3	WFS506	WR58	WNC538	-	-	-	-
FRB25	F55	B3	WFS506	WR58	WNC538	-	-	-	-
FRB25-3	F61	B3	WFS506	WR58	WNC538	-	-	-	-
FRB27 TO FRB28	F69	see page F69	-	-	-	-	-	-	-
FRB30 TO FRB31	F68	see page F68	-	-	-	-	-	-	-
FRB31-1, FRB31-3	F70	see page F70	-	-	-	-	-	-	-
FRB31-2, FRB31-4	F71	see page F71	-	-	-	-	-	-	-
FRB31-5	F72	B5	-	-	-	-	-	-	WNF516
FRB31-6	F35	see page F35	-	-	-	-	-	-	WNF516
FRB31-7	F34	see page F34	-	-	-	-	-	-	WNF516
FRB33 TO FRB36	F54	B3	WFS506	WR58	WNC538	-	-	-	-
FRB37 TO FRB40	F54	B1	WFS504	WR12	WNC538	-	-	-	-
FRB40-1 TO FRB40-2	F55	B3	WFS504	WR58	WNC538	-	-	-	-
FRB41 TO FRB44	F56	B3	WFS506	WR58	WNC538	-	-	-	-
FRB49 TO FRB52	F53	B3	WFS506	WR58	WNC538	-	-	-	-
FRB63	F58	B5	-	-	-	WC01	-	-	-
FRB64	F58	B7	-	-	-	WC02	-	-	-
FRB65	F58	B5	-	-	-	WC01	-	-	-
FRB66	F58	B7	-	-	-	WC02	-	-	-
FRB67 TO FRB69	F57	B3	WFS506	WR58	WNC538	-	-	-	-
FRB74 TO FRB74-1	F81	B3	WFS506	WR58	WNC538	-	-	-	-
FRB74-2 TO FRB74-6	F81	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB76 TO FRB76-2	F86	B3-3	-	-	WNF1012	-	W01	WNC525	-
FRB76-3	F85	B3-3	-	-	WNF1012	-	W01	WNC525	-
FRB76-7	F83	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB77-1 TO FRB77-4	F82	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB77-5 TO FRB77-6	F85	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB77-7 TO FRB77-8	F85	B4	WFS500, WFS506	-	WNC538	-	-	-	-
FRB77-9	F84	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB78-1 TO FRB78-3	F98	B3	WFS506	WR58	WNC538	-	-	-	-
FRB78-4 TO FRB78-6	F99	B3	WFS506	WR58	WNC538	-	-	-	-
FRB100	F87	B3	WFS506	WR58	WNC538	-	-	-	-
FRB101 TO FRB102	F87	B3	WFS506	WR58	WNC538	-	-	-	-
FRB104	F88	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB106 TO FRB107	F88	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB105	F90	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB108	F89	B3-2	WFS506	WR59	WNC512	-	-	-	-
FRB109	F89	B3	WFS506	WR58	WNC538	-	-	-	-
FRB110	F90	B3	WFS506	WR58	WNC538	-	-	-	-
FRB111	F89	B3	WFS506	WR58	WNC538	-	-	-	-
FRB113 TO FRB113-2	F91	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB114	F91	B4	WFS500	-	WNF1012	-	-	-	-
FRB115 TO FRB116	F92	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB117 TO FRB120	F93	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB121	F95	B3	WFS506	WR58	WNC538	-	-	-	-
FRB122 TO FRB124	F94	B3	WFS506	WR58	WNC538	-	-	-	-
FRB160 TO FRB163	F48	B3	WFS506	WR58	WNC538	-	-	-	-
FRB164	F48	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB170	F36	see page F36	-	-	-	-	-	-	-
FRB171	F37	see page F37	-	-	-	-	-	-	-
FRB180 TO FRB182	F101	B3	WFS506	WR58	WNC538	-	-	-	-
FRB183	F102	B3	WFS506	WR58	WNC538	-	-	-	-
FRB190	F102	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB191	F103	B3-4	WFS506	WR59	WNC538	-	-	-	-
FRB192	F103	B3	WFS506	WR58	WNC538	-	-	-	-
FRB195	F49	B3	WFS506	WR58	WNC538	-	-	-	-

ROUTER BIT REPLACEMENT PARTS INDEX










ROUTER BIT PART NO.	CAT. PAGE	BALL BEARING(S)	FLAT/SPRING WASHER	RAISED WASHER	SCREW	EXTERNAL CIRCLIP	LOCK RING	LOCK RING SCREW	HEX NUT
FRB200 TO FRB202	F47	see page F47	-	-	-	-	-	-	-
FRB212 TO FRB213	F72	B2	WFS500, WFS506	-	WNC538	-	-	-	-
FRB215	F65	B2	WFS500, WFS506	-	-	-	-	WNC538	-
FRB216 TO FRB217	F65	B3-1	-	-	-	-	W01	WNC525	-
FRB219, FRB222	F66	B2	WFS500, WFS506	-	WNC538	-	-	-	-
FRB220, FRB223	F66	B3-1	-	-	-	-	W01	WNC525	-
FRB225, FRB228	F67	B2	WFS500, WFS506	-	WNC538	-	-	-	-
FRB226, FRB229	F67	B3-1	-	-	-	-	W01	WNC525	-
FRB231, FRB234	F67	B2	WFS500, WFS506	-	WNC538	-	-	-	-
FRB232, FRB235	F67	B3-1	-	-	-	-	W01	WNC525	-
FRB237	F66	B2	WFS500, WFS506	-	WNC538	-	-	-	-
FRB238	F66	B3-1	-	-	-	-	W01	WNC525	-
FRB400 TO FRB401	F106	B22	WFS508	-	WNF1012	-	-	-	-
FRB402	F107	B24	WFS508	-	WNF1012	-	-	-	-
FRB403 TO FRB404	F109	B24	WFS508	-	WNF1012	-	-	-	-
FRB405 TO FRB406	F108	B24	WFS508	-	WNF1012	-	-	-	-
FRB407 TO FRB408	F105	B30	-	-	-	-	W03	WNC518	-
FRB410 TO FRB413	F106	B20	WFS500	-	WNC538	-	-	-	-
FRB418	F105	B26	-	-	WNF1012	-	-	-	-
FRB420	F107	B6-4	-	-	-	-	W03	WNC518	-
FRB424	F111	B22	-	-	WNF1012	-	-	-	-
FRB426	F106	B22	-	-	WNF1012	-	-	-	-
FRB430	F105	B80	WFS500	-	WNF1012	-	-	-	-
FRB432	F105	B84	WFS500	-	WNF1012	-	-	-	-
FRB436	F108	B21	WFS500	-	W103214	-	-	-	-
FRB438	F107	B24	WFS500	-	WNF1012	-	-	-	-
FRB440	F109	B30	-	-	-	-	W03	WNC518	-
FRB442	F110	B20	WFS500	-	WNC538	-	-	-	-
FRB448	F108	B3-3	WFS502	-	WNF1012	-	-	-	-
FRB460	F111	B4	WFS500	-	WNF1012	-	-	-	-
FRB461	F111	B3-3	WFS500	-	WNF1012	-	-	-	-
FRB462, FRB468	F111	B3-1	WFS500	-	WNF1012	-	-	-	-
FRB463	F111	B4	WFS500	-	WNF1012	-	-	-	-
FRB464	F111	B3-3	WFS500	-	WNF1012	-	-	-	-
FRB466	F111	B4	WFS500	-	WNF1012	-	-	-	-
FRB467	F111	B3-3	WFS500	-	WNF1012	-	-	-	-
R2320 TO R2320 -2	F11	B3-1	-	-	-	-	W01	WNC525	-
R2321	F11	B3-3	-	-	-	-	W01	WNC525	-
R2322	F11	B4	-	-	-	-	W01	WNC525	-
R2322-1 TO R2322-2	F11	B4-1A	-	-	-	-	W04	WNC518	-
R2323	F11	B6-1	-	-	-	-	W02	WNC525	-
R2324	F11	B6-1B	-	-	-	-	W04	WNC518	-
R2325	F11	B6-4	-	-	-	-	W03	WNC518	-
R2326	F11	B6-5	-	-	-	-	W03	WNC518	-
R2406-9	F28	B3-1	-	-	-	-	W01	WNC525	-
R2420	F28	B3-1	-	-	-	-	W01	WNC525	-
R2421	F28	B4	-	-	-	-	W01	WNC525	-
R2422	F28	B4-1A	-	-	-	-	W04	WNC518	-
R2423	F28	B6-4	-	-	-	-	W03	WNC518	-
R2430 TO R2434	F82	B3	WFS506	WR58	WNC538	-	-	-	-
R2436 TO R2437	F83	B3-1 / B3	WFS506	WR58	WNC538	-	W01	WNC525	-
R2440 TO R2444	F83	B3	WFS506	WR58	WNC538	-	-	-	-
R2450	F11	B4	-	-	-	-	W01	WNC525	-
R2451	F11	B6-1B	-	-	-	-	W04	WNC518	-
R2452	F11	B10	-	-	-	-	W03	WNC518	-
R2514	F80	B3	WFS506	WR58	WNC538	-	-	-	-
R2515	F80	B3-4	WFS506	WR59	WNC512	-	-	-	-
R2516 TO R2517	F80	B4	WFS508	WR59	WNF1012	-	-	-	-

ROUTER BIT REPLACEMENT PARTS INDEX

										
ROUTER BIT PART NO.	**CAT. PAGE**	**BALL BEARING(S)**	**FLAT/SPRING WASHER**	**RAISED WASHER**	**SCREW**	**EXTERNAL CIRCLIP**	**LOCK RING**	**LOCK RING SCREW**	**HEX NUT**
R2519	F79	B6-4	-	-	-	-	W03	WNC518	-
R2525 TO R2527	F77	B6-3	-	-	-	-	-	-	WNF516
R2530	F78	B5	-	-	-	-	-	-	WNF516
R2535	F78	B5	-	-	-	-	-	-	WNF516
R2560	F24	B3-1	-	-	-	-	W01	WNC525	-
R2620	F40	B3-1	-	-	-	-	W01	WNC525	-
R2800-1 TO R2806	F52	B1	WFS504	WR12	WNC338	-	-	-	-
R2807 TO R2810	F52	B3	WFS506	WR58	WNC538	-	-	-	-
R2900 TO R2903	F12	B3	WFS506	WR58	WNC538	-	-	-	-
R2905 TO R2908	F12	B2	WFS500, WFS506	-	WNC538	-	-	-	-
R2950 TO R2951	F13	see page F13	-	-	-	-	-	-	-
R2960 TO R2961	F14	see page F14	-	-	-	-	-	-	-
R2970 TO R2972	F15	see page F15	-	-	-	-	-	-	-
R3000 TO R3013	F76	B3	WFS506	WR58	WNC538	-	-	-	-
R3030	F51	B3-1	-	-	-	-	W01	WNC525	-
R3032	F51	B4	-	-	-	-	W01	WNC525	-
R3034	F51	B5	-	-	-	-	W01	WNC525	-
R3036	F51	B6-4	-	-	-	-	W03	WNC518	-
R3100 TO R3114	F50	B2	WFS500, WFS506	-	WNC538	-	-	-	-
R3200 TO R3203	F55	B1	WFS504	WR12	WNC338	-	-	-	-
R3300 TO R3301	F75	B2	WFS500, WFS506	-	WM308	-	-	-	-
R3302	F75	B3	WFS506	WR58	WNC538	-	-	-	-
R3302-1	F75	B1	WFS506	WR58	WNC338	-	-	-	-
R3303 TO R3304	F75	B3	WFS506	WR58	WNC538	-	-	-	-
R3304-1	F75	B1	WFS506	WR58	WNC338	-	-	-	-
R3305 TO R3307	F75	B3	WFS506	WR58	WNC538	-	-	-	-
R3310 TO R3313	F22	B3-4	WFS506	WR59	WNC538	-	-	-	-
R3320 TO R3323	F21	B3	WFS506	WR58	WNC538	-	-	-	-
R3324	F21	B4	WFS508	-	WNF1012	-	-	-	-
R3325	F21	B1	WFS504	WR12	WNC338	-	-	-	-
R3400-1 TO R3400-2	F17	B01	-	-	WNC2732	-	-	-	-
R3400 TO R3401	F17	B2	WFS500, WFS506	-	WNC538	-	-	-	-
R3402 TO R3403	F17	B3	WFS506	WR58	WNC538	-	-	-	-
R3403-1	F17	B3-4	WFS506	WR59	WNC538	-	-	-	-
R3404 TO R3408	F17	B3	WFS506	WR58	WNC538	-	-	-	-
R3409	F17	B4	WFS508	-	WNF1012	-	-	-	-
R3500 TO R3504	F17	B3	WFS506	WR58	WNC538	-	-	-	-
R3510 TO R3512	F16	B3 (2 pieces)	WFS508	WR58	-	-	-	-	WN1024
R3520 TO R3521	F19	B3	WFS506	WR58	WNC538	-	-	-	-
R3600 TO R3608	F22	B5	WF608	-	-	-	-	-	WNF516
R3700 -1	F19	B3-3	-	-	W103214	-	-	-	-
R3700 TO R3703	F19	B4	WFS500	-	WNF1012	-	-	-	-
R4120 TO R4152	F32	see page F32	-	-	-	-	-	-	-
R4160 TO R4162	F34	see page F34	-	-	-	-	-	-	WNF516
R4164	F33	see page F33	-	-	-	-	-	-	WNF516

B01 BALL BEARING GUIDES



PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
B01	1/4"	1/8"	7/64"
B1	3/8"	1/8"	5/32"
B2	3/8"	3/16"	1/8"
B2-1	1/2"	1/8"	11/64"
B3	1/2"	3/16"	5.0mm
B3-1	1/2"	1/4"	3/16"
B3-1A	14mm	7.0mm	5.0mm
B3-1B	14mm	8.0mm	4.0mm
B3-2	5/8"	3/16"	5.0mm
B3-3	5/8"	1/4"	5.0mm
B3-4	16mm	5.0mm	5.0mm
B3-4A	16mm	8.0mm	5.0mm
B3-5	3/4"	3/16"	3/16"
B3-6	19mm	6.0mm	6.0mm
B4	3/4"	1/4"	9/32"
B4-1A	3/4"	1/2"	5/32"

PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
B4-1	22mm	7.0mm	7.0mm
B5	7/8"	5/16"	7.0mm
B6	7/8"	3/16"	6.6mm
B6-1	26mm	10mm	8.0mm
B6-1B	1"	1/2"	6.0mm
B6-2	1-1/8"	3/16"	6.6mm
B6-3	28mm	8.0mm	9.0mm
B6-4	1-1/8"	1/2"	5/16"
B6-4A	1-7/32"	5/16"	8.6mm
B6-5	1-1/4"	15mm	8.5mm
B6-5A	1-1/4"	8.0mm	5.0mm
B6-6	1-5/16"	5/16"	8.6mm
B7	35mm	15mm	11.0mm
B8	1-3/8"	3/16"	6.6mm
B10	1-1/2"	15mm	8.5mm
B12	2"	15mm	12.5mm

B20 SUPER-GLIDE BALL "NO MARK" BEARING GUIDES



PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	DEGREE OF TAPER
B20	1/2"	3/16"	0°
B21	25mm	1/4"	5°
B22	3/4"	1/4"	0°
B24	7/8"	1/4"	10°
B26	7/8"	1/4"	5°
B27	27mm	1/4"	0°
B28	28mm	5/16" (8mm)	0°
B30	1-1/8"	15mm	0°
B32	29mm	5/16" (8mm)	0°
B34	34mm	5/16" (8mm)	0°
B36	40.8mm	5/16" (8mm)	0°
B38	43mm	5/16" (8mm)	0°

B80 SUPER-GLIDE RADIUS BALL "NO MARK" BEARING GUIDES



PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS	RADIUS
B80	27/32"	1/4"	1/4"	1/2"
B82	3/4"	1/4"	1/4"	3/4"
B84	3/4"	1/4"	1/4"	1"

WNC SCREWS



HEAD TYPE:
SOCKET CAP



HEAD TYPE:
HEADLESS



HEAD TYPE:
PHILIPS

PART NO.	SCREW TYPE	SCREW DIAM.	THREADS PER IN.	OVERALL LENGTH	HEAD TYPE
WNC2732	NC2	11/128"	56	7/32"	Philips
WNC518	NC5	1/8"	40	1/8"	Headless
WNC525	NC5	1/8"	40	2.5mm	Headless
WNC338	NC3	0.099"	48	3/8"	Socket Cap
WNC538	NC5	1/8"	40	3/8"	Socket Cap
WNC512	NC5	1/8"	40	1/2"	Socket Cap
WNF1012	NF10	3/16"	32	1/2"	Socket Cap
W103214	10/32	3/16"	32	1/4"	Socket Cap

WN1024 NYLON INSERT LOCKNUT



PART NO.	TYPE
WN1024	10-24

WNF516 HEX NUTS FOR ROUTER ARBORS

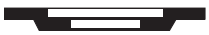


PART NO.	THREAD TYPE	APPLICATION
WNF516	5/16-24 NF	All arbors with 5/16-24 NF Thread

WR12 RAISED WASHERS (DUST SHIELDS)



SIDE PROFILE:



PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
WR12	3/8"	1/8"	0.7mm
WR58	1/2"	3/16"	0.7mm
WR59	16mm	5mm	0.8mm

WFS500 FLAT/SPRING WASHERS



PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
WFS500	5/16"	3/16"	1.2mm
WFS502	3/8"	1/4"	1.4mm
WFS504	3/16"	7/64"	1/64"
WFS506	1/4"	1/8"	1/64"
WFS508	3/8"	3/16"	1mm
WFS510	12mm	5/16"	1mm

W01 LOCK RINGS



PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	SCREW PART NO.
W01	11mm	1/4"	WNC525
W02	16mm	3/8"	WNC518
W03	21mm	1/2"	WNC518
W04	18mm	1/2"	WNC518

WF501 SPACERS - FLAT SHIMS



PART NO.	OUTSIDE DIAM.	INSIDE DIAM.	THICKNESS
WF501	12mm	8mm	0.1mm
WF502	12mm	8mm	0.2mm
WF510	12mm	8mm	1.0mm
WF600	5/8"	5/16"	0.05mm
WF604	5/8"	5/16"	0.1mm
WF605	5/8"	5/16"	0.4mm
WF606	5/8"	5/16"	0.5mm
WF608	5/8"	5/16"	1.0mm
WF610	5/8"	5/16"	3.0mm
WF611	5/8"	5/16"	3.15mm
WF612	16mm	5/16"	3.4mm
WF614	1/2"	1/4"	5.0mm
WF616	5/8"	5/16"	5.5mm
WF618	5/8"	5/16"	6.0mm

WC01 EXTERNAL CIRCLIP



PART NO.	INSIDE DIAM.	THICKNESS
WC01	9/32"	0.8mm
WC02	1/2"	1.0mm

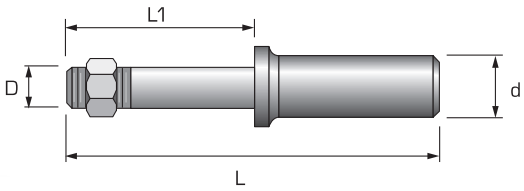
WA3814 ROUTER BIT ADAPTORS



PART NO.	OUTSIDE DIAM. MACHINE COLLET	INSIDE DIAM. ROUTER SHANK	LENGTH
WA3814	3/8"	1/4"	1"
WA1238	1/2"	3/8"	1"
WA1214	1/2"	1/4"	1"

AR14 ARBORS FOR ROUTER CUTTERS
ARBORS WITH NUT AND WASHER





PART NO.	SPINDLE DIAM. (D)	SHANK DIAM. (D)	LENGTH (L1)	OVERALL LENGTH (L)
AR14	5/16"	1/4"	7/8"	2-3/8"
AR13	5/16"	3/8"	1-7/16"	3"
AR12	5/16"	1/2"	1"	2-3/8"
AR11	5/16"	1/2"	1-3/8"	3"
AR20	5/16"	1/2"	2-1/8"	3-3/4"
AR21	5/16"	1/2"	1-1/2"	3-1/8"
AR22	5/16"	1/2"	2-5/8"	4-1/4"
AR23	5/16"	1/2"	1-3/4"	3-5/16"

AR12MB THREADED ARBOR
FOR MORTISING BITS



PART NO.	SHANK DIAM.	TYPE OF THREAD	OVERALL LENGTH
AR12MB	1/2"	1/4-28	2-3/8"
AR14MB	1/4"	1/4-28	1-3/4"

Fits R2310 to R2314 mortising bits (screw type)

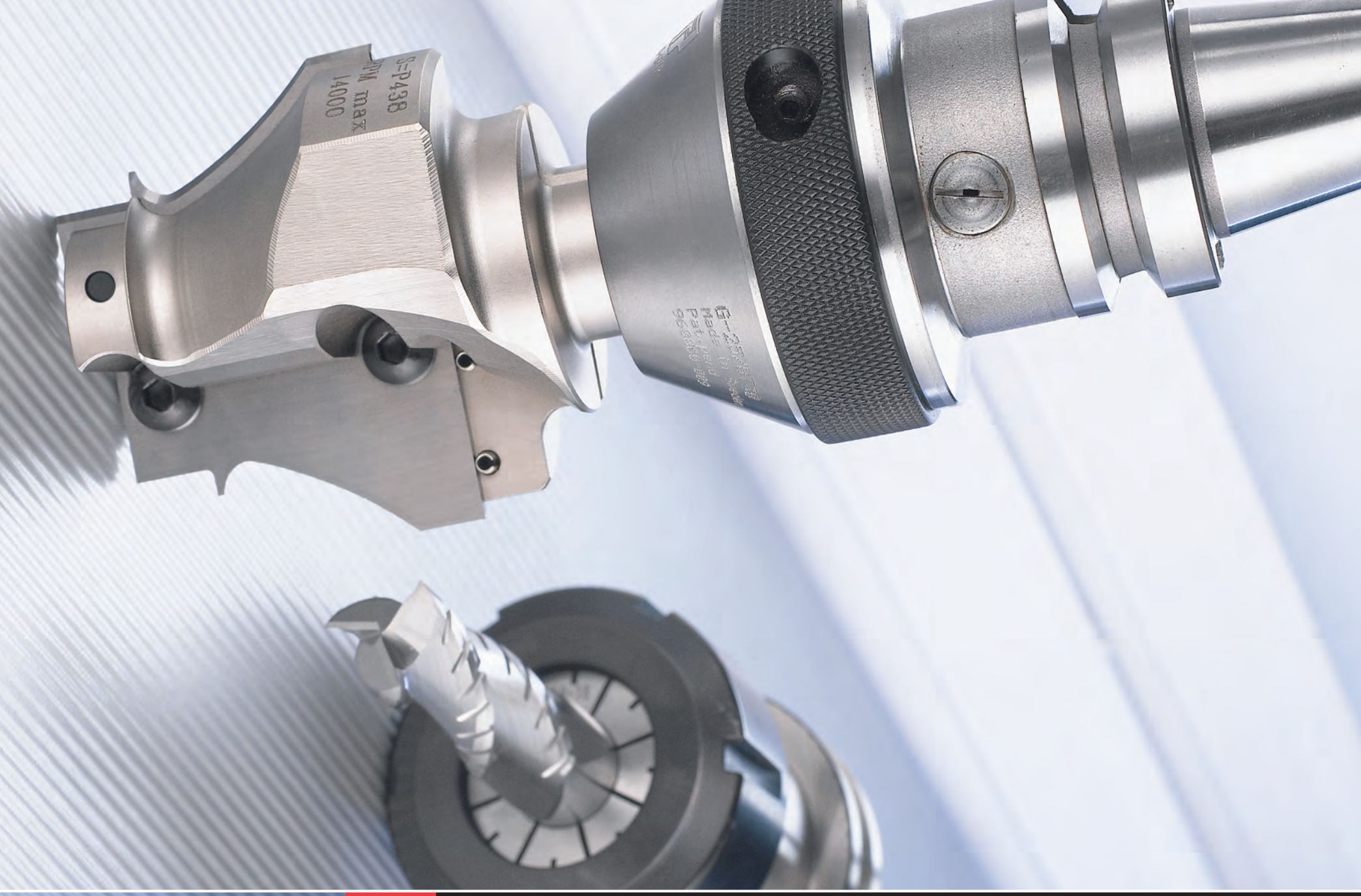
ARCNC ARBOR FOR CNC ROUTERS



PART NO.	SPINDLE DIAM.	SHANK DIAM.	OVERALL LENGTH
ARCNC	5/16"	1/2"	2"

ARBOR INCLUDES:

Washers 1.0mm (2 pieces)	WF608
Washer 0.5mm (1 piece)	WF606
Screw WNF1012 (1 piece)	WNF1012
Raised Washer (1 piece)	WR59



FC

PRECISION TOOLING FOR CNC MACHINES

Spiral bits / Insert bits / Tool holders

PRECISION CNC TOOLING - TABLE OF CONTENTS

PRODUCT CATEGORY	PAGE NO.
60 - DEGREE V-POINT SOLID CARBIDE ROUTER BITS Z=2	FC 66
90 - DEGREE V-POINT SOLID CARBIDE ROUTER BITS Z=2	FC 66
AEROTECH SYSTEM BODY HSK63F CONNECTION	FC 2
AEROTECH UNIVERSAL HYDRO-GRIP BODY HSK63F CONNECTION	FC 3
AEROTECH UNIVERSAL HYDRO-GRIP BODY ISO30/BT30 CONNECTION	FC 9
COLLET CHUCKS HSK63F CONNECTION WITH BALLBEARING COLLET NUT	FC 6
COLLET CHUCKS HSK63F CONNECTION WITHOUT BALL BEARING COLLET NUT	FC 6
COLLET CHUCKS HSK63FCONNECTION WITH BB COLLET NUT FOR THERMWOOD	FC 7
COLLET CHUCKS WITH BALL BEARING NUT BT20 - BT40 CONNECTION	FC 13
COLLET CHUCKS WITH BALL BEARING NUT ISO30 CONNECTION	FC 11
COLLET CHUCKS WITH BB NUT ISO30 CONNECTION FOR SCM/MORBIDELLI	FC 12
COLLET CHUCKS WITHOUT BALL BEARING NUT ISO30 CONNECTION	FC 11
COLLET CHUCKS WITHOUT BB NUT ISO30 CONNECTION FOR SCM/MORBIDELLI	FC 12
COLLET CHUCKS WITHOUT BB NUT ISO30 CONNECTION FOR THERMWOOD	FC 13
COLLET NUTS FOR TOOLHOLDES	FC 15
CUTTER ARBORS HSK63F CONNECTION	FC 26
CUTTER ARBORS ISO30 CONNECTION	FC 27
DIAMOND TIPPED COMPRESSION ROUTER BITS Z=1+1	FC 47
DIAMOND TIPPED MDF DOOR SET FOR SHAKER DOOR	FC 88
DIAMOND TIPPED T-SLOT ROUTER BITS Z=2+1	FC 48
ETP HYDRO-GRIP COMPACT TOOLHOLDERS HSK63F CONNECTION	FC 4
ETP HYDRO-GRIP CUTTER ARBORS GE2 TYPE	FC 28
ETP HYDRO-GRIP SLENDER TOOLHOLDERS HSK63F CONNECTION	FC 5
ETP HYDRO-GRIP SLENDER TOOLHOLDERS ISO30 & BT30 CONNECTION	FC 10
INSERT ADJUSTABLE CORNER ROUNDING & CHAMFERING R/BITS Z=2	FC 91
INSERT MULTI PROFILE ROUTER CUTTERS Z=1 & Z=2	FC 89, FC 90
INSERT ROUTER BIT MULTI PROFILE Z=1	FC 81, FC 82
INSERT ROUTER BITS BEVEL & CHAMFERING Z=2	FC 78
INSERT ROUTER BITS FOR MDF DOOR PROFILES Z=1 & Z=2	FC 83, FC 84
INSERT ROUTER BITS FOR PLUNGING & SIZING WITH CARBIDE PINS Z=3	FC 77
INSERT ROUTER BITS FOR PLUNGING & SIZING WITH COMORESSION SHEAR Z=1+1+1	FC 75
INSERT ROUTER BITS FOR PLUNGING & SIZING WITH COMORESSION SHEAR Z=2+2+1	FC 76
INSERT ROUTER BITS FOR PLUNGING & SIZING Z=2+1	FC 74
INSERT ROUTER BITS FOR RAMP-IN PLUNGING & SIZING Z=1	FC 73
INSERT ROUTER BITS FOR V GROOVING ON CNC ROUTERS Z=1, Z=1+1, & Z=2	FC 79, FC 80
INSERT ROUTER BITS FPR PANEL RAISING Z=2	FC 85

PRODUCT CATEGORY	PAGE NO.
INSERT ROUTER CUTTERS FOR EDGE GROOVING Z=4, V=4 (2+2)	FC 86
ISNERT STILE AND RAIL ROUTER CUTTERS CUSTOM MANUFACTURED	FC 92
PULL STUDS FOR TOOLHOLDERS	FC 14
REDUCTION SLEEVES FOR ETP HYDRO-GRIP TOOLHOLERS IMPERIAL SIZES	FC 24
REDUCTION SLEEVES FOR ETP HYDRO-GRIP TOOLHOLERS METRIC SIZES	FC 25
SAW BLADE TOOLHOLDER FOR CNC MACHINES HSK63F CONNECTION	FC 29
SHRINKFIT TOOLHOLDERS HSK63F CONNECTION	FC 1
SHRINKFIT TOOLHOLDERS ISO30 CONNECTION	FC 8
SOLID CARBIDE FINISHING ROUTER BITS STRAIGHT FLUTE Z=1	FC 70
SOLID CARBIDE FINISHING ROUTER BITS STRAIGHT FLUTE Z=2	FC 70
SOLID CARBIDE ROUGHING ROUTER BITS FOR PHENOLIC/COMPOSITE DOWNCUT Z=3	FC 69
SOLID CARBIDE ROUGHING ROUTER BITS FOR PHENOLIC/COMPOSITE UPCUT Z=3	FC 69
SPARE PARTS (WEDGES, SCRES, WRENCHES	FC 94, FC 95
SPIRAL CHIPBREAKER COMPRESSION ROUTER BITS Z=2+2	FC 51
SPIRAL CHIPBREAKER COMPRESSION ROUTER BITS Z=3+3	FC 52
SPIRAL CHIPBREAKER ROUTER BITS DOWNCUT Z=2	FC 49
SPIRAL CHIPBREAKER ROUTER BITS DOWNCUT Z=3	FC 50
SPIRAL CHIPBREAKER ROUTER BITS UPCUT Z=2	FC 49
SPIRAL CHIPBREAKER ROUTER BITS UPCUT Z=3	FC 50
SPIRAL DOVETAIL ROUTER BITS DOWNCUT Z=2	FC 61, FC 62
SPIRAL DOVETAIL ROUTER BITS UPCUT Z=2	FC 61, FC 62
SPIRAL FINISHING BALLNOSE ROUTER BITS UPCUT Z=2 & Z=3	FC 64
SPIRAL FINISHING COMPRESION ROUTER BITS Z=1+1	FC 40
SPIRAL FINISHING COMPRESION ROUTER BITS Z=2+2	FC 42
SPIRAL FINISHING COMPRESSION BITS Z=2+2 FOR AEROTECH SYSTEM BODY	FC 30
SPIRAL FINISHING COMPRESSION BITS Z=2+2 FOR AEROTECH UNIVERSAL HYDRO-GRIP	FC 32
SPIRAL FINISHING COMPRESSION BITS Z=3+3	FC 45
SPIRAL FINISHING COMPRESSION BITS Z=3+3 FOR AEROTECH SYSTEM BODY	FC 31
SPIRAL FINISHING COMPRESSION BITS Z=3+3 FOR AEROTECH UNIVERSAL HYDRO-GRIP	FC 33
SPIRAL FINISHING LOW HELIX COMPRESSION BITS Z=2+2	FC 46
SPIRAL FINISHING LOW HELIX ROUTER BITS DOWNCUT Z=3	FC 39
SPIRAL FINISHING LOW HELIX ROUTER BITS UPCUT Z=3	FC 38
SPIRAL FINISHING ROUTER BITS DOWNCUT Z=2	FC 35
SPIRAL FINISHING ROUTER BITS DOWNCUT Z=3	FC 37
SPIRAL FINISHING ROUTER BITS UPCUT Z=2	FC 34
SPIRAL FINISHING ROUTER BITS UPCUT Z=3	FC 36

PRODUCT CATEGORY	PAGE NO.
SPIRAL FINISHING SPEEDMASTER SERIES COMPRESSION BITS Z=3+3	FC 45
SPIRAL FINISHING TAPERED BALLNOSE ROUTER BITS UPCUT Z=2 & Z=3	FC 65
SPIRAL FINSIHING SPEEDMASTER SERIES COMPRESSION BITS Z=2+2	FC 44
SPIRAL HIGH POLISH O-FLUTE ROUTER BITS DOWNCUT Z=1	FC 67
SPIRAL HIGH POLISH O-FLUTE ROUTER BITS OPTIMIZED FOR ALUMINIUM UPCUT Z=1	FC 68
SPIRAL HIGH POLISH O-FLUTE ROUTER BITS UPCUT Z=1	FC 67
SPIRAL PAAS-BY/DEEP POCKET MORTISE CUSTOM ROUTER BITS REQUEST FORM	FC 60
SPIRAL ROUGHING BALLNOSE ROUTER BITS UPCUT Z=3	FC 63
SPIRAL ROUGHING STYLE LOW HELIX ROUTER BITS DOWNCUT Z=3	FC 58
SPIRAL ROUGHING STYLE LOW HELIX ROUTER BITS UPCUT Z=3	FC 57
SPIRAL ROUGHING STYLE ROUTER BITS DOWNCUT Z=2	FC 54
SPIRAL ROUGHING STYLE ROUTER BITS DOWNCUT Z=3	FC 56
SPIRAL ROUGHING STYLE ROUTER BITS UPCUT Z=2	FC 53
SPIRAL ROUGHING STYLE ROUTER BITS UPCUT Z=3	FC 55
SPIRAL ROUGHING/HOGGER ROUTER BITS UPCUT AND DOWNCUT Z=3	FC 59
SPRING COLLETS ER11	FC 18
SPRING COLLETS ER16	FC 18
SPRING COLLETS ER20	FC 19
SPRING COLLETS ER25	FC 19
SPRING COLLETS ER32	FC 20
SPRING COLLETS ER40	FC 21
SPRING COLLETS OZ25	FC 21
STAGGERED TOOTH INSERT ROUTER CUTTERS Z4/16, V=2	FC 93
SURFACING INSERT R/BITS WITH 5 DEGREEE & RADIUSED CORNERS Z=3 & Z=4	FC 72
SURFACING INSERT ROUTER BITS WITH 10 DEGREEE SHEAR Z=3 & Z=4	FC 71
SURFACING INSERT ROUTER BITS WITH NO SHEAR AGLE Z=3	FC 71
TOOLHOLDER EXTENSIONS FOR SHRINKFIT STYLE	FC 16
TOOLHOLDER EXTENSIONS WITH ER HEX NUT	FC 17
TOOLHOLDER EXTENSIONS WITH ER MINI-NUT	FC 17
TOOLHOLDER EXTENSIONS WITH ER NUT	FC 16
TOOLHOLDER MOUNTING DEVICES - VARIOUS CONNECTIONS	FC 22
TORQUE WRENCHES - FIXED SETTINGS STYLE	FC 22
TORQUE WRENCHES & ADAPETERS - ADJUSTABLE STYLE	FC 23
WRENCHES FOR TOOLHOLDERS	FC 22



SHRKFH-HSK63F FC1

Shrinkfit Toolholders - High Precision Clamping System



AER-11 Aerotech System® FC2

Aerotech System Body HSK63F



AER-59 Aerotech System® FC3

Aerotech Universal Hydro Body - HSK63F



ETPHGC FC4

HSK63F Hydro-Grip® Compact



ETPHGS FC5

HSK63F Hydro-Grip® Slender



RCBB-HSK63F FC6

Collet Chucks with Ball Bearing Collet Nut



RC-HSK63F FC6

Collet Chucks without Ball Bearing Collet Nut



RCTH-HSK63F FC7

Thermwood Collet Chucks without Ball Bearing Collet Nuts



SHRKFH-ISO30 FC8

Shrinkfit Toolholders - High Precision Clamping System



AER-56 Aerotech System® FC9

Aerotech Universal Hydro Body - ISO30 & BT30 Spindles



ETPHGS FC10

Hydro-Grip® Slender. Hydraulic Toolholder for ISO30 & BT30 Spindles



RCBB-ISO30 FC11

Collet Chucks with Ball Bearing Collet Nut



RC-ISO30 FC11

Collet Chucks without Ball Bearning Collet Nut



RCBBM-ISO30 FC12

SCM/Mordbidelli Collet Chucks with Ball Bearing Nut



RCM-ISO30 FC12

SCM/Mordbidelli Collet Chucks without Ball Bearing Nut



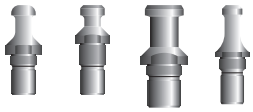
RCTH-ISO30 FC13

Thermwood Collet Chucks without Ball Bearing Collet Nut



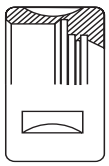
RC-BT FC13

BT20 & BT40 Collet Chucks with Ball Bearing Nut



RCPS FC14

Pull Studs for Toolholders



RCCN FC15

Precision Collet Nuts with & without Ball Bearing



RCEXT-SHT FC16

Toolholder Extensions, Shrinkfit Type



RCEXT-CER FC16

Toolholder Extensions, Standard ER Nut



RCEXT-CM FC17

Toolholder Extensions, Slotted ER Mini-nut



RCEXT-CHX FC17

Toolholder Extensions, ER Hex Nut



ER11 FC18

Precision Spring Collets



ER16 FC18

Precision Spring Collets



ER20 FC19

Precision Spring Collets



ER25 FC19

Precision Spring Collets



ER32 FC20

Precision Spring Collets



ER40 FC21

Precision Spring Collets



OZ25 FC21

SYOZ25 Precision Spring Collets



MD2010 FC22

Adjustable Mounting Devices



WR1010 FC22

Wrenches for Toolholders



WRTRQ FC23

Adjustable Torque Wrench & Adapters



ETP-RSI FC24

Reduction Sleeves for ETP Hydro Holders, Imperial Clamping Sizes



ETP-RSM FC25

Reduction Sleeves for ETP Hydro Holders, Metric Clamping Sizes



ARI-HSK63F FC26

Cutter Arbors



ARM-ISO30 FC27

Cutter Arbors, Metric Sizes



ETP-GE2 FC28

HSK63F Hydro-Grip® Cutter Arbors



ARS-HSK63F FC29

Saw Blade Toolholder for CNC Routers



AF-UD2 Aerotech System® FC30

Aerotech Finishing Compression, Z=2+2



AF-UD3 Aerotech System® FC31

Aerotech Finishing Compression, Z=3+3



AFU-UD2 Aerotech Universal® FC32

Finishing Compression Z=2+2



AFU-UD3 Aerotech Universal® FC33

Finishing Compression Z=3+3

XLC



RSF-U2 FC34

Finishing Upcut, Z=2

XLC



RSF-D2 FC35

Finishing Downcut, Z=2



RSF-U3 FC36

Finishing Upcut, Z=3



RSF-D3 FC37

Finishing Downcut, Z=3



RSFL-U3 FC38

Finishing Low Helix Upcut



RSFL-D3 FC39

Finishing Low Helix Downcut



RSF-UD1

Finishing Compression, Z=1+1

FC40

XLC



RSF-UD2



Finishing Compression, Z=2+2

FC42

XLC



RSFW-UD2



Finishing SpeedMaster Compression, Z=2+2

FC44

XLC



RSF-UD3



Finishing Compression, Z=3+3

FC45

XLC



RSFL-UD2



Finishing Low Helix Comperssion, Z=2+2

FC46



RPCD-UD1

Polycrystalline Diamond Compression with Plunge Point

FC47



RPCD-T

Polycrystalline Diamond T-Slot, Z=2+1

FC48



RSC21-U2

Chipbreaker Upcut, Z=2

FC49



RSC21-D2

Chipbreaker Downcut, Z=2

FC49



RSC21-U3

Chipbreaker Upcut, Z=3

FC50



RSC21-D3

Chipbreaker Downcut, Z=3

FC50

XLC



RSC21-UD2



Chipbreaker Compression, Z=2+2

FC51

XLC

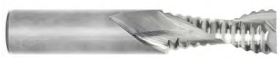


RSC21-UD3



Chipbreaker Compression, Z=3+3

FC52



RSC20-U2

Roughing Upcut, Z=2

FC53



RSC20-D2

Roughing Downcut, Z=2

FC54

XLC



RSC20-U3



Roughing Upcut, Z=3

FC55

XLC



RSC20-D3



Roughing Downcut, Z=3

FC56



RSCL-U3

Roughing Low Helix Upcut, Z=3

FC57



RSCL-D3 FC58

Roughing Low Helix Downcut, Z=3



RSCH FC59

Roughing Hogger, Z=3



RS-DPM FC60

Pass-by/Deep Pocket Mortise (Request Form)



RSFDL-U2 FC61

10° Spiral Dovetail Upcut Router Bits, Z=2



RSFDL-D2 FC61

10° Spiral Dovetail Downcut Router Bits, Z=2



RSFD-U2 FC62

10° Spiral Dovetail Upcut Router Bits, Z=2



RSFD-D2 FC62

10° Spiral Dovetail Downcut Router Bits, Z=2



RSCBN-U3 FC63

Roughing Ballnose Upcut Router Bits, Z=3



RSFBN FC64

Finishing Ballnose Router Bits, Upcut Z=2 & Z=3

RSFBNT FC65



Tapered Finishing Ballnose Router Bits, Upcut Z=2 & Z=3



RSFV60 FC66

60° V-Point Solid Carbide Router Bits, Z=2



RSFV90 FC66

90° V-Point Solid Carbide Router Bits, Z=2



RSF0-U1 FC67

High Polish O-Flute Router Bits, Upcut Z=1



RSF0-D1 FC67 FC68

High Polish O-Flute Router Bits, Downcut Z=1



RSF04-U1 FC68

O-Flutes Optimized for Aluminum, Upcut & Downcut Z=1



RSCP-U3 FC69

Roughing for Phenolic/ Composite, Upcut Z=3



RSCP-D3 FC69

Roughing for Phenolic/ Composite, Downcut Z=3



RSF-S1 FC70

Finishing Straight, Z=1



RSF-S2 FC70

Finishing Straight, Z=2



RD2562 FC71

Surfacing Insert Router Bit, 0° Shear



RD2560 FC71

Surfacing Insert Router Bit, 10° Shear



RD2570 FC72

Surfacing Insert Router Bit, 5° Shear with Radius Corners



RD2167 FC73

Insert Router Bits, Ramp-in Plunging & Sizing



RD2520 FC74

Insert Router Bits, Plunging & Sizing



RD2535 FC75

Insert Router Bits, Plunging & Sizing with Compression Shear



RD2530 FC76

Plunging & Sizing with Compression Shear



RD2540 FC77

Insert Router Bits, Roughing & Sizing



RD2590 FC78

Insert Router Bits, Bevel & Chamfering



RD2571 FC79 FC80

V Groove Insert Router Bits for CNC Routers



RD2600 FC81

Insert Router Cutter, Multi Profile



RD2610 FC82

Insert Router Bit, Multi Profile



RD2620 FC83

Insert Router Bits Set for MDR Doors



RD2630 FC84

Insert Router Bits Set for MDR Doors



RD2720 FC85

Insert Router Cutter, Panel Raising



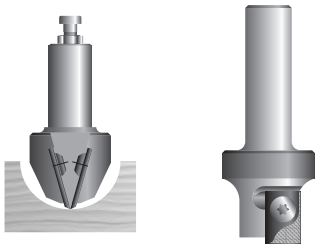
RD2760 FC86

Insert Router Cutter, Grooving



DRS01 FC88

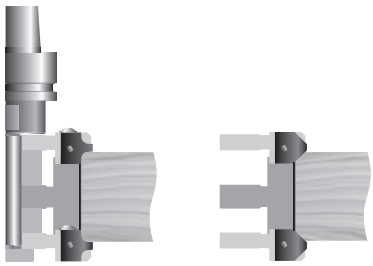
PCD Diamond MDF Door Tooling Set Shaker Style



RD

Router Cutters,
Custom Insert Profile

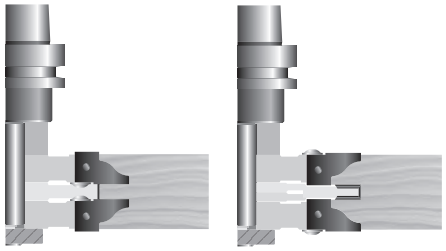
FC89
FC90



RD2770

Insert Router Cutters,
Adjustable Corner Rounding & Chamfering

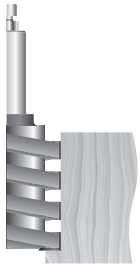
FC91



RD

Insert Router Cutters,
Stile and Rail

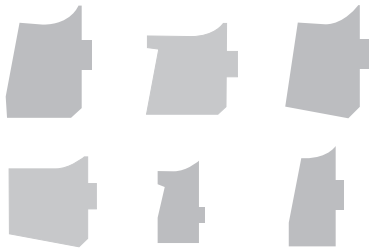
FC92



RD2810

Insert Router Cutters,
Staggered Tooth

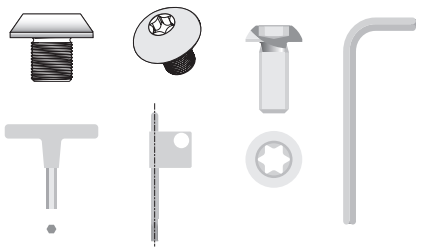
FC93



W302411

Replacement Parts,
Wedges

FC94



WM350

Replacement Parts,
Screws & Wrenches

FC94
FC95

SHRKFH-HSK63F

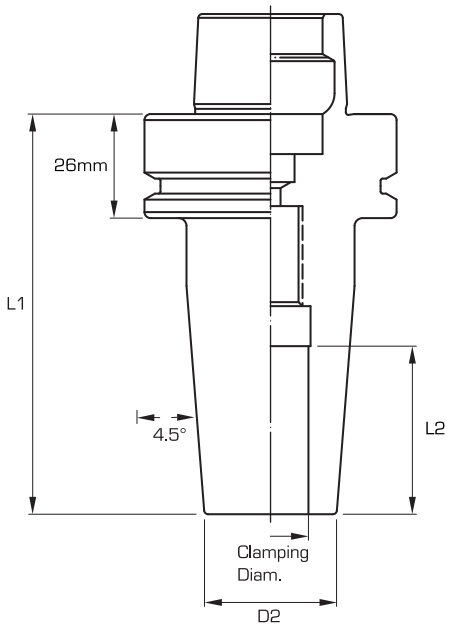
HSK63F SHRINKFIT TOOLHOLDERS
HIGH PRECISION CLAMPING SYSTEM



DESIGN:
» HSK63F spindle connection type
» Durable high quality steel
» Precision ground interface
» Capable of a high number of tool change cycles
» Tools must be inserted and removed using a shrinkfit machine
» Requires minimum h7 shank tolerance

APPLICATION:
» For precision mounting of carbide, densimet, and steel shank tools
» Where additional tool rigidity is required
» Ideal for PCD and Insert tooling, such as profiled tools and surfacing cutters

BENEFITS:
» Provides highest achievable rigidity and accuracy
» Minimizes run-out on long tool projections
» Superior cut quality and blending of profiles
» Exceptionally fast tool changes



IMPERIAL SIZES

PART NO.	CLAMPING DIAM.	D2	L1	L2
RC3302	1/4"	.83"	3.15"	1.42"
RC3304	3/8"	.94"	3.74"	1.65"
RC3306	1/2"	.94"	3.74"	1.85"
RC3307	5/8"	1.06"	3.74"	1.97"
RC3308	3/4"	1.42"	3.94"	2.05"
RC3310	1"	1.42"	4.53"	2.28"

Other sizes available upon request

METRIC SIZES

PART NO.	CLAMPING DIAM. MM	D2 MM	L1 MM	L2 MM
RC3504	8	22	75	37
RC3505	10	25	75	40
RC3506	12	28	75	45
RC3507	16	28	75	48
RC3509	20	36	75	50
RC3510	25	36	75	55

Other sizes available upon request

AER-11 AEROTECH SYSTEM BODY
HSK63F CONNECTION



PART NO:
AER-11F-HOLDER

Aerotech System®

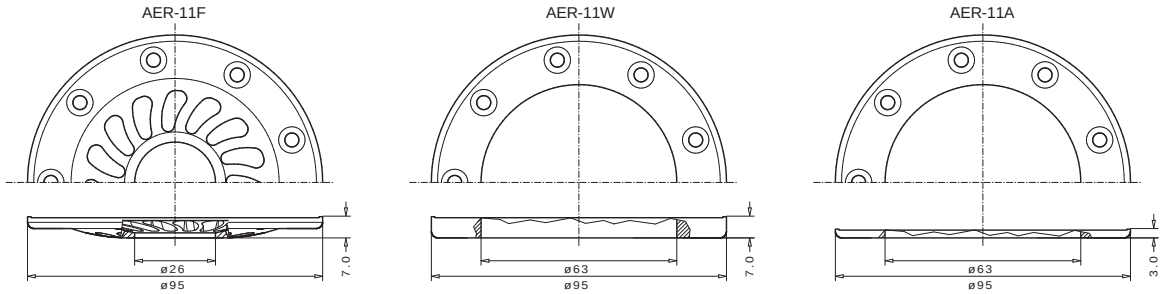
DESIGN:
» Hardened 58 HRC steel body
» Award winning Centrifugal design with arched fan blades provides safe dust extraction without the risk of debris being 'thrown'
» Proprietary HSK20C router bit connection
» Shrinkfit and monoblock tool bodies provide unmatched tool rigidity and increased tool life
» Proper mounting of tool requires tightening to the specified torque settings

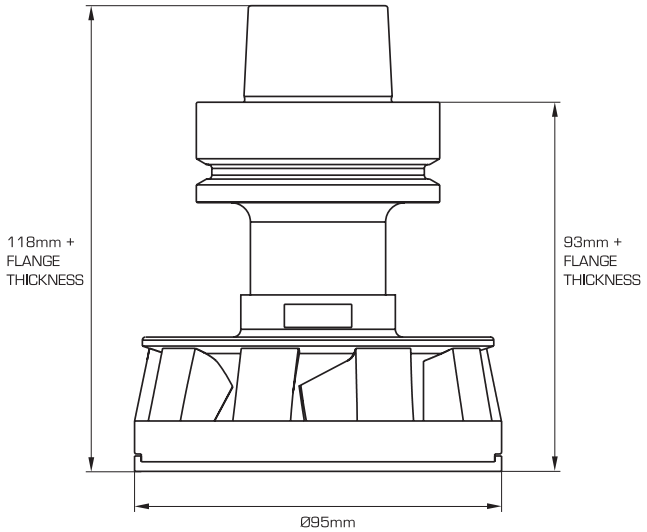
APPLICATION:
» Reduce combustible environmental dust during routing operations
» Increase production throughput by reducing or eliminating clean-up time between cuts and end of the shift
» Longer tool life due to HSK20C connection's increased tool rigidity
» Improved heat disipation provided by enhanced airflow within the cutting path

MATERIALS:
» MDF
» TFL and HPL Laminated panels
» Plywood, OSB, and Veneered Panels (requires Flange Type: GRILL on Aerotech)
» Composite materials: CFRP, Kevlar composites, Solid Surface, etc.

AEROTECH BODY

PART NO.	FLANGE TYPE	TYPE OF TOOLING	SPINDLE CONNECTION	LARGE DIAM.	ROUTER BIT CONNECTION	OVERALL LENGTH	FLANGE THICKNESS	TORQUE SETTING
AER-11A-HOLDER	OPEN	PCD only	HSK63F	95mm	HSK20C	125mm	3mm	25 Nm
AER-11F-HOLDER	GRILL	Carbide, PCD	HSK63F	95mm	HSK20C	125mm	7mm	25 Nm
AER-11W-HOLDER	OPEN	Carbide, PCD	HSK63F	95mm	HSK20C	125mm	7mm	25 Nm





AEROTECH HSK20 MOUNTING KIT

PART NO.	PART DESCRIPTION
AER-KIT-FP	AEROTECH HSK20C MOUNTING KIT INCLUDES: MOUNTING PLATE, BI-SCREW POSITIONER (DEPTH GAUGE), T-HANDLE 5MM HEX WRENCH

AER-59 AEROTECH UNIVERSAL HYDRO BODY
HSK63F CONNECTION



PART NO:
AER-59F-HOLDER

PART NO:
AER-59W-HOLDER



Aerotech Universal®

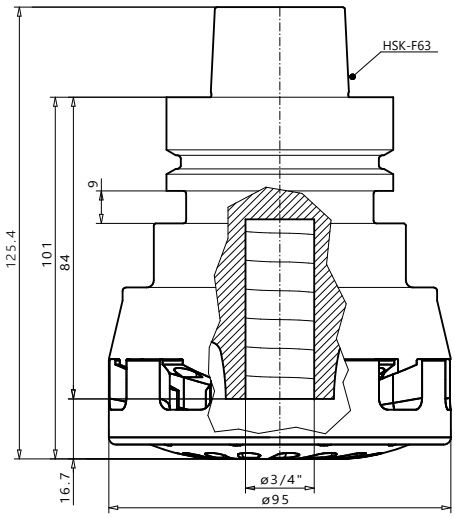
DESIGN:
- » Extended Extraction Flanges provide even more extraction power
- » Hardened 58 HRC steel body reduces wear
- » Award winning Centrifugal design with arched fan blades provides safe dust extraction without the risk of debris being 'thrown'
- » Hydraulic clamping chamber provides exceptional clamping power and significantly reduced run-out
- » Universal clamping of standard cylindrical shank tools
- » 3/4" clamping diameter can be reduced with precision sleeves to accept smaller h6 shank diameters
- » Thermwood machines require a standard HSK63F toolholder gripper fork to be installed.
- » Proper clamping of tool shanks requires tightening to the specified torque settings

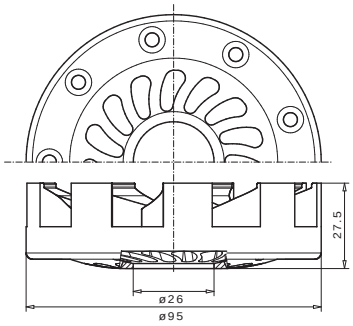
APPLICATION:
- » Reduce combustible environmental dust during routing operations
- » Increase production throughput by reducing or eliminating clean-up time between cuts and end of the shift
- » Fast tool changes
- » Longer tool life due to increased tool rigidity
- » Improved heat disipation provided by enhanced airflow within the cutting path

MATERIALS:
- » MDF
- » TFL and HPL Laminated panels
- » Plywood, OSB, and Veneered Panels (requires Flange Type: GRILL on Aerotech)
- » Composite materials: CFRP, Kevlar composites, Solid Surface, etc.

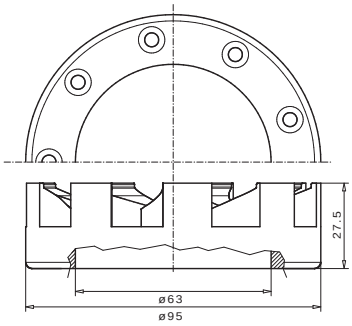
AEROTECH BODY

PART NO.	FLANGE TYPE	SPINDLE CONNECTION	LARGE DIAM.	CLAMPING DIAM.	OVERALL LENGTH	TORQUE SETTING
AER-59F-HOLDER	Extended GRILL	HSK63F	95mm	3/4"	125.4mm	10 Nm
AER-59W-HOLDER	Extended OPEN	HSK63F	95mm	3/4"	125.4mm	10 Nm





Extended GRILL



Extended OPEN

REPLACEMENT PARTS

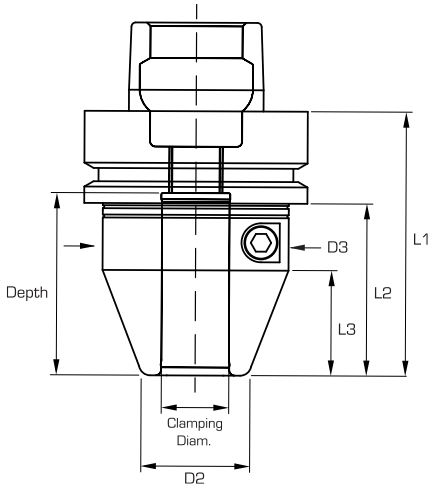
PART NO.	DESCRIPTION
AER-TW-10NM	10 Nm Torque Wrench 5mm Hex Drive

REDUCTION SLEEVES

PART NO.	OUTSIDE DIAMETER	CLAMPING DIAM.	OVERALL LENGTH
AERC-RS3/4-1/8	3/4"	1/8"	50.5mm
AERC-RS3/4-1/4	3/4"	1/4"	50.5mm
AERC-RS3/4-3/8	3/4"	3/8"	50.5mm
AERC-RS3/4-1/2	3/4"	1/2"	50.5mm
AERC-RS3/4-5/8	3/4"	5/8"	50.5mm

ETPHGC HSK63F HYDRO-GRIP® COMPACT
HYDRAULIC TOOLHOLDER





DESIGN:
» HSK63F spindle connection type
» Durable high quality steel
» Precision ground interfaces
» Clamping activated with 5mm Hex Wrench
» Requires minimum h7 shank tolerance
» Compact design with reduced gauge length
» Proper clamping of tool shanks requires tightening to the specified torque settings
» Dynamically balanced G 2.5 at 25,000 RPM

APPLICATION:
» Provides the fastest tool change process
» For precision mounting of carbide, densimet, and steel shank tools
» Where additional tool rigidity is required

IDEAL FOR:
» High use tools, such as compression bits
» Profiled tools
» Tools used in challenging cutting applications such as solid woods or HPL

BENEFITS:
» Provides exceptional rigidity and accuracy
» Minimizes run-out on long tool projections
» Superior cut quality and blending of profiles
» Exceptionally fast tool changes without the need for specialized equipment
» Extends tool life

IMPERIAL SIZES

PART NO.	CLAMPING DIAM. ø	D2	D3	L1	L2	L3	DEPTH	TORQUE SETTING
ETPHGC1/2HSK63F	1/2"	0.866"	1.713"	2.953"	1.929"	0.709"	1.575"	6 Nm
ETPHGC5/8HSK63F	5/8"	1.024"	1.890"	2.953"	1.929"	1.102"	1.969"	6 Nm
ETPHGC3/4HSK63F •	3/4"	1.181"	2.047"	2.953"	1.929"	1.181"	2.047"	6 Nm

• Clamping diameter may be reduced using an ETP reduction sleeve (see page FC24 & FC25)

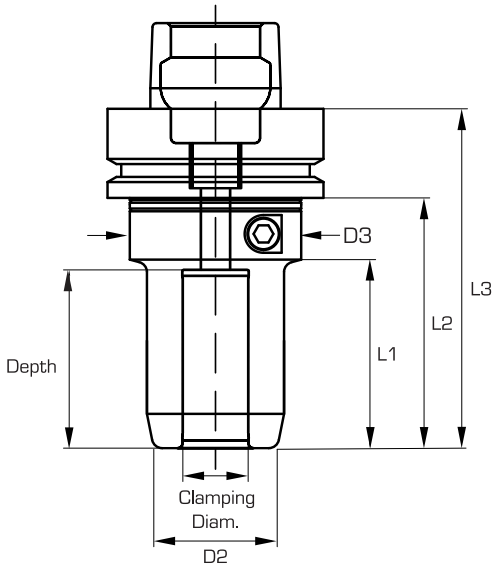
METRIC SIZES

PART NO.	CLAMPING DIAM. ø MM	D2 MM	D3 MM	L1 MM	L2 MM	L3 MM	DEPTH MM	TORQUE SETTING
ETPHGC012/HSK63F	12	22	43.5	75	49	18	40	6 Nm
ETPHGC016/HSK63F	16	26	48	75	49	28	50	6 Nm
ETPHGC020/HSK63F •	20	30	52	75	49	30	52	6 Nm

• Clamping diameter may be reduced using an ETP reduction sleeve (see page FC24 & FC25)

ETPHGS HSK63F HYDRO-GRIP® SLENDER
HYDRAULIC TOOLHOLDER





DESIGN:
» HSK63F spindle connection type
» Durable high quality steel
» Precision ground interfaces
» Clamping activated with 5mm Hex Wrench
» Requires minimum h7 shank tolerance
» Renowned design
» Proper clamping of tool shanks requires tightening to the specified torque settings
» Dynamically balanced G 2.5 at 25,000 RPM

APPLICATION:
» Provides the fastest tool change process
» For precision mounting of carbide, densimet, and steel shank tools
» Where additional tool rigidity is required

IDEAL FOR:
» High use tools, such as compression bits
» Profiled tools
» Tools used in challenging cutting applications such as solid woods or HPL

BENEFITS:
» Provides exceptional rigidity and accuracy
» Minimizes run-out on long tool projections
» Superior cut quality and blending of profiles
» Exceptionally fast tool changes without the need for specialized equipment

IMPERIAL SIZES

PART NO.	CLAMPING DIAM. ø	D2 MM	D3 MM	L1 MM	L2 MM	L3 MM	DEPTH MM	TORQUE SETTING
ETPHGS1/2HSK63F	1/2"	32	40	43	61	87	40	6 Nm
ETPHGS5/8HSK63F	5/8"	38	40	43	61	87	40	6 Nm
ETPHGS3/4HSK63F •	3/4"	40	50	55	73	99	52	6 Nm
ETPHGS100HSK63F •	1"	45	50	59	77	103	56	6 Nm

• Clamping diameter may be reduced using an ETP reduction sleeve (see page FC24 & FC25)

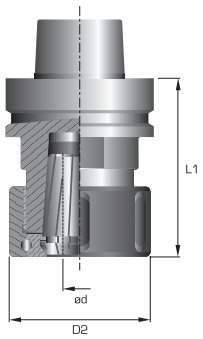
METRIC SIZES

PART NO.	CLAMPING DIAM. ø MM	D2 MM	D3 MM	L1 MM	L2 MM	L3 MM	DEPTH MM	TORQUE SETTING
ETPHGS012HSK63F	12	32	40	43	61	87	40	6 Nm
ETPHGS016HSK63F	16	38	40	43	61	87	40	6 Nm
ETPHGS020HSK63F •	20	40	50	55	73	99	52	6 Nm
ETPHGS025HSK63F •	25	45	50	59	77	103	56	6 Nm

• Clamping diameter may be reduced using an ETP reduction sleeve (see page FC24 & FC25)

RCBB-HSK63F
HSK63F COLLET CHUCKS
WITH BALL BEARING COLLET NUT





DESIGN:
» Collet chucks with hollow taper shank HSK63F
» Ball bearing collet nut for increased clamping pressure and improved concentricity
» Balanced tool body and collet nut
» Suitable for both left and right hand rotation
» Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

APPLICATION:
» Precision collet chuck for clamping shank type tools

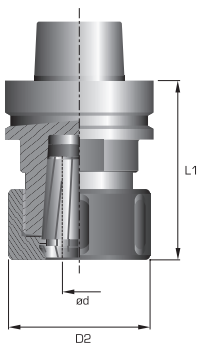
PLEASE SPECIFY WHEN ORDERING:
» If your CNC Router requires holes in the HSK Taper

STANDARD PART NO.	STAINLESS STEEL PART NO.	COLLET TYPE	DIN TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2080	RC2080S	ER32	6499	2-20	50	70	RH/LH	100 ft-lbs
RC2082	RC2082S	ER40	6499	3-26	63	76	RH/LH	130 ft-lbs
RC2084	RC2084S	OZ25	6388	3-25.4	60	76	RH/LH	90 ft-lbs

Spring collets not included (see pages FC18 - FC21)

RC-HSK63F
HSK63F COLLET CHUCKS
WITHOUT BALL BEARING COLLET NUT





DESIGN:
» Collet chucks with hollow taper shank HSK63F
» Balanced tool body and collet nut
» Right hand rotation (left hand available upon request)
» Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

APPLICATION:
» Precision collet chuck for clamping shank type tools

PLEASE SPECIFY WHEN ORDERING:
» If your CNC Router requires holes in the HSK Taper

PART NO.	COLLET TYPE	DIN TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2090	ER32	6499	2-20	50	70	RH	100 ft-lbs
RC2092	ER40	6499	3-26	63	75	RH	130 ft-lbs

Spring collets not included (see pages FC18 - FC21)

RCTH-HSK63F

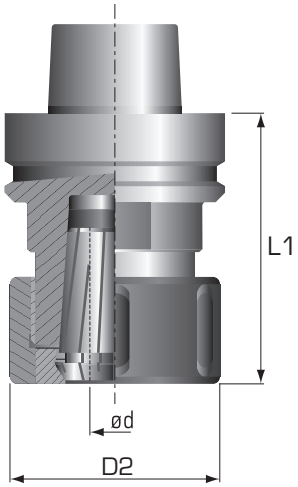
THERMWOOD HSK63F COLLET CHUCKS
WITHOUT BALL BEARING COLLET NUT



DESIGN:
» Collet chucks with hollow taper shank HSK63F
» Balanced tool body and collet nut
» Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

APPLICATION:
» Precision collet chuck for clamping shank type tools
» For Thermwood CNC routers with automatic tool changers

IMPORTANT:
» Part number RC2092TH and RC2094TH are not compatible with Thermwood's "Typewriter" style tool changer



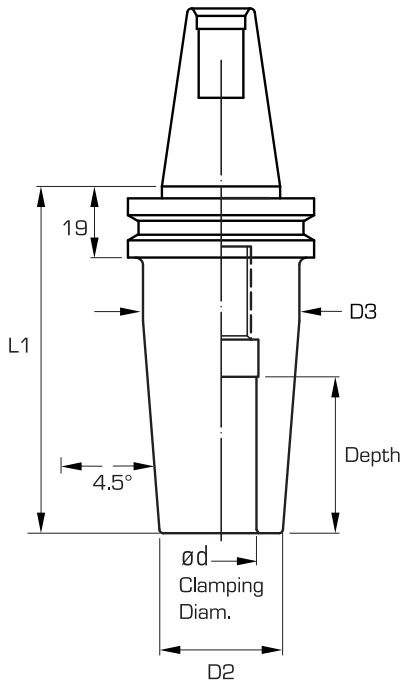
PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2090TH	ER32	2-20	50	72.5	RH	100 ft-lbs
RC2092TH	ER40	3-26	63	76.5	RH	130 ft-lbs
RC2094TH	OZ25	3-25.4	60	76.5	RH	90 ft-lbs

Spring collets not included (see pages FC18 - FC21)

SHRKFH-ISO30

ISO30 shrinkfit toolholders
HIGH PRECISION CLAMPING SYSTEM





DESIGN:
» ISO30 spindle connection type
» Durable high quality steel
» Precision ground interface
» Capable of a high number of tool change cycles
» Tools must be inserted and removed using a shrinkfit machine
» Requires minimum h7 shank tolerance

APPLICATION:
» For precision mounting of carbide, densimet, and steel shank tools
» Where additional tool rigidity is required
» Ideal for PCD and Insert tooling, such as profiled tools and surfacing cutters
» On CNC routers with manual or automatic tool changers

BENEFITS:
» Provides highest achievable rigidity and accuracy
» Minimizes run-out on long tool projections
» Superior cut quality and blending of profiles
» Exceptionally fast tool changes

PART NO.	CLAMPING DIAM. ød	D2 MM	D3 MM	L1	DEPTH MM
RC3602	1/4"	21	27	80mm	39
RC3604	3/8"	24	32	80mm	42
RC3606	1/2"	28	32	80mm	47
RC3607	5/8"	28	32	80mm	50
RC3608	3/4"	33	42	80mm	52
RC3610	1"	46	53	4"	58

Other sizes available upon request

THERMWOOD MACHINES ONLY

PART NO.	CLAMPING DIAM. ød	D2 MM	L1 MM	DEPTH MM
RC3606TH	1/2"	28	80	47
RC3608TH	3/4"	33	80	52

Other sizes available upon request

AER-56 AEROTECH UNIVERSAL HYDRO BODY
SK30 TAPER - ISO30 / BT30 CONNECTIONS



PART NO:
AER-56F-HOLDER

Aerotech Universal®

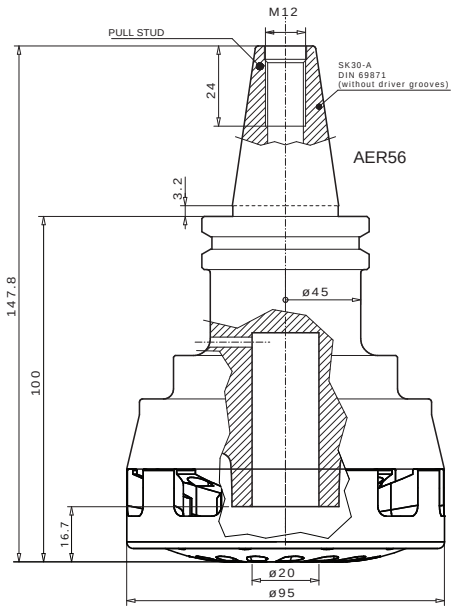
DESIGN:
- » Hardened 58 HRC steel body reduces wear
- » Award winning Centrifugal design with arched fan blades provides safe dust extraction without the risk of debris being 'thrown'
- » Hydraulic clamping chamber provides exceptional clamping power and significantly reduced run-out
- » Universal clamping of standard cylindrical shank tools
- » 20mm clamping diameter can be reduced with precision sleeves to accept smaller h6 shank diameters
- » SK30 taper is usable on ISO30 and BT30 spindle type machines. Thermwood machines require a standard ISO30 toolholder gripper fork to be installed.
- » Proper clamping of tool shanks requires tightening to the specified torque settings

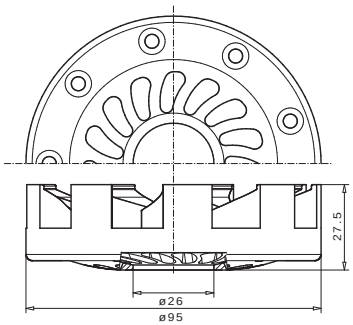
APPLICATION:
- » Reduce combustible environmental dust during routing operations
- » Increase production throughput by reducing or eliminating clean-up time between cuts and end of the shift
- » Fast tool changes
- » Longer tool life due to increased tool rigidity
- » Improved heat disipation provided by enhanced airflow within the cutting path

MATERIAL:
- » MDF
- » TFL and HPL Laminated panels
- » Plywood, OSB, and Veneered Panels (requires Flange Type: GRILL on Aerotech)
- » Composite materials: CFRP, Kevlar composites, Solid Surface, etc.

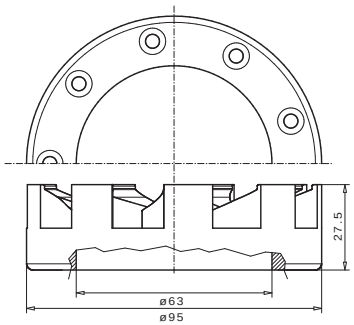
AEROTECH BODY

PART NO.	FLANGE TYPE	SPINDLE CONNECTION	LARGE DIAM.	CLAMPING DIAM.	OVERALL LENGTH	TORQUE SETTING
AER-56F-HOLDER	Extended GRILL	SK30 (ISO/BT)	95mm	20mm	125mm	10 Nm
AER-56W-HOLDER	Extended OPEN	SK30 (ISO/BT)	95mm	20mm	125mm	10 Nm





Extended GRILL



Extended OPEN

REPLACEMENT PARTS

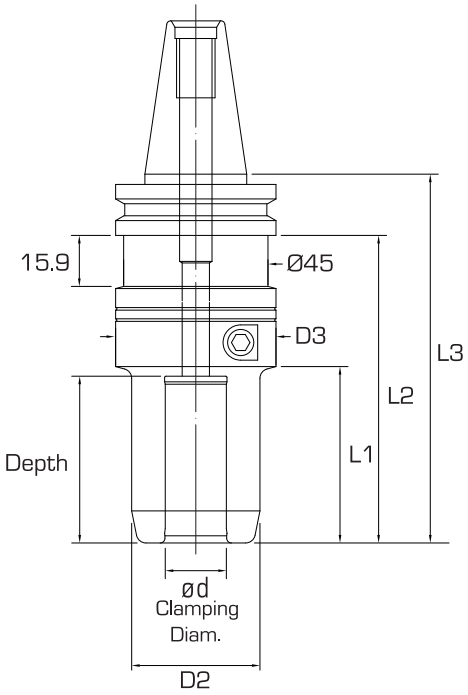
PART NO.	DESCRIPTION
AER-TW-10NM	10 Nm Torque Wrench 4mm Hex Drive

REDUCTION SLEEVES

PART NO.	OUTSIDE DIAMETER	CLAMPING DIAM.	OVERALL LENGTH
AERC-RS20MM-3/8	20mm	3/8"	50.5mm
AERC-RS20MM-1/2	20mm	1/2"	50.5mm

ETPHGS SK30 HYDRO-GRIP® SLENDER
HYDRAULIC TOOLHOLDER FOR ISO30 & BT30 SPINDLES





DESIGN:
» ISO30 spindle connection type
» Durable high quality steel
» High precision ground interfaces
» Clamping activated with 5mm Hex Wrench
» Requires minimum h7 shank tolerance
» Renowned design
» Proper clamping of tool shanks requires tighten to the specified torque setting
» Dynamically balanced G 2.5 at 25,000 RPM

APPLICATION:
» Provides the fastest tool change process
» For precision mounting of carbide, densimet, and steel shank tools
» Where additional tool rigidity is required

IDEAL FOR:
» High use tools such as compression bits
» Profiled tools
» Tools used in challenging cutting applications such as solid woods or HPL

BENEFITS:
» Provides exceptional rigidity and accuracy
» Minimizes run-out on long tool projections
» Superior cut quality and blending of profiles
» Exceptionally fast tool changes without the need for specialized equipment

IMPERIAL SIZES

PART NO.	CLAMPING DIAM. ød	D2 MM	D3 MM	L1 MM	L2 MM	L3 MM	DEPTH MM	TORQUE SETTING
ETPHGS1/2SK30	1/2"	32	40	43	60.9	80	40	5 Nm
ETPHGS3/4SK30 •	3/4"	40	50	55	95.9	115	52	5 Nm
ETPHGS100SK30 •	1"	45	50	59	99.9	119	56	5 Nm

• Clamping diameter may be reduced using a reduction sleeve (see page FC24 & FC25)

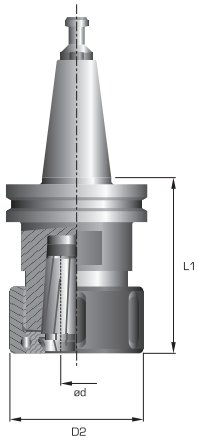
METRIC SIZES

PART NO.	CLAMPING DIAM. ød MM	D2 MM	D3 MM	L1 MM	L2 MM	L3 MM	DEPTH MM	TORQUE SETTING
ETPHGS012SK30	12	32	40	43	60.9	80	40	5 Nm
ETPHGS016SK30	16	38	40	43	60.9	80	40	5 Nm
ETPHGS020SK30 •	20	40	50	55	95.9	115	52	5 Nm
ETPHGS025SK30 •	25	45	50	59	99.9	119	56	5 Nm

• Clamping diameter may be reduced using a reduction sleeve (see page FC24 & FC25)

RCBB-ISO30 ISO30 COLLET CHUCKS
WITH BALL BEARING COLLET NUT





DESIGN:
- » Collet chucks with steep taper DIN 69871, without grooves or notches
- » Ball bearing collet nut for increased clamping pressure and increased concentricity
- » Balanced tool body and collet nut
- » Suitable for both left and right hand rotation
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

APPLICATION:
- » Precision collet chuck for clamping shank type tools

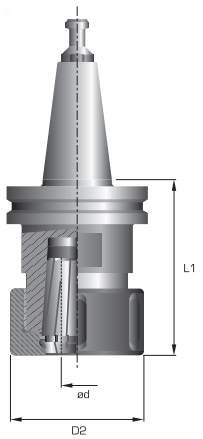
PART NO.	COLLET TYPE	DIN TYPE	CLAMPING DIAM. ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2000	ER32	6499	2-20	50	45	RH/LH	100 ft-lbs
RC2002	ER32	6499	2-20	50	55	RH/LH	100 ft-lbs
RC2004	ER40	6499	3-26	63	57	RH/LH	130 ft-lbs
RC2006	OZ25	6388	3-25.4	60	70	RH/LH	90 ft-lbs

When ordering, specify pull stud type (see page FC14)

Spring collets not included (see pages FC18 - FC21)

RC-ISO30 ISO30 COLLET CHUCKS
WITHOUT BALL BEARING COLLET NUT





DESIGN:
- » Collet chucks with steep taper DIN 69871, without grooves or notches
- » Suitable for spring collets manufactured to DIN 6388 or DIN 6499
- » Balanced tool body and collet nut
- » Right hand rotation (left hand available upon request)
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

APPLICATION:
- » Precision collet chuck for clamping shank type tools

PART NO.	COLLET TYPE	DIN TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2010	ER32	6499	2-20	50	45	RH	100 ft-lbs
RC2012	ER32	6499	2-20	50	58	RH	100 ft-lbs
RC2014	ER40	6499	3-26	63	55	RH	130 ft-lbs
RC2016	OZ25	6388	3-25.4	60	70	RH	90 ft-lbs

When ordering, specify pull stud type (see page FC14)

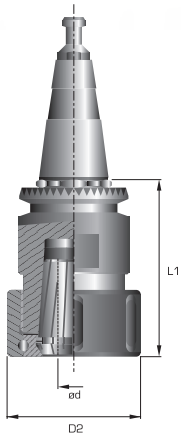
Spring collets not included (see pages FC18 - FC21)

RCBBM-ISO30 ISO30 COLLET CHUCKS
SCM/MORBIDELLI WITH BALL BEARING NUT



DESIGN:
- » Collet chucks with steep taper and serrated flange
- » Suitable for spring collets manufactured to DIN 6388 or DIN 6499
- » Ball bearing collet nut for increased clamping pressure and increased concentricity
- » Balanced tool body and collet nut
- » Suitable for both left and right hand rotation
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

APPLICATION:
- » Precision collet chuck for clamping shank type tools
- » On CNC routers with automatic tool change for SCM and Morbidelli



PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2020	ER32	2-20	50	55	RH/LH	100 ft-lbs
RC2022	ER40	3-26	63	70	RH/LH	130 ft-lbs
RC2024	OZ25	3-25.4	60	72	RH/LH	90 ft-lbs

When ordering, specify pull stud type (see page FC14)

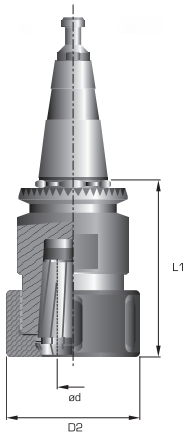
Spring collets not included (see pages FC18 - FC21)

RCM-ISO30 ISO30 COLLET CHUCKS
SCM/MORBIDELLI WITHOUT BALL BEARING NUT



DESIGN:
- » Collet chucks with steep taper and toolhead flange
- » Suitable for spring collets manufactured to DIN 6388 or DIN 6499
- » Balanced tool body and collet nut
- » Right hand rotation (left hand available upon request)
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

APPLICATION:
- » Precision collet chuck for clamping shank type tools
- » On CNC routers with automatic tool change for SCM and Morbidelli



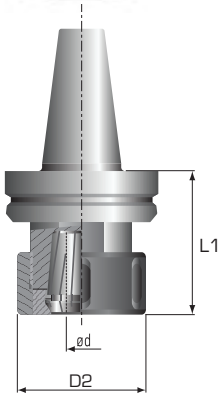
PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2030	ER32	2-20	50	55	RH	100 ft-lbs
RC2032	ER32	2-20	50	55	LH	100 ft-lbs
RC2034	ER40	3-26	63	70	RH	130 ft-lbs
RC2036	ER40	3-26	63	70	LH	130 ft-lbs
RC2038	OZ25	3-25.4	60	72	RH	90 ft-lbs
RC2039	OZ25	2-25.4	60	72	LH	90 ft-lbs

When ordering, specify pull stud type (see page FC14)

Spring collets not included (see pages FC18 - FC21)

RCTH-ISO30 THERMWOOD ISO30 COLLET CHUCKS
WITHOUT BALL BEARING COLLET NUT





DESIGN:
» Collet chucks with steep taper, without grooves or notches
» Specifically for Therwood CNC Routers
» Suitable for left-hand and right-hand rotation
» Balanced tool body and collet nut
» Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

APPLICATION:
» Precision collet chuck for clamping shank type tools
» Thermwood CNC routers with automatic tool changers

IMPORTANT:
» RC2014TH is not compatible with Thermwood's "Typewriter" style tool changer

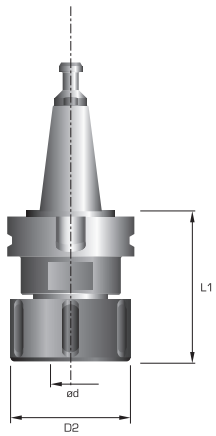
PART NO.	COLLET TYPE	DIN TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2012TH	ER32	6499	2-20	50	57.5	RH	100 ft-lbs
RC2012THL	ER32	6499	2-20	50	57.5	LH	100 ft-lbs
RC2014TH	ER40	6499	3-26	63	67.5	RH	130 ft-lbs

When ordering, specify pull stud type (see page FC14)

Spring collets not included (see pages FC18 - FC21)

RC-BT BT20-BT40 COLLET CHUCKS





DESIGN:
» Collet chucks with steep taper DIN 69871, with grooves/notches
» Suitable for spring collets manufactured to DIN 6388 or DIN 6499
» Balanced tool body and collet nut
» Right hand rotation (left hand available upon request)
» Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting

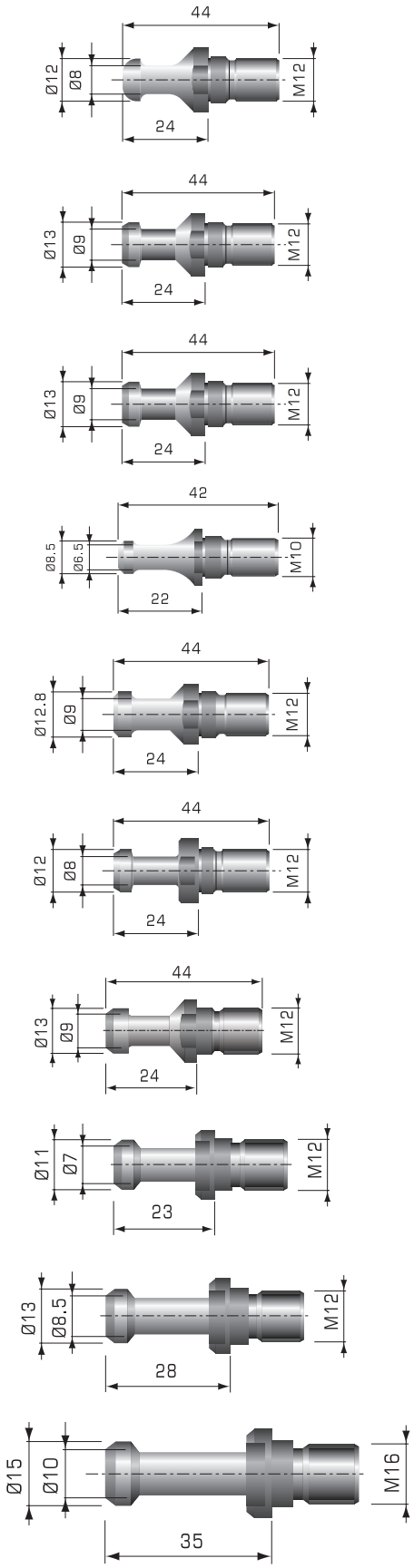
APPLICATION:
» Precision collet chuck for clamping shank type tools

PART NO.	TAPER SIZE	COLLET TYPE	DIN TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2040	BT20	ER20	6499	2-13	35	45	RH	24 ft-lbs
RC2042	BT20	ER25	6499	2-16	42	45	RH	77 ft-lbs
RC2044	BT30	ER25	6499	2-16	42	60	RH	77 ft-lbs
RC2046	BT30	ER32	6499	2-20	50	60	RH	100 ft-lbs
RC2047 •	BT30	ER32	6499	2-20	50	60	RH	100 ft-lbs
RC2048	BT30	ER40	6499	3-26	63	70	RH	130 ft-lbs
RC2050	BT35	ER25	6499	2-16	42	65	RH	77 ft-lbs
RC2052	BT35	ER32	6499	2-20	50	65	RH	100 ft-lbs
RC2054	BT35	ER40	6499	3-26	63	55	RH	130 ft-lbs
RC2056	BT40	ER25	6499	2-16	42	65	RH	77 ft-lbs
RC2058	BT40	ER32	6499	2-20	50	65	RH	100 ft-lbs
RC2059	BT40	ER40	6499	3-26	63	70	RH	130 ft-lbs

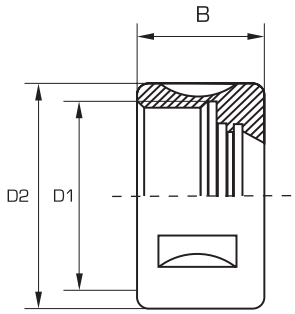
When ordering, specify pull stud type (see page FC14)

Spring collets not included (see pages FC18 - FC21)

• Special "No Knotch" Collet Chuck for Komo CNC Routers, use pull stud type PS1090

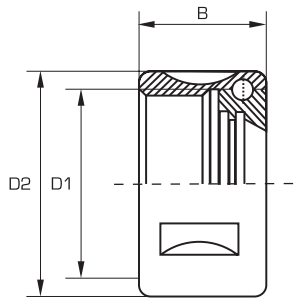


PART NO.	TOOLHOLDER TYPE	MACHINE
PS1020	ISO30	BIESSE (After 1992) MASTERWOOD
PS1030	ISO30	ALBERTI
PS1040	ISO30 / BT30	IMA, MAKA, WEEKE, BUSELLATO, BULLERI, COSMEC RICHENBACHER
PS1060	ISO30	SCM - MORBIDELLI
PS1070	ISO30	CMS
PS1080	ISO30	THERMWOOD, ESSETEAM
PS1090	BT30	KOMO
PS1100	BT30	SHODA
PS1110	BT35	HEIAN
PS1120	BT40	SHODA



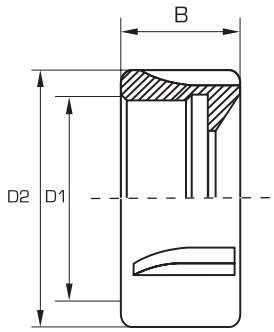
SLOTTED COLLET NUTS WITHOUT BALL BEARING

PART NO.	COLLET TYPE	DIN #	DIAM. D2 MM	THICKNESS B MM	DIAM. D1	ROTATION	TORQUE SETTING
CN41916	ER16	6499	32	18	M22 x 1.5	RH	42 ft-lbs
CN41920	ER20	6499	35	19.5	M25 x 1.5	RH	59 ft-lbs
CN41925	ER25	6499	42	21	M32 x 1.5	RH	77 ft-lbs
CN1010	ER32	6499	50	23	M40 x 1.5	RH	100 ft-lbs
CN1020	ER40	6499	63	25	M50 x 1.5	RH	130 ft-lbs
CN1030	OZ25	6388	60	30	M48 x 2.0	RH	90 ft-lbs
CN1040	ER32	6499	50	23	M40 x 1.5	LH	100 ft-lbs
CN1050	ER40	6499	63	25	M50 x 1.5	LH	130 ft-lbs
CN1060	OZ25	6388	60	30	M48 x 2.0	LH	90 ft-lbs



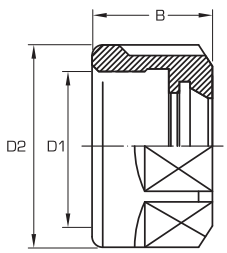
SLOTTED COLLET NUTS WITH BALL BEARING

PART NO.	COLLET TYPE	DIN #	DIAM. D2 MM	THICKNESS B MM	DIAM. D1	ROTATION	TORQUE SETTING
CN1110	ER32	6499	50	23	M40 x 1.5	RH	100 ft-lbs
CN1120	ER40	6499	63	29	M50 x 1.5	RH	130 ft-lbs
CN1130	OZ25	6388	60	30	M48 x 2.0	RH	90 ft-lbs
CN1140	ER32	6499	50	23	M40 x 1.5	LH	100 ft-lbs
CN1150	ER40	6499	63	29	M50 x 1.5	LH	130 ft-lbs
CN1160	OZ25	6388	60	30	M48 x 2.0	LH	90 ft-lbs



MINI SLOTTED COLLET NUTS WITHOUT BALL BEARING

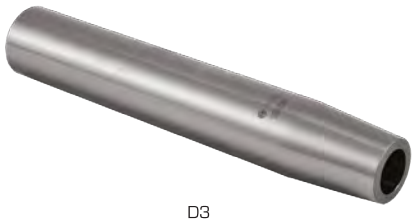
PART NO.	COLLET TYPE	DIN #	DIAM. D2 MM	THICKNESS B MM	DIAM. D1	ROTATION	TORQUE SETTING
CN23111	ER11	6499	16	12	M13 x 0.75	RH	12 ft-lbs
CN23116	ER16	6499	22	18	M19 x 1.0	RH	20 ft-lbs
CN23120	ER20	6499	28	19.5	M24 x 1.0	RH	22 ft-lbs
CN23125	ER25	6499	35	21	M30 x 1.0	RH	28 ft-lbs

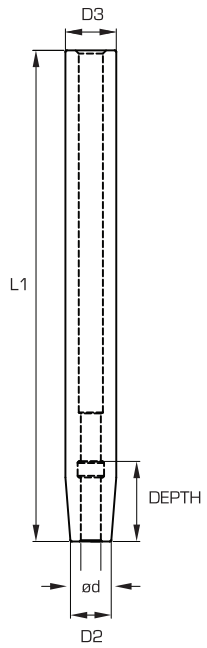


HEX COLLET NUTS WITHOUT BALL BEARING

PART NO.	COLLET TYPE	DIN #	DIAM. D2 MM	THICKNESS B MM	DIAM. D1	ROTATION	TORQUE SETTING
CN41111	ER11	6499	19	12	M14 x 0.75	RH	17 ft-lbs
CN41116	ER16	6499	27.5	18	M22 x 1.5	RH	42 ft-lbs
CN41120	ER20	6499	34	19	M25 x 1.5	RH	59 ft-lbs

RCEXT-SHF TOOLHOLDER EXTENSIONS
SHRINKFIT TYPE





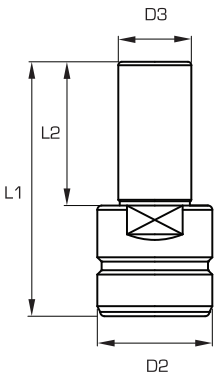
DESIGN:
- » Extension with shrinkfit interface provides the smallest nose diameter
- » Small diameter provides greatest access to confined cuts
- » Durable high quality steel
- » Precision ground interfaces
- » Capable of many accurate tool change cycles
- » Provides superior rigidity and accuracy
- » Tools must be inserted and removed using a shrinkfit machine
- » Requires minimum h7 shank tolerance
- » Set screw for consistent depth between tool changes

APPLICATION:
- » Enables greater reach of the cutting tool
- » Reduced tool projection achieves superior cutting performance and tool life
- » For precision mounting of carbide, densimet, and steel shank tools
- » Where additional tool rigidity is required

PART NO.	CLAMPING DIAM. ød	NOSE DIAM. D2	SHANK DIAM. D3	OVERALL LENGTH L1	DEPTH	SET SCREW
RCEXT86062	1/8"	0.394"	5/8"	6.3"	0.79"	-
RCEXT86064	3/16"	0.394"	5/8"	6.3"	0.79"	-
RCEXT86066	1/4"	0.394"	5/8"	6.3"	0.79"	M6 x 1.0
RCEXT86076	1/4"	0.551"	3/4"	6.3"	1.42"	M6 x 1.0
RCEXT86080	3/8"	0.551"	3/4"	6.3"	1.65"	M8 x 1.25
RCEXT86090	3/8"	0.79"	1"	6.3"	1.65"	M8 x 1.25
RCEXT86092	1/2"	0.79"	1"	6.3"	1.85"	M10 x 1.5
RCEXT86094	5/8"	0.87"	1"	6.3"	1.97"	M12 x 1.75

RCEXT-CER DIN 6499 TOOLHOLDER EXTENSIONS
STANDARD ER NUT





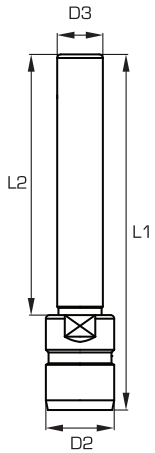
DESIGN:
- » Precision ground surfaces
- » Collet design allows for fast, easy tool changes of different shank diameters
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting
- » Tightens using standard collet nut wrench

APPLICATION:
- » Enables greater reach of the cutting tool
- » Using an extension with smaller collet nut allows access to confined cuts
- » Reduced tool projection achieves superior cutting performance and tool life

PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	SHANK DIAM. D3 MM	NUT DIAM. D2	OVERALL LENGTH L1 MM	SHANK LENGTH L2 MM	TORQUE SETTING	WRENCH PART NO.
RCEXT04837	ER25	2-16	1"	42	101	50	77 ft-lbs	WR04615
RCEXT04817	ER32	2-20	20mm	50	97.1	50	100 ft-lbs	WR04616
RCEXT04818	ER32	2-20	20mm	50	146.5	100	100 ft-lbs	WR04616
RCEXT04818–150	ER32	2-20	20mm	50	196.5	150	100 ft-lbs	WR04616
RCEXT04839	ER32	2-20	1"	50	101.5	50	100 ft-lbs	WR04616
RCEXT04839–140	ER32	2-20	1"	50	191.5	140	100 ft-lbs	WR04616
RCEXT04841	ER40	3-26	1"	63	115	50	130 ft-lbs	WR04617

RCEXT-CM DIN 6499 TOOLHOLDER EXTENSIONS
SLOTTED ER MINI-NUT





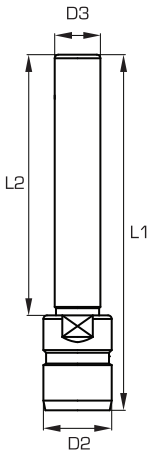
DESIGN:
- » Slotted mini-nut collet provides smaller nut diameters for improved access to more confined cuts
- » Precision ground surfaces
- » Collet design allows for fast, easy tool changes of different shank diameters
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tighten to the specified torque setting
- » Requires ER Mini-Nut collet wrench to tighten

APPLICATION:
- » Enables greater reach of the cutting tool
- » Using an extension with smaller collet nut allows access to confined cuts
- » Reduced tool projection achieves superior cutting performance and tool life

PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	SHANK DIAM. D3	NUT DIAMETER D2 MM	OVERALL LENGTH L1 MM	SHANK LENGTH L2 MM	TORQUE SETTING	WRENCH PART NO.
RCEXT04891	ER11	0.5-7	1/2"	16	166.5	140	14 ft-lbs	WR04621
RCEXT04893	ER11	0.5-7	5/8"	16	158.5	140	14 ft-lbs	WR04621
RCEXT04895	ER16	1-10	1/2"	22	177	140	22 ft-lbs	WR04622
RCEXT04896	ER16	1-10	3/4"	22	165	140	22 ft-lbs	WR04622
RCEXT04892	ER20	2-13	1/2"	28	180	140	25 ft-lbs	WR04623
RCEXT04894	ER20	2-13	3/4"	28	180	140	25 ft-lbs	WR04623
RCEXT04881	ER20	2-13	20mm	28	220	180	25 ft-lbs	WR04623
RCEXT04897	ER20	2-13	1"	28	168	140	25 ft-lbs	WR04623
RCEXT04898	ER25	2-16	3/4"	35	149	100	29 ft-lbs	WR04624
RCEXT04888	ER25	2-16	1"	35	190	140	29 ft-lbs	WR04624

RCEXT-CHX DIN 6499 TOOLHOLDER EXTENSIONS
ER HEX NUT





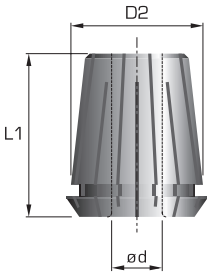
DESIGN:
- » Precision ground surfaces
- » Collet design allows for fast, easy tool changes of different shank diameters
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting
- » Requires wrench to tighten hex nuts

APPLICATION:
- » Enables greater reach of the cutting tool
- » Using an extension with smaller collet nut allows access to confined cuts
- » Reduced tool projection achieves superior cutting performance and tool life

PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	SHANK DIAM. D3	NUT DIAMETER D2 MM	OVERALL LENGTH L1 MM	SHANK LENGTH L2 MM	TORQUE SETTING	WRENCH PART NO.
RCEXT04855	ER11	0.5-7	1/2"	19	174.5	140	20 ft-lbs	WR04608
RCEXT04854	ER11	0.5-7	5/8"	19	174.5	140	50 ft-lbs	WR04608
RCEXT04832	ER16	1-10	5/8"	28	95.1	60	50 ft-lbs	WR04609
RCEXT04834	ER16	1-10	3/4"	28	85.1	50	50 ft-lbs	WR04609
RCEXT04835	ER16	1-10	3/4"	28	135.1	100	50 ft-lbs	WR04609
RCEXT04856	ER16	1-10	3/4"	28	175.1	140	50 ft-lbs	WR04609
RCEXT04858	ER20	2-13	1"	34	180.5	140	75 ft-lbs	WR04610

ER11 DIN 6499
ER11 PRECISION COLLETS
SPRING COLLETS

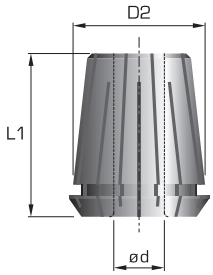




PART NO.	DIAM. ød	CLAMPING RANGE ød	DIAM. D2 MM	LENGTH L1 MM
RCER11010	1.0mm	1-0.5mm	11.5	18
RCER11015	1.5mm	1.5-1mm	11.5	18
RCER11020	2mm	2-1.5mm	11.5	18
RCER11025	2.5mm	2.5-2mm	11.5	18
RCER11030	3mm	3-2.5mm	11.5	18
RCER11–18	1/8"	1/8"	11.5	18
RCER11035	3.5mm	3.5-3mm	11.5	18
RCER11040	4mm	4-3.5mm	11.5	18
RCER11045	4.5mm	4.5-4mm	11.5	18
RCER11–316	3/16"	3/16"	11.5	18
RCER11050	5mm	5-4.5mm	11.5	18
RCER11055	5.5mm	5.5-5mm	11.5	18
RCER11060	6mm	6-5.5mm	11.5	18
RCER11–14	1/4"	1/4"	11.5	18
RCER11065	6.5mm	6.5-6mm	11.5	18
RCER11070	7mm	7-6.5mm	11.5	18

ER16 DIN 6499
ER16 PRECISION COLLETS
SPRING COLLETS



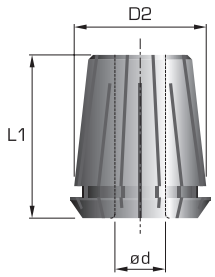


PART NO.	DIAM. ød	CLAMPING RANGE ød	DIAM. D2 MM	LENGTH L1 MM
RCER16–16	1/16"	1/16"	17	28
RCER1602	2mm	2-1mm	17	28
RCER1603	3mm	3-2mm	17	28
RCER16–18	1/8"	1/8"	17	28
RCER1604	4mm	4-3mm	17	28
RCER1605	5mm	5-4mm	17	28
RCER1606	6mm	6-5mm	17	28
RCER16–14	1/4"	1/4"	17	28
RCER1607	7mm	7-6mm	17	28
RCER1608	8mm	8-7mm	17	28
RCER1609	9mm	9-8mm	17	28
RCER16–38	3/8"	3/8"	17	28
RCER1610	10mm	10-9mm	17	28

ER20 DIN 6499

ER20 PRECISION COLLETS
SPRING COLLETS



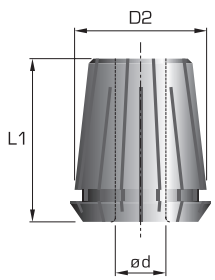


PART NO.	DIAM. ød	CLAMPING RANGE ød	DIAM. D2 MM	LENGTH L1 MM
RCER2003	3mm	3-2mm	21	32
RCER20–18	1/8"	1/8"	21	32
RCER2004	4mm	4-3mm	21	32
RCER2005	5mm	5-4mm	21	32
RCER2006	6mm	6-5mm	21	32
RCER20–14	1/4"	1/4"	21	32
RCER2007	7mm	7-6mm	21	32
RCER2008	8mm	8-7mm	21	32
RCER2009	9mm	9-8mm	21	32
RCER20–38	3/8"	3/8"	21	32
RCER2010	10mm	10-9mm	21	32
RCER2011	11mm	11-10mm	21	32
RCER2012	12mm	12-11mm	21	32
RCER20–12	1/2"	1/2"	21	32
RCER2013	13mm	13-12mm	21	32

ER25 DIN 6499

ER25 PRECISION COLLETS
SPRING COLLETS

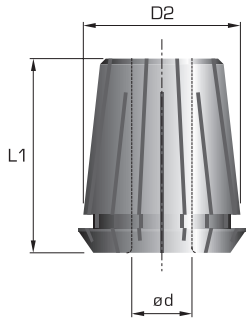




PART NO.	DIAM. ød	CLAMPING RANGE ød	DIAM. D2 MM	LENGTH L1 MM
RCER2503	3mm	3-2mm	26	34
RCER25–18	1/8"	1/8"	26	34
RCER2504	4mm	4-3mm	26	34
RCER2505	5mm	5-4mm	26	34
RCER2506	6mm	6-5mm	26	34
RCER25–14	1/4"	1/4"	26	34
RCER2507	7mm	7-6mm	26	34
RCER25–516	5/16"	5/16"	26	34
RCER2508	8mm	8-7mm	26	34
RCER2509	9mm	9-8mm	26	34
RCER25–38	3/8"	3/8"	26	34
RCER2510	10mm	10-9mm	26	34
RCER2511	11mm	11-10mm	26	34
RCER2512	12mm	12-11mm	26	34
RCER25–12	1/2"	1/2"	26	34
RCER2513	13mm	13-12mm	26	34
RCER2514	14mm	14-13mm	26	34
RCER2515	15mm	15-14mm	26	34
RCER25–58	5/8"	5/8"	26	34
RCER2516	16mm	16-15mm	26	34

ER32 PRECISION COLLETS
SPRING COLLETS



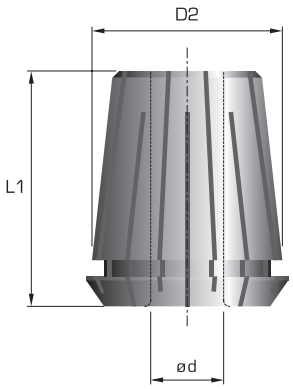


PART NO.	DIAM. ød	CLAMPING RANGE ød	DIAM. D2 MM	LENGTH L1 MM
RCER3203	3mm	3-2mm	32.8	40
RCER32–18	1/8"	1/8"	32.8	40
RCER3204	4mm	4-3mm	32.8	40
RCER32–316	3/16"	3/16"	32.8	40
RCER3205	5mm	5-4mm	32.8	40
RCER3206	6mm	6-5mm	32.8	40
RCER32–14	1/4"	1/4"	32.8	40
RCER3207	7mm	7-6mm	32.8	40
RCER3208	8mm	8-7mm	32.8	40
RCER3209	9mm	9-8mm	32.8	40
RCER32–38	3/8"	3/8"	32.8	40
RCER3210	10mm	10-9mm	32.8	40
RCER3211	11mm	11-10mm	32.8	40
RCER3212	12mm	12-11mm	32.8	40
RCER32–12	1/2"	1/2"	32.8	40
RCER3213	13mm	13-12mm	32.8	40
RCER3214	14mm	14-13mm	32.8	40
RCER3215	15mm	15-14mm	32.8	40
RCER3216	16 (5/8")	16-15mm	32.8	40
RCER3217	17mm	17-16mm	32.8	40
RCER3218	18mm	18-17mm	32.8	40
RCER3219	19mm	19-18mm	32.8	40
RCER32–34	3/4"	3/4"	32.8	40
RCER3220	20mm	20-19mm	32.8	40

ER40 DIN 6499

ER40 PRECISION COLLETS
SPRING COLLETS



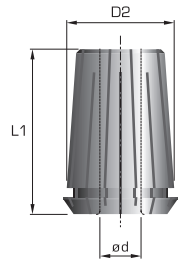


PART NO.	DIAM. ød	CLAMPING RANGE ød	DIAM. D2 MM	LENGTH L1 MM
RCER40–18	1/8"	1/8"	40.8	46
RCER4004	4mm	4-3mm	40.8	46
RCER40–316	3/16"	3/16"	40.8	46
RCER4005	5mm	5-4mm	40.8	46
RCER4006	6mm	6-5mm	40.8	46
RCER40–14	1/4"	1/4"	40.8	46
RCER4007	7mm	7-6mm	40.8	46
RCER4008	8mm	8-7mm	40.8	46
RCER4009	9mm	9-8mm	40.8	46
RCER40–38	3/8"	3/8"	40.8	46
RCER4010	10mm	10-9mm	40.8	46
RCER4011	11mm	11-10mm	40.8	46
RCER4012	12mm	12-11mm	40.8	46
RCER40–12	1/2"	1/2"	40.8	46
RCER4013	13mm	13-12mm	40.8	46
RCER4014	14mm	14-13mm	40.8	46
RCER4015	15mm	15-14mm	40.8	46
RCER4016	16 (5/8")	16-15mm	40.8	46
RCER4017	17mm	17-16mm	40.8	46
RCER4018	18mm	18-17mm	40.8	46
RCER4019	19mm	19-18mm	40.8	46
RCER40–34	3/4"	3/4"	40.8	46
RCER4020	20mm	20-19mm	40.8	46
RCER4025	25mm	25-24mm	40.8	46
RCER40–1	1"	1"	40.8	46
RCER4026	26mm	26-25mm	40.8	46

OZ25 DIN 6388

SYOZ25 PRECISION COLLETS
SPRING COLLETS





PART NO.	DIAM. ød	CLAMPING RANGE ød	DIAM. D2 MM	LENGTH L1 MM
RCOZ2504	4mm	4-3mm	35	52
RCOZ2506	6mm	6-5mm	35	52
RCOZ25–14	1/4"	1/4"	35	52
RCOZ2507	7mm	7-6mm	35	52
RCOZ25–38	3/8"	3/8"	35	52
RCOZ2510	10mm	10mm	35	52
RCOZ25–12	1/2"	1/2"	35	52
RCOZ2513	13mm	13-12mm	35	52
RCOZ2516	16mm	16-15mm	35	52
RCOZ2519	19mm	19-18mm	35	52
RCOZ25–34	3/4"	3/4"	35	52
RCOZ2520	20mm	20-19mm	35	52
RCOZ2525	25mm	25-24mm	35	52
RCOZ25–1	1"	1"	35	52

MD2010 ADJUSTABLE MOUNTING DEVICE FOR TOOLHOLDERS



DESIGN:

» Durable steel construction
» Anodized light alloy base
» Four holes in base for easy mounting near machinery
» Auto-locking roller bearing design for fast tool changes and no slippage
» Adjustable from 0° to 90°

APPLICATION:

» For safe assembly and disassembly of shank type tools into toolholders or bore type tools onto cutter arbors
» Best used with a torque wrench for accurate tightening
» Essential for operations using CNC routers
» Wide range of tightening stand/locking devices available for HSK50, HSK63, ISO30/SK30 and ISO40 spindles including those for Thermwood machines



PART NO.	ød MM	TOOLHOLDER TYPE
MD2010	50	ISO30 / SK30 / HSK50
MD2020	63.5	ISO40
MD2030	63	HSK63F
MD2060	58	ISO30 ELTE/ESSETEAM THERMWOOD

WR1010 WRENCHES FOR TOOLHOLDERS



TYPE:
DIN 6388

DIN 6388

PART NO.	COLLET NUT ød MM	SPRING COLLET TYPE
WR1020	63/60	ER40/OZ25

For collet nut specs, see page FC15



TYPE:
DIN 6499

DIN 6499

PART NO.	COLLET NUT ød MM	SPRING COLLET TYPE
WR1030	50	ER32
WR1040	63	ER40

For collet nut specs, see page FC15



PART NO:
ETP-TW-6NM
AER-TW-10NM



PART NO:
CRW100

FIXED TORQUE WRENCHES

PART NO.	DRIVE TYPE	TORQUE SETTING TYPE	TORQUE VALUE	APPLICATION
ETP-TW-6NM	5mm Hex	Fixed	6 Nm	ETP Hydro-Grip Sleeves
AER-TW-10NM	5mm Hex	Fixed	10 Nm	AEROTECH Hydro Body
CWR100	1/4" Square	Fixed	100 in-lbs	CONSTANT PCD Tools
CSBT25-1/4	T25 Socket with 1/4" drive bit for use with above CWR100			

ADJUSTABLE TORQUE WRENCH & ADAPTERS
FOR TOOLHOLDERS



DESIGN:
» Durable industrial construction
» Factory calibrated and certified accuracy +/- 3%
» Easy read dial for fast adjustments to torque value

APPLICATION:
» For safe and accurate assembly of collet type toolholders

BENEFITS:
» Improves tool and collet life
» Improves accuracy by reducing run-out
» Reduces risk of tool breakage from improper clamping or damaged collets

ADJUSTABLE TORQUE WRENCH

PART NO.	ADAPTER TYPE	LENGTH	SPIGOT TYPE	TORQUE SETTING TYPE	TORQUE RANGE ft-lbs	TORQUE RANGE Nm
WR050TH	Mini	12.5"	16mm round	Adjustable	7.5 - 37.5 ft-lbs	10.1 - 50.8 Nm
WR200TH	Slotted, Hook, Hex	16.5"	16mm round	Adjustable	30 - 150 ft-lbs	40.6 - 203.3 Nm


Type:
Slotted


Type:
Hook


Type:
Mini Slotted


Type:
Hex


Type:
Pull Stud Socket Drive


Type:
Right Angle Drive

PULL STUD SOCKET DRIVES

PART NO.	TOOLHOLDER TYPE	DRIVE SIZE	WRENCH PART NO.	TORQUE SETTING
WRDPSS-30ISO	ISO30	3/8"	WR200TH	36 ft-lbs
WRDPSS-30BT	BT30	3/8"	WR200TH	36 ft-lbs

Requires right angle drive (Part no. 29828)

RIGHT ANGLE DRIVE

PART NO.	DRIVE SIZE	WRENCH PART NO.
WRD29828	3/8"	WR050TH, WR200TH

SLOTTED COLLET KEY ADAPTERS

PART NO.	COLLET NUT TYPE	ADAPTER TYPE	WRENCH PART NO.	TORQUE SETTING
WRA04580-16	ER16 Slotted	Slotted	WR200TH	42 ft-lbs
WRA04580-20	ER20 Slotted	Slotted	WR200TH	59 ft-lbs
WRA04603-25	ER25 Slotted	Slotted	WR200TH	77 ft-lbs
WRA04604-32	ER32 Slotted	Slotted	WR200TH	100 ft-lbs
WRA04605-40	ER40 Slotted	Slotted	WR200TH	130 ft-lbs

HOOK COLLET KEY ADAPTER

PART NO.	COLLET NUT TYPE	ADAPTER TYPE	WRENCH PART NO.	TORQUE SETTING
WRA03690-25	OZ25	Hook	WR200TH	90 ft-lbs

HEX COLLET KEY ADAPTERS

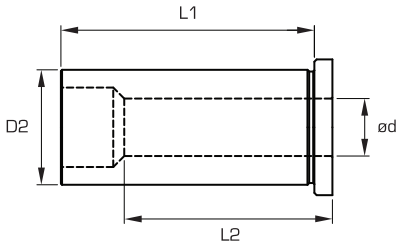
PART NO.	COLLET NUT TYPE	ADAPTER TYPE	WRENCH PART NO.	TORQUE SETTING
WRA04581	ER11 Hex	Hex	WR200TH	12 ft-lbs
WRA04601-16	ER16 Hex	Hex	WR200TH	42 ft-lbs
WRA04602-20	ER20 Hex	Hex	WR200TH	59 ft-lbs

MINI COLLET KEY ADAPTERS

PART NO.	COLLET NUT TYPE	ADAPTER TYPE	WRENCH PART NO.	TORQUE SETTING
WRA04576	ER11 Mini	Mini	WR050TH	12 ft-lbs
WRA04577	ER16 Mini	Mini	WR050TH	20 ft-lbs
WRA04578	ER20 Mini	Mini	WR050TH	22 ft-lbs
WRA04587	ER25 Mini	Mini	WR050TH	28 ft-lbs

REDUCTION SLEEVES FOR ETP HYDRO HOLDERS
IMPERIAL CLAMPING SIZES





REDUCTION SLEEVES

PART NO.	OUTSIDE DIAMETER D2	CLAMPING DIAMETER ød	L1 MM	L2 MM
ETPR1919-03182	3/4"	1/8"	50	28
ETPR1919-04762	3/4"	3/16"	50	28
ETPR1919-06352	3/4"	1/4"	50	36
ETPR1919-07942	3/4"	5/16"	50	37
ETPR1919-09522	3/4"	3/8"	50	36
ETPR1919-11112	3/4"	7/16"	50	40
ETPR1919-12702	3/4"	1/2"	50	45
ETPR1919-14292	3/4"	9/16"	50	45
ETPR1919-15882	3/4"	5/8"	50	48

REDUCTION SLEEVES

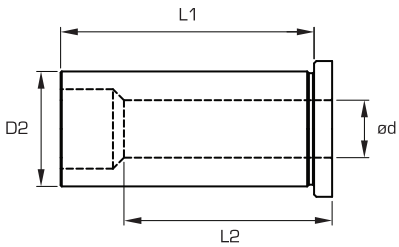
PART NO.	OUTSIDE DIAMETER D2 MM	CLAMPING DIAMETER ød	L1 MM	L2 MM
ETPR1920-03181	20	1/8"	50	28
ETPR1920-04761	20	3/16"	50	28
ETPR1920-06351	20	1/4"	50	36
ETPR1920-07941	20	5/16"	50	37
ETPR1920-09521	20	3/8"	50	36
ETPR1920-11111	20	7/16"	50	40
ETPR1920-12701	20	1/2"	50	45
ETPR1920-14291	20	9/16"	50	45
ETPR1920-15881	20	5/8"	50	48

REDUCTION SLEEVES

PART NO.	OUTSIDE DIAMETER D2	CLAMPING DIAMETER ød	L1 MM	L2 MM
ETPR1926-03182	1"	1/8"	56	29
ETPR1926-04762	1"	3/16"	56	29
ETPR1926-06352	1"	1/4"	56	37
ETPR1926-07942	1"	5/16"	56	37
ETPR1926-09522	1"	3/8"	56	38
ETPR1926-11112	1"	7/16"	56	40
ETPR1926-12702	1"	1/2"	56	46
ETPR1926-14292	1"	9/16"	56	47
ETPR1926-15882	1"	5/8"	56	48
ETPR1926-17462	1"	11/16"	56	48
ETPR1926-19052	1"	3/4"	56	48

REDUCTION SLEEVES FOR ETP HYDRO HOLDERS
METRIC CLAMPING SIZES





REDUCTION SLEEVES

PART NO.	OUTSIDE DIAMETER D2 MM	CLAMPING DIAMETER ød MM	L1 MM	L2 MM
ETPR1920-03000	20	3	50	28
ETPR1920-04000	20	4	50	28
ETPR1920-05000	20	5	50	28
ETPR1920-06000	20	6	50	36
ETPR1920-07000	20	7	50	38
ETPR1920-08000	20	8	50	37
ETPR1920-09000	20	9	50	38
ETPR1920-10000	20	10	50	40
ETPR1920-11000	20	11	50	40
ETPR1920-12000	20	12	50	45
ETPR1920-13000	20	13	50	45
ETPR1920-14000	20	14	50	45
ETPR1920-15000	20	15	50	45
ETPR1920-16000	20	16	50	48
ETPR1920-18000	20	18	50	48

REDUCTION SLEEVES

PART NO.	OUTSIDE DIAMETER D2 MM	CLAMPING DIAMETER ød MM	L1 MM	L2 MM
ETPR1925-03000	25	3	56	29
ETPR1925-04000	25	4	56	29
ETPR1925-05000	25	5	56	29
ETPR1925-06000	25	6	56	37
ETPR1925-07000	25	7	56	37
ETPR1925-08000	25	8	56	37
ETPR1925-09000	25	9	56	38
ETPR1925-10000	25	10	56	40
ETPR1925-12000	25	12	56	46
ETPR1925-14000	25	14	56	47
ETPR1925-16000	25	16	56	48
ETPR1925-18000	25	18	56	48
ETPR1925-20000	25	20	56	50

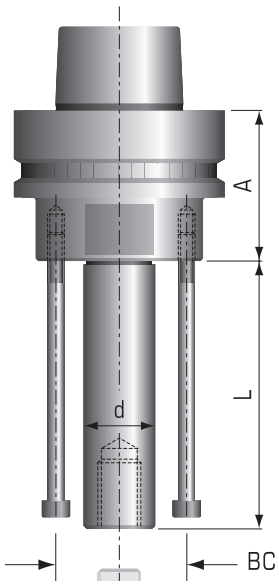


REDUCTION SLEEVE EXTRACTORS

PART NO.	SLEEVE OUTSIDE DIAMETER	HEAD WIDTH MM	LENGTH MM
ETPE7321-20000	3/4" to 20mm	38	160
ETPE7321-25000	25mm to 1"	51	180

Not for use with Aerotech holders





DESIGN:

» Toolholder with hollow taper VDIN 69893-6 FORM F
» Balanced for high speed machining
» Cutters are mounted onto the arbor and secured with bolts

APPLICATION:

» For mounting bore type tools
» For CNC routers with automatic tool changers

IMPERIAL SIZES

PART NO.	ARBOR DIAM. ød	ARBOR LENGTH L MM	A MM	BOLT CIRCLE BC MM
RC3200	1-1/4"	55	45	41
RC3201	1-1/4"	55	33	41
RC3202	1-1/4"	80	33	41

Other shaft sizes available upon request

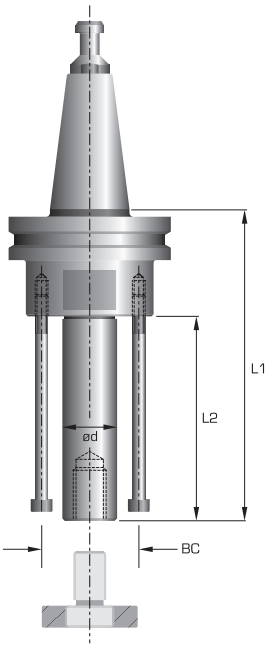
METRIC SIZES

PART NO.	ARBOR DIAM. ød MM	ARBOR LENGTH L MM	A MM	BOLT CIRCLE BC MM
RC3100	20	40	80	32
RC3102	20	70	45	32
RC3104	20	70	80	32
RC3106	30	40	80	48
RC3108	30	80	45	48
RC3109	30	80	80	48

Other shaft sizes available upon request

Bolts not included

ISO30 CUTTER ARBORS
METRIC SIZES



DESIGN:
» Cutter arbor with steep taper DIN 69871, without grooves or notches
» Balanced for high speed machining
» Cutters are mounted onto the arbor and secured with bolts

APPLICATION:
» For mounting bore type tools
» On CNC routers with automatic tool changers

PART NO.	SHAFT DIAM. ød MM	SHAFT LENGTH L2 MM	L1 MM	BOLT CIRCLE BC MM
RC3050	20	55	97	32
RC3052	20	70	112	32
RC3054	30	55	97	48
RC3056	30	80	122	48
RC3050L	20	55	118	32
RC3052L	20	70	133	32
RC3054L	30	55	118	48
RC3056L	30	80	143	48

When ordering, specify pull stud type (see page FC14)

Other shaft sizes available upon request

Bolts not included

ETP-GE2 HSK63F HYDRO-GRIP® CUTTER ARBORS
TYPE: GE2

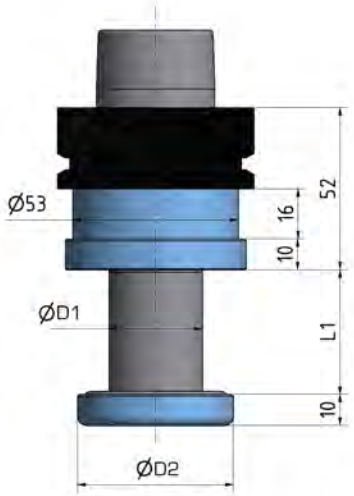


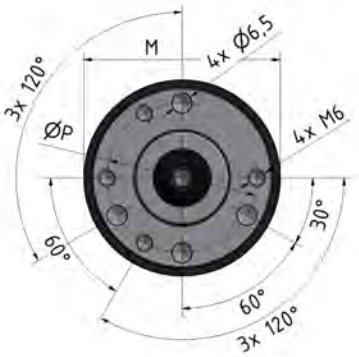
DESIGN:

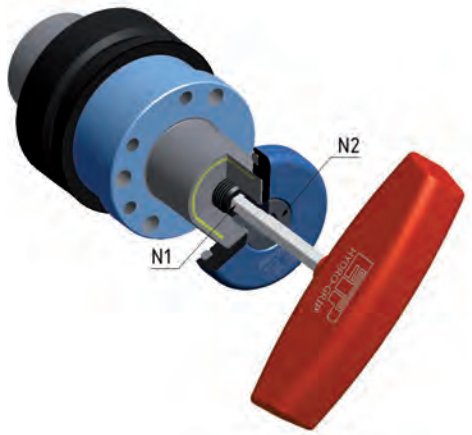
» Precision GE2 hydraulic chucks are available in HSK63F only
» Balanced for high speed machining
» Hydraulic clamping ensures exact radial running accuracy for optimum quality of cut and extended tool life
» Designed with safety ring in light metal
» Adapted for 3 wing cutters
» Suitable for both left and right hand rotation

APPLICATION:

» Quick and simple tool changing reduces downtime
» For precision mounting of bore type tools
» On CNC routers with manual or automatic tool change







METRIC SIZES

PART NO.	D1 MM	L1 MM	D2 MM	M MM	ØP MM	N1 MM	N2 MM
ETPGE2-20040HSK63F	20	40	50	53	32	6	8
ETPGE2-25055HSK63F	25	55	50	53	40	6	8
ETPGE2-30040HSK63F	30	40	50	58	48	6	8
ETPGE2-30055HSK63F	30	55	50	58	48	6	8
ETPGE2-30080HSK63F	30	80	50	58	48	6	8
ETPGE2-30100HSK63F	30	100	50	58	48	6	8

IMPERIAL SIZES

PART NO.	D1	L1 MM	D2 MM	M MM	ØP MM	N1 MM	N2 MM
ETPGE2-10040HSK63F	1"	40	50	53	40	6	8
ETPGE2-10055HSK63F	1"	55	50	53	40	6	8
ETPGE2-10080HSK63F	1"	80	50	53	40	6	8
ETPGE2-11440HSK63F	1-1/4"	40	50	58	48	6	8
ETPGE2-11455HSK63F	1-1/4"	55	50	58	48	6	8

ARS-HSK63F

HSK63F SAW BLADE TOOLHOLDER
FOR CNC ROUTERS



TYPE:
ARBOR ONLY

DESIGN:
» Balanced for high speed machining
» Large diameter supportive flange ensures accuracy for optimum quality of cut and extended tool life
» Standard 30mm bore can be changed with adaptors
» 8 screws provide excellent stability over conventional 4 screw mounts
» Optional Safety Flange provides increased security in challenging applications
» Suitable for both CW and CCW hand rotation

APPLICATION:
» For precise and rigid mounting of saw blades
» On CNC routers with manual or automatic tool change

MACHINES:
» 5-axis CNC routers
» Adapters apart from 30mm must be specified & ordered separately by customer

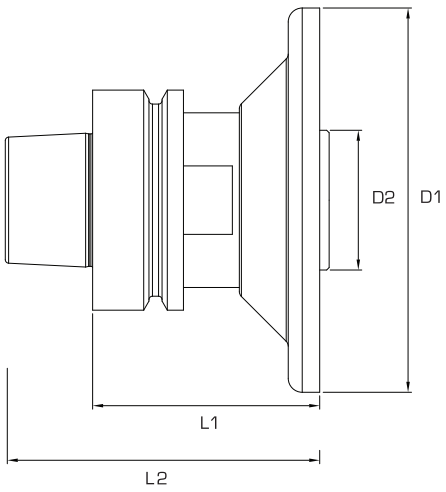
SPECIAL CONSIDERATIONS:
» Select an arbor length and saw blade diameter that projects far enough away from the CNC router's spindle housing so that it will not come in to contact with the workpiece



TYPE:
WITHOUT SAFETY FLANGE



TYPE:
WITH SAFETY FLANGE



TOOLHOLDERS - SUPPLIED WITH 30MM ADAPTER

PART NO.	TOOL TYPE	FLANGE ØD1 MM	LENGTH L1 MM	LENGTH L2 MM	PIN HOLE CONF. MM
ARS085040	A	85	40	65	8/6/70
ARS085065	A	85	65	90	8/6/70
ARS085100	A	85	100	125	8/6/70
ARS085120	A	85	120	145	8/6/70
ARS110040	B	110	40	65	8/6/90
ARS110065	B	110	65	90	8/6/90
ARS110100	B	110	100	125	8/6/90
ARS110120	B	110	120	145	8/6/90
ARS110160	B	110	160	185	8/6/90

SAFETY FLANGES

PART NO.	TOOL TYPE	FLANGE ØD MM	THICKNESS MM	PIN HOLE CONF. MM
ARSF08510	A	85	10	8/6/70
ARSF11010	B	110	10	8/6/90

SAW BLADE ADAPTERS

PART NO.	TOOL TYPE	ARBOR ØD	ARBOR LENGTH MM
ARSA030	A	30mm	4
ARSA114	A	1-1/4"	4
ARSA032	A	32mm	4
ARSA035	A	35mm	4
ARSA040	A	40mm	4
ARSB030	B	30mm	4
ARSB114	B	1-1/4"	4
ARSB032	B	32mm	4
ARSB035	B	35mm	4
ARSB040	B	40mm	4

REPLACEMENT PARTS



DESCRIPTION	SCREW FOR ARBOR ONLY	SCREW FOR BORE ADAPTOR	SCREW FOR SAFETY FLANGE
PART NO.	W500006	W501701	W501703
DIMENSIONS	M6X12 Torx	M5X12 Hex	M6X20 Hex
QUANTITY	8pcs	4pcs	8pcs
WRENCH	W400430	W400114	W400115

# AEROTECH FINISHING COMPRESSION
Z=2+2 FOR AEROTECH SYSTEM

Aerotech System®



TYPE:
HIGH UPCUT

DESIGN:
» Optimized for Aerotech System only (see page FC2)
» Router bits are shrinkfitted into reusable HSK20C holders
» 2 precision ground cutting edges
» Unmatched rigidity and near zero runout acheived by the shrinkfit connection
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» For exceptionally smooth finishing cuts
» Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter

IMPORTANT:
» Dust (Chips) must remain moderately loose and unpacked in the cut to achieve optimal dust extraction
» High Upcut design is recommended for maximum dust extraction

MATERIAL:
Excellent finish on:
» Laminated panels
» Chipboard

Good finish on:
» Softwoods and Hardwoods
» MDF
» Plywood, OSB
(requires Aerotech Flange type: GRILL)

HIGH UPCUT

PART NO.	CUTTING DIAM.	MAX. DEPTH OF CUT	UPCUT LENGTH MM	SHANK TYPE	NO. FLUTES
AF2059W-HUD2-12.9BH	3/8"	1/2"	9.5	HSK20C	2+2
AF2059W-HUD2-16BH	3/8"	5/8"	12.0	HSK20C	2+2
AF2059W-HUD2-19.25BH	3/8"	3/4"	14.5	HSK20C	2+2
AF2059W-HUD2-22.2BH	3/8"	7/8"	16.5	HSK20C	2+2
AF2059W-HUD2-25.6BH	3/8"	1"	19.0	HSK20C	2+2
AF2061-HUD2-12.9BH	1/2"	1/2"	8.0	HSK20C	2+2
AF2061-HUD2-16BH	1/2"	5/8"	10.0	HSK20C	2+2
AF2061-HUD2-19.25BH	1/2"	3/4"	12.0	HSK20C	2+2
AF2061-HUD2-22.2BH	1/2"	7/8"	14.0	HSK20C	2+2
AF2061-HUD2-25.6BH	1/2"	1"	16.0	HSK20C	2+2
AF2061-HUD2-31.95BH	1/2"	1-1/4"	20.0	HSK20C	2+2
AF2064-HUD2-19.25BH	5/8"	3/4"	12.0	HSK20C	2+2
AF2066-HUD2-19.25BH	3/4"	3/4"	12.0	HSK20C	2+2

MORTISE UPCUT

PART NO.	CUTTING DIAM.	MAX. DEPTH OF CUT	UPCUT LENGTH MM	SHANK TYPE	NO. FLUTES
AF2059W-UD2-12.9BH	3/8"	1/2"	4.8	HSK20C	2+2
AF2059W-UD2-16BH	3/8"	5/8"	4.8	HSK20C	2+2
AF2059W-UD2-19.25BH	3/8"	3/4"	4.8	HSK20C	2+2
AF2059W-UD2-22.2BH	3/8"	7/8"	4.8	HSK20C	2+2
AF2059W-UD2-25.6BH	3/8"	1"	4.8	HSK20C	2+2
AF2061-UD2-12.9BH	1/2"	1/2"	4.8	HSK20C	2+2
AF2061-UD2-16BH	1/2"	5/8"	4.8	HSK20C	2+2
AF2061-UD2-19.25BH	1/2"	3/4"	4.8	HSK20C	2+2
AF2061-UD2-22.2BH	1/2"	7/8"	4.8	HSK20C	2+2
AF2061-UD2-25.6BH	1/2"	1"	4.8	HSK20C	2+2
AF2061-UD2-31.95BH	1/2"	1-1/4"	4.8	HSK20C	2+2
AF2064-UD2-19.25BH	5/8"	3/4"	4.8	HSK20C	2+2
AF2066-UD2-19.25BH	3/4"	3/4"	4.8	HSK20C	2+2

Aerotech System®



TYPE:
HIGH UPCUT

IMPORTANT:

» Dust (chips) must remain moderately loose and unpacked in the cut to achieve optimal dust extraction
» High Upcut design is recommended for maximum dust extraction

MATERIAL:

Excellent finish on:

» Laminated panels
» Chipboard

Good finish on:

» Softwoods and Hardwoods
» MDF
» Plywood, OSB
(requires Aerotech flange Type: GRILL)

DESIGN:

» Optimized for Aerotech System only (see page FC2)
» Router bits are shrinkfitted into reusable HSK20C holders
» 3 precision ground cutting edges
» Unmatched rigidity and near zero runout acheived by the shrinkfit connection
» Good chipflow and low heat retention is achieved by the three semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:

» For exceptionally smooth finishing cuts
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Increased number of bite marks per inch reduce chip size and provide a smooth finish, important when edge-banding without pre-miling
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter

HIGH UPCUT

PART NO.	CUTTING DIAM.	MAX. DEPTH OF CUT	UPCUT LENGTH MM	SHANK TYPE	NO. FLUTES
AF2059A-HUD3-12.9BH	3/8"	1/2"	9.5	HSK20C	3+3
AF2059A-HUD3-16BH	3/8"	5/8"	12.0	HSK20C	3+3
AF2059A-HUD3-19.25BH	3/8"	3/4"	14.5	HSK20C	3+3
AF2059A-HUD3-25.6BH	3/8"	1"	19.0	HSK20C	3+3
AF2061-HUD3-12.9BH	1/2"	1/2"	8.0	HSK20C	3+3
AF2061-HUD3-16BH	1/2"	5/8"	10.0	HSK20C	3+3
AF2061-HUD3-19.25BH	1/2"	3/4"	12.0	HSK20C	3+3
AF2061-HUD3-25.6BH	1/2"	1"	16.0	HSK20C	3+3

MORTISE UPCUT

PART NO.	CUTTING DIAM.	MAX. DEPTH OF CUT	UPCUT LENGTH MM	SHANK TYPE	NO. FLUTES
AF2059A-UD3-12.9BH	3/8"	1/2"	4.8	HSK20C	3+3
AF2059A-UD3-16BH	3/8"	5/8"	4.8	HSK20C	3+3
AF2059A-UD3-19.25BH	3/8"	3/4"	4.8	HSK20C	3+3
AF2059A-UD3-25.6BH	3/8"	1"	4.8	HSK20C	3+3
AF2061-UD3-12.9BH	1/2"	1/2"	4.8	HSK20C	3+3
AF2061-UD3-16BH	1/2"	5/8"	4.8	HSK20C	3+3
AF2061-UD3-19.25BH	1/2"	3/4"	4.8	HSK20C	3+3
AF2061-UD3-25.6BH	1/2"	1"	4.8	HSK20C	3+3

AEROTECH FINISHING COMPRESSION
Z=2+2, FOR AEROTECH UNIVERSAL

Aerotech Universal®



TYPE:
HIGH UPCUT



TYPE:
MORTISE UPCUT

DESIGN:
» Optimized for high-speed, dust-free cutting with the Aerotech Universal Hydro (see pages FC3, FC9)
» 2 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

IMPORTANT:
» Dust (chips) must remain moderately loose and unpacked in the cut to achieve optimal dust extraction
» High Upcut design is recommended for maximum dust extraction

APPLICATION:
» For exceptionally smooth finishing cuts
» Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter

MATERIAL:
Excellent finish on:
» Laminated panels
» Chipboard

Good finish on:
» Softwoods and hardwoods
» MDF
» Plywood, OSB
(requires Aerotech Flange type: GRILL)

HIGH UPCUT

PART NO.	CUTTING DIAM.	MAX. DEPTH OF CUT	UPCUT LENGTH MM	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSF2059W-HUD2-12.9	3/8"	1/2"	9.5	3/8"	3"	2+2
RSF2059W-HUD2-16	3/8"	5/8"	12.0	3/8"	3"	2+2
RSF2059W-HUD2-19.25	3/8"	3/4"	14.5	3/8"	3"	2+2
RSF2059W-HUD2-22.2	3/8"	7/8"	16.5	3/8"	3"	2+2
RSF2059W-HUD2-25.6	3/8"	1"	19.0	3/8"	3"	2+2
RSF2061-HUD2-12.9	1/2"	1/2"	8.0	1/2"	3"	2+2
RSF2061-HUD2-16	1/2"	5/8"	10.0	1/2"	3"	2+2
RSF2061-HUD2-19.25	1/2"	3/4"	12.0	1/2"	3"	2+2
RSF2061-HUD2-22.2	1/2"	7/8"	14.0	1/2"	3"	2+2
RSF2061-HUD2-25.6	1/2"	1"	16.0	1/2"	3"	2+2
RSF2061-HUD2-31.95	1/2"	1-1/4"	20.0	1/2"	3-1/2"	2+2
RSF2061-HUD2-38.3	1/2"	1-1/2"	24.0	1/2"	3-1/2"	2+2
RSF2064-HUD2-19.25	5/8"	3/4"	12.0	5/8"	3"	2+2
RSF2066-HUD2-19.25	3/4"	3/4"	12.0	3/4"	3"	2+2

MORTISE UPCUT

PART NO.	CUTTING DIAM.	MAX. DEPTH OF CUT	UPCUT LENGTH MM	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSF2059W-UD2-12.9	3/8"	1/2"	4.8	3/8"	3"	2+2
RSF2059W-UD2-16	3/8"	5/8"	4.8	3/8"	3"	2+2
RSF2059W-UD2-19.25	3/8"	3/4"	4.8	3/8"	3"	2+2
RSF2059W-UD2-25.6	3/8"	1"	4.8	3/8"	3"	2+2
RSF2061-UD2-12.9	1/2"	1/2"	4.8	1/2"	3"	2+2
RSF2061-UD2-16	1/2"	5/8"	4.8	1/2"	3"	2+2
RSF2061-UD2-19.25	1/2"	3/4"	4.8	1/2"	3"	2+2
RSF2061-UD2-25.6	1/2"	1"	4.8	1/2"	3"	2+2
RSF2061-UD2-31.95	1/2"	1-1/4"	4.8	1/2"	3-1/2"	2+2
RSF2061-UD2-38.3	1/2"	1-1/2"	4.8	1/2"	3-1/2"	2+2
RSF2064-UD2-19.25	5/8"	3/4"	4.8	5/8"	3"	2+2
RSF2066-UD2-19.25	3/4"	3/4"	4.8	3/4"	3"	2+2

# AEROTECH FINISHING COMPRESSION
Z=3+3, FOR AEROTECH UNIVERSAL

Aerotech Universal®



TYPE:
HIGH UPCUT



TYPE:
MORTISE UPCUT

DESIGN:
» Optimized for high-speed, dust-free cutting with the Aerotech Universal Hydro (see pages FC3, FC9)
» 3 precision ground cutting edges
» Good chipflow and low heat retention is achieved by 3 semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

HIGH UPCUT

PART NO.	CUTTING DIAM.	MAX. DEPTH OF CUT	UPCUT LENGTH MM	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSF2059A-HUD3-12.9	3/8"	1/2"	9.5	3/8"	3"	3+3
RSF2059A-HUD3-16	3/8"	5/8"	12.0	3/8"	3"	3+3
RSF2059A-HUD3-19.25	3/8"	3/4"	14.5	3/8"	3"	3+3
RSF2059A-HUD3-25.6	3/8"	1"	19.0	3/8"	3"	3+3
RSF2061-HUD3-12.9	1/2"	1/2"	8.0	1/2"	3"	3+3
RSF2061-HUD3-16	1/2"	5/8"	10.0	1/2"	3"	3+3
RSF2061-HUD3-19.25	1/2"	3/4"	12.0	1/2"	3"	3+3
RSF2061-HUD3-25.6	1/2"	1"	16.0	1/2"	3"	3+3

MORTISE UPCUT

PART NO.	CUTTING DIAM.	MAX. DEPTH OF CUT	UPCUT LENGTH MM	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSF2059A-UD3-12.9	3/8"	1/2"	4.8	3/8"	3"	3+3
RSF2059A-UD3-16	3/8"	5/8"	4.8	3/8"	3"	3+3
RSF2059A-UD3-19.25	3/8"	3/4"	4.8	3/8"	3"	3+3
RSF2059A-UD3-25.6	3/8"	1"	4.8	3/8"	3"	3+3
RSF2061-UD3-12.9	1/2"	1/2"	4.8	1/2"	3"	3+3
RSF2061-UD3-16	1/2"	5/8"	4.8	1/2"	3"	3+3
RSF2061-UD3-19.25	1/2"	3/4"	4.8	1/2"	3"	3+3
RSF2061-UD3-25.6	1/2"	1"	4.8	1/2"	3"	3+3

IMPORTANT:
» Dust (chips) must remain moderately loose and unpacked in the cut to achieve optimal dust extraction
» High Upcut design is recommended for maximum dust extraction

APPLICATION:
» For exceptionally smooth finishing cuts
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Increased number of bite marks per inch reduce chip size and provide a smooth finish, important when edge-banding without pre-miling
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter

MATERIAL:
Excellent finish on:
» Laminated panels
» Chipboard

Good finish on:
» Softwoods and hardwoods
» MDF
» Plywood, OSB
(requires Aerotech Flange type: GRILL)

RSF-U2 FINISHING UPCUT Z=2



TYPE: ***UNCOATED***

TYPE: ***LINEAGE XLC***

DESIGN:

- 2 precision ground cutting edges
- Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
- Increased cutting edge durability from special submicron, extended life carbide
- 30° helix design with bottom cutting capability

APPLICATION:

- For exceptionally smooth finishing cuts
- Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board
- Upward cutting action provides excellent chip ejection from the cutting path
- For improved dust extraction use with an Aerotech (see pages FC3, FC9)

MATERIAL:

Excellent finish on:

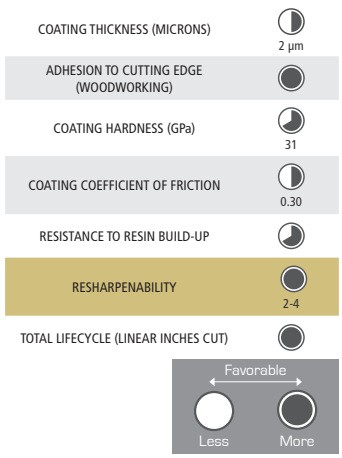
- Laminated panels
- Chipboard

Good finish on:

- Softwoods and hardwoods
- Plywood, OSB
- MDF
- Solid surface

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
	RSFM03012-U2	3mm	12mm	3mm	50mm	2
	RSF2000A-U2	1/8"	1/2"	1/8"	2-1/2"	2
	RSF2000-U2	1/8"	1/2"	1/4"	2"	2
	RSF2002-U2	5/32"	1/2"	1/4"	2"	2
	RSFM04012-U2	4mm	12mm	4mm	50mm	2
	RSF2004-U2	3/16"	3/4"	1/4"	2"	2
	RSF2005-U2	3/16"	3/4"	1/4"	2-1/2"	2
	RSFM05017-U2	5mm	17mm	5mm	50mm	2
	RSFM06027-U2	6mm	27mm	6mm	70mm	2
	RSF2006-U2	1/4"	3/4"	1/4"	2-1/2"	2
	RSF2008-U2	1/4"	1"	1/4"	2-1/2"	2
XLC	RSF2008XLC-U2	1/4"	1"	1/4"	2-1/2"	2
	RSF2009-U2	1/4"	1"	1/4"	3"	2
	RSF2010-U2	5/16"	1"	5/16"	2-1/2"	2
	RSFM08035-U2	8mm	35mm	8mm	80mm	2
	RSF2012-U2	3/8"	3/4"	3/8"	2-1/2"	2
	RSF2014-U2	3/8"	1"	3/8"	2-1/2"	2
XLC	RSF2014XLC-U2	3/8"	1"	3/8"	2-1/2"	2
	RSF2015-U2	3/8"	1-1/4"	3/8"	3"	2
	RSF2016-U2	3/8"	1-1/4"	1/2"	3"	2
	RSFM10035-U2	10mm	35mm	10mm	80mm	2
	RSFM12035-U2	12mm	35mm	12mm	80mm	2
	RSF2019S-U2	1/2"	5/8"	1/2"	3"	2
	RSF2020S-U2	1/2"	7/8"	1/2"	3"	2
	RSF2020-U2	1/2"	1-1/4"	1/2"	3"	2
XLC	RSF2020XLC-U2	1/2"	1-1/4"	1/2"	3"	2
	RSF2024-U2	1/2"	1-1/2"	1/2"	3-1/2"	2
	RSF2028-U2	1/2"	2"	1/2"	4"	2
	RSF2032-U2	1/2"	2-1/4"	1/2"	4-1/2"	2
	RSF2034-U2	1/2"	2-1/2"	1/2"	5-1/2"	2
	RSFM14055-U2	14mm	55mm	14mm	100mm	2
	RSF2036-U2	5/8"	1-1/2"	5/8"	4"	2
	RSF2038-U2	5/8"	2"	5/8"	4"	2
	RSFM16055-U2	16mm	55mm	16mm	100mm	2
	RSFM18055-U2	18mm	55mm	18mm	100mm	2
	RSF2042-U2	3/4"	1-1/2"	3/4"	4"	2
	RSF2044-U2	3/4"	2"	3/4"	4"	2
	RSF2048-U2	3/4"	2-1/2"	3/4"	5"	2
	RSF2052-U2	3/4"	3-1/2"	3/4"	6"	2
	RSFM20055-U2	20mm	55mm	20mm	127mm	2

# RSF-D2 FINISHING DOWNCUT
Z=2



TYPE:
UNCOATED

TYPE:
LINEAGE XLC

APPLICATION:

» For exceptionally smooth finishing cuts
» Eliminates chipping, fuzzing, and tear-out along the top surface of the board
» Smooth finish along the top edge produced by down (negative) shear
» Downward cutting action helps hold down material and reduces the likelihood of part movement
» Commonly used for rebating, dadoes/grooving, and pocketing operations

MATERIAL:

Excellent finish on:
» Laminated panels
» Chipboard

Good finish on:
» Softwoods and hardwoods
» Plywood, OSB
» MDF
» Solid surface

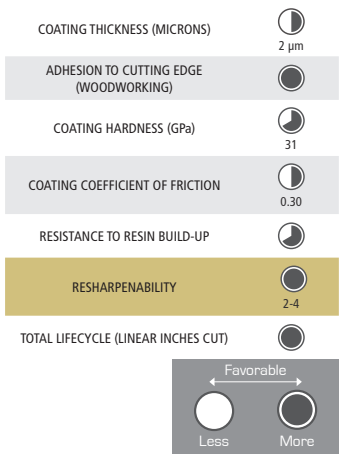
DESIGN:

» 2 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
	RSFM03012-D2	3mm	12mm	3mm	50mm	2
	RSF2000A-D2	1/8"	1/2"	1/8"	2-1/2"	2
	RSF2000-D2	1/8"	1/2"	1/4"	2"	2
	RSF2002-D2	5/32"	1/2"	1/4"	2"	2
	RSFM04012-D2	4mm	12mm	4mm	50mm	2
	RSF2004-D2	3/16"	3/4"	1/4"	2"	2
	RSF2005-D2	3/16"	3/4"	1/4"	2-1/2"	2
	RSFM05017-D2	5mm	17mm	5mm	50mm	2
	RSFM06027-D2	6mm	27mm	6mm	70mm	2
	RSF2006-D2	1/4"	3/4"	1/4"	2-1/2"	2
	RSF2008-D2	1/4"	1"	1/4"	2-1/2"	2
XLC	RSF2008XLC-D2	1/4"	1"	1/4"	2-1/2"	2
	RSF2009-D2	1/4"	1"	1/4"	3"	2
	RSF2010-D2	5/16"	1"	5/16"	2-1/2"	2
	RSFM08035-D2	8mm	35mm	8mm	80mm	2
	RSF2012-D2	3/8"	3/4"	3/8"	2-1/2"	2
	RSF2014-D2	3/8"	1"	3/8"	2-1/2"	2
XLC	RSF2014XLC-D2	3/8"	1"	3/8"	2-1/2"	2
	RSF2015-D2	3/8"	1-1/4"	3/8"	3"	2
	RSF2016-D2	3/8"	1-1/4"	1/2"	3"	2
	RSFM10035-D2	10mm	35mm	10mm	80mm	2
	RSFM12035-D2	12mm	35mm	12mm	80mm	2
	RSF2019S-D2	1/2"	5/8"	1/2"	3"	2
	RSF2020S-D2	1/2"	7/8"	1/2"	3"	2
	RSF2020-D2	1/2"	1-1/4"	1/2"	3"	2
XLC	RSF2020XLC-D2	1/2"	1-1/4"	1/2"	3"	2
	RSF2024-D2	1/2"	1-1/2"	1/2"	3-1/2"	2
	RSF2028-D2	1/2"	2"	1/2"	4"	2
	RSF2032-D2	1/2"	2-1/4"	1/2"	4-1/2"	2
	RSF2034-D2	1/2"	2-1/2"	1/2"	5-1/2"	2
	RSFM14055-D2	14mm	55mm	14mm	100mm	2
	RSF2036-D2	5/8"	1-1/2"	5/8"	4"	2
	RSF2038-D2	5/8"	2"	5/8"	4"	2
	RSFM16055-D2	16mm	55mm	16mm	100mm	2
	RSFM18055-D2	18mm	55mm	18mm	100mm	2
	RSF2042-D2	3/4"	1-1/2"	3/4"	4"	2
	RSF2044-D2	3/4"	2"	3/4"	4"	2
	RSF2048-D2	3/4"	2-1/2"	3/4"	5"	2
	RSF2052-D2	3/4"	3-1/2"	3/4"	6"	2
	RSFM20055-D2	20mm	55mm	20mm	127mm	2

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



# RSF-U3 FINISHING UPCUT
Z=3



DESIGN:
» 3 precision ground cutting edges
» Good chipflow and low heat retention is achieved by the 3 semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» For exceptionally smooth finishing cuts
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive 3 cutting edges
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board
» Upward cutting action provides excellent chip ejection from the cutting path
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

MATERIAL:
Excellent finish on:
» Laminated panels
» Chipboard

Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» MDF
» Solid surface

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFM08035-U3	8mm	35mm	8mm	80mm	3
RSF2011S-U3	3/8"	5/8"	3/8"	2-1/2"	3
RSF2013S-U3	3/8"	7/8"	3/8"	2-1/2"	3
RSF2018-U3	3/8"	1-1/4"	1/2"	3"	3
RSFM10035-U3	10mm	35mm	10mm	80mm	3
RSFM12035-U3	12mm	35mm	12mm	80mm	3
RSF2019S-U3	1/2"	5/8"	1/2"	3"	3
RSF2020S-U3	1/2"	7/8"	1/2"	3"	3
RSF2022-U3	1/2"	1-1/4"	1/2"	3"	3
RSF2026-U3	1/2"	1-1/2"	1/2"	3-1/2"	3
RSF2030-U3	1/2"	2"	1/2"	4"	3
RSFM14055-U3	14mm	55mm	14mm	100mm	3
RSF2040-U3	5/8"	2"	5/8"	4"	3
RSFM16055-U3	16mm	55mm	16mm	100mm	3
RSFM18055-U3	18mm	55mm	18mm	100mm	3
RSF2046-U3	3/4"	2"	3/4"	4"	3
RSF2050-U3	3/4"	2-1/2"	3/4"	5"	3
RSFM20055-U3	20mm	55mm	20mm	127mm	3

RSF-D3

FINISHING DOWNCUT
Z=3



DESIGN:
» 3 precision ground cutting edges
» Good chipflow and low heat retention is achieved by the 3 semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» For exceptionally smooth finishing cuts
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive 3 cutting edges
» Eliminates chipping, fuzzing, and tear-out along the top surface of the board
» Smooth finish along the top edge produced by down (negative) shear
» Downward cutting action helps hold down material and reduces the likelihood of part movement

MATERIAL:
Excellent finish on:
» Laminated panels
» Chipboard

Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» MDF
» Solid surface

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFM08035-D3	8mm	35mm	8mm	80mm	3
RSF2011S-D3	3/8"	5/8"	3/8"	2-1/2"	3
RSF2013S-D3	3/8"	7/8"	3/8"	2-1/2"	3
RSF2018-D3	3/8"	1-1/4"	1/2"	3"	3
RSFM10035-D3	10mm	35mm	10mm	80mm	3
RSFM12035-D3	12mm	35mm	12mm	80mm	3
RSF2019S-D3	1/2"	5/8"	1/2"	3"	3
RSF2020S-D3	1/2"	7/8"	1/2"	3"	3
RSF2022-D3	1/2"	1-1/4"	1/2"	3"	3
RSF2026-D3	1/2"	1-1/2"	1/2"	3-1/2"	3
RSF2030-D3	1/2"	2"	1/2"	4"	3
RSFM14055-D3	14mm	55mm	14mm	100mm	3
RSF2040-D3	5/8"	2"	5/8"	4"	3
RSFM16055-D3	16mm	55mm	16mm	100mm	3
RSFM18055-D3	18mm	55mm	18mm	100mm	3
RSF2046-D3	3/4"	2"	3/4"	4"	3
RSF2050-D3	3/4"	2-1/2"	3/4"	5	3
RSFM20055-D3	20mm	55mm	20mm	127mm	3

RSFL-U3

FINISHING LOW HELIX UPCUT
Z=3



DESIGN:
» 3 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 10° helix design with bottom cutting capability
» Low helix upshear design reduces deflection in hard materials and lifting forces

APPLICATION:
» For exceptionally smooth finishing cuts
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Ideal for robust spindles as more power is required to drive 3 cutting edges
» Improved cutting edge life when cutting hard materials
» Reduces noise levels during cutting operations of hard materials
» 3 cutting edges provide faster feed rates at low spindle speeds
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board
» Upward cutting action provides good chip ejection from the cutting path
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFL2006-U3	1/4"	3/4"	1/4"	3"	3
RSFL2010-U3	5/16"	1"	5/16"	3"	3
RSFL2018-U3	3/8"	1-1/4"	3/8"	4"	3
RSFL2022-U3	1/2"	1-1/4"	1/2"	4"	3
RSFL2030-U3	1/2"	2-1/8"	1/2"	4-1/2"	3
RSFL2046-U3	3/4"	2"	3/4"	5"	3
RSFL2052-U3	3/4"	2-1/2"	3/4"	5-1/4"	3

MATERIAL:
Excellent finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» MDF
» Solid surface
» Phenolic

RSFL-D3

FINISHING LOW HELIX DOWNCUT
Z=3



DESIGN:
» 3 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 10° helix design with bottom cutting capability
» Low helix design reduces deflection in hard materials

APPLICATION:
» For exceptionally smooth finishing cuts
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Ideal for robust spindles as more power is required to drive 3 cutting edges
» Improved cutting edge life when cutting hard materials
» Reduces noise levels during cutting operations of hard materials
» 3 cutting edges provide faster feed rates at low spindle speeds
» Eliminates chipping, fuzzing, and tear-out along the top surface of the board
» Smooth finish along the top edge produced by down (negative) shear
» Downward cutting action helps hold down material and reduces the likelihood of part movement

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFL2006-D3	1/4"	3/4"	1/4"	3"	3
RSFL2010-D3	5/16"	1"	5/16"	3"	3
RSFL2018-D3	3/8"	1-1/4"	1/2"	4"	3
RSFL2022-D3	1/2"	1-1/4"	1/2"	4"	3
RSFL2030-D3	1/2"	2-1/8"	1/2"	4-1/2"	3
RSFL2046-D3	3/4"	2"	3/4"	5"	3
RSFL2052-D3	3/4"	2-1/2"	3/4"	5-1/4"	3

MATERIAL:
Excellent finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» MDF
» Solid surface
» Phenolic

# RSF-UD1 FINISHING COMPRESSION
Z=1+1



DESIGN:
» 1 precision ground cutting edge
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» For exceptionally smooth finishing cuts
» Ideal multi-purpose tool for light duty CNC routers
» Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter
» When possible, select a router bit with a longer upcut length to improve chip ejection from cutting path
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

MATERIAL:
Excellent finish on:
» Laminated panels
» Chipboard

Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» MDF
» Solid surface

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. FLUTES
RSF2058-UD1	1/4"	7/8"	1/4"	8.4mm	2-1/2"	1+1
RSF2060-UD1	3/8"	1-1/8"	3/8"	10mm	3"	1+1
RSF2061-UD1	1/2"	1-1/4"	1/2"	9.8mm	3"	1+1
RSF2062-UD1	1/2"	1-1/2"	1/2"	9.8mm	3-1/2"	1+1
RSF2063-UD1	1/2"	2"	1/2"	9.8mm	4"	1+1
RSF2064-UD1	5/8"	1-1/2"	5/8"	11.7mm	4"	1+1
RSF2066-UD1	3/4"	2"	3/4"	15.9mm	5-1/4"	1+1

Understanding Tool Coatings

Coatings used by wood industry cutting tool manufacturers

Less — More
Favorable

	DLC	TiAlN	XLC	nACo	TiCo
					
COATING THICKNESS (MICRONS)	1 µm	3 µm	2 µm	4 µm	3 µm
ADHESION TO CUTTING EDGE (WOODWORKING)					
COATING HARDNESS (GPa)	25	23	31	45	38
COATING COEFFICIENT OF FRICTION	0.15	0.60	0.30	0.40	0.25
RESISTANCE TO RESIN BUILD-UP					
RESHARPENABILITY	0	0	2-4	0	0
TOTAL LIFECYCLE (LINEAR INCHES CUT)					

Resharpening your tools without negatively affecting the coating's performance

High-wear laminates benefit most from coatings that protect the carbide substrate without distorting the cutting edge's geometry (rake and clearance).

This is why we invented XLC - the only tool coating to mimic the edge geometry on a single plane, maintaining its performance after sharpening and maximizing tool life. **Nothing provides better ROI.**



WE **ENGINEER** TO
OUTPERFORM

FS TOOL

# RSF-UD2 FINISHING COMPRESSION
Z=2+2



TYPE: *UNCOATED*

TYPE: *LINEAGE XLC*

DESIGN:
» 2 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° Helix design with bottom cutting capability

APPLICATION:
» For exceptionally smooth finishing cuts
» Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 0.200" or 5mm or shorter
» When possible, select a router bit with a longer upcut length to improve chip ejection
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

MATERIALS:
Excellent finish on:
» Laminated panels
» HPL (XLC recommended)
» Chipboard
» MDF

Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» Solid surface

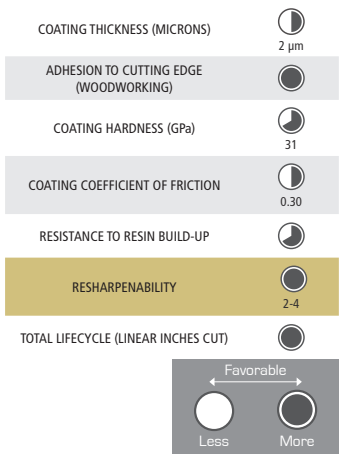
	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. FLUTES
	RSF2058M-UD2	1/4"	7/8"	1/4"	4.8mm	2-1/2"	2+2
XLC	RSF2058MXLC-UD2	1/4"	7/8"	1/4"	4.8mm	2-1/2"	2+2
	RSF2059MS-UD2	3/8"	7/8"	3/8"	4.8mm	3"	2+2
	RSF2060-UD2	3/8"	1-1/8"	3/8"	7.4mm	3"	2+2
	RSF2059M-UD2	3/8"	1-1/4"	3/8"	4.8mm	3"	2+2
	RSF2059-UD2	3/8"	1-1/4"	3/8"	7.0mm	3"	2+2
XLC	RSF2059XLC-UD2	3/8"	1-1/4"	3/8"	7.0mm	3"	2+2
	RSF2061MS-UD2	1/2"	7/8"	1/2"	4.8mm	3"	2+2
	RSF2061M-UD2	1/2"	1-1/4"	1/2"	4.8mm	3"	2+2
	RSF2061-UD2	1/2"	1-1/4"	1/2"	9.8mm	3"	2+2
XLC	RSF2061XLC-UD2	1/2"	1-1/4"	1/2"	9.8mm	3"	2+2
	RSF2061-UD2-312	1/2"	1-1/4"	1/2"	9.8mm	3-1/2"	2+2
	RSF2061A-UD2	1/2"	1-3/8"	1/2"	9.8mm	3-1/2"	2+2
	RSF2062M-UD2	1/2"	1-5/8"	1/2"	4.8mm	3-1/2"	2+2
	RSF2062-UD2	1/2"	1-5/8"	1/2"	14.3mm	3-1/2"	2+2
XLC	RSF2062XLC-UD2	1/2"	1-5/8"	1/2"	14.3mm	3-1/2"	2+2
	RSF2063-UD2	1/2"	2"	1/2"	16.4mm	4"	2+2
	RSF2064-UD2	5/8"	1-1/2"	5/8"	16.2mm	4"	2+2
	RSF2065-UD2	5/8"	2"	5/8"	16.2mm	4"	2+2
XLC	RSF2065XLC-UD2	5/8"	2"	5/8"	16.2mm	4"	2+2
	RSF2066M-UD2	3/4"	2"	3/4"	4.8mm	5-1/4"	2+2
	RSF2066-UD2	3/4"	2"	3/4"	16.2mm	5-1/4"	2+2
	RSF2068-UD2	3/4"	2-1/2"	3/4"	16.2mm	5-1/4"	2+2

LEFT-HAND ROTATION

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. FLUTES
RSF2058M-UD2L	1/4"	7/8"	1/4"	4.8mm	2-1/2"	2+2
RSF2059-UD2L	3/8"	1-1/4"	3/8"	7.0mm	3"	2+2
RSF2061-UD2L	1/2"	1-1/4"	1/2"	9.8mm	3"	2+2
RSF2061A-UD2L	1/2"	1-3/8"	1/2"	9.8mm	3-1/2"	2+2
RSF2062-UD2L	1/2"	1-5/8"	1/2"	14.3mm	3-1/2"	2+2
RSF2063-UD2L	1/2"	2"	1/2"	16.4mm	4"	2+2
RSF2065-UD2L	5/8"	2"	5/8"	16.2mm	4"	2+2
RSF2066-UD2L	3/4"	2"	3/4"	16.2mm	5-1/4"	2+2

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



SPEEDMASTER

Extreme Highspeed Compression Router Bit

Capture more

PRODUCTION

every hour.

50 metres /min

NESTING & ROUTING



Why bother?

Your CNC router is designed for feed-rates and production volumes that cannot be achieved with conventional tooling. Only with the unique geometries, cutting edge materials and core tensile strength of our SpeedMaster Series can you begin to realize your lost potential and maximize production throughout!

TRUE HIGHSPEED

What to expect?

Serviced once or six times, the performance of our SpeedMaster Series continues to provide production feed-rates more than double what you currently experience when cutting engineered wood products such as MDF, Plywood, Particleboard and HPL, all the while never sacrificing cut quality or tool life.

More than G-Code, RPM and feed-rate parameters represent the most determining factors in your tooling's performance and product quality. We maximize your parameters based on several key factors such as material, # of expected service cycles, and your required quality of cut.

A little research goes a long way.
We take the time to do it right because our passion is high performance tooling.

ES TOOL

RSFW-UD2 FINISHING HIGH SPEED COMPRESSION
Z=2+2 SPEEDMASTER SERIES



TYPE: ***UNCOATED*** TYPE: ***LINEAGE XLC***

DESIGN:
- » Unmatched high speed capability achieved by the unique cutting geometry
- » Fast feed rates are possible due to the high performance tool geometry
- » 2 precision ground cutting edges
- » Excellent chipflow and lower heat retention is provided by the semi-polished 2 flute design
- » Large clearance areas enable chips to quickly move away from cutting edges
- » Increased cutting edge durability from special submicron, extended life carbide
- » 30° Helix design with bottom cutting capability

APPLICATION:
- » For exceptionally smooth finishing cuts
- » For maximizing production with the highest feed-rates and longest tool life
- » Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
- » Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
- » When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
- » If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter
- » When possible, select a router bit with a longer upcut length to improve chip ejection from cutting path
- » For improved dust extraction use with an Aerotech (see pages FC3, FC9)

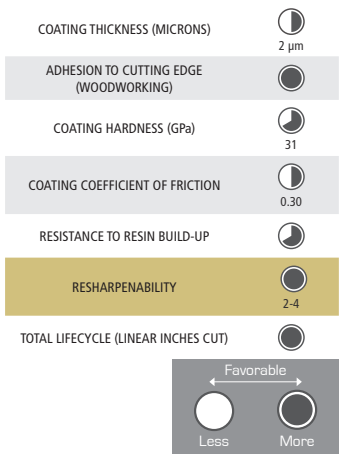
MATERIALS:
Excellent finish on:
- » Laminated panels
- » HPL
- » Chipboard
- » MDF

Good finish on:
- » Softwoods and hardwoods
- » Plywood
- » OSB

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. FLUTES
	RSF2059W-UD2	3/8"	1"	3/8"	4.7mm	2-1/2"	2+2
XLC	RSF2059WXLC-UD2	3/8"	1"	3/8"	4.7mm	2-1/2"	2+2
	RSF2059W-UD2-3	3/8"	1"	3/8"	4.7mm	3"	2+2
XLC	RSF2059WXLC-UD2-3	3/8"	1"	3/8"	4.7mm	3"	2+2
	RSF2060W-UD2	3/8"	1-1/4"	3/8"	4.7mm	3"	2+2
	RSFM2061W-UD2	12mm	35mm	12mm	4.8mm	80mm	2+2
	RSF2061WS-UD2	1/2"	7/8"	1/2"	4.8mm	3"	2+2
XLC	RSF2061WSXLC-UD2	1/2"	7/8"	1/2"	4.8mm	3"	2+2
	RSF2061W-UD2	1/2"	1-3/8"	1/2"	4.8mm	3-1/2"	2+2
XLC	RSF2061WXLC-UD2	1/2"	1-3/8"	1/2"	4.8mm	3-1/2"	2+2
	RSF2061WP-UD2	1/2"	1-3/8"	1/2"	12.7mm	3-1/2"	2+2
	RSF2064W-UD2	5/8"	1-3/8"	5/8"	4.8mm	4"	2+2
	RSF2066W-UD2	3/4"	2"	3/4"	4.8mm	5-1/4"	2+2

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



RSF-UD3

FINISHING COMPRESSION
Z=3+3



TYPE:
UNCOATED

TYPE:
LINEAGE XLC

DESIGN:
- 3 precision ground cutting edges
- Good chipflow and low heat retention is achieved by the three semi-polished flutes
- Increased cutting edge durability from special submicron, extended life carbide
- 30° helix design with bottom cutting capability

APPLICATION:
- For exceptionally smooth finishing cuts
- Increased number of bite marks per inch reduce chip size and provide a smooth finish, important when edge-banding without pre-miling
- Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
- 3 cutting edges provide faster feed rates at low spindle speeds
- Ideal for robust spindles as more power is required to drive three cutting edges
- Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
- When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
- If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter
- When possible, select a router bit with a longer upcut length to improve chip ejection from cutting path
- For improved dust extraction use with an Aerotech (see pages FC3, FC9)

MATERIALS:
Excellent finish on:
- Laminated panels
- Chipboard

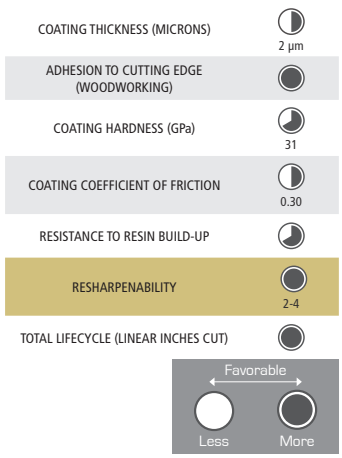
Good finish on:
- Softwoods and hardwoods
- Plywood
- OSB
- MDF
- HPL
- Solid surface

	PART NO.		CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. FLUTES
	RSF2059AS-UD3		3/8"	7/8"	3/8"	4.8mm	2-1/2"	3+3
	RSF2059MS-UD3		3/8"	7/8"	3/8"	4.8mm	3"	3+3
XLC	RSF2059MSXLC-UD3		3/8"	7/8"	3/8"	4.8mm	3"	3+3
	RSF2059S-UD3		3/8"	1"	3/8"	7.0mm	2-1/2"	3+3
	RSF2059A-UD3		3/8"	1"	3/8"	6.2mm	2-1/2"	3+3
XLC	RSF2059AXLC-UD3		3/8"	1"	3/8"	6.2mm	2-1/2"	3+3
	RSF2059M-UD3		3/8"	1-1/4"	3/8"	4.8mm	3"	3+3
	RSF2059-UD3		3/8"	1-1/4"	3/8"	7.0mm	3"	3+3
	RSF2061MS-UD3		1/2"	7/8"	1/2"	4.8mm	3"	3+3
	RSF2061-UD3		1/2"	1-1/4"	1/2"	4.8mm	3"	3+3
XLC	RSF2061XLC-UD3		1/2"	1-1/4"	1/2"	4.8mm	3"	3+3
	RSF2061WS-UD3	Δ	1/2"	1"	1/2"	4.8mm	3"	3+3
XLC	RSF2061WSXLC-UD3	Δ	1/2"	1"	1/2"	4.8mm	3"	3+3
	RSF2061W-UD3	Δ	1/2"	1-1/4"	1/2"	4.8mm	3"	3+3
XLC	RSF2061WXLC-UD3	Δ	1/2"	1-1/4"	1/2"	4.8mm	3"	3+3
	RSF2062-UD3		1/2"	1-5/8"	1/2"	9.6mm	3-1/2"	3+3
	RSF2062M-UD3		1/2"	1-5/8"	1/2"	4.8mm	3-1/2"	3+3
	RSF2065-UD3		5/8"	2"	5/8"	15.9mm	4"	3+3
	RSF2066-UD3		3/4"	2"	3/4"	15.9mm	4"	3+3

Δ Speedmaster series

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



RSFL-UD2

FINISHING LOW HELIX COMPRESSION
Z=2+2



TYPE:
UNCOATED

TYPE:
LINEAGE XLC

DESIGN:
» 2 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 10° helix design with bottom cutting capability
» Low helix design reduces deflection in hard materials and lifting forces

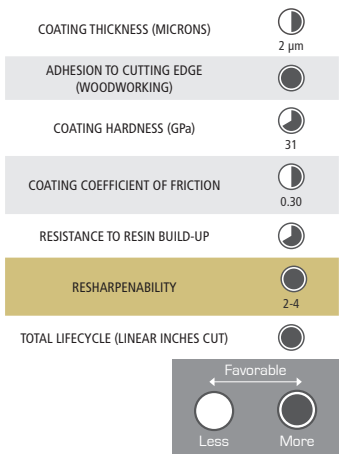
APPLICATION:
» For exceptionally smooth finishing cuts
» Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
» Improved cutting edge life when cutting hard materials
» Reduces noise levels during cutting operations of hard materials
» Ideal for plywood panels
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter
» When possible, select a router bit with a longer upcut length to improve chip ejection from cutting path
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. WINGS
	RSFL2060M-UD2	3/8"	1"	3/8"	4.7mm	3-1/2"	2+2
XLC	RSFL2060MXLC-UD2	3/8"	1"	3/8"	4.7mm	3-1/2"	2+2
	RSFL2061M-UD2	1/2"	1-1/4"	1/2"	4.7mm	4"	2+2
XLC	RSFL2061MXLC-UD2	1/2"	1-1/4"	1/2"	4.7mm	4"	2+2
	RSFL2062-UD2	1/2"	1-5/8"	1/2"	14.4mm	4"	2+2
XLC	RSFL2062XLC-UD2	1/2"	1-5/8"	1/2"	14.4mm	4"	2+2

MATERIAL:
Excellent finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» MDF
» HPL
» Solid surface
» Phenolic

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



RPCD-UD1 POLYCRYSTALLINE DIAMOND
COMPRESSION WITH PLUNGE POINT



DESIGN:
» Excellent surface finish and exceptionally long run-time are provided by the Microfinish erosion process of each PCD diamond cutting edge
» Excellent chipflow and low heat retention is provided by the staggered 1+1 tooth configuration
» Carbide Plunge Point provides clean entry cuts
» Re-sharpenable

APPLICATION:
» For smooth finishing cuts
» PCD Diamond tools are recommended for operations that require maximum tool life and consistency of cut
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When possible, select a router bit with a longer upcut length to improve chip ejection from cutting path
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

MATERIALS:
Good finish on:
» Laminated panels
» Chipboard
» MDF
» HPL
» Solid surface

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. TEETH
RPCD2066	1/2"	1"	1/2"	0.375"	3-3/8"	1+1
RPCD2068	1/2"	1-3/8"	1/2"	0.375"	3-3/8"	1+1
RPCD2070	1/2"	1-5/8"	1/2"	0.375"	4"	1+1
RPCD2076	5/8"	1"	5/8"	0.375"	3-3/8"	1+1+1
RPCD2148	3/4"	1"	3/4"	0.375"	3-3/8"	1+1+1
RPCD2150	3/4"	1-3/8"	3/4"	0.375"	3-3/4"	1+1+1
RPCD2152	3/4"	1-5/8"	3/4"	0.375"	4"	1+1+1
RPCD2160	3/4"	2-1/16"	3/4"	0.375"	4-1/2"	1+1+1

ADDITIONAL SIZES/DESIGNS
PCD Diamond router bits are available in a variety of dimensions and cutting angles beyond those listed here.

For more information on a PCD Diamond router bit that matches your application, please contact your FS Tool representative.

# RPCD-T POLYCRYSTALLINE DIAMOND T-SLOT
Z=2+1



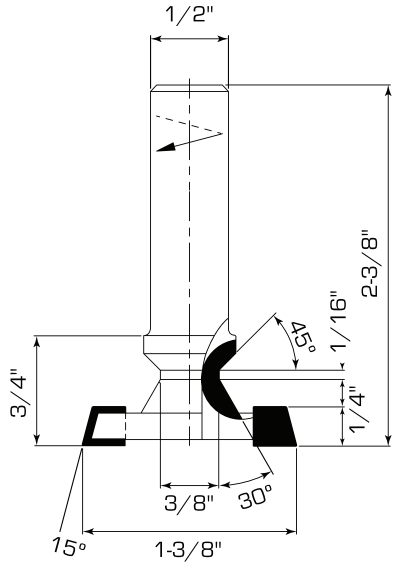
DESIGN:
» Excellent surface finish and exceptionally long run-time are provided by the Microfinish erosion process of each PCD diamond cutting edge
» Re-sharpenable

APPLICATION:
» For smooth finishing T-Slot cuts
» PCD Diamond tools are recommended for operations that require maximum tool life and consistency of cut

PART NO.	CUTTING DIAM.	KERF	SHANK DIAM.	MAX. DEPTH OF CUT	OVERALL LENGTH	NO. TEETH
RPCD138	1-3/8"	1/4"	1/2"	3/4"	2-3/8"	2+1
RPCD138-LH •	1-3/8"	1/4"	1/2"	3/4"	2-3/8"	2+1

• Left-hand rotation

MATERIALS:
Good finish on:
» Laminated panels
» Chipboard
» MDF
» HPL
» Solid surface



ADDITIONAL SIZES/DESIGNS
PCD Diamond router bits are available in a variety of dimensions and cutting angles beyond those listed here.

For more information on a PCD Diamond router bit that matches your application, please contact your FS Tool representative.

# RSC21-U2 CHIPBREAKER UPCUT
Z=2



DESIGN:
» 2 precision ground cutting edges with notch style chipbreakers
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» Chipbreakers reduce tear-out and improve chipflow by reducing the size of chips
» Chipbreakers lower noise levels and cutting pressure
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board
» Upward cutting action provides excellent chip ejection from the cutting path
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSC2116-U2	3/8"	1-1/4"	3/8"	3"	2
RSC2120-U2	1/2"	1-1/4"	1/2"	3"	2
RSC2124-U2	1/2"	1-5/8"	1/2"	3-1/2"	2
RSC2130-U2	1/2"	2-1/8"	1/2"	4"	2
RSC2138-U2	5/8"	2-1/4"	5/8"	4"	2
RSC2144-U2	3/4"	2-1/4"	3/4"	4"	2

MATERIALS:
Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» Unfaced chipboard

# RSC21-D2 CHIPBREAKER DOWNCUT
Z=2



DESIGN:
» 2 precision ground cutting edges with notch style chipbreakers
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» Chipbreakers reduce tear-out and improve chipflow by reducing the size of chips
» Chipbreakers lower noise levels and cutting pressure
» Eliminates chipping, fuzzing, and tear-out along the top surface of the board
» Downward cutting action helps hold down material and reduces the likelihood of part movement
» Commonly used for rebating, dadoes/grooving, and pocketing operations

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSC2116-D2	3/8"	1-1/4"	3/8"	3"	2
RSC2120-D2	1/2"	1-1/4"	1/2"	3"	2
RSC2124-D2	1/2"	1-5/8"	1/2"	3-1/2"	2
RSC2130-D2	1/2"	2-1/8"	1/2"	4"	2
RSC2138-D2	5/8"	2-1/4"	5/8"	4"	2
RSC2144-D2	3/4"	2-1/4"	3/4"	4"	2

MATERIALS:
Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» Unfaced chipboard

# RSC21-U3 CHIPBREAKER UPCUT
Z=3



DESIGN:
» 3 precision ground cutting edges with notch style chipbreakers
» Good chipflow and low heat retention is achieved by the three semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» Chipbreakers reduce tear-out and improve chipflow by reducing the size of chips
» Chipbreakers lower noise levels and cutting pressure
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive three cutting edges
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board
» Upward cutting action provides excellent chip ejection from the cutting path
» For improved dust extraction use with an Aerotech (see pages FC3. FC9)

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSC2118-U3	1/2"	1-1/8"	1/2"	3"	3
RSC2146-U3	3/4"	2-1/4"	3/4"	4"	3

MATERIALS:
Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» Unfaced chipboard

# RSC21-D3 CHIPBREAKER DOWNCUT
Z=3



DESIGN:
» 3 precision ground cutting edges with notch style chipbreakers
» Good chipflow and low heat retention is achieved by the three semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» Chipbreakers reduce tear-out and improve chipflow by reducing the size of chips
» Chipbreakers lower noise levels and cutting pressure
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive three cutting edges
» Eliminates chipping, fuzzing, and tear-out along the top surface of the board
» Downward cutting action helps hold down material and reduces the likelihood of part movement

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSC2118-D3	1/2"	1-1/8"	1/2"	3"	3
RSC2146-D3	3/4"	2-1/4"	3/4"	4"	3

MATERIALS:
Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» Unfaced chipboard

# RSC21-UD2 CHIPBREAKER COMPRESSION
Z=2+2



TYPE:
UNCOATED

TYPE:
LINEAGE XLC

DESIGN:
» 2 precision ground cutting edges with chipbreakers
» Excellent chipflow and lower heat retention is provided by the semi-polished 2 flute design
» Fast feed rates are possible due to the high performance tool geometry
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 30° helix design with bottom cutting capability

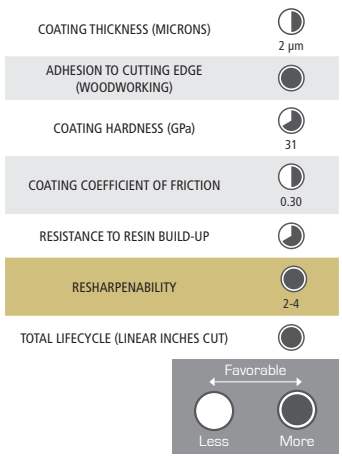
APPLICATION:
» Chipbreakers reduce tear-out and improve chipflow by reducing the size of chips
» Chipbreakers lower noise levels and cutting pressure
» Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter
» When possible, select a router bit with a longer upcut length to improve chip ejection from cutting path
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

MATERIALS:
Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» Unfaced chipboard

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. FLUTES
	RSC2159W-UD2	3/8"	1"	3/8"	4.7mm	2-1/2"	2+2
	RSC2159-UD2	3/8"	1-1/4"	3/8"	7.0mm	3"	2+2
XLC	RSC2159XLC-UD2	3/8"	1-1/4"	3/8"	7.0mm	3"	2+2
	RSC2161WS-UD2	1/2"	7/8"	1/2"	4.8mm	3"	2+2
	RSC2161W-UD2	1/2"	1-3/8"	1/2"	4.8mm	3-1/2"	2+2
XLC	RSC2161WXLC-UD2	1/2"	1-3/8"	1/2"	4.8mm	3-1/2"	2+2
	RSC2161M-UD2	1/2"	1-1/4"	1/2"	4.8mm	3"	2+2
XLC	RSC2161MXLC-UD2	1/2"	1-1/4"	1/2"	4.8mm	3"	2+2
	RSC2161-UD2	1/2"	1-1/4"	1/2"	9.9mm	3"	2+2
XLC	RSC2161XLC-UD2	1/2"	1-1/4"	1/2"	9.9mm	3"	2+2
	RSC2162-UD2	1/2"	1-5/8"	1/2"	14.4mm	3-1/2"	2+2
	RSC2164-UD2	5/8"	1-5/8"	5/8"	15.8mm	4"	2+2
	RSC2166-UD2	3/4"	2-1/4"	3/4"	15.8mm	5-1/4"	2+2

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



# RSC21-UD3 CHIPBREAKER COMPRESSION
Z=3+3



TYPE:
UNCOATED



TYPE:
LINEAGE XLC

DESIGN:
» 3 precision ground cutting edges with chipbreakers
» Good chipflow and lower heat retention is provided by the semi-polished 3 flute design
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 30° helix design with bottom cutting capability

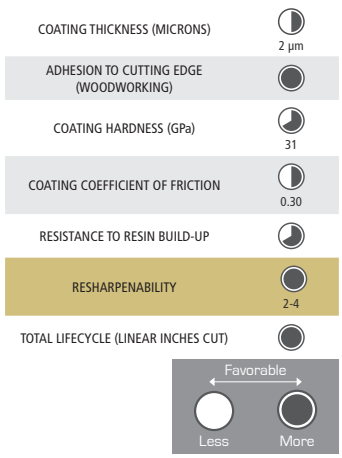
APPLICATION:
» Chipbreakers reduce tear-out and improve chipflow by reducing the size of chips
» Chipbreakers lower noise levels and cutting pressure
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive three cutting edges
» Eliminates chipping, fuzzing, and tear-out when the end of the upcut and downcut cutting edges are more than 1/16" from the top and bottom surfaces
» When cutting rebates, dados, or pockets, use an upcut length that is at least 1/16" shorter than the shallowest cut
» If part movement is a concern, use an upcut length of 4.8mm (0.188") or shorter
» When possible, select a router bit with a longer upcut length to improve chip ejection from cutting path
» For improved dust extraction use with an Aerotech (see pages FC3, FC9)

MATERIALS:
Good finish on:
» Softwoods and hardwoods
» Plywood
» OSB
» Unfaced chipboard

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. FLUTES
	RSC2159A-UD3	3/8"	1"	3/8"	4.8mm	2-1/2"	3+3
	RSC2161-UD3	1/2"	1-1/4"	1/2"	4.8mm	3"	3+3
XLC	RSC2161XLC-UD3	1/2"	1-1/4"	1/2"	4.8mm	3"	3+3
	RSC2162-UD3	1/2"	1-5/8"	1/2"	13.4mm	3-1/2"	3+3

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



RSC20-U2 ROUGHING UPCUT Z=2



DESIGN:

» 2 precision ground scalloped cutting edges
» Excellent chipflow and lower heat retention is provided by the semi-polished 2 flute design
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 30° helix design with bottom cutting capability

APPLICATION:

» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Scalloped edges produce smaller chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Improved cutting edge life when cutting hard and fibrous materials
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board
» Upward cutting action provides excellent chip ejection from the cutting path

MATERIALS:

» Softwoods and hardwoods
» Plywood
» OSB

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSCM0835-U2	8mm	35mm	8mm	80mm	2
RSC2015-U2	3/8"	1-1/4"	3/8"	3"	2
RSC2016-U2	3/8"	1-1/4"	1/2"	3"	2
RSCM1035-U2	10mm	35mm	10mm	80mm	2
RSCM1235-U2	12mm	35mm	12mm	80mm	2
RSC2020-U2	1/2"	1-1/4"	1/2"	3"	2
RSC2024-U2	1/2"	1-1/2"	1/2"	3-1/2"	2
RSC2028-U2	1/2"	2'	1/2"	4"	2
RSC2036-U2	5/8"	1-1/2"	5/8"	4"	2
RSC2038-U2	5/8"	2"	5/8"	4"	2
RSC2042-U2	3/4"	1-1/2"	3/4"	4"	2
RSC2044-U2	3/4"	2"	3/4"	4"	2

# RSC20-D2 ROUGHING DOWNCUT
Z=2



MATERIALS:
» Softwoods and hardwoods
» Plywood
» OSB

DESIGN:
» 2 precision ground scalloped cutting edges
» Excellent chipflow and lower heat retention is provided by the semi-polished 2 flute design
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 30° helix design with bottom cutting capability

APPLICATION:
» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Scalloped edges produce smaller chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Improved cutting edge life when cutting hard and fibrous materials
» Eliminates chipping, fuzzing, and tear-out along the top surface of the board
» Downward cutting action helps hold down material and reduces the likelihood of part movement

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSCM0835-D2	8mm	35mm	8mm	80mm	2
RSC2015-D2	3/8"	1-1/4"	3/8"	3"	2
RSC2016-D2	3/8"	1-1/4"	1/2"	3"	2
RSCM1035-D2	10mm	35mm	10mm	80mm	2
RSCM1235-D2	12mm	35mm	12mm	80mm	2
RSC2020-D2	1/2"	1-1/4"	1/2"	3"	2
RSC2024-D2	1/2"	1-1/2"	1/2"	3-1/2"	2
RSC2028-D2	1/2"	2'	1/2"	4"	2
RSC2036-D2	5/8"	1-1/2"	5/8"	4"	2
RSC2038-D2	5/8"	2"	5/8"	4"	2
RSC2042-D2	3/4"	1-1/2"	3/4"	4"	2
RSC2044-D2	3/4"	2"	3/4"	4"	2

RSC20-U3 ROUGHING UPCUT Z=3



TYPE:
UNCOATED

TYPE:
LINEAGE XLC

MATERIALS:

» Softwoods and hardwoods
» Plywood
» OSB

DESIGN:

» 3 precision ground scalloped cutting edges
» Good chipflow and low heat retention is achieved by the 3 semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 30° helix design with bottom cutting capability

APPLICATION:

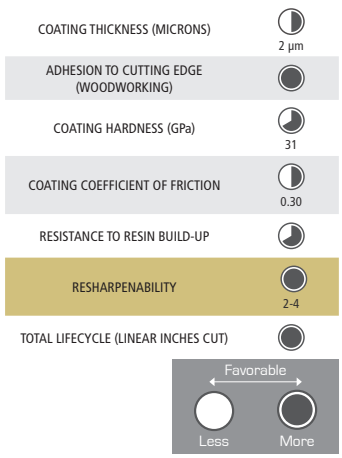
» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Scalloped edges produce smaller chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Improved cutting edge life when cutting hard and fibrous materials
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive 3 cutting edges
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board
» Upward cutting action provides excellent chip ejection from the cutting path

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
	RSCM0835-U3	8mm	35mm	8mm	80mm	3
	RSC2016-U3 Δ	3/8"	1"	3/8"	2-1/2"	3
XLC	RSC2016XLC-U3 Δ	3/8"	1"	3/8"	2-1/2"	3
	RSC2017-U3	3/8"	1-1/4"	3/8"	3"	3
XLC	RSC2017XLC-U3	3/8"	1-1/4"	3/8"	3"	3
	RSC2018-U3	3/8"	1-1/4"	1/2"	3"	3
	RSCM1035-U3	10mm	35mm	10mm	80mm	3
	RSCM1235-U3	12mm	35mm	12mm	80mm	3
	RSC2022-U3	1/2"	1-1/4"	1/2"	3"	3
XLC	RSC2022XLC-U3	1/2"	1-1/4"	1/2"	3"	3
	RSC2026-U3	1/2"	1-1/2"	1/2"	3-1/2"	3
	RSC2030-U3	1/2"	2"	1/2"	4"	3
	RSCM1455-U3	14mm	55mm	14mm	100mm	3
	RSC2040-U3	5/8"	2"	5/8"	4"	3
XLC	RSC2040XLC-U3	5/8"	2"	5/8"	4"	3
	RSCM1655-U3	16mm	55mm	16mm	100mm	3
	RSCM1855-U3	18mm	55mm	18mm	100mm	3
	RSC2046-U3	3/4"	2"	3/4"	4"	3
	RSCM2055-U3	20mm	55mm	20mm	100mm	3

Δ For Castle machine

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



RSC20-D3 ROUGHING DOWNCUT Z=3



TYPE: ***UNCOATED***

TYPE: ***LINEAGE XLC***

MATERIALS:

» Softwoods and hardwoods
» Plywood
» OSB

DESIGN:

» 3 precision ground scalloped cutting edges
» Good chipflow and low heat retention is achieved by the 3 semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 30° helix design with bottom cutting capability

APPLICATION:

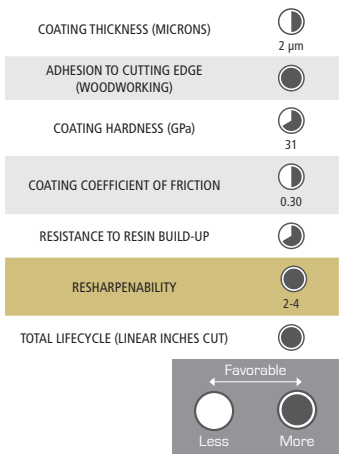
» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Scalloped edges produce smaller chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Improved cutting edge life when cutting hard and fibrous materials
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive 3 cutting edges
» Eliminates chipping, fuzzing, and tear-out along the top surface of the board
» Downward cutting action helps hold down material and reduces the likelihood of part movement

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
	RSCM0835-D3	8mm	35mm	8mm	80mm	3
	RSC2016-D3 Δ	3/8"	1"	3/8"	2-1/2"	3
XLC	RSC2016XLC-D3 Δ	3/8"	1"	3/8"	2-1/2"	3
	RSC2017-D3	3/8"	1-1/4"	3/8"	3"	3
XLC	RSC2017XLC-D3	3/8"	1-1/4"	3/8"	3"	3
	RSC2018-D3	3/8"	1-1/4"	1/2"	3"	3
	RSCM1035-D3	10mm	35mm	10mm	80mm	3
	RSCM1235-D3	12mm	35mm	12mm	80mm	3
	RSC2022-D3	1/2"	1-1/4"	1/2"	3"	3
XLC	RSC2022XLC-D3	1/2"	1-1/4"	1/2"	3"	3
	RSC2026-D3	1/2"	1-1/2"	1/2"	3-1/2"	3
	RSC2030-D3	1/2"	2'	1/2"	4"	3
	RSCM1455-D3	14mm	55mm	14mm	100mm	3
	RSC2040-D3	5/8"	2"	5/8"	4"	3
XLC	RSC2040XLC-D3	5/8"	2"	5/8"	4"	3
	RSCM1655-D3	16mm	55mm	16mm	100mm	3
	RSCM1855-D3	18mm	55mm	18mm	100mm	3
	RSC2046-D3	3/4"	2"	3/4"	4"	3
	RSCM2055-D3	20mm	55mm	20mm	100mm	3

Δ For Castle machine

XLC

LINEAGE XLC
EXTENDED LIFE RESHARPENABLE COATING



# RSCL-U3 ROUGHING LOW HELIX UPCUT
Z=3



DESIGN:
» 3 precision ground scalloped cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 10° helix design with bottom cutting capability
» Low helix upshear design reduces deflection and lifting forces in hard materials

APPLICATION:
» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Scalloped edges produce small chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Increased tool life and performance in hard materials and roughing/hogging applications
» Reduces noise levels during cutting operations of hard materials
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive three cutting edges
» Upward cutting action provides good chip ejection from the cutting path
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood
» OSB

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSCL2018-U3	3/8"	1-1/4"	3/8"	4"	3
RSCL2026-U3	1/2"	1-1/2"	1/2"	4"	3
RSCL2030-U3	1/2"	2"	1/2"	4-1/2"	3
RSCL2040-U3	5/8"	2"	5/8"	5"	3
RSCL2046-U3	3/4"	2"	3/4"	5"	3

# RSCL-D3 ROUGHING LOW HELIX DOWNCUT
Z=3



DESIGN:
» 3 precision ground scalloped cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 10° helix design with bottom cutting capability
» Low helix downshear design reduces deflection and lifting forces in hard materials

APPLICATION:
» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Scalloped edges produce small chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Increased tool life and performance in hard materials and roughing/hogging applications
» Reduces noise levels during cutting operations of hard materials
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive three cutting edges
» Downward cutting action helps hold down material and reduces the likelihood of part movement
» Eliminates chipping, fuzzing, and tear-out along the top surface of the board

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood
» OSB

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSCL2018-D3	3/8"	1-1/4"	3/8"	4"	3
RSCL2026-D3	1/2"	1-1/2"	1/2"	4"	3
RSCL2030-D3	1/2"	2"	1/2"	4-1/2"	3
RSCL2040-D3	5/8"	2"	5/8"	5"	3
RSCL2046-D3	3/4"	2"	3/4"	5"	3

# RSCH ROUGHING HOGGER
Z=3



DESIGN:
» 3 precision ground cutting edges with specialized chipbreakers
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability

APPLICATION:
» Chipbreakers cutting edges produce small chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal for robust spindles as more power is required to drive three cutting edges
» Reduces noise levels during cutting operations of hard materials
» Increased core diameter and shoulder mass to improve rigidity in harder materials
» Recommended for entry doors, stairways, and other deep cuts in hard materials
» Upward cutting action provides excellent chip ejection from the cutting path
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the board with the upcut design and along top surface of the board with the downcut design

PART NO.	SHEAR DIRECTION	CUTTING DIAM.	MAX. DEPTH OF CUT	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
RSCH2046-U3	UPCUT	1"	4"	1"	2"	7"	3
RSCH2046-D3	DOWNCUT	1"	4"	1"	2"	7"	3

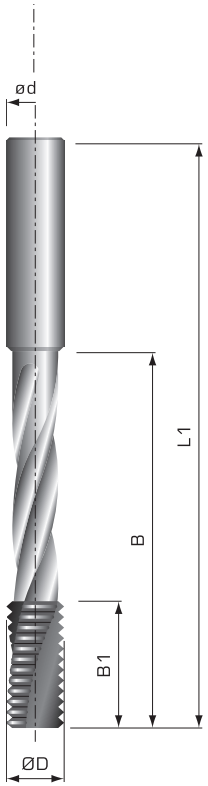
ADDITIONAL SIZES
Roughing Hogger bits are available in a variety of dimensions and cutting angles beyond those listed here.

For more information on a Roughing Hogger router bit that matches your application, please contact your FS Tool representative.

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood
» OSB

RS-DPM PASS-BY/DEEP POCKET MORTISE
REQUEST FORM





» Any of our in-stock solid carbide spiral router bits can be ordered in a Pass By/Deep Pocket Mortise style. To request information about a Pass-By/ Deep Pocket Mortise modification or custom router bit, please provide the information below.

DESIGN:

» Excellent chipflow and lower heat retention is achieved by semi-polished flutes
» Increased cutting edge durability from special submicron, extended life carbide

APPLICATION:

» Improved cutting edge life when making deep cuts
» Recommended for deep cuts such as those made for door hardware

ORDER DETAILS

DESCRIPTION	PLEASE SUBMIT THESE DIMENSIONS
PART # TO MODIFY*	
MATERIAL TYPE:	
QUANTITY TO ORDER	
CUTTING DIAMETER: ØD	
MAXIMUM DEPTH OF CHANNEL: B	
MAXIMUM DEPTH OF CUT: B1	
REDUCED DIAMETER*	
SHANK DIAMETER: Ød	
SHANK LENGTH*	
# OF FLUTES (CUTTING EDGES)*	
HELIX ANGLE*	☐ STANDARD ☐ LOW
OVERALL LENGTH: *L1	

*Optional

RSFDL-U2 10° SPIRAL DOVETAIL UPCUT ROUTER BITS Z=2



DESIGN:
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» Features whistle notch flat on shank

APPLICATION:
» For exceptionally smooth finishing cuts
» Reduces fuzzing and tear-out along the top surface
» Cutting action provides good chip ejection from the tool path

MACHINE:
» For OMEC machines

WHEN ORDERING SPECIFY:
» If your machines has an Eccentric Spindle, router bits will be custom manufactured

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood

PART NO. RIGHT HAND	DOVETAIL ANGLE	CUTTING DIAM.	DOVETAIL LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFDLM1014/8-U2	10°	10mm	8mm	14mm	60mm	2
RSFDLM1014/9-U2	10°	14mm	9mm	14mm	60mm	2
RSFDLM1014/10-U2	10°	14mm	10mm	14mm	60mm	2
RSFDL1014/450-U2	10°	14mm	0.450"	14mm	60mm	2
RSFDL1014/622-U2	10°	14mm	0.622"	14mm	60mm	2

PART NO. LEFT HAND	DOVETAIL ANGLE	CUTTING DIAM.	DOVETAIL LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFDLM1014/8-U2L	10°	10mm	8mm	14mm	60mm	2
RSFDLM1014/9-U2L	10°	14mm	9mm	14mm	60mm	2
RSFDLM1014/10-U2L	10°	14mm	10mm	14mm	60mm	2
RSFDL1014/450-U2L	10°	14mm	0.450"	14mm	60mm	2
RSFDL1014/622-U2L	10°	14mm	0.622"	14mm	60mm	2

RSFDL-D2 10° SPIRAL DOVETAIL DOWNCUT ROUTER BITS Z=2



APPLICATION:
» For exceptionally smooth finishing cuts
» Reduces fuzzing and tear-out along the top surface

MACHINE:
» For OMEC machines

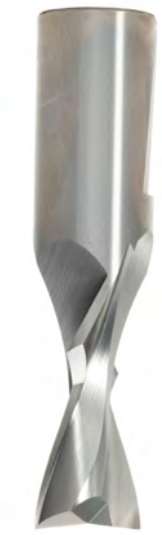
WHEN ORDERING SPECIFY:
» If your machines has an Eccentric Spindle, router bits will be custom manufactured

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood

PART NO. RIGHT HAND	DOVETAIL ANGLE	CUTTING DIAM.	DOVETAIL LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFDLM1014/8-D2	10°	10mm	8mm	14mm	60mm	2
RSFDLM1014/9-D2	10°	14mm	9mm	14mm	60mm	2
RSFDLM1014/10-D2	10°	14mm	10mm	14mm	60mm	2
RSFDL1014/450-D2	10°	14mm	0.450"	14mm	60mm	2
RSFDL1014/622-D2	10°	14mm	0.622"	14mm	60mm	2

PART NO. LEFT HAND	DOVETAIL ANGLE	CUTTING DIAM.	DOVETAIL LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFDLM1014/8-D2L	10°	10mm	8mm	14mm	60mm	2
RSFDLM1014/9-D2L	10°	14mm	9mm	14mm	60mm	2
RSFDLM1014/10-D2L	10°	14mm	10mm	14mm	60mm	2
RSFDL1014/450-D2L	10°	14mm	0.450"	14mm	60mm	2
RSFDL1014/622-D2L	10°	14mm	0.622"	14mm	60mm	2

RSFD-U2 10° SPIRAL DOVETAIL UPCUT ROUTER BITS Z=2



DESIGN:
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» Features whistle notch on shank

APPLICATION:
» For exceptionally smooth finishing cuts
» Reduces fuzzing and tear-out along the bottom surface
» Significantly increases tool life and cut quaility in comparison to brazed dovetail router bits
» For use on standard CNC routers
» Upward cutting action provides good chip ejection from the tool path

WHEN ORDERING SPECIFY:
» If your machines has an Eccentric Spindle, router bits will be custom manufactured

PART NO. RIGHT HAND	DOVETAIL ANGLE	CUTTING DIAM.	DOVETAIL LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFD1012/625-U2	10°	1/2"	0.625"	14mm	2-1/2"	2
RSFDM1014/450-U2	10°	14mm	0.450"	14mm	60mm	2

PART NO. LEFT HAND	DOVETAIL ANGLE	CUTTING DIAM.	DOVETAIL LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFD1012/625-U2L	10°	1/2"	0.625"	14mm	2-1/2"	2
RSFDM1014/450-U2L	10°	14mm	0.450"	14mm	60mm	2

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood

RSFD-D2 10° SPIRAL DOVETAIL DOWNCUT ROUTER BITS Z=2



DESIGN:
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» Features whistle notch on shank

APPLICATION:
» For exceptionally smooth finishing cuts
» Reduces fuzzing and tear-out along the top surface
» Significantly increases tool life and cut quaility in comparison to brazed dovetail router bits
» For use on standard CNC routers

WHEN ORDERING SPECIFY:
» If your machines has an Eccentric Spindle, router bits will be custom manufactured

PART NO. RIGHT HAND	DOVETAIL ANGLE	CUTTING DIAM.	DOVETAIL LENGTH	SHANK DIAM.	OVERALL LENGTH	NO.. FLUTES
RSFD1012/625-D2	10°	1/2"	0.625"	14mm	2-1/2"	2
RSFDM1014/450-D2	10°	14mm	0.450"	14mm	60mm	2

PART NO. LEFT HAND	DOVETAIL ANGLE	CUTTING DIAM.	DOVETAIL LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFD1012/625-D2L	10°	1/2"	0.625"	14mm	2-1/2"	2
RSFDM1014/450-D2L	10°	14mm	0.450"	14mm	60mm	2

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood

# RSCBN-U3 ROUGHING BALLNOSE UPCUT ROUTER BITS
Z=3



DESIGN:
» 3 precision ground cutting edges
» Good chipflow and low heat retention is achieved by the three semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 30° helix design with bottom cutting capability

APPLICATION:
» For an exceptionally smooth finish on 3 dimensional machining operations
» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Improved cutting edge life when cutting hard and fibrous materials
» 3 cutting edges provide faster feed rates at low spindle speeds
» Upward cutting action provides excellent chip ejection from the cutting path

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSCBN2018-U3	3/8"	1-1/4"	3/8"	4"	3
RSCBN2030-U3	1/2"	2-1/4"	1/2"	4"	3
RSCBN2040-U3	5/8"	2-1/4"	5/8"	4"	3
RSCBN2050-U3	3/4"	3-1/2"	3/4"	6"	3

ADDITIONAL SIZES
Spiral Ballnose bits are available in a variety of dimensions and cutting angles beyond those listed here.
For more information on a Ballnose router bit that matches your application, please contact your FS Tool representative.

MATERIALS:
Good for:
» Softwoods and hardwoods
» Plywood
» Chipboard
» MDF
» Solid surface

RSFBN FINISHING BALLNOSE ROUTER BITS
UPCUT, Z=2 & Z=3



DESIGN:
» 2 or 3 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Large clearance areas enable chips to quickly move away from cutting edges
» Increased cutting edge durability from special submicron, extended life carbide
» 30° helix design with bottom cutting capability

APPLICATION:
» For exceptionally smooth finishing cuts
» Commonly used for cleaning corners of MDF Doors
» For an exceptionally smooth finish on 3 dimensional machining operations
» Upward cutting action provides excellent chip ejection from the cutting path

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood
» Chipboard
» MDF
» Solid surface
» Hard plastics
» Soft plastics

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFBN2000A-U2	1/8"	1/2"	1/8"	2-1/2"	2
RSFBN2000-U2	1/8"	1/2"	1/4"	2"	2
RSFBN2004-U2	3/16"	3/4"	1/4"	2"	2
RSFBN2006-U2	1/4"	7/8"	1/4"	2-1/2"	2
RSFBN2009-U2	1/4"	1-1/2"	1/4"	3"	2
RSFBN2018-U3	3/8"	1-1/4"	3/8"	4"	3
RSFBN2019-U2	1/2"	1/2"	1/2"	3"	2
RSFBN2020-U2	1/2"	1-1/4"	1/2"	3"	2
RSFBN2030-U3	1/2"	2-1/4"	1/2"	4"	3
RSFBN2040-U3	5/8"	2-1/4"	5/8"	4"	3
RSFBN2046-U3	3/4"	1-1/2"	3/4"	4"	3
RSFBN2050-U3	3/4"	3-1/2"	3/4"	6"	3

ADDITIONAL SIZES
Spiral Ballnose bits are available in a variety of dimensions and cutting angles beyond those listed here.
For more information on a Ballnose router bit that matches your application, please contact your FS Tool representative.

RSFBNT

TAPERED FINISHING BALLNOSE ROUTER BITS
UPCUT, Z=2 & Z=3



DESIGN:
- 2 or 3 precision ground cutting edges
- Tapered design provides increased strength and rigidity for small ballnose diameters and long cutting lengths
- Good chipflow and low heat retention is achieved by the three semi-polished flutes
- Large clearance areas enable chips to quickly move away from cutting edges
- Submicron, corrosion resistant, extended life carbide provides increased durability
- 30° Helix design with bottom cutting capability

APPLICATION:
- For exceptionally smooth finishing cuts
- Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
- 3 cutting edges provide faster feed rates at low spindle speeds
- Commonly used for cleaning corners of MDF Doors
- For an exceptionally smooth finish on 3 dimensional machining operations
- Upward cutting action provides excellent chip ejection from the cutting path

MATERIALS:
Recommended for:
- Softwoods and hardwoods
- Plywood
- Chipboard
- MDF
- Solid surface
- Hard plastics
- Soft plastics

PART NO.	BALLNOSE DIAM.	TAPER INCL. ANGLE	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFBNT1160514/1-U2	1/16"	5°	1"	1/4"	2-1/2"	2
RSFBNT1160314/34-U3	1/16"	3°	3/4"	1/4"	3"	3
RSFBNT180514/34-U3	1/8"	5°	3/4"	1/4"	3"	3
RSFBNT180114/112-U3	1/8"	1°	1-1/2"	1/4"	3"	3
RSFBNT140512/138-U3	1/4"	5°	1-3/8"	1/2"	4"	3
RSFBNT380512/112-U3	3/8"	5°	1-1/2"	1/2"	4"	3

# RSFV60 60° V-POINT SOLID CARBIDE ROUTER BITS
Z=2



DESIGN:
» 2 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Good chipflow is provided by the low upshear design with steep back clearances
» Special secondary chamfered clearance improves chipflow
» Submicron, corrosion resistant, extended life carbide provides increased durability

APPLICATION:
» For smooth finishing V-Groove, Bevel, or Chamfer cuts
» Commonly used for cleaning corners of MDF Doors

60°V-POINT BITS

PART NO.	TIP ANGLE	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFV6014/78	60°	1/4"	7/8"	1/4"	3"	2
RSFV6038/1	60°	3/8"	1"	3/8"	3"	2
RSFV6012/114	60°	1/2"	1-1/4"	1/2"	3"	2

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood
» Chipboard
» MDF
» Solid surface
» Hard plastics
» Soft plastics

ADDITIONAL SIZES
V-Point bits are available in a variety of dimensions and cutting angles beyond those listed here.

For more information on a V-Point router bit that matches your application, please contact your FS Tool representative.

# RSFV90 90° V-POINT SOLID CARBIDE ROUTER BITS
Z=2



DESIGN:
» 2 precision ground cutting edges
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Special secondary chamfered clearance improves chipflow
» Submicron, corrosion resistant, extended life carbide provides increased durability

APPLICATION:
» For smooth finishing V-Groove, Bevel, or Chamfer cuts
» Commonly used for cleaning corners of MDF Doors

90°V-POINT BITS

PART NO.	TIP ANGLE	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFV9014/78	90°	1/4"	7/8"	1/4"	3"	2
RSFV9038/1	90°	3/8"	1"	3/8"	3"	2
RSFV9012/114	90°	1/2"	1-1/4"	1/2"	3"	2

MATERIALS:
Recommended for:
» Softwoods and hardwoods
» Plywood
» Chipboard
» MDF
» Solid surface
» Hard plastics
» Soft plastics

ADDITIONAL SIZES
V-Point bits are available in a variety of dimensions and cutting angles beyond those listed here.

For more information on a V-Point router bit that matches your application, please contact your FS Tool representative.

RSFO-U1 HIGH POLISH O-FLUTE ROUTER BITS
UPCUT, Z=1



Unmatched cutting edge strength and integrity provided by proprietary grinding process enables our O-Flutes to outperform across a broad range of materials and applications without the need for different tools for Hard and Soft plastics.

MATERIALS:
Recommended for:
- Soft plastics
- Hard plastics
- Acrylic
- Plexiglass
- Trespa
- Solid surface
- MDF
- Aluminum
- ACM (Aluminum Composite Material)

DESIGN:
- Single flute high polish, precision ground cutting edge
- Superior chipflow and lower heat retention is provided by the highly polished flute and primary land (back of cutting edge)
- Submicron, corrosion resistant, extended life carbide provides increased durability
- 25° helix design with bottom cutting capability

APPLICATION:
- For exceptionally smooth, near mirror finish cuts
- Ideal for cutting materials that build-up on the tool or reweld to the material
- Upward cutting action provides excellent chip ejection from the tool path

INCH SIZES

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFO1999-U1	1/16"	1/4"	1/4"	2"	1
RSFO2000-U1	1/8"	1/2"	1/4"	2"	1
RSFO2001-U1	1/8"	1/2"	1/8"	2"	1
RSFO2002-U1	1/8"	3/4"	1/8"	2"	1
RSFO2003-U1	3/16"	5/8"	3/16"	2"	1
RSFO2004-U1	3/16"	5/8"	1/4"	2"	1
RSFO2005-U1	3/16"	1-1/4"	1/4"	3"	1
RSFO2006-U1	1/4"	3/4"	1/4"	2-1/2"	1
RSFO2007-U1	1/4"	3/4"	1/4"	2"	1
RSFO2009-U1	1/4"	1-1/2"	1/4"	3"	1
RSFO2015-U1	3/8"	1-1/4"	3/8"	3"	1

METRIC SIZES

PART NO.	CUTTING DIAM. MM	CUTTING LENGTH MM	SHANK DIAM. MM	OVERALL LENGTH MM	NO. FLUTES
RSFO3000-U1	2	8	6	50	1
RSFO3001-U1	3	12	6	50	1
RSFO3002-U1	4	12	6	50	1
RSFO3004-U1	4	20	6	60	1
RSFO3005-U1	5	12	6	60	1
RSFO3006-U1	5	22	6	60	1
RSFO3008-U1	6	22	6	60	1
RSFO3012-U1	8	22	8	60	1
RSFO3016-U1	8	38	8	80	1

RSFO-D1 HIGH POLISH O-FLUTE ROUTER BITS
DOWNCUT, Z=1



APPLICATION:
- For exceptionally smooth finishing cuts
- Optimized for soft and hard plastics
- Ideal for cutting materials that have a tendancy to build-up on the tool or rewelded to the material
- Downward cutting action provides excellent chip finish along the top of materials
- Helps reduces part movement but increases risk of rewelding chips and build up of debris

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSFO2006-D1	1/4"	3/4"	1/4"	2-1/2"	1

*Other sizes available upon request

RSF04-U1 O-FLUTES OPTIMIZED FOR ALUMINUM
UPCUT, Z=1

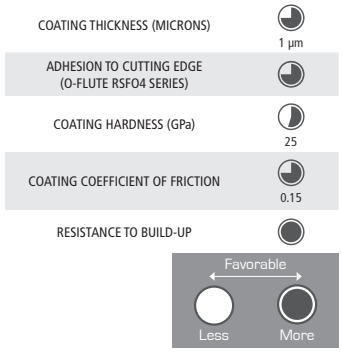


With it's prepared edge and highly polished flute, rake face, and primary land - the RSF04's optimized **Power Edge**™ provides enhanced finish and durability when cutting aluminum materials.

MATERIALS:
Recommended and optimized for:
- Aluminium
- ACM (Aluminium Composite Material)
- Solid surface

DLC

DIAMOND-LIKE CARBON DLC
AMORPHOUS CARBON TOOL COATING



DESIGN:
- **Power Edge**™ cutting point for optimal cutting of aluminum
- Single flute high polish, precision ground cutting edge
- Outstanding surface finish is produced by the precision ground cutting edge
- Superior chipflow and lower heat retention is provided by the highly polished flute and primary land (back of cutting edge)
- Submicron, corrosion resistant, extended life carbide provides increased durability
- 25° helix design with bottom cutting capability

APPLICATION:
- For exceptionally smooth finishing cuts
- Ideal for cutting aluminum materials that build-up on the tool or reweld to the material
- Upward cutting action provides excellent chip ejection from the tool path

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
	RSF0400A-U1	1/8"	5/16"	1/4"	1-1/2"	1
DLC	RSF0400ADLC-U1	1/8"	5/16"	1/4"	1-1/2"	1
	RSF0400B-U1	1/8"	1/2"	1/4"	1-1/2"	1
DLC	RSF0400BDLC-U1	1/8"	1/2"	1/4"	1-1/2"	1
	RSF04000-U1	1/8"	1/2"	1/4"	2"	1
DLC	RSF04000DLC-U1	1/8"	1/2"	1/4"	2"	1
	RSF04002-U1	3/16"	1/2"	3/16"	2"	1
DLC	RSF04002DLC-U1	3/16"	1/2"	3/16"	2"	1
	RSF04003-U1	3/16"	1/2"	1/4"	2"	1
DLC	RSF04003DLC-U1	3/16"	1/2"	1/4"	2"	1
	RSF04004-U1	3/16"	5/8"	1/4"	2"	1
DLC	RSF04004DLC-U1	3/16"	5/8"	1/4"	2"	1
	RSF04005-U1	3/16"	1-1/4"	1/4"	3"	1
DLC	RSF04005DLC-U1	3/16"	1-1/4"	1/4"	3"	1
	RSF04006-U1	1/4"	5/8"	1/4"	2"	1
DLC	RSF04006DLC-U1	1/4"	5/8"	1/4"	2"	1
	RSF04007-U1	1/4"	3/4"	1/4"	2"	1
DLC	RSF04007DLC-U1	1/4"	3/4"	1/4"	2"	1
	RSF04009-U1	1/4"	1-1/2"	1/4"	3"	1
DLC	RSF04009DLC-U1	1/4"	1-1/2"	1/4"	3"	1

RSF04-D1 O-FLUTES OPTIMIZED FOR ALUMINUM
DOWNCUT, Z=1



APPLICATION:
- For exceptionally smooth finishing cuts
- Ideal for cutting aluminum materials that build-up on the tool or reweld to the material
- Downward cutting action provides excellent chip finish along the top of materials
- Helps reduces part movement but increases risk of rewelding chips and build up of debris

	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
	RSF04000-D1	1/8"	1/2"	1/4"	2"	1
DLC	RSF04000DLC-D1	1/8"	1/2"	1/4"	2"	1
	RSF04004-D1	3/16"	5/8"	1/4"	2"	1
DLC	RSF04004DLC-D1	3/16"	5/8"	1/4"	2"	1

*Other sizes available upon request

RSCP-U3 ROUGHING FOR PHENOLIC/COMPOSITE
UPCUT, Z=3



DESIGN:
» 3 precision ground cutting edges
» Special chipbreakers for phenolic reduce cutting pressure and noise levels
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 10° helix design with bottom cutting capability

APPLICATION:
» Improved cutting edge life and feed speeds when sizing/rough cutting phenolic
» Chipbreakers specifically designed to provide increased tool life, and lower noise levels when cutting phenolic
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Ideal for robust spindles as more power is required to drive 3 cutting edges
» 3 cutting edges provide faster feed rates at low spindle speeds
» Eliminates chipping, fuzzing, and tear-out along the bottom surface of the panel
» Upward cutting action provides good chip ejection from the tool path

MATERIALS:
Recommended and optimized for:
» Phenolic

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSCP2108-U3	1/4"	5/8"	1/4"	2-1/2"	3
RSCP2118-U3	3/8"	7/8"	3/8"	3"	3
RSCP2121-U3	1/2"	7/8"	1/2"	3"	3
RSCP2122-U3	1/2"	1-1/4"	1/2"	3"	3
RSCP2131-U3	1/2"	2-1/8"	1/2"	4-1/2"	3

RSCP-D3 ROUGHING FOR PHENOLIC/COMPOSITE
DOWNCUT, Z=3



DESIGN:
» 3 precision ground cutting edges
» Special chipbreakers for phenolic reduce cutting pressure and noise levels
» Excellent chipflow and lower heat retention is achieved by the semi-polished flutes
» Submicron, corrosion resistant, extended life carbide provides increased durability
» 10° helix design with bottom cutting capability

APPLICATION:
» Improved cutting edge life and feed speeds when sizing/rough cutting phenolic
» Chipbreakers specifically designed to provide increased tool life, and lower noise levels when cutting phenolic
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» Ideal for robust spindles as more power is required to drive 3 cutting edges
» 3 cutting edges provide faster feed rates at low spindle speeds
» Eliminates chipping, fuzzing, and tear-out along the top surface of the panel
» Downward cutting action helps hold down material and reduces the likelihood of part movement

MATERIALS
Recommended and optimized for:
» Phenolic

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
RSCP2108-D3	1/4"	5/8"	1/4"	2-1/2"	3
RSCP2118-D3	3/8"	7/8"	3/8"	3"	3
RSCP2121-D3	1/2"	7/8"	1/2"	3"	3
RSCP2122-D3	1/2"	1-1/4"	1/2"	3-1/2"	3
RSCP2131-D3	1/2"	2-1/8"	1/2"	4-1/2"	3

# RSF-S1 FINISHING STRAIGHT
Z=1



DESIGN:
» 1 precision ground cutting edge
» Good chipflow and lower heat retention is achieved by the single flute design at low speeds
» Straight edge with bottom cutting capability

APPLICATION:
» For exceptionally smooth finishing cuts
» Excellent for glue-line cuts on solid surface and unlaminated composite materials

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R1000	1/8"	3/8"	1/4"	1-1/2"	1
R1008	7/32"	3/4"	1/4"	2"	1

MATERIALS:
Recommended for:
» MDF
» Solid surface
» Hardwoods
» Softwoods

# RSF-S2 FINISHING STRAIGHT
Z=2



DESIGN:
» 2 precision ground cutting edges
» Good chipflow and lower heat retention is achieved by the 2 flute design at moderate feed rates
» Straight edge with bottom cutting capability

APPLICATION:
» For smooth finishing cuts
» Excellent for glue-line cuts on solid surface and unlaminated composite materials

PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	OVERALL LENGTH	NO. FLUTES
R1100	1/8"	3/8"	1/4"	1-1/2"	2
R1104	5/32"	5/8"	1/4"	1-1/2"	2
R1106	3/16"	5/8"	1/4"	2"	2
R1108	7/32"	3/4"	1/4"	2"	2
R1110	1/4"	3/4"	1/4"	2"	2
R1112	1/4"	1"	1/4"	2-1/2"	2
R1304	1/4"	3/4"	1/2"	3"	2
R1306	1/4"	1"	1/2"	3"	2
R1308	5/16"	1"	1/2"	3"	2
R1302	3/8"	1"	3/8"	3"	2
R1310	1/2"	1-1/4"	1/2"	3"	2

MATERIALS:
Recommended for:
» MDF
» Solid surface
» Hardwoods
» Softwoods

RD2562 SURFACING INSERT ROUTER BIT
0° SHEAR

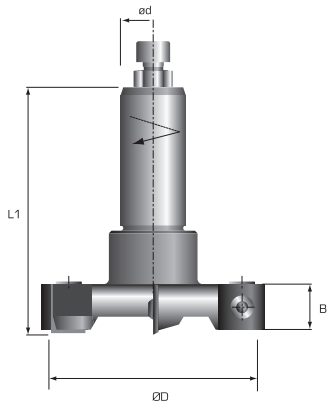


DESIGN:
» High tensile steel body
» 0° shear provides smooth cutting on MDF
» Reversible tungsten carbide inserts with 4 cutting edges

APPLICATION:
» MDF Spoilboard cutter for preparing nesting tables
» For surface cutting in workpieces with large areas
» For producing large rabbeting cuts with a single pass

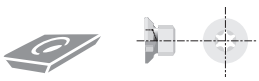
PART NO.	CUTTING DIAM. ØD MM	SHEAR ANGLE	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. TEETH
RD2562	80	0°	14	1/2"	90	14000	3
RD2565	100	0°	14	3/4"	90	12000	3

Other sizes available upon request





REPLACEMENT PARTS



DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
PART NO.	301404	W500002	W400405
DIMENSIONS	14x14x2.0	M5x7	T15 Torx

RD2560 SURFACING INSERT ROUTER BIT
10° SHEAR

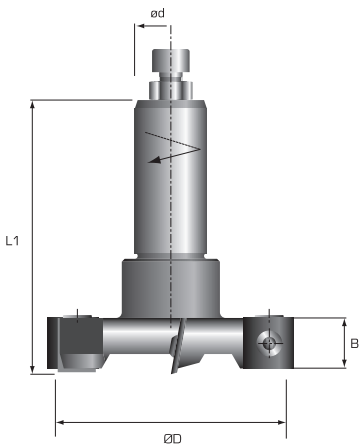


DESIGN:
» High tensile steel body
» 10° shear provides smooth cutting on a variety of materials including solid wood
» Reversible tungsten carbide inserts with 4 cutting edges

APPLICATION:
» MDF Spoilboard cutter for preparing nesting tables
» For surface cutting in workpieces with large areas
» For producing large rabbeting cuts with a single pass

PART NO.	CUTTING DIAM. ØD	SHEAR ANGLE	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. TEETH
RD2560	80mm	10°	12	3/4"	90	14000	3
RD2567	4-1/2"	10°	12	3/4"	90	10000	4

Other sizes available upon request





REPLACEMENT PARTS



DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
PART NO.	301200	WM350-PL	W400405
DIMENSIONS	12x12x1.5	M3.5x6	T15 Torx

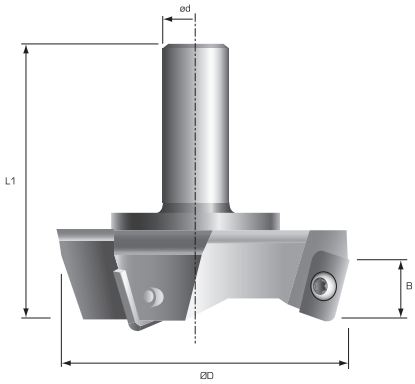
RD2570 SURFACING INSERT ROUTER BIT
5° SHEAR WITH RADIUS CORNERS



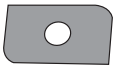
DESIGN:
» High tensile steel body
» Radius on cutting edges provides blending for smoothest surface finish
» 5° shear provides smooth cutting on a variety of materials including solid wood
» Reversible tungsten carbide insert with 2 cutting edges

APPLICATION:
» MDF Spoilboard cutter for preparing nesting tables
» Ideal for high speed processing of nesting tables
» For surface cutting in workpieces with large areas
» Improves surface finish on spindles that are not in optimal condition

PART NO.	CUTTING DIAM. ØD MM	SHEAR ANGLE	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. TEETH
RD2570	90	5°	19	3/4"	82	12000	3



REPLACEMENT PARTS




DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
PART NO.	RD2570A	WM350-P	W400405
DIMENSIONS	19x12x1.5	M3.5x7.5	T15 Torx



DESIGN:

» High tensile steel body
» 1 straight reversible tungsten carbide insert with 4 cutting edges

APPLICATION:

» For jointing, rabbeting, and grooving in solid wood and panel materials
» Suitable for ramp-in plunge cuts using Z and X or Y axis
» On stationary and CNC routers

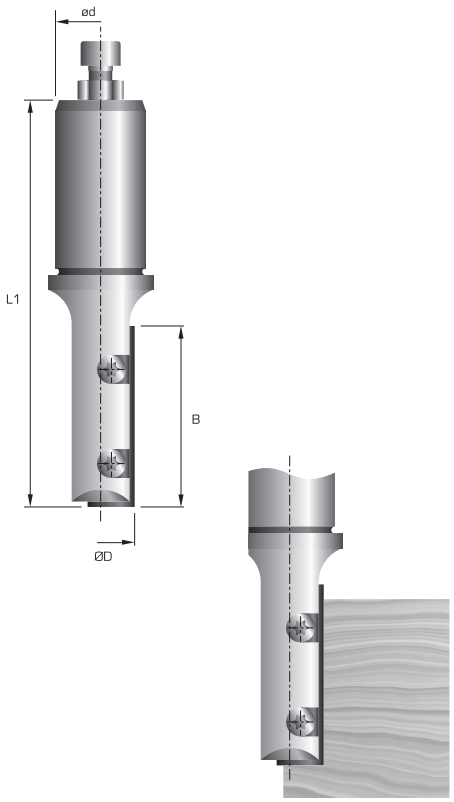
PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1	MAX. RPM	NO. FLUTES
RD2167	1/2"	30	1/2"	3-1/8"	24000	1
RD2177	5/8"	30	5/8"	3-1/8"	24000	1
RD2180	5/8"	50	5/8"	4-3/4"	20000	1
RD2185	3/4"	30	3/4"	3-1/8"	24000	1
RD2187	3/4"	50	3/4"	4-3/4"	20000	1

Other sizes available upon request

REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	GIB	SCREW FOR KNIFE	WRENCH
RD2167	PART NO.	303011S	W300803	W501314	W40000A
	DIMENSIONS	30x5.5x1.1	28x5x2	M3x4	1.5 Hex
RD2177	PART NO.	303009	–	WM350-PL	W400405
	DIMENSIONS	30x9x1.5		M3.5x6	T15 Torx
RD2180	PART NO.	305022	–	WM350-PL	W400405
	DIMENSIONS	50x12x1.5		M3.5x6	T15 Torx
RD2185	PART NO.	303022	–	WM350-PL	W400405
	DIMENSIONS	30x12x1.5		M3.5x6	T15 Torx
RD2187	PART NO.	305022	–	WM350-PL	W400405
	DIMENSIONS	50x12x1.5		M3.5x6	T15 Torx





DESIGN:

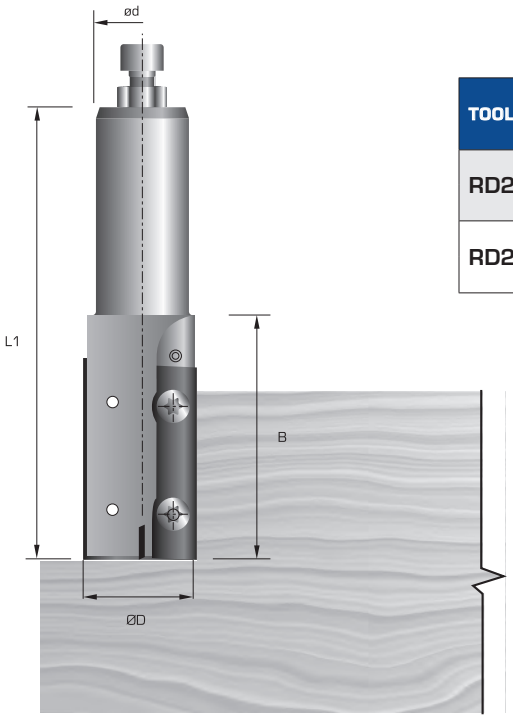
» High tensile steel body
» 2 straight and 1 plunge reversible tungsten carbide insert

APPLICATION:

» For jointing, rabbeting, and grooving in solid wood and panel materials
» Suitable for ramp-in plunge cuts
» On stationary and CNC routers

PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1	MAX. RPM	NO. FLUTES
RD2520	1"	30	3/4"	3-1/2"	20000	2+1
RD2522	1-3/8"	30	3/4"	3-1/2"	20000	2+1

Other sizes available upon request



REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	SCREW FOR KNIFE	PLUNGE KNIFE	SCREW FOR PLUNGE TIP
RD2520	PART NO.	303009	WM356	302415	W500406
	DIMENSIONS	30x9x1.5	M3.5X6	24x10x1.5	M4X6
RD2522	PART NO.	303022	WM356	303315	W500406
	DIMENSIONS	30x12x1.5	M3.5X6	33.6x10x1.5	M4X6

WRENCHES

DESCRIPTION	WRENCH FOR KNIFE	WRENCH FOR PLUNGE KNIFE
PART NO.	W400405	W400101
DIMENSIONS	T15 Torx	2.5 Hex

RD2535 INSERT ROUTER BITS
PLUNGING & SIZING WITH COMPRESSION SHEAR



DESIGN:
» High tensile steel body
» Compression shear provided by 1+1 reversible tungsten carbide inserts
» 1 plunge reversible tungsten carbide insert

APPLICATION:
» For machining double sided laminated panels, solid wood, and wood composites
» Suitable for straight down plunge cuts and ramp-in plunge cuts
» On stationary and CNC routers

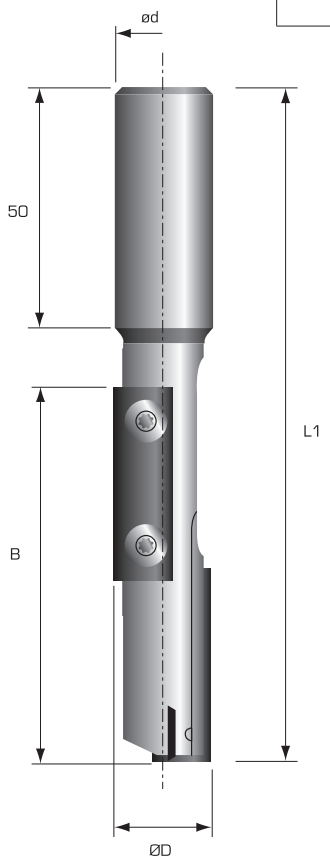
PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. FLUTES
RD2535	3/4"	58	3/4"	120	20000	1+1+1
RD2537	3/4"	78	3/4"	140	20000	1+1+1

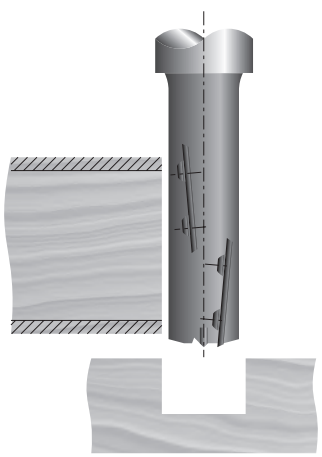
Other sizes available upon request

REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	TOP KNIFE	BOTTOM KNIFE	PLUNGE KNIFE	SCREW FOR KNIFE & PLUNGE	WRENCH
RD2535	PART NO.	303000	303022	300960	WM356	W400405
	DIMENSIONS	30x12x1.5	30x12x1.5	9.6x12x1.5	M3.5X6	T15 Torx
RD2537	PART NO.	304000	304022	300960	WM356	W400405
	DIMENSIONS	40x12x1.5	40x12x1.5	9.6x12x1.5	M3.5X6	T15 Torx







DESIGN:

» High tensile steel body
» 2+2 reversible tungsten carbide inserts in opposing shear angle and 1 brazed carbide plunge point

APPLICATION:

» For machining double sided laminated panels, solid wood, and wood composites
» Suitable for ramp-in plunge cuts
» On stationary and CNC routers

PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH B MM	SHANK DIAM. ød MM	OVERALL LENGTH L1 MM	ROTATION	MAX. RPM	NO. FLUTES
RD2530	20	53	20	125	Right Hand	20000	2+2+1
RD2532	20	53	20	125	Left Hand	20000	2+2+1

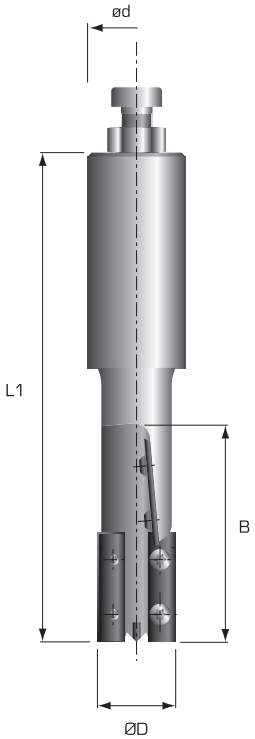
Other sizes available upon request

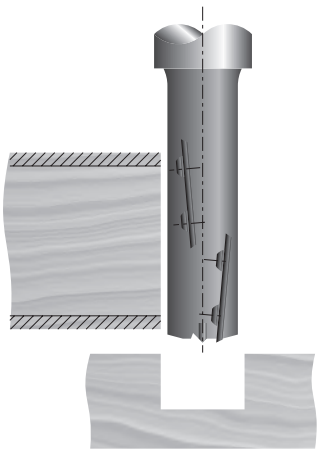
Supplied with brazed plunge point

REPLACEMENT PARTS

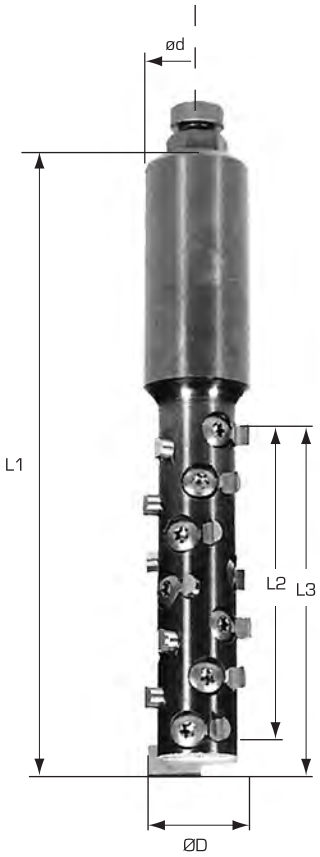


DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
PART NO.	**302810**	**W502331**	**W400401**
DIMENSIONS	28x7x1.5	M3x4	T9 Torx





RD2540 INSERT ROUTER BITS
ROUGHING & SIZING



DESIGN:

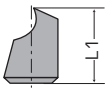
» High tensile steel body
» 3 wings of solid tungsten carbide cutting pins
» 1 tungsten carbide plunge point insert
» Standard version with straight cutting pins, optional with shear angle cutting pins, upshear or downshear can be inserted at any height
» High quality of cut achieved by helically positioned cutting pins
» Fast exchange of cutting pins without adjustment through the patented pin clamping system

APPLICATION:

» For shaping, panel sizing, rabbeting, and nesting applications
» Ideal for solid wood and panel materials
» Suitable for straight or ramp-in plunge cuts
» On stationary and CNC routers

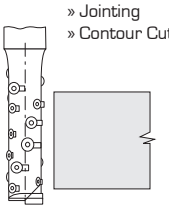
PART NO.	DIAM. ØD	CUTTING LENGTH L2 MM	CUTTING LENGTH L3 MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. PINS	NO. OF WINGS
RD2540	16mm	42	48	14mm	110	24000	27	3
RD2542	16mm	56	62	14mm	125	24000	36	3
RD2543	3/4"	42	48	3/4"	105	24000	27	3
RD2544	3/4"	56	62	3/4"	119	24000	36	3

Other sizes available upon request

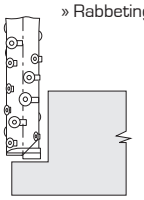


Interchangeable Solid Carbide Cutting Pins

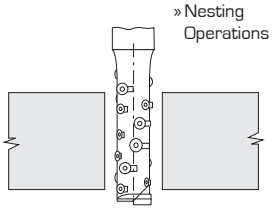
L1 = 5.5 mm



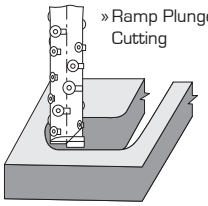
» Jointing
» Contour Cutting



» Rabbeting



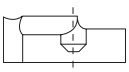
» Nesting Operations



» Ramp Plunge Cutting

REPLACEMENT PARTS





TOOL NO.	DESCRIPTION	STRAIGHT PIN	DOWNSHEAR PIN	UPSHEAR PIN	PLUNGING INSERT KNIFE	SCREW FOR PIN	SCREW FOR PLUNGE INSERT	WRENCH
RD2540 RD2542	**PART NO.**	**RD2540S**	**RD2540D**	**RD2540U**	**RD2540P**	**WM355**	**WM380**	**W400401**
	DIMENSIONS	5.5mm	5.5mm	5.5mm	14mm	M3x5.5	M3x8	T9 Torx
RD2543 RD2544	**PART NO.**	**RD2540S**	**RD2540D**	**RD2540U**	**RD2544P**	**WM355**	**WM380**	**W400401**
	DIMENSIONS	5.5mm	5.5mm	5.5mm	17mm	M3x5.5	M3x8	T9 Torx



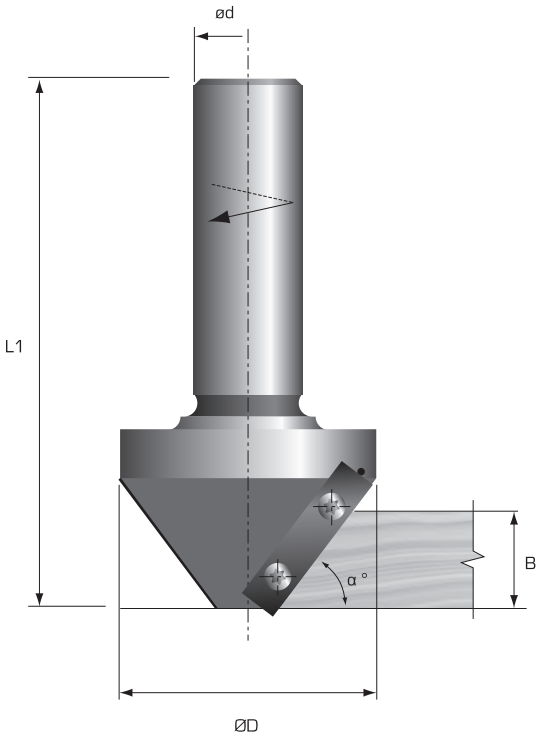
DESIGN:

» High tensile steel body
» 2 reversible tungsten carbide insert knives
» Tool body with positioning pins for easy and accurate replacement of inserts

APPLICATION:

» For beveling or chamfering solid wood and panel materials
» On stationary and CNC routers

PART NO.	ANGLE OF CUT α°	CUTTING DIAM. ØD MM	CUTTING DEPTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. TEETH
RD2590	60°	60	23	3/4"	95	18000	2
RD2592	45°	60	19	3/4"	95	18000	2
RD2594	30°	70	13	3/4"	90	18000	2
RD2595	60°	70	40	3/4"	115	14000	2
RD2596	45°	90	33	3/4"	110	14000	2
RD2598	30°	100	23	3/4"	100	12000	2



REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
RD2590 RD2592 RD2594	**PART NO.**	**303000**	**WM350-PL**	**W400405**
	DIMENSIONS	30x12x1.5	M3.5x6	T15 Torx
RD2595 RD2596 RD2598	**PART NO.**	**305000**	**WM350-PL**	**W400405**
	DIMENSIONS	50x12x1.5	M3.5x6	T15 Torx

RD2571 V GROOVE INSERT ROUTER BIT
FOR CNC ROUTERS

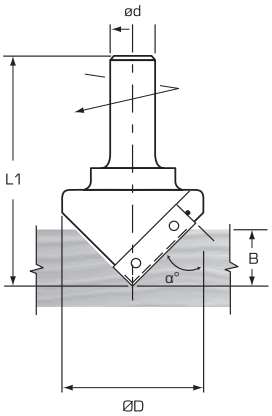


DESIGN:
- » High tensile steel body with no shear
- » Precise center point on bottom

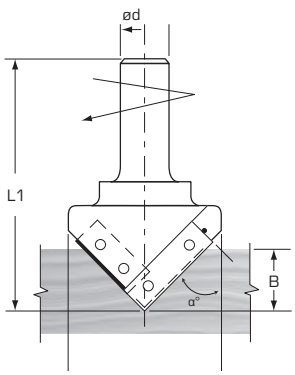
APPLICATION:
- » For chamfering, bevels, decorative grooving, and mitre folds in solid wood and panel materials
- » For Glue Folds, a 44.5° angle of cut (91° included angle) is recommended to allow for the addition of glue
- » Suitable for ramp-in plunge cuts or side entry
- » On stationary and CNC routers

PART NO.	ANGLE OF CUT α°	CUTTING DIAM. ØD	CUTTING DEPTH B	SHANK DIAM. ød	OVERALL LENGTH L1	MAX. RPM	NO. TEETH Z
RD2571A	22.5°	13/16"	1"	1/2"	2-3/8"	18000	1
RD2571B	25°	7/8"	31/32"	1/2"	2-9/16"	18000	1
RD2571	30°	1"	15/16"	1/2"	2-9/16"	18000	1
RD2572	35°	1-1/4"	7/8"	1/2"	2-9/16"	18000	1
RD2573	45.5°	1-1/2"	3/4"	1/2"	3"	18000	1
RD2574	50°	1-5/8"	11/16"	1/2"	3-1/4"	18000	1
RD2575	55°	1-3/4"	5/8"	1/2"	3-1/4"	18000	1
RD2576	60°	2-1/32"	19/32"	1/2"	3"	18000	2
RD2577	65°	2-1/8"	1/2"	1/2"	3"	18000	2
RD2578	75°	2-1/4"	19/64"	1/2"	2-15/16"	18000	2
RD2579	80°	2-5/16"	3/16"	1/2"	2-3/4"	18000	2
RD2580	45°	48mm	18mm	3/4"	95mm	18000	1+1
RD2582	45°	60mm	25mm	3/4"	100mm	18000	1+1
RD2584	45°	75mm	32mm	3/4"	110mm	14000	1+1
RD2585	30°	52.6mm	44.6mm	20mm	111mm	18000	1
RD2586A	45°	66mm	33mm	20mm	97mm	18000	1
RD2586	45.5°	67mm	33mm	20mm	97mm	18000	1
RD2587	60°	86.6mm	25mm	20mm	97.5mm	18000	2
RD2588	65°	90.6mm	20.8mm	20mm	98mm	18000	2
RD2589	75°	96.6mm	13mm	20mm	90.3mm	18000	2

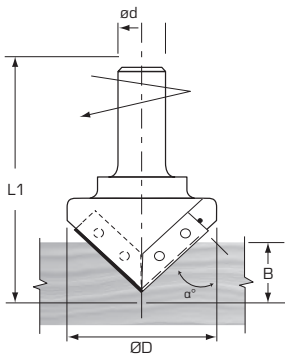
WING CONFIGURATION: Z = 1



WING CONFIGURATION: Z = 1+1



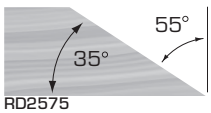
WING CONFIGURATION: Z = 2



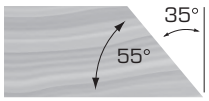
ANGLE OF CUT α°



RD2579



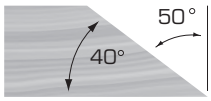
RD2575



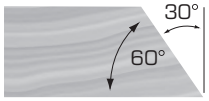
RD2572



RD2578, RD2589



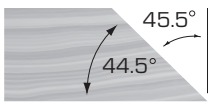
RD2574



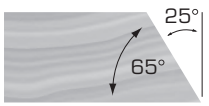
RD2571, RD2585



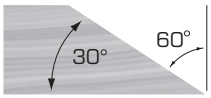
RD2577, RD2588



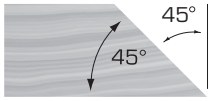
RD2573, RD2586



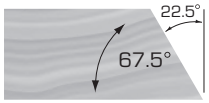
RD2571B



RD2576, RD2587



RD2580, RD2582, RD2584, RD2586A



RD2571A

REPLACEMENT PARTS



TOOL NO.	ANGLE OF CUT α°	DESCRIPTION	KNIFE	KNIFE	SCREW FOR KNIFE	WRENCH
RD2571A	22.5°	PART NO.	302709V	–	WM350	W400405
		DIMENSIONS	27X9X1.5		M3.5X6	T15
RD2571B	25°	PART NO.	302709V	–	WM350	W400405
		DIMENSIONS	27X9X1.5		M3.5X6	T15
RD2571	30°	PART NO.	302709V	–	WM350	W400405
		DIMENSIONS	27X9X1.5		M3.5X6	T15
RD2572	35°	PART NO.	302709V	–	WM350	W400405
		DIMENSIONS	27X9X1.5		M3.5X6	T15
RD2573	45.5°	PART NO.	302812V	–	WM350	W400405
		DIMENSIONS	28X12X1.5		M3.5X6	T15
RD2574	50°	PART NO.	302812V	–	WM350	W400405
		DIMENSIONS	28X12X1.5		M3.5X6	T15
RD2575	55°	PART NO.	302812V	–	WM350	W400405
		DIMENSIONS	28X12X1.5		M3.5X6	T15
RD2576	60°	PART NO.	303012V	303012V	WM407	W400405
		DIMENSIONS	29.8X12X1.5	29.8X12X1.5	M4X8 ★	T15
RD2577	65°	PART NO.	303012V	303012V	WM407	W400405
		DIMENSIONS	29.8X12X1.5	29.8X12X1.5	M4X8 ★	T15
RD2578	75°	PART NO.	303112V	303112V	WM408	W400405
		DIMENSIONS	29.8X12X1.5	29.8X12X1.5	M4X8 ■	T15
RD2579	80°	PART NO.	303112V	303112V	WM408	W400405
		DIMENSIONS	29.8X12X1.5	29.8X12X1.5	M4X8 ■	T15
RD2580	45°	PART NO.	302000	303023	WM350-PL	W400405
		DIMENSIONS	20X12X1.5	30X12X1.5	M3.5X6	T15
RD2582	45°	PART NO.	303000	304023	WM350-PL	W400405
		DIMENSIONS	30X12X1.5	40X12X1.5	M3.5X6	T15
RD2584	45°	PART NO.	304000	305023	WM350-PL	W400405
		DIMENSIONS	40X12X1.5	50X12X1.5	M3.5X6	T15
RD2585	30°	PART NO.	306012V	–	W502306	W400405
		DIMENSIONS	59.7X12x1.5		M4X8 ●	T15
RD2586A	45°	PART NO.	304812V	–	W502306	W400405
		DIMENSIONS	48x12x1.5		M4X8 ●	T15
RD2586	45.5°	PART NO.	304812V	–	W502306	W400405
		DIMENSIONS	48x12x1.5		M4X8 ●	T15
RD2587	60°	PART NO.	305012V	305012V	WM408	W400405
		DIMENSIONS	50x12x1.5	50x12x1.5	M4X8 ■	T15
RD2588	65°	PART NO.	305012V	305012V	WM408	W400405
		DIMENSIONS	50x12x1.5	50x12x1.5	M4X8 ■	T15
RD2589	75°	PART NO.	305012V	305012V	WM408	W400405
		DIMENSIONS	50x12x1.5	50x12x1.5	M4X8 ■	T15

★ Head Diameter - 7.0mm
■ Head Diameter - 8.0mm
● Head Diameter - 9.0mm



DESIGN:

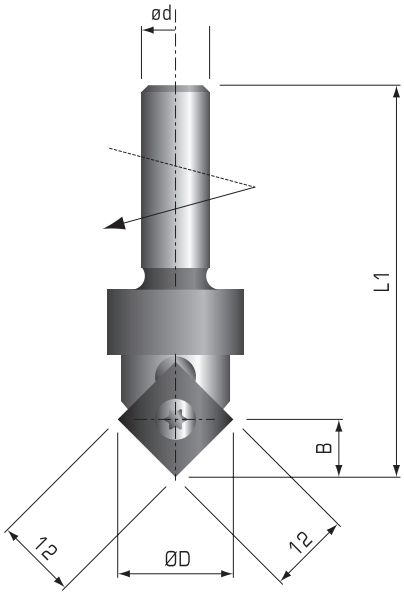
» High tensile steel body with 1 insert knife
» Tungsten carbide insert knife
» Tool body supplied with square insert for profile A. For other profiles, knives ordered separately (refer to chart at the bottom of this page)

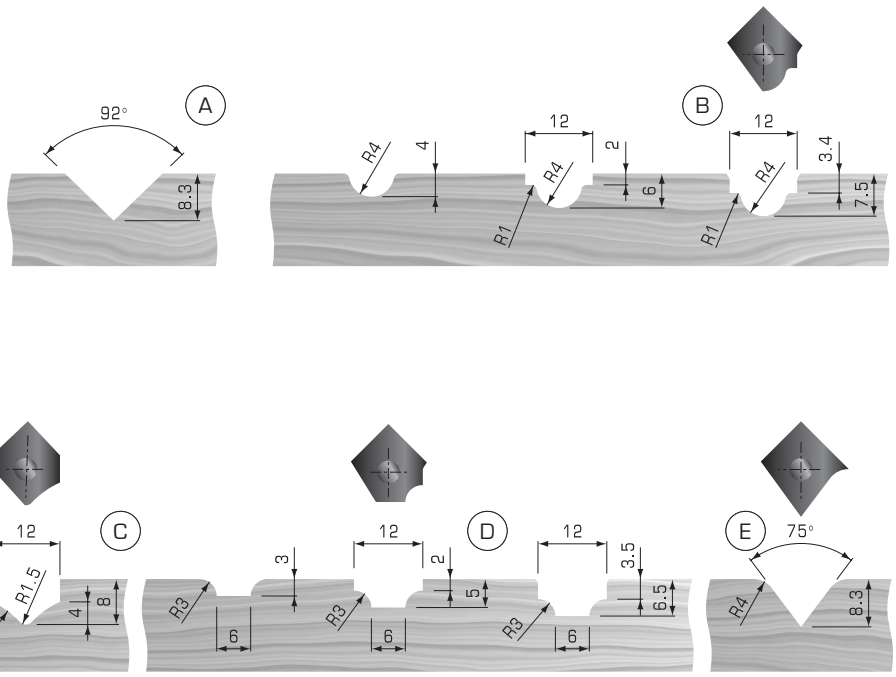
APPLICATION:

» For decorative routing in solid wood and panel materials
» On stationary and CNC routers

PART NO.	CUTTING DIAM. ØD MM	CUTTING DEPTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. TEETH
RD2600	17	8.5	1/2"	58	20000	1

Other profiles available upon request





REPLACEMENT PARTS

TOOL NO.	DESCRIPTION	KNIFE A	KNIFE B	KNIFE C	KNIFE D	KNIFE E	SCREW FOR KNIFE	WRENCH
RD2600	PART NO.	301200	RD2600B	RD2600C	RD2600D	RD2600E	WM350	W400405
	DIMENSIONS	12x12x1.5	12x12x1.5	12x12x1.5	12x12x1.5	12x12x1.5	M3.5x4.8	T15 Torx

RD2610 INSERT ROUTER BIT
MULTI PROFILE

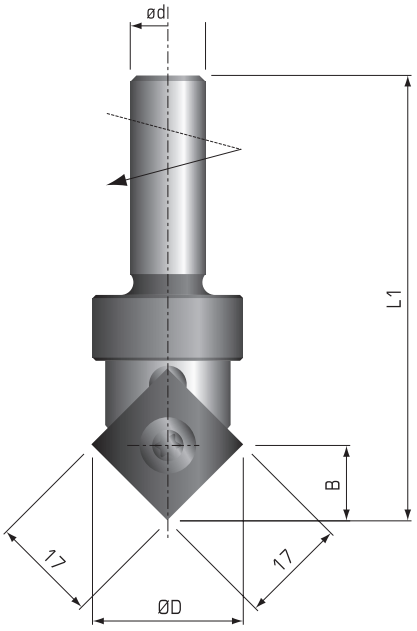


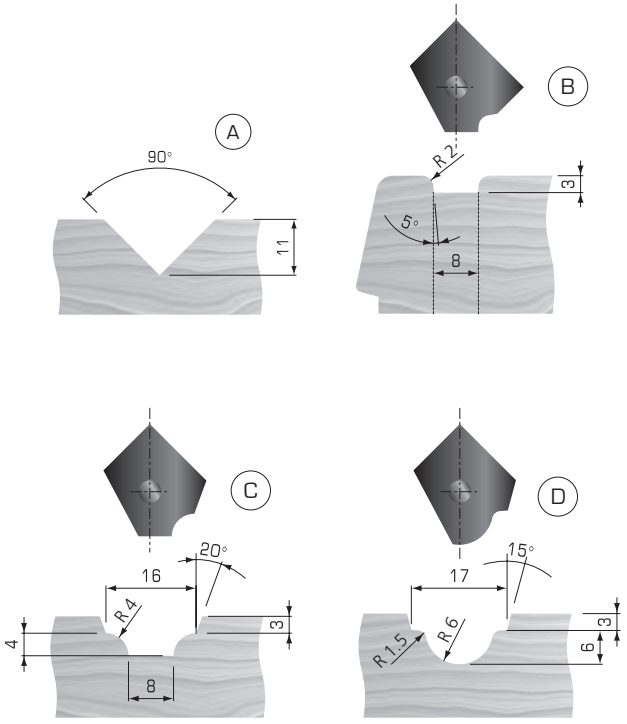
DESIGN:
» High tensile steel body with 1 tungsten carbide insert knife
» Tool body supplied with square insert for profile A. For other profiles, knives ordered separately (refer to chart at the bottom of this page)

APPLICATION:
» For decorative routing in solid wood and panel materials
» On stationary and CNC routers

PART NO.	CUTTING DIAM. ØD MM	CUTTING DEPTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. TEETH
RD2610	24	12	1/2"	76	20000	1

Other profiles available upon request

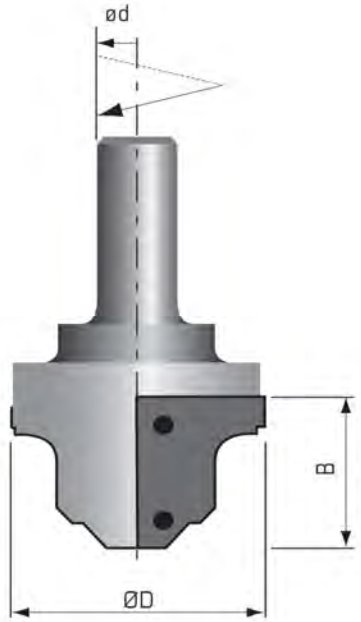




REPLACEMENT PARTS

TOOL NO.	DESCRIPTION	KNIFE A	KNIFE B	KNIFE C	KNIFE D	SCREW FOR KNIFE	WRENCH
RD2610	PART NO.	301701	RD2610B	RD2610C	RD2610D	W502306	W400405
	DIMENSIONS	17x17x2	17x17x2	17x17x2	17x17x2	M4x6	T15 Torx

RD2620 INSERT ROUTER BIT SET
FOR MDF DOORS

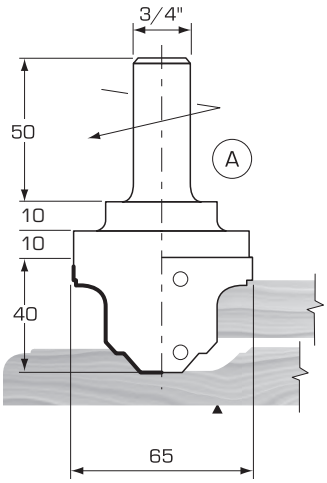


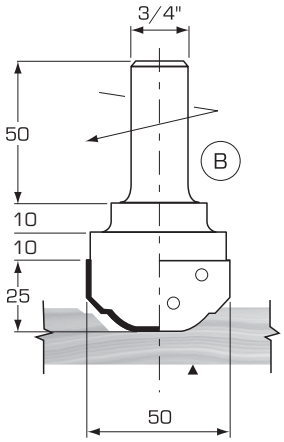
DESIGN:
» High tensile steel body with 1or 2 insert knives
» Tool body supplied with positioning pins for easy and accurate replacement of inserts
» Profiled tungsten carbide inserts with 1 cutting edge

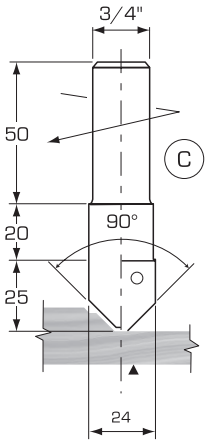
APPLICATION:
» For machining MDF cabinet doors
» On CNC routers

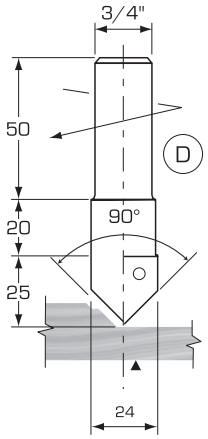
PART NO.	TOOL NO.	CUTTING DIAM. ØD MM	CUTTING DEPTH B MM	SHANK DIAM. ød	MAX. RPM	NO. TEETH
RD2620	A	65	40	3/4"	16000	2
RD2622	B	50	25	3/4"	18000	2
RD2624	C	24	25	3/4"	20000	1
RD2626	D	24	25	3/4"	20000	1

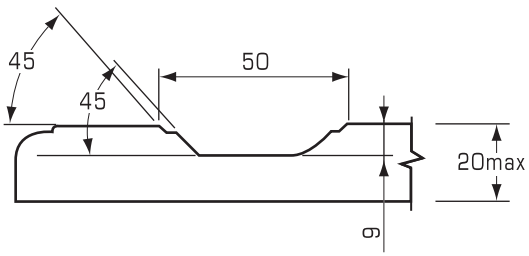
Other profiles available upon request









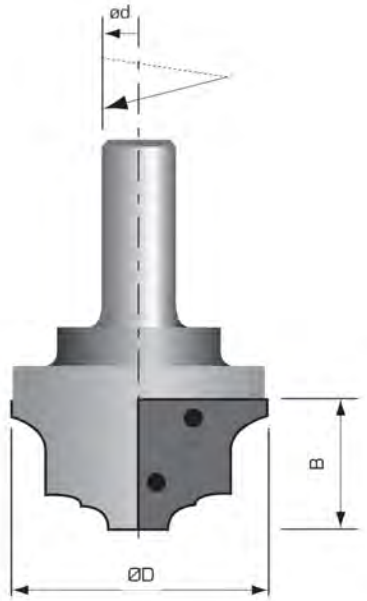


REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
RD2620	**PART NO.**	**RD2620A**	**WM350-PL**	**W400405**
	DIMENSIONS	40x35x2.0	M3.5x5L	T15 Torx
RD2622	**PART NO.**	**RD2622B**	**WM350-PL**	**W400405**
	DIMENSIONS	30x25x2.0	M3.5x5L	T15 Torx
RD2624	**PART NO.**	**RD2624C**	**WM350-PL**	**W400405**
	DIMENSIONS	25x12x1.5	M3.5x5L	T15 Torx
RD2626	**PART NO.**	**RD2626D**	**WM350-PL**	**W400405**
	DIMENSIONS	25x12x1.5	M3.5x5L	T15 Torx

RD2630 INSERT ROUTER BIT SET
FOR MDF DOORS

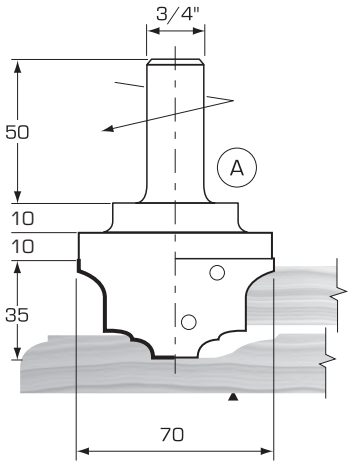


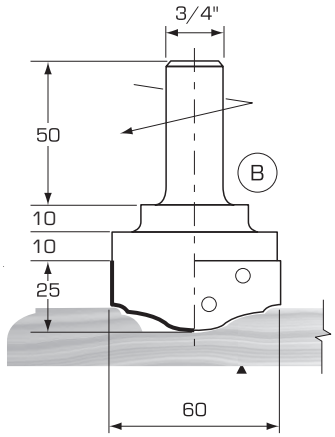
DESIGN:
» High tensile steel body with 2 insert knives
» Tool body pvositioning pins for easy and accurate replacement of inserts
» Profiled tungsten carbide inserts with 1 cutting edge

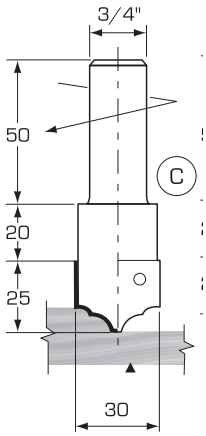
APPLICATION:
» For machining MDF cabinet doors
» On CNC routers

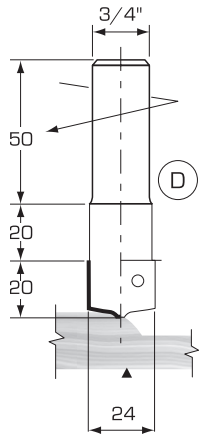
PART NO.	TOOL NO.	CUTTING DIAM. ØD MM	CUTTING DEPTH B MM	SHANK DIAM. ød	MAX. RPM	NO. TEETH
RD2630	A	70	35	3/4"	16000	2
RD2632	B	60	25	3/4"	18000	2
RD2634	C	30	25	3/4"	20000	2
RD2636	D	24	20	3/4"	20000	2

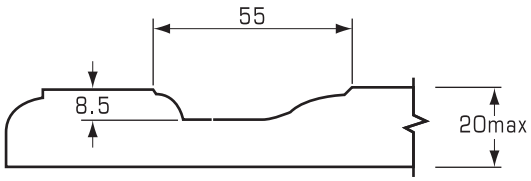
Other profiles available upon request











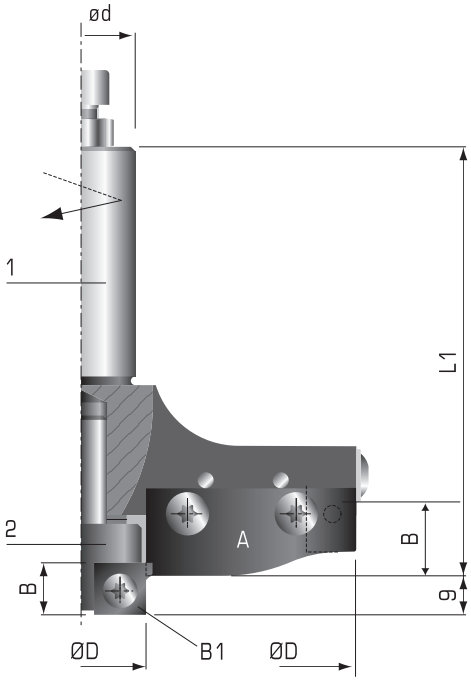
REPLACEMENT PARTS

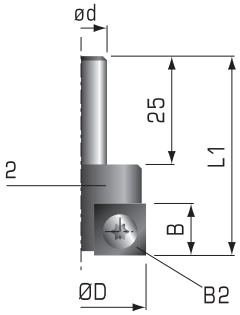


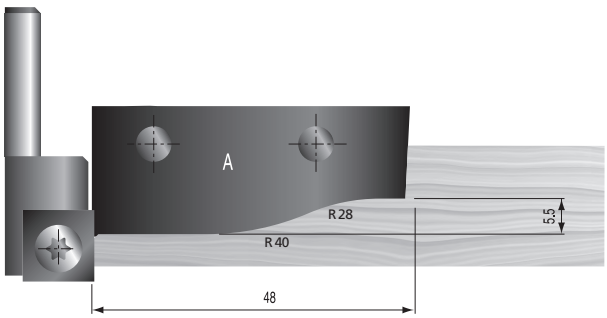


TOOL NO.	DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
RD2630	PART NO.	RD2630A	WM350-PL	W400405
	DIMENSIONS	35x35x2.0	M3.5x5L	T15 Torx
RD2632	PART NO.	RD2632B	WM350-PL	W400405
	DIMENSIONS	30x25x2.0	M3.5x5L	T15 Torx
RD2634	PART NO.	RD2634C	WM350-PL	W400405
	DIMENSIONS	25x25x2.0	M3.5x5L	T15 Torx
RD2636	PART NO.	RD2636D	WM350-PL	W400405
	DIMENSIONS	20x20x2.0	M3.5x5L	T15 Torx

RD2720 INSERT ROUTER CUTTER
PANEL RAISING







DESIGN:
- » High tensile steel body
- » 2 profiled tungsten carbide insert knives with upshear angle
- » 2 straight reversible tungsten carbide insert knives on the jointing cutter
- » Two piece design allows for optional use of jointing cutter
- » Tool body with positioning pins for easy and accurate replacement of inserts

APPLICATION:
- » For panel raising in solid wood and panel materials
- » On stationary and CNC routers

PART NO.	CUTTING DIAM. ØD MM	CUTTING DEPTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. TEETH
RD2720	129	16	3/4"	99	12000	2
RD2722	30	12	10mm	46	12000	2

REPLACEMENT PARTS



TOOL NO.	DESCRIPTION	PROFILED INSERT	STRAIGHT INSERT	STOP SCREW	SCREW FOR INSERTS	WASHER FOR SCREW	WRENCH
RD2720	**PART NO.**	**RD2720A**	**–**	**W502601**	**W501203**	**W300460**	**W400113**
	DIMENSIONS	50x21.5x2.0	–	M5X10	M5x10	10X5.3	3mm Hex
RD2722	**PART NO.**	**RD2722B1**	**301200 (B2)**	**–**	**W502306**	**W300460**	**W400405**
	DIMENSIONS	12x13x1.5	12x12x1.5	–	M4x6	10X5.3	T15 Torx

Custom profiles available upon request

RD2760 INSERT ROUTER CUTTER
GROOVING



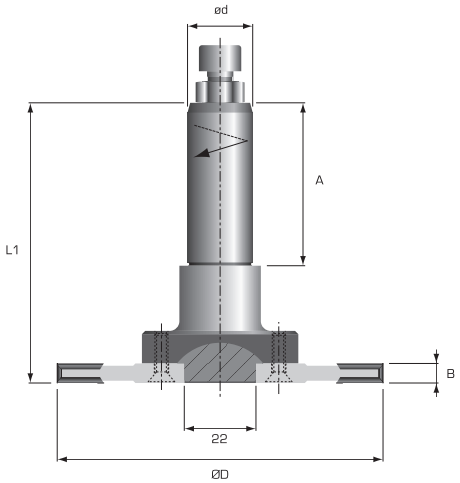
DESIGN:
» High tensile steel body
» 4 reversible tungsten carbide teeth + 4 reversible tungsten carbide spurs with 4 cutting edges

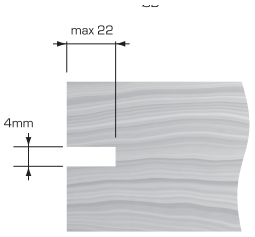
APPLICATION:
» For grooving in solid wood and panel materials
» On stationary and CNC routers

PART NO.	CUTTING DIAM. ØD MM	KERF B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. SPURS	NO. TEETH
RD2760	100	4	3/4"	84	13200	4	4

Other profiles available upon request







REPLACEMENT PARTS



DESCRIPTION	GROOVER	MOUNTING SCREW FOR GROOVER	KNIFE	KNIFE SCREW	THREADED RING FOR KNIFE	SPUR KNIFE	SPUR SCREW	THREADED RING FOR SPUR	WRENCH
PART NO.	1T13L	W500603	320301	W500401	W501101	301414	W500401	W501001	W400401
DIMENSIONS	100x4x22	M4x12	18x18x1.95	M4x3.2	12x1.7	14x14x1.2	M4x3.2	10x1.65	T9 Torx
QUANTITY	1pc	4pcs	4pcs	4pcs	8pcs	4pcs	4pcs	8pcs	1pc

SHAKER

MDF DOOR TOOLING



SHAKER Hogout	SHAKER Inside Radius	SHAKER Corner	SHAKER Highlight	SHAKER Cutout+Radius

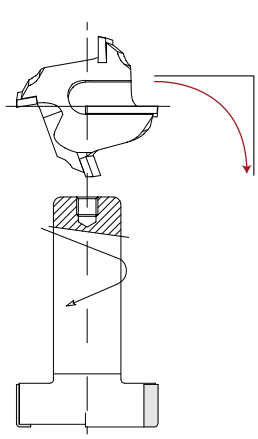
- Perfect-finish, one-piece MDF Shaker door
- Increase your production throughput and eliminate sanding
- 5-piece PCD Diamond tool set

DRS01 MDF DOOR TOOLING SET
SHAKER

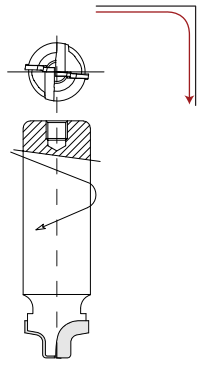


DESIGN:
» Resharpenable PCD cutting edges
» Profiles are designed to blend seamlessly
» Nickel plated to resist erosion of the cutter body
» 5-piece PCD Diamond tool set
» Tools sold individually

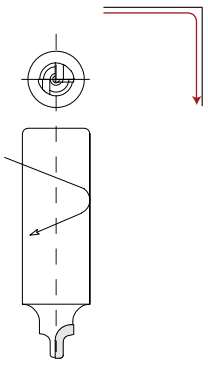
APPLICATION:
» For producing perfect paint ready, one-piece MDF Shaker doors
» Shaker - Hogout: Removes material from the pocket and leaves a smooth, clean surface
» Shaker - Inside Radius: Removes material from the perimeter of the pocket
» Shaker - Corner: Refines the inner corners of the pocket
» Shaker - Highlight: Cuts the fine line that gives the appearance of a traditional 5-piece cabinet door
» Shaker - Cutout + Radius: Cuts the overall outside shape of the door, leaving a clean outside edge with a small top radius



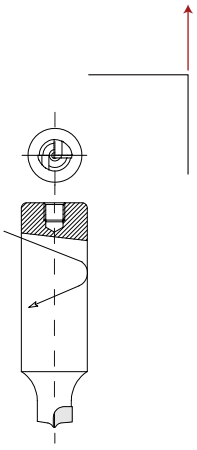
SHAKER - HOGOUT
PART NO. DRS01-D01



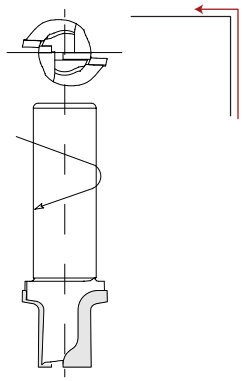
SHAKER - INSIDE RADIUS
PART NO. DRS01-D02



SHAKER - CORNER
PART NO. DRS01-D03



SHAKER - HIGHLIGHT
PART NO. DRS01-D04



SHAKER - CUTOUT + RADIUS
PART NO. DRS01-D05

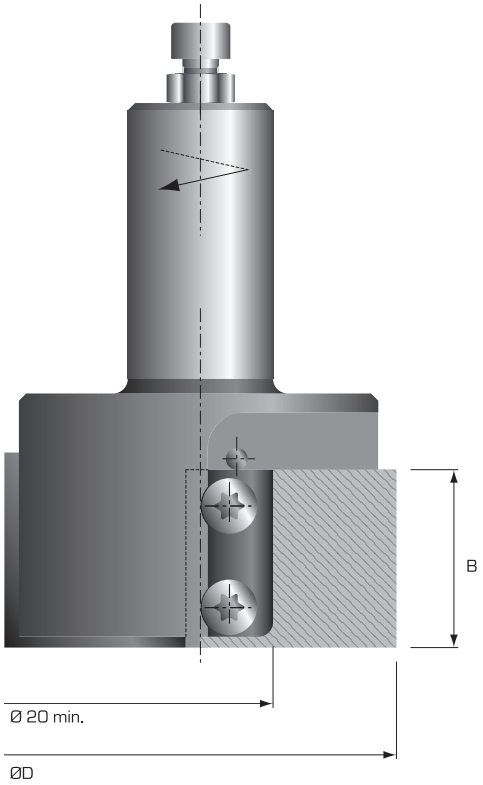
PART NO.	DESCRIPTION	LARGE CUTTING DIAM.	SMALL CUTTING DIAM.	RADIUS MM	CUTTING DEPTH MM	SHANK DIAM. ød	NO. TEETH	OVERALL LENGTH
DRS01-D01	Hogout	40.0mm	-	-	8.5	3/4"	3+1	65mm
DRS01-D02	Inside Radius	18.0mm	8.0mm	2.0	6.5	3/4"	2	67mm
DRS01-D03	Corner	10.0mm	4.0mm	2.0	6.5	3/4"	1	65mm
DRS01-D04	Highlight	10.4mm	0.5mm	2.0	1.3	3/4"	1	65mm
DRS01-D05	Cutout + Radius	26.0mm	16.0mm	2.0	19.25	3/4"	2	80mm



PART NO:
AER-59W-HOLDER

Aerotech Universal®

ENHANCED DUST EXTRACTION:
» Use with the Aeroech Universal Hydro + extended fan with open mouth design for unparrelled dust extraction and cut quality (see page FC3, FC9)
» Enhanced dust removal reduces tool wear and re-cutting of dust, leaving parts clean and your work area ready for the next cycle
» Use with DRS01-D01 and DRS01-D05 for exceptional dust extraction

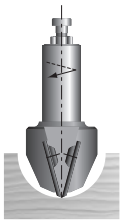


DESIGN:

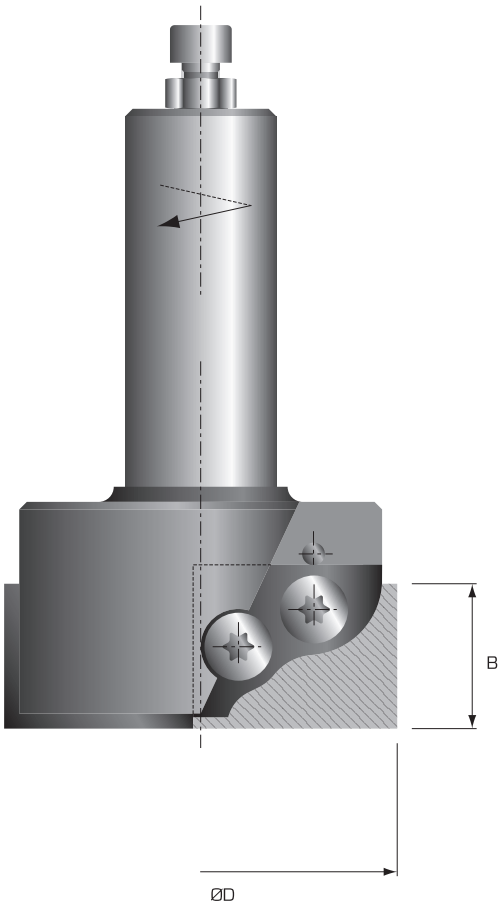
» High tensile steel body with 2 inserts, up-shear angle
» Profiles produced to customer's specifications
» Light shaded section of insert indicates profiling area
» Tungsten carbide insert knives

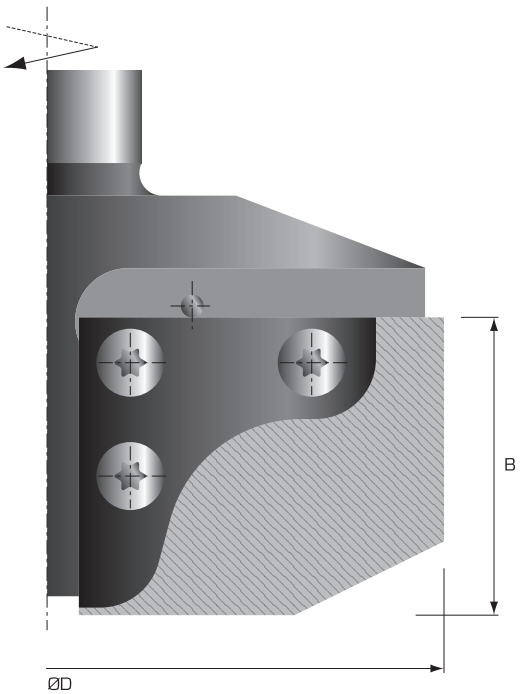
APPLICATION:

» To produce decorative profiles for furniture and cabinet door production
» On stationary and CNC routers



Z=2



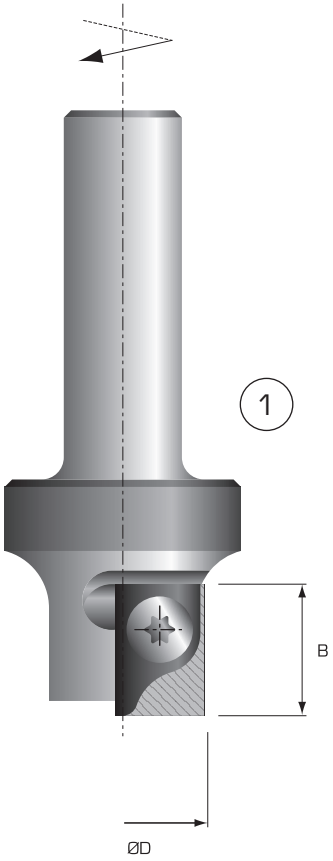


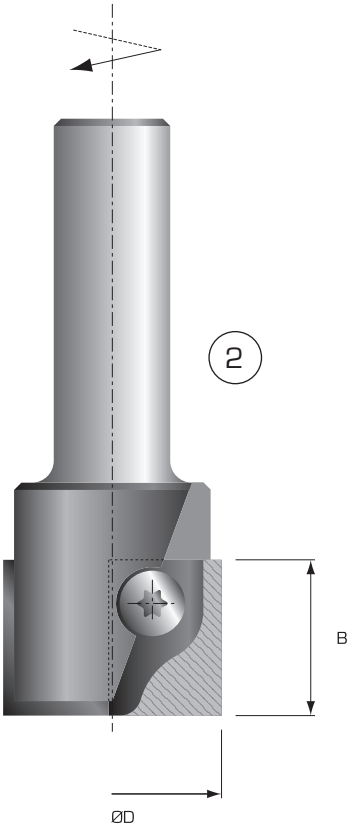
DESIGN:

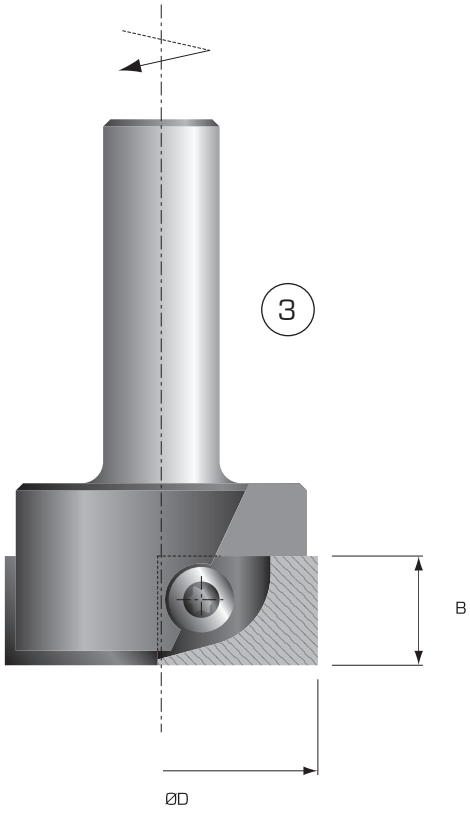
» High tensile steel body with 1 or 2 profiled inserts, up-shear angle
» Profiles produced to customer's specifications
» Light shaded section of insert indicates profiling area
» Tungsten carbide insert knives

APPLICATION:

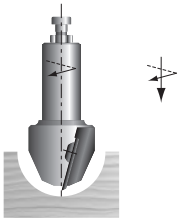
» To produce decorative profiles for furniture and cabinet door production
» On stationary and CNC routers



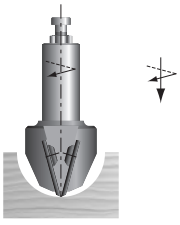


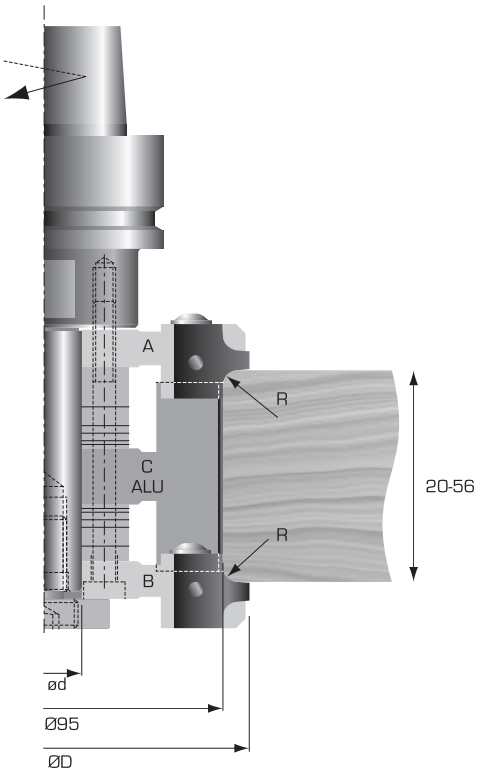


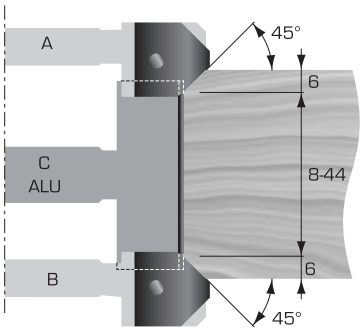
Z=1



Z=2







DESIGN:

- » High tensile steel body with 2 teeth, for cutter A & B
- » Aluminum body with 2 teeth, for cutter C
- » Cutter set supplied with toolholder as indicated
- » Cutters adjustable with spacers and shims
- » Tungsten carbide insert knives

APPLICATION:

- » For corner rounding and chamfering in solid wood and panel materials
- » On stationary and CNC routers

PART NO.	DIAM. ØD MM	KERF B MM	ARBOR ød MM	TOOL HOLDER TYPE	MAX. RPM	NO. TEETH
RD2770	109	20	20	ISO30	10000	2
RD2772	109	20	20	BT30	10000	2
RD2774	109	20	20	HSK63F	10000	2

Cutter type A and B do not include knives

REPLACEMENT CUTTERS

PART NO.	CUTTER TYPE	ØD MM	B MM	ød MM	NO. TEETH
RD2770A	A	109	20	20	2
RD2770C	C	95	50	20	2
RD2770B	B	109	20	20	2

Cutter type A and B do not include knives

REPLACEMENT KNIVES



PART NO.	CUTTER TYPE	RADIUS CHAMFER R MM	DIMENSIONS MM
RD2770R2	A-B	2	20x21x2
RD2770R3	A-B	3	20x21x2
RD2770R4	A-B	4	20x21x2
RD2770R5	A-B	5	20x21x2
RD2770R6	A-B	6	20x21x2
RD2770-45	A-B	45°	20x21x2
305000	C	-	50x12x1.5

REPLACEMENT PARTS



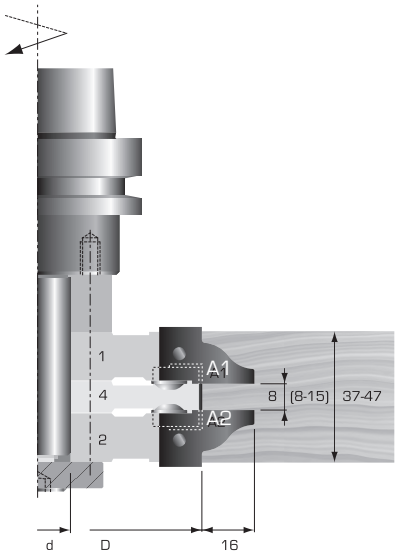
TOOL NO.	DESCRIPTION	GIB	SCREW FOR GIB	WRENCH
RD2770A RD2770B	PART NO.	W341001	W501403	W400114
	DIMENSIONS	16	M8x16	4mm Hex
RD2770C	PART NO.	W341002	W501403	W400114
	DIMENSIONS	46	M8x16	4mm Hex

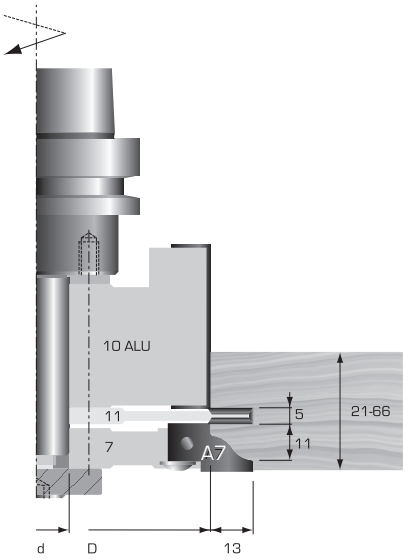
DESIGN:

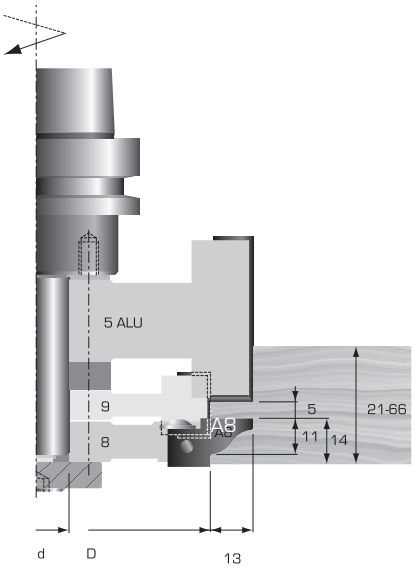
» Router cutters custom manufactured to customer's specifications
» Tungsten carbide inserts

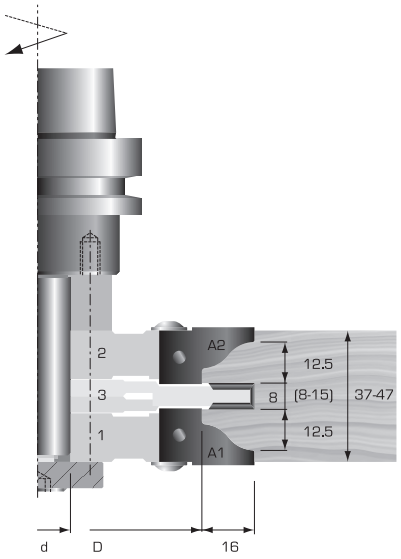
APPLICATION:

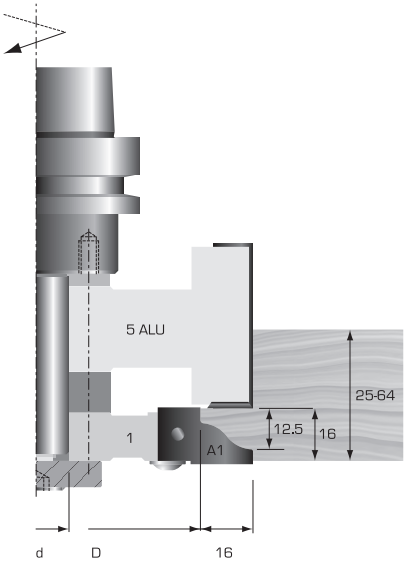
» To produce stile and rails in solid wood
» On stationary and CNC routers

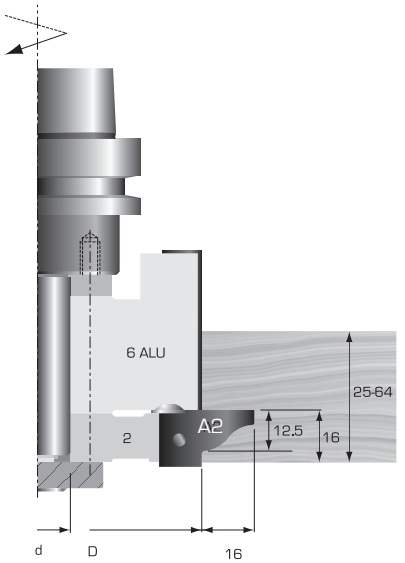


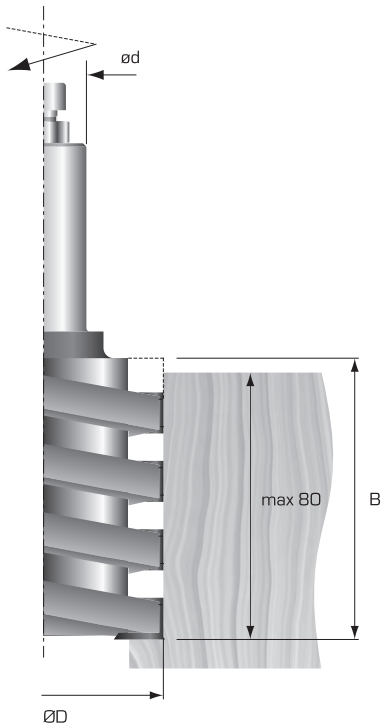












DESIGN:

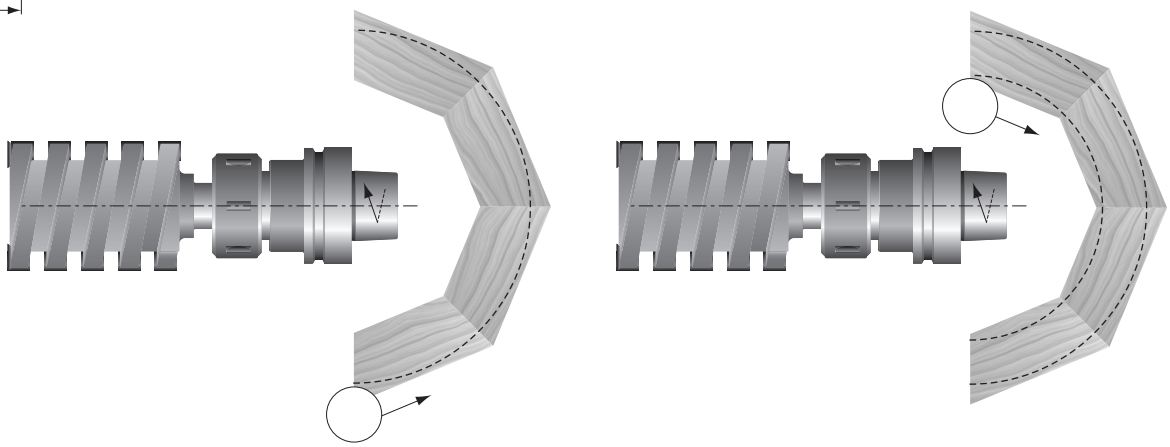
» High tensile steel body
» Spiral and staggered tooth design with reversible tungsten carbide inserts with 4 cutting edges
» 2 reversible tungsten carbide spurs

APPLICATION:

» For jointing and shaping solid wood components
» Ideal for arched window frame manufacturing
» On stationary and CNC routers

PART NO.	CUTTING DIAM. ØD MM	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH MM	MAX. RPM	NO. SPURS	NO. TEETH
RD2810	70	82	3/4"	140	14000	2	4/16

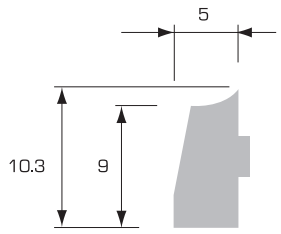
Other sizes available upon request



REPLACEMENT PARTS

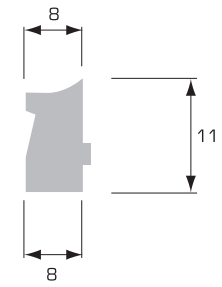


DESCRIPTION	KNIFE	WEDGE	WEDGE SCREW	SPUR	SPUR SCREW	WRENCH FOR WEDGE SCREW	WRENCH FOR SPUR SCREW
PART NO.	301200	W340033	W501414	301404	W500002	W400113	W400405
DIMENSIONS	12x12x1.5	9	M6x8	14x14x2	M5x6.5	3mm Hex	T15 Torx



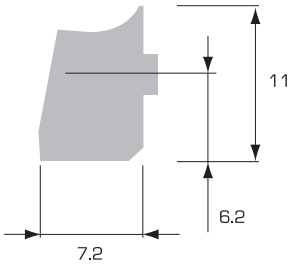
WEDGES

PART NO.	LENGTH MM
W302411	32
W302410	54



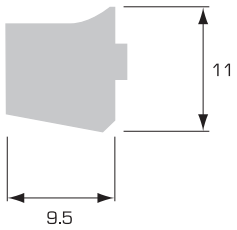
WEDGES

PART NO.	LENGTH MM
W303017	37
W303016	47
W303015	57



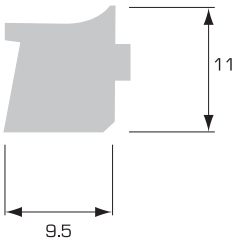
WEDGES

PART NO.	LENGTH MM
W340033	9
W340034	27



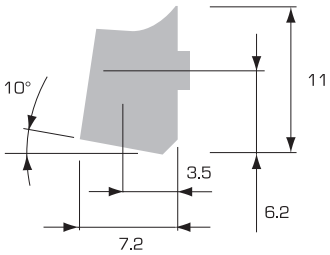
WEDGES

PART NO.	LENGTH MM
W340032	42
W340035	47



WEDGES

PART NO.	LENGTH MM
W341001	16
W341099	38
W341002	46



WEDGES

PART NO.	LENGTH MM
W340037	9



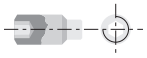
WEDGES

PART NO.	DIMENSIONS MM
W300803	28x5x2.0
W300805	26x9.5x2.5
W300806	46x9.5x2.5
W300905	26x9.5x3.5
W300906	46x9.5x3.5



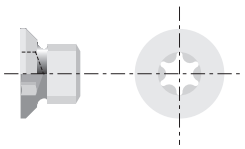
WEDGE SCREWS

PART NO.	DIMENSIONS MM
W501306	M6x10



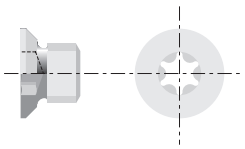
WEDGE SCREWS

PART NO.	DIMENSIONS MM
W501314	M3x4
W501414	M6x8
W501402	M6x10
W501412	M8x14
W501403	M8x16



TORX SCREWS

PART NO.	DIMENSIONS MM
W500002	M5x7



TORX SCREWS

PART NO.	DIMENSIONS MM
W500401	M4x3.2



TORX SCREWS

PART NO.	DIMENSIONS MM
WM350-P	M3.5x7.5
WM336	M6x10



TORX SCREWS

PART NO.	DIMENSIONS MM
WM350	3.5x6.0



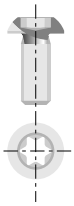
TORX SCREWS

PART NO.	DIMENSIONS MM
WM350-PL	3.5x6.0



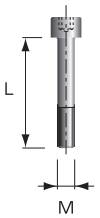
TORX SCREWS

PART NO.	DIMENSIONS MM
WM355	M3x5.5
WM356	M3.5x6.0
WM380	M3x8.0
WM420	M4x2.0



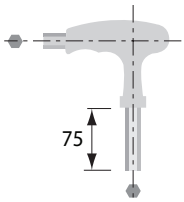
TORX SCREWS

PART NO.	DIMENSIONS MM
W502301	M4x6.0
W502302	M4x10
W502303	M4x12
W502306	M4x8
W502310	M3.5x4.8
W502315	M5x8
W502331	M3x4



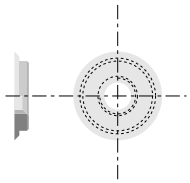
HEX SCREWS

PART NO.	DIMENSIONS MM
W501731	M6x75



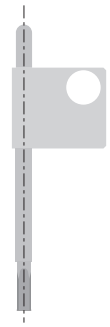
T-HANDLE DUAL ALLEN WRENCHES

PART NO.	DIMENSIONS MM
W400113	3



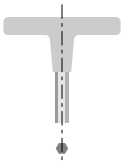
THREADED RINGS

PART NO.	DIMENSIONS MM
W501001	10x1.65
W501101	12x1.7



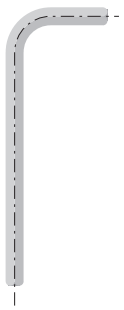
TORX WRENCHES

PART NO.	DIMENSIONS MM
W400406	T8
W400401	T9
W400405	T15



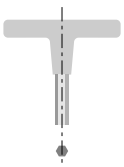
T-HANDLE TORX WRENCHES

PART NO.	DIMENSIONS MM
W400420	T20
W400430	T30



ALLEN WRENCHES

PART NO.	DIMENSIONS MM
W40000A	1.5
W400000	2
W400002	3
W400003	4



T-HANDLE ALLEN WRENCHES

PART NO.	DIMENSIONS MM
W400101	2.5
W400111	4 (LONG)
W400114	4
W400115	5



DRILL BITS / HINGE BORING BITS

Drill Bit Adaptors / Mortise Bits

INDEX

DRILL BITS - TABLE OF CONTENTS

PRODUCT CATEGORY	PAGE NO.
45° COUNTERSINK	G21
BORING DRILLS	G22 - G28
CUSTOM COUNTERBORE BIT	G31, G32
CUSTOM COUNTERSINK BIT	G31, G32
DOWEL DRILLS	G10, G14, G18
DRILL ADAPTORS	G20
DRILL BUSHING	G20
HIGH PRECISION DOWEL DRILLS	G1, G3
HIGH PRECISION THROUGH HOLE DRILLS	G2, G20
HOLZ-HER BORING DRILLS	G22
HOLZ-HER DOWEL DRILLS	G11
INSERT BORING DRILLS	G26
MORIBIDELLI QUICK CHANGE DRILL ADAPTORS	G30
NO CENTER POINT BORING DRILLS	G23
PRECISION DOWEL DRILLS	G4
PRECISION THROUGH HOLE DRILLS	G5
QUICK CHANGE DRILL ADAPTORS	G29, G30
SOLID CARBIDE BORING DRILLS	G27, G28
SOLID CARBIDE DOWEL DRILLS	G5, G6
SOLID CARBIDE THROUGH HOLE DRILLS	G6, G7
TAPERED THREADED DRILL ADAPTORS	G29
THREADED DRILL ADAPTORS	G28
THREADED SHANK COUNTERSINK DOWEL DRILLS	G8
THREADED SHANK DOWEL DRILLS	G7, G9
THROUGH HOLE BORING DRILLS	G27
THROUGH HOLE DRILLS	G15 - G17, G19

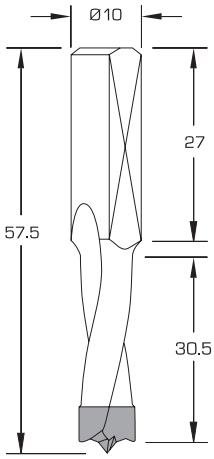
DRILL BITS - ALPHA-NUMERIC INDEX

PART NO.	PAGE NO.
D001208L - D0013R	G28
D001408L - D0014R	G29
D0020 - D0040	G20
D00520 - D00540	G20
D14A15L - D14A7/8R	G22
D14A30L-H - D14A35R-H	G22
D14B25L - D14B40R	G23
D14C15 - D14C40	G27
D14D15 - D14D3/4	G25
D14E25L - D14E40R	G26
D14H25L - D14H40R	G23
D15A15L - D15A3/4R	G24
D16A15L - D16A35R	G24
D30A15L - D30A35R	G27
D35A15L - D35A35R	G28
D40L05L - D40L10R	G1
D40M05L - D40M10R	G1
D40N05L - D40N10R	G2
D40Y05L - D40Y10R	G2
D41L04L - D41L08R	G3
D41M04L - D41M08R	G3
D42L04L - D42L12R	G4
D42M04L - D42M12R	G4
D42Y05L - D42Y10R	G5
D45L03L - D45L10R	G5
D45M03L - D45M10R	G6
D45N03L - D45N10R	G6
D45Y03L - D45Y10R	G7
D50A05L - D50A12R	G18
D50B05L - D50B12R	G18
D50C05L - D50C08R	G19
D50D05L - D50D08R	G19
D50E05L - D50E1/2R	G10
D50F04L - D50F5/8R	G10
D50F08L-H - D50F08R-H	G11
D50G04L - D50G5/8R	G11

PART NO.	PAGE NO.
D50GL05L - D50GL12R	G12
D50GX05L - D50GX12R	G12
D50H04L - D50H7/16R	G15
D50HS20L - D50HS40R	G20
D50I05L - D50I10R	G13
D50K04L - D50K1/2R	G15
D50L04L - D50L5/8R	G13
D50M04L - D50M5/8R	G14
D50N04L - D50N12R	G16
D50P05L - D50P12R	G7
D50PS05L - D50PS12R	G8
D50R05L - D50R12R	G9
D50RM04L - D50RM12R	G9
D50RS05L - D50RS12R	G8
D50S04L - D50S1/4R	G21
D50TL - D50UR	G21
D50W04L - D50W12R	G14
D50Y04L - D50Y12R	G17
D50Z05L - D50Z12R	G17
M140 - M141R	G29
M160 - M170	G30

D40L 57.5MM HIGH PRECISION DOWEL DRILLS
10MM DIAM. X 27MM LONG SHANK





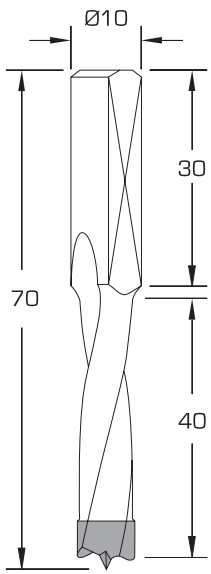
APPLICATION:
» Used in high wear applications
» Tool life increased up to 10 times compared to traditional dowel drills
» For blind flat bottom holes

DESIGN:
» Precision ground diameter
» Rigid body reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D40L05L	D40L05R	5	30.5	10	27	57.5
D40L06L	D40L06R	6	30.5	10	27	57.5
D40L08L	D40L08R	8	30.5	10	27	57.5
D40L10L	D40L10R	10	37.5	10	20	57.5

D40M 70MM HIGH PRECISION DOWEL DRILLS
10MM DIAM. X 30MM LONG SHANK



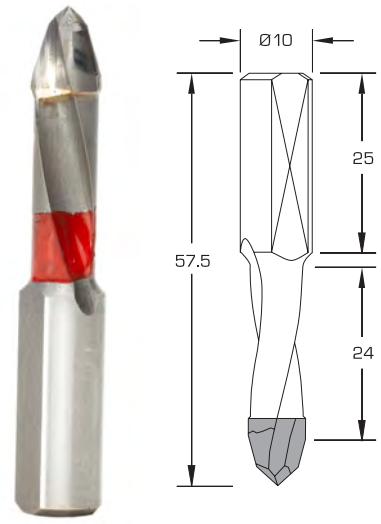


APPLICATION:
» Used in high wear applications
» Tool life increased up to 10 times compared to traditional dowel drills
» For blind flat bottom holes

DESIGN:
» Precision ground diameter
» Rigid body reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D40M05L	D40M05R	5	40	10	30	70
D40M06L	D40M06R	6	40	10	30	70
D40M08L	D40M08R	8	40	10	30	70
D40M10L	D40M10R	10	40	10	30	70

D40N 57.5MM HIGH PRECISION THROUGH HOLE DRILLS
10MM DIAM. X 25MM LONG SHANK

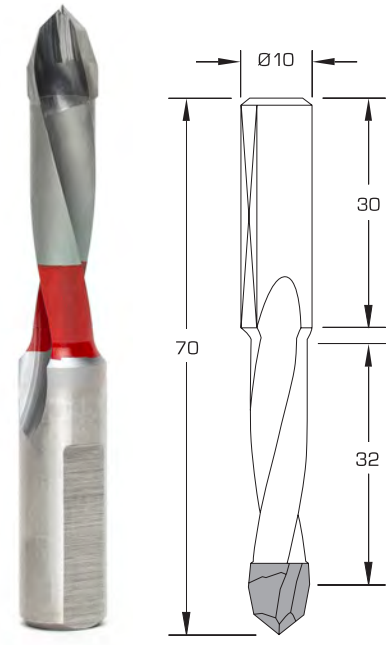


APPLICATION:
» Used in high wear applications
» Tool life increased up to 10 times compared to traditional through hole drills
» For clean pass-through holes

DESIGN:
» Precision ground diameter
» Rigid body reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D40N05L	D40N05R	5	24	10	25	57.5
D40N06L	D40N06R	6	24	10	25	57.5
D40N08L	D40N08R	8	24	10	25	57.5
D40N10L	D40N10R	10	24	10	25	57.5

D40Y 70MM HIGH PRECISION THROUGH HOLE DRILLS
10MM DIAM. X 30MM LONG SHANK

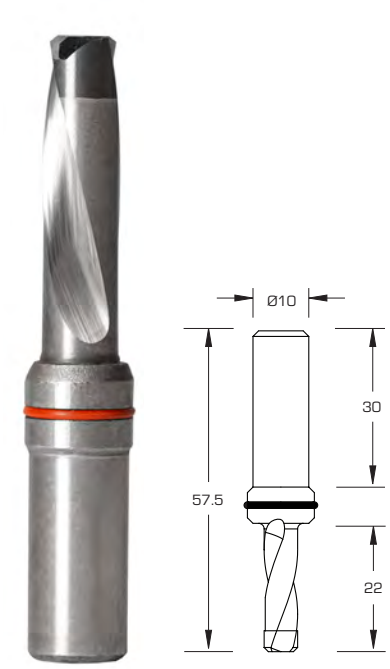


APPLICATION:
» Used in high wear applications
» Tool life increased up to 10 times compared to traditional through hole drills
» For clean pass-through holes

DESIGN:
» Precision ground diameter
» Rigid body reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D40Y05L	D40Y05R	5	32	10	30	70
D40Y06L	D40Y06R	6	32	10	30	70
D40Y08L	D40Y08R	8	32	10	30	70
D40Y10L	D40Y10R	10	32	10	30	70

D41L 57.5MM HIGH PRECISION DOWEL DRILLS
10MM DIAM. X 25MM LONG SHANK

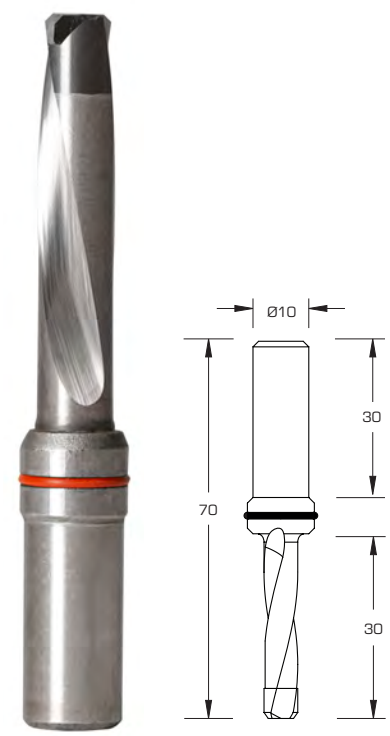


APPLICATION:
- Used in high wear applications
- Chip free clean holes
- For clean flat bottom holes
- Ideal for drilling thinner panels without center point/spurs projection on bottom of panel

DESIGN:
- Solid carbide precision ground diamter with 2 wings and 2 radius spurs with minimal spur projection
- Rigid body reduces deflection
- Tool life increased dramatically

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D41L04L	D41L04R	4	22	10	30	57.5
D41L05L	D41L05R	5	22	10	30	57.5
D41L055L	D41L055R	5.5	22	10	30	57.5
D41L06L	D41L06R	6	22	10	30	57.5
D41L1/4L	D41L1/4R	1/4"	22	10	30	57.5
D41L07L	D41L07R	7	22	10	30	57.5
D41L08L	D41L08R	8	22	10	30	57.5

D41M 70MM HIGH PRECISION DOWEL DRILLS
10MM DIAM. X 30MM LONG SHANK

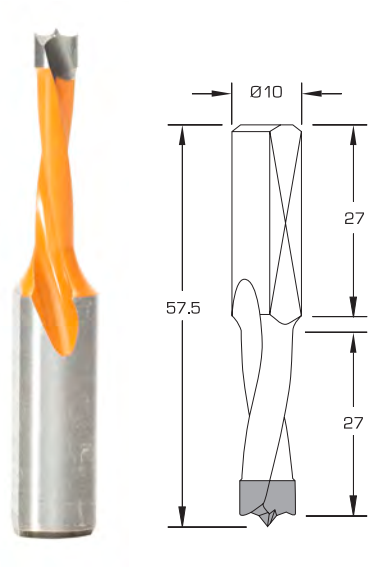


APPLICATION:
- Used in high wear applications
- Chip free clean holes
- For clean flat bottom holes
- Ideal for drilling thinner panels without center point/spurs projection on bottom of panel

DESIGN:
- Solid carbide precision ground diamter with 2 wings and 2 radius spurs with minimal spur projection
- Rigid body reduces deflection
- Tool life increased dramatically

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D41M04L	D41M04R	4	30	10	30	70
D41M05L	D41M05R	5	30	10	30	70
D41M055L	D41M055R	5.5	30	10	30	70
D41M06L	D41M06R	6	30	10	30	70
D41M1/4L	D41M1/4R	1/4"	30	10	30	70
D41M07L	D41M07R	7	30	10	30	70
D41M08L	D41M08R	8	30	10	30	70

D42L 57.5MM PRECISION DOWEL DRILLS
10MM DIAM. X 27MM LONG SHANK

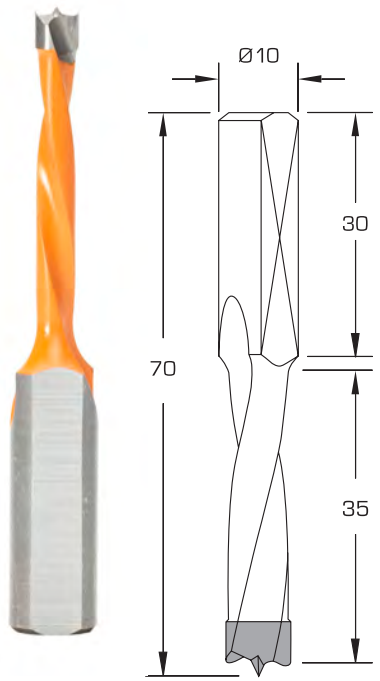


APPLICATION:
» Used in high wear applications
» Extended life compared to traditional dowel drills
» For blind flat bottom holes

DESIGN:
» Precision ground diameter
» Round spurs to ensure chip-free drilling

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D42L04L	D42L04R	4	27	10	27	57.5
D42L05L	D42L05R	5	27	10	27	57.5
D42L06L	D42L06R	6	27	10	27	57.5
D42L07L	D42L07R	7	27	10	27	57.5
D42L08L	D42L08R	8	27	10	27	57.5
D42L09L	D42L09R	9	27	10	27	57.5
D42L10L	D42L10R	10	27	10	27	57.5
D42L12L	D42L12R	12	27	10	27	57.5

D42M 70MM PRECISION DOWEL DRILLS
10MM DIAM. X 30MM LONG SHANK



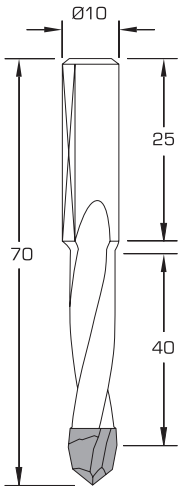
APPLICATION:
» Used in high wear applications
» Extended life compared to traditional dowel drills
» For blind flat bottom holes

DESIGN:
» Precision ground diameter
» Round spurs to ensure chip-free drilling

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D42M04L	D42M04R	4	35	10	30	70
D42M05L	D42M05R	5	35	10	30	70
D42M06L	D42M06R	6	35	10	30	70
D42M07L	D42M07R	7	35	10	30	70
D42M08L	D42M08R	8	35	10	30	70
D42M09L	D42M09R	9	35	10	30	70
D42M10L	D42M10R	10	35	10	30	70
D42M12L	D42M12R	12	35	10	30	70

D42Y 70MM PRECISION THROUGH HOLE DRILLS
10MM DIAM. X 25MM LONG SHANK





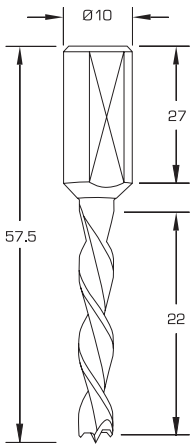
APPLICATION:
» Used in high wear applications
» Extended life compared to traditional through hole drills
» For clean pass-through holes

DESIGN:
» Precision ground diameter
» Finishing edges to ensure chip-free drilling

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D42Y05L	D42Y05R	5	40	10	25	70
D42Y06L	D42Y06R	6	40	10	25	70
D42Y07L	D42Y07R	7	40	10	25	70
D42Y08L	D42Y08R	8	40	10	25	70
D42Y10L	D42Y10R	10	40	10	25	70

D45L 57.5MM SOLID CARBIDE DOWEL DRILLS
10MM DIAM. X 27MM LONG SHANK





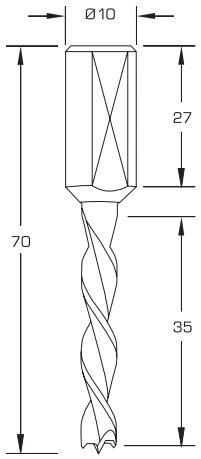
APPLICATION:
» Improved precision on hard materials
» Increased tool life due to solid carbide body
» For blind flat bottom holes

DESIGN:
» Precision ground diameter
» Rigid solid carbide body resists deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D45L03L	D45L03R	3	22	10	27	57.5
D45L04L	D45L04R	4	22	10	27	57.5
D45L05L	D45L05R	5	22	10	27	57.5
D45L06L	D45L06R	6	22	10	27	57.5
D45L08L	D45L08R	8	22	10	27	57.5
D45L10L	D45L10R	10	22	10	27	57.5

D45M 70MM SOLID CARBIDE DOWEL DRILLS
10MM DIAM. X 27MM LONG SHANK





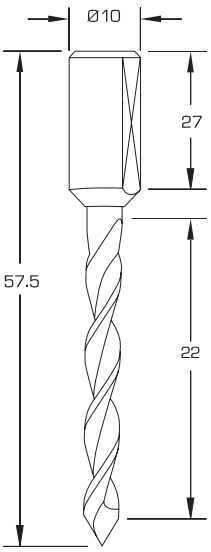
APPLICATION:
» Improved precision on hard materials
» Increased tool life due to solid carbide body
» For blind flat bottom holes

DESIGN:
» Precision ground diameter
» Rigid solid carbide body resists deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D45M03L	D45M03R	3	35	10	30	70
D45M04L	D45M04R	4	35	10	27	70
D45M05L	D45M05R	5	35	10	27	70
D45M06L	D45M06R	6	35	10	27	70
D45M08L	D45M08R	8	35	10	27	70
D45M10L	D45M10R	10	35	10	27	70

D45N 57.5MM SOLID CARBIDE THROUGH HOLE DRILLS
10MM DIAM. X 27MM LONG SHANK



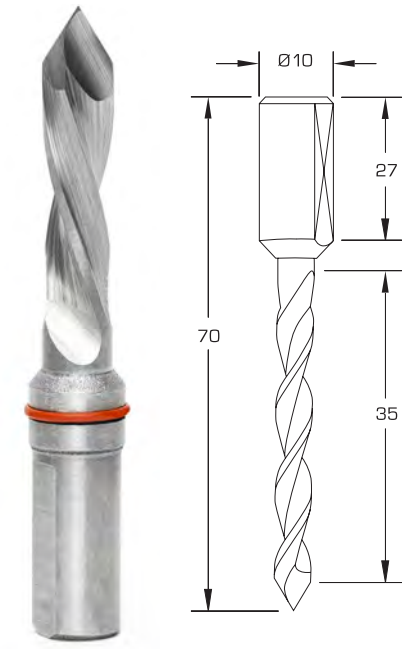


APPLICATION:
» Improved precision on hard materials
» Increased tool life due to solid carbide body
» For clean pass-through holes

DESIGN:
» Precision ground diameter
» Rigid solid carbide body resists deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D45N03L	D45N03R	3	22	10	27	57.5
D45N04L	D45N04R	4	22	10	27	57.5
D45N05L	D45N05R	5	22	10	27	57.5
D45N06L	D45N06R	6	22	10	27	57.5
D45N08L	D45N08R	8	22	10	27	57.5
D45N10L	D45N10R	10	22	10	27	57.5

D45Y 70MM SOLID CARBIDE THROUGH HOLE DRILLS
10MM DIAM. X 27MM LONG SHANK

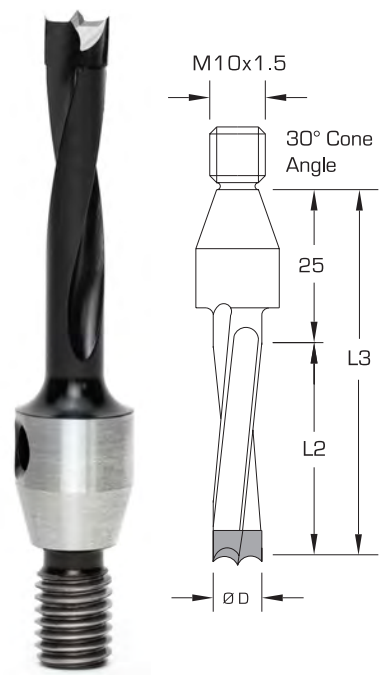


APPLICATION:
» Improved precision on hard materials
» Increased tool life due to solid carbide body
» For clean pass-through holes

DESIGN:
» Precision ground diameter
» Rigid solid carbide body resists deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D45Y03L	D45Y03R	3	35	10	27	70
D45Y04L	D45Y04R	4	35	10	27	70
D45Y05L	D45Y05R	5	35	10	27	70
D45Y06L	D45Y06R	6	35	10	27	70
D45Y08L	D45Y08R	8	35	10	27	70
D45Y10L	D45Y10R	10	35	10	27	70

D50P THREADED SHANK DOWEL DRILLS
M10 X 1.5 X 25MM LONG SHANK

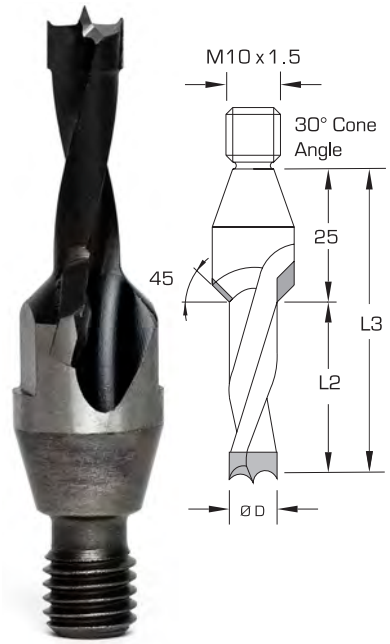


APPLICATION:
» For blind flat bottom holes

DESIGN:
» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH L2	LENGTH L3	SHANK LENGTH	THREAD
D50P05L	D50P05R	5	40	65	25	M10 x 1.5
D50P06L	D50P06R	6	40	65	25	M10 x 1.5
D50P08L	D50P08R	8	40	65	25	M10 x 1.5
D50P10L	D50P10R	10	40	65	25	M10 x 1.5
D50P12L	D50P12R	12	40	65	25	M10 x 1.5

D50PS THREADED SHANK COUNTERSINK DOWEL DRILLS
M10 X 1.5 SHANK

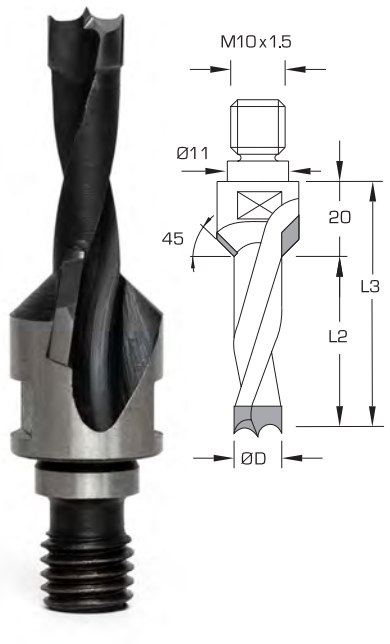


APPLICATION:
» Provides clean 45° countersink cuts
» For blind flat bottom holes

DESIGN:
» Carbide-tipped bradpoint drill end
» Integrated monoblock countersink

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH L2	LENGTH L3	COUNTERSINK ANGLE	CONNECTION TYPE	THREAD
D50PS05L	D50PS05R	5	25	50	45°	Tapered	M10 x 1.5
D50PS06L	D50PS06R	6	25	50	45°	Tapered	M10 x 1.5
D50PS08L	D50PS08R	8	25	50	45°	Tapered	M10 x 1.5
D50PS10L	D50PS10R	10	25	50	45°	Tapered	M10 x 1.5
D50PS12L	D50PS12R	12	25	50	45°	Tapered	M10 x 1.5

D50RS THREADED SHANK COUNTERSINK DOWEL DRILLS
M10 X 1.5 SHANK

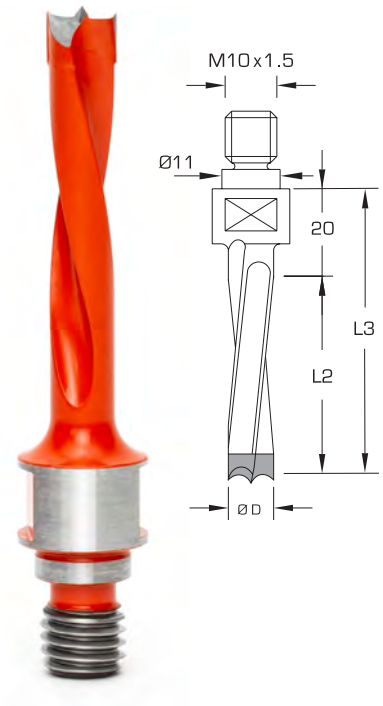


APPLICATION:
» Provides clean 45° countersink cuts
» For blind flat bottom holes

DESIGN:
» Carbide-tipped bradpoint drill end
» Integrated monoblock countersink

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH L2	LENGTH L3	COUNTERSINK ANGLE	COLLAR SIZE	THREAD
D50RS05L	D50RS05R	5	25	45	45°	11	M10 x 1.5
D50RS06L	D50RS06R	6	25	45	45°	11	M10 x 1.5
D50RS08L	D50RS08R	8	25	45	45°	11	M10 x 1.5
D50RS10L	D50RS10R	10	25	45	45°	11	M10 x 1.5
D50RS12L	D50RS12R	12	25	45	45°	11	M10 x 1.5

D50R THREADED SHANK DOWEL DRILLS
M8 X 1.5 X 20MM LONG SHANK



APPLICATION:

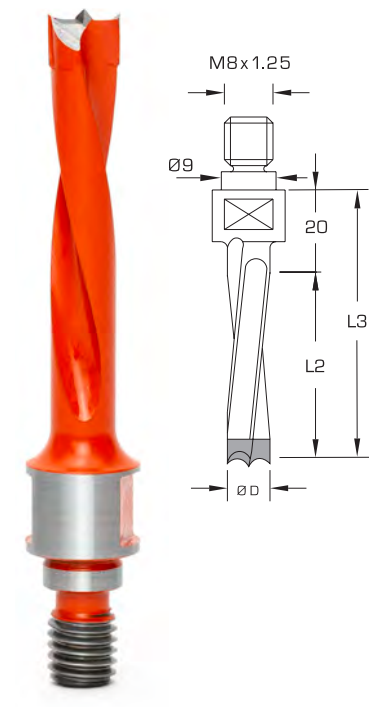
» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH L2	LENGTH L3	COLLAR SIZE	THREAD
D50R05L	D50R05R	5	40	60	11	M10 x 1.5
D50R06L	D50R06R	6	40	60	11	M10 x 1.5
D50R08L	D50R08R	8	40	60	11	M10 x 1.5
D50R10L	D50R10R	10	40	60	11	M10 x 1.5
D50R12L	D50R12R	12	40	60	11	M10 x 1.5

D50RM THREADED SHANK DOWEL DRILLS
M8 X 1.5 X 20MM LONG SHANK



APPLICATION:

» For blind flat bottom holes

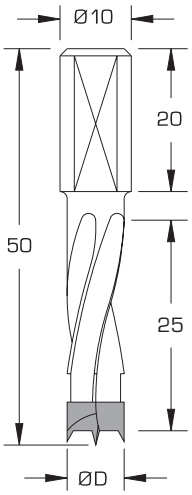
DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH L2	LENGTH L3	COLLAR SIZE	THREAD
D50RM04L	D50RM04R	4	40	60	9	M8 x 1.25
D50RM05L	D50RM05R	5	40	60	9	M8 x 1.25
D50RM06L	D50RM06R	6	40	60	9	M8 x 1.25
D50RM08L	D50RM08R	8	40	60	9	M8 x 1.25
D50RM10L	D50RM10R	10	40	60	9	M8 x 1.25
D50RM12L	D50RM12R	12	40	60	9	M8 x 1.25

D50E 50MM DOWEL DRILLS
10MM DIAM. X 20MM LONG SHANK





APPLICATION:

» For blind flat bottom holes

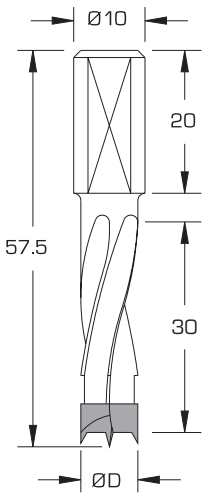
DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50E05L	D50E05R	5	25	10	20	50
D50E06L	D50E06R	6	25	10	20	50
D50E07L	D50E07R	7	25	10	20	50
D50E08L	D50E08R	8	25	10	20	50
D50E09L	D50E09R	9	25	10	20	50
D50E10L	D50E10R	10	25	10	20	50
D50E11L	D50E11R	11	25	10	20	50
D50E12L	D50E12R	12	25	10	20	50
D50E14L	D50E14R	14	25	10	20	50
D50E1/4L	D50E1/4R	1/4"	25	10	20	50
D50E3/8L	D50E3/8R	3/8"	25	10	20	50
D50E1/2L	D50E1/2R	1/2"	25	10	20	50

D50F 57.5MM DOWEL DRILLS
10MM DIAM. X 20MM LONG SHANK





APPLICATION:

» For blind flat bottom holes

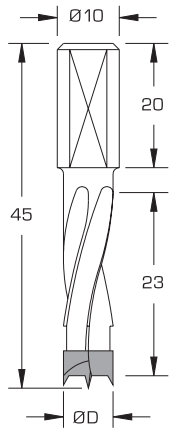
DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50F04L	D50F04R	4	30	10	20	57.5
D50F05L	D50F05R	5	30	10	20	57.5
D50F052L	D50F052R	5.2	30	10	20	57.5
D50F055L	D50F055R	5.5	30	10	20	57.5
D50F06L	D50F06R	6	30	10	20	57.5
D50F065L	D50F065R	6.5	30	10	20	57.5
D50F067L	D50F067R	6.7	30	10	20	57.5
D50F07L	D50F07R	7	30	10	20	57.5
D50F08L	D50F08R	8	30	10	20	57.5
D50F082L	D50F082R	8.2	30	10	20	57.5
D50F09L	D50F09R	9	30	10	20	57.5
D50F10L	D50F10R	10	30	10	20	57.5
D50F11L	D50F11R	11	30	10	20	57.5
D50F12L	D50F12R	12	30	10	20	57.5
D50F14L	D50F14R	14	30	10	20	57.5
D50F15L	D50F15R	15	30	10	20	57.5
D50F16L	D50F16R	16	30	10	20	57.5
D50F3/16L	D50F3/16R	3/16"	30	10	20	57.5
D50F1/4L	D50F1/4R	1/4"	30	10	20	57.5
D50F3/8L	D50F3/8R	3/8"	30	10	20	57.5
D50F1/2L	D50F1/2R	1/2"	30	10	20	57.5
D50F5/8L	D50F5/8R	5/8"	30	10	20	57.5

D50F-H 45MM HOLZ-HER DOWEL DRILLS
10MM DIAM. X 20MM LONG SHANK





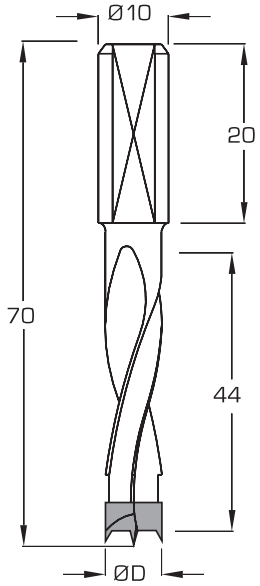
APPLICATION:
» 45mm length for Holz-Her machines
» For blind flat bottom holes

DESIGN:
» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50F08L-H	D50F08R-H	8	23	10	20	45

D50G 70MM DOWEL DRILLS
10MM DIAM. X 20MM LONG SHANK



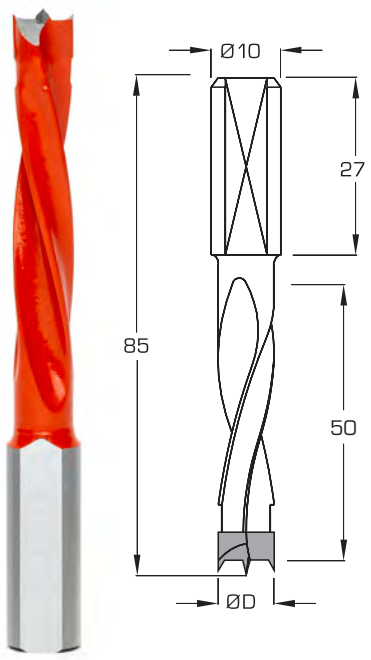


APPLICATION:
» For blind flat bottom holes

DESIGN:
» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50G04L	D50G04R	4	44	10	20	70
D50G05L	D50G05R	5	44	10	20	70
D50G052L	D50G052R	5.2	44	10	20	70
D50G055L	D50G055R	5.5	44	10	20	70
D50G06L	D50G06R	6	44	10	20	70
D50G065L	D50G065R	6.5	44	10	20	70
D50G067L	D50G067R	6.7	44	10	20	70
D50G07L	D50G07R	7	44	10	20	70
D50G075L	D50G075R	7.5	44	10	20	70
D50G079L	D50G079R	7.9	44	10	20	70
D50G08L	D50G08R	8	44	10	20	70
D50G09L	D50G09R	9	44	10	20	70
D50G10L	D50G10R	10	44	10	20	70
D50G11L	D50G11R	11	44	10	20	70
D50G12L	D50G12R	12	44	10	20	70
D50G13L	D50G13R	13	44	10	20	70
D50G14L	D50G14R	14	44	10	20	70
D50G15L	D50G15R	15	44	10	20	70
D50G16L	D50G16R	16	44	10	20	70
D50G17L	D50G17R	17	44	10	20	70
D50G3/16L	D50G3/16R	3/16"	44	10	20	70
D50G1/4L	D50G1/4R	1/4"	44	10	20	70
D50G3/8L	D50G3/8R	3/8"	44	10	20	70
D50G7/16L	D50G7/16R	7/16"	44	10	20	70
D50G1/2L	D50G1/2R	1/2"	44	10	20	70
D50G5/8L	D50G5/8R	5/8"	44	10	20	70

D50GL 85MM DOWEL DRILLS
10MM DIAM. X 27MM LONG SHANK



APPLICATION:

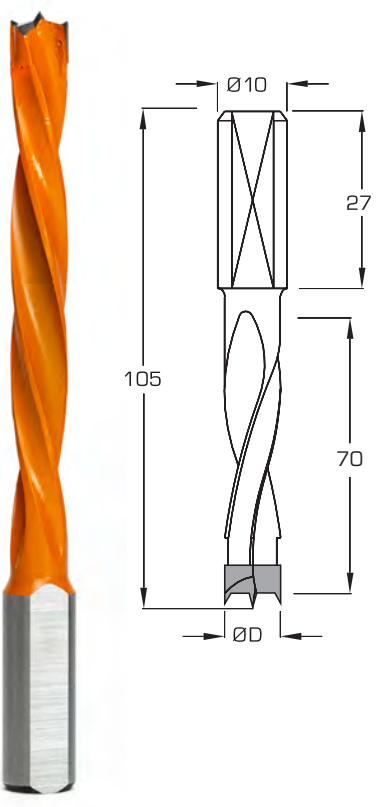
» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50GL05L	D50GL05R	5	50	10	27	85
D50GL06L	D50GL06R	6	50	10	27	85
D50GL08L	D50GL08R	8	50	10	27	85
D50GL10L	D50GL10R	10	50	10	27	85
D50GL12L	D50GL12R	12	50	10	27	85

D50GX 105MM DOWEL DRILLS
10MM DIAM. X 27MM LONG SHANK



APPLICATION:

» For blind flat bottom holes

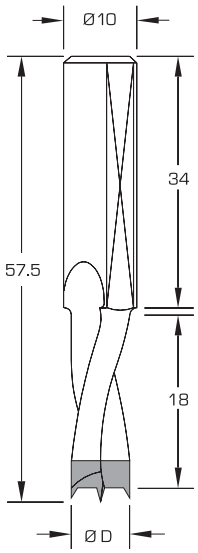
DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50GX05L	D50GX05R	5	70	10	27	105
D50GX06L	D50GX06R	6	70	10	27	105
D50GX08L	D50GX08R	8	70	10	27	105
D50GX10L	D50GX10R	10	70	10	27	105
D50GX12L	D50GX12R	12	70	10	27	105

D50I 57.5MM DOWEL DRILLS
10MM DIAM. X 34MM LONG SHANK





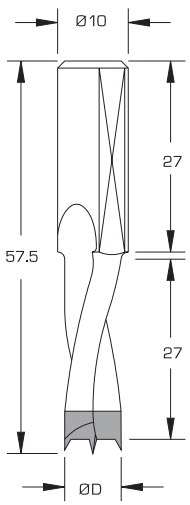
APPLICATION:
» For blind flat bottom holes

DESIGN:
» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50I05L	D50I05R	5	18	10	34	57.5
D50I06L	D50I06R	6	18	10	34	57.5
D50I08L	D50I08R	8	18	10	34	57.5
D50I10L	D50I10R	10	18	10	34	57.5

D50L 57.5MM DOWEL DRILLS
10MM DIAM. X 27MM LONG SHANK





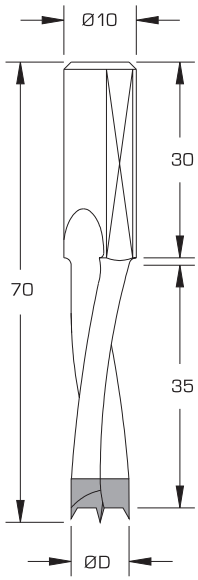
APPLICATION:
» For blind flat bottom holes

DESIGN:
» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50L04L	D50L04R	4	27	10	27	57.5
D50L05L	D50L05R	5	27	10	27	57.5
D50L052L	D50L052R	5.2	27	10	27	57.5
D50L055L	D50L055R	5.5	27	10	27	57.5
D50L06L	D50L06R	6	27	10	27	57.5
D50L07L	D50L07R	7	27	10	27	57.5
D50L08L	D50L08R	8	27	10	27	57.5
D50L082L	D50L082R	8.2	27	10	27	57.5
D50L09L	D50L09R	9	27	10	27	57.5
D50L10L	D50L10R	10	27	10	27	57.5
D50L11L	D50L11R	11	27	10	27	57.5
D50L12L	D50L12R	12	27	10	27	57.5
D50L13L	D50L13R	13	27	10	27	57.5
D50L14L	D50L14R	14	27	10	27	57.5
D50L15L	D50L15R	15	27	10	27	57.5
D50L16L	D50L16R	16	27	10	27	57.5
D50L1/4L	D50L1/4R	1/4"	27	10	27	57.5
D50L3/8L	D50L3/8R	3/8"	27	10	27	57.5
D50L1/2L	D50L1/2R	1/2"	27	10	27	57.5
D50L5/8L	D50L5/8R	5/8"	27	10	27	57.5

D50M 70MM DOWEL DRILLS
10MM DIAM. X 30MM LONG SHANK





APPLICATION:

» For blind flat bottom holes

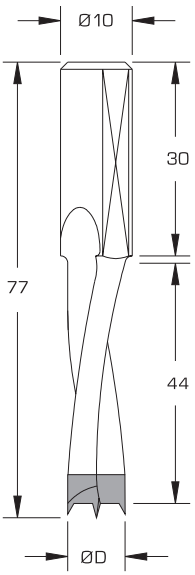
DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50M04L	D50M04R	4	35	10	30	70
D50M05L	D50M05R	5	35	10	30	70
D50M055L	D50M055R	5.5	35	10	30	70
D50M06L	D50M06R	6	35	10	30	70
D50M07L	D50M07R	7	35	10	30	70
D50M08L	D50M08R	8	35	10	30	70
D50M082L	D50M082R	8.2	35	10	30	70
D50M09L	D50M09R	9	35	10	30	70
D50M10L	D50M10R	10	35	10	30	70
D50M11L	D50M11R	11	35	10	30	70
D50M12L	D50L12R	12	35	10	30	70
D50M13L	D50M13R	13	35	10	30	70
D50M14L	D50M14R	14	35	10	30	70
D50M15L	D50M15R	15	35	10	30	70
D50M16L	D50M16R	16	35	10	30	70
D50M1/4L	D50M1/4R	1/4"	35	10	30	70
D50M3/8L	D50M3/8R	3/8"	35	10	30	70
D50M1/2L	D50M1/2R	1/2"	35	10	30	70
D50M5/8L	D50M5/8R	5/8"	35	10	30	70

D50W 77MM DOWEL DRILLS
10MM DIAM. X 30MM LONG SHANK





APPLICATION:

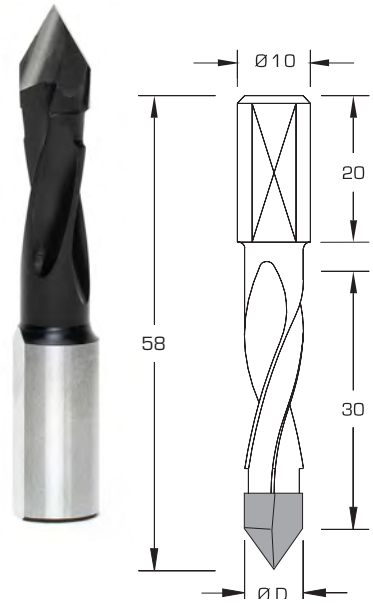
» For blind flat bottom holes

DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50W04L	D50W04R	4	44	10	30	77
D50W05L	D50W05R	5	44	10	30	77
D50W06L	D50W06R	6	44	10	30	77
D50W07L	D50W07R	7	44	10	30	77
D50W08L	D50W08R	8	44	10	30	77
D50W09L	D50W09R	9	44	10	30	77
D50W10L	D50W10R	10	44	10	30	77
D50W11L	D50W11R	11	44	10	30	77
D50W12L	D50W12R	12	44	10	30	77

D50H 58MM THROUGH HOLE DRILLS
10MM DIAM. X 20MM LONG SHANK



APPLICATION:

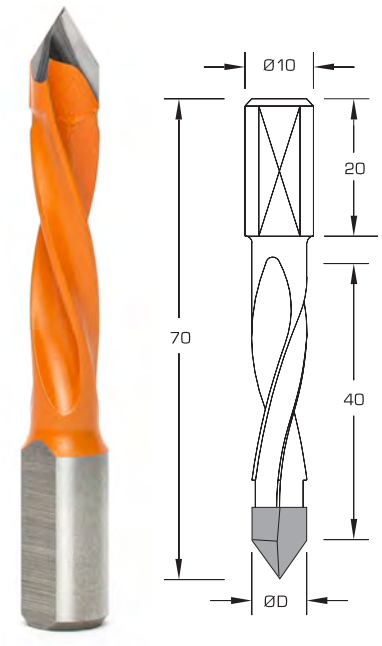
» For clean pass-through holes

DESIGN:

» Carbide-tipped V-point drill point

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50H04L	D50H04R	4	30	10	20	58
D50H05L	D50H05R	5	30	10	20	58
D50H06L	D50H06R	6	30	10	20	58
D50H07L	D50H07R	7	30	10	20	58
D50H08L	D50H08R	8	30	10	20	58
D50H09L	D50H09R	9	30	10	20	58
D50H10L	D50H10R	10	30	10	20	58
D50H12L	D50H12R	12	30	10	20	58
D50H1/4L	D50H1/4R	1/4"	30	10	20	58
D50H3/8L	D50H3/8R	3/8"	30	10	20	58
D50H7/16L	D50H7/16R	7/16"	30	10	20	58

D50K 70MM THROUGH HOLE DRILLS
10MM DIAM. X 20MM LONG SHANK



APPLICATION:

» For clean pass-through holes

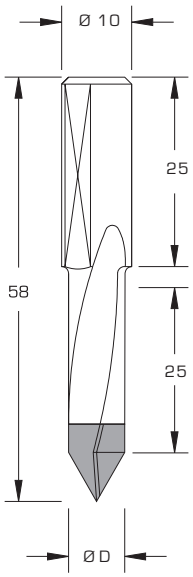
DESIGN:

» Carbide-tipped V-point drill point

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50K04L	D50K04R	4	40	10	20	70
D50K045L	D50K045R	4.5	40	10	20	70
D50K0483L	D50K0483R	4.83	40	10	20	70
D50K05L	D50K05R	5	40	10	20	70
D50K055L	D50K055R	5.5	40	10	20	70
D50K06L	D50K06R	6	40	10	20	70
D50K065L	D50K065R	6.5	40	10	20	70
D50K07L	D50K07R	7	40	10	20	70
D50K08L	D50K08R	8	40	10	20	70
D50K09L	D50K09R	9	40	10	20	70
D50K10L	D50K10R	10	40	10	20	70
D50K11L	D50K11R	11	40	10	20	70
D50K12L	D50K12R	12	40	10	20	70
D50K1/4L	D50K1/4R	1/4"	40	10	20	70
D50K3/8L	D50K3/8R	3/8"	40	10	20	70
D50K7/16L	D50K7/16R	7/16"	40	10	20	70
D50K1/2L	D50K1/2R	1/2"	40	10	20	70

57.5MM THROUGH HOLE DRILLS
10MM DIAM. X 25MM LONG SHANK



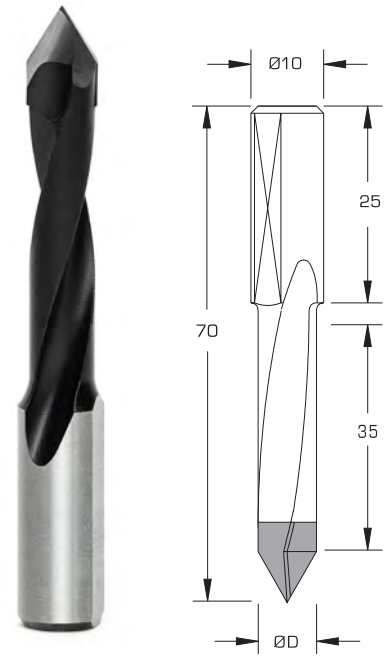


APPLICATION:
» For clean pass-through holes

DESIGN:
» Carbide-tipped V-point drill point

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50N04L	D50N04R	4	25	10	25	58
D50N05L	D50N05R	5	25	10	25	58
D50N06L	D50N06R	6	25	10	25	58
D50N07L	D50N07R	7	25	10	25	58
D50N08L	D50N08R	8	25	10	25	58
D50N10L	D50N10R	10	25	10	25	58
D50N12L	D50N12R	12	25	10	25	58

D50Y 70MM THROUGH HOLE DRILLS
10MM DIAM. X 25MM LONG SHANK



APPLICATION:

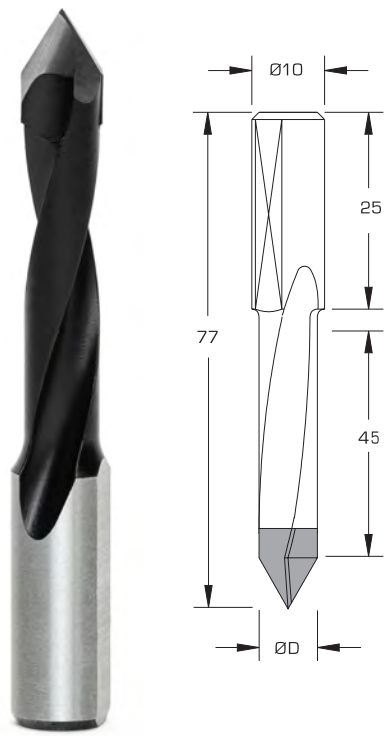
» For clean pass-through holes

DESIGN:

» Carbide-tipped V-point drill point

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50Y04L	D50Y04R	4	35	10	25	70
D50Y05L	D50Y05R	5	35	10	25	70
D50Y06L	D50Y06R	6	35	10	25	70
D50Y07L	D50Y07R	7	35	10	25	70
D50Y08L	D50Y08R	8	35	10	25	70
D50Y09L	D50Y09R	9	35	10	25	70
D50Y10L	D50Y10R	10	35	10	25	70
D50Y11L	D50Y11R	11	35	10	25	70
D50Y12L	D50Y12R	12	35	10	25	70

D50Z 77MM THROUGH HOLE DRILLS
10MM DIAM. X 25MM LONG SHANK



APPLICATION:

» For clean pass-through holes

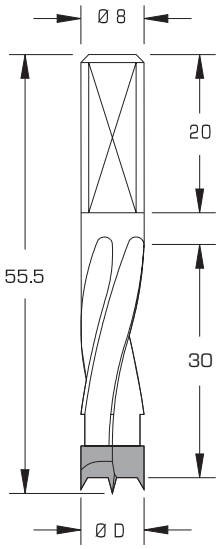
DESIGN:

» Carbide-tipped V-point drill point

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50Z05L	D50Z05R	5	45	10	25	77
D50Z052L	D50Z052R	5.2	45	10	25	77
D50Z06L	D50Z06R	6	45	10	25	77
D50Z08L	D50Z08R	8	45	10	25	77
D50Z10L	D50Z10R	10	45	10	25	77
D50Z12L	D50Z12R	12	45	10	25	77

D50A 55.5MM DOWEL DRILLS
8MM DIAM. X 20MM LONG SHANK





APPLICATION:

» For blind flat bottom holes

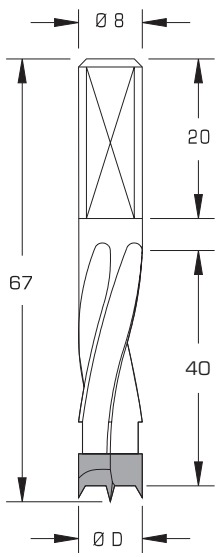
DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50A05L	D50A05R	5	30	8	20	55.5
D50A06L	D50A06R	6	30	8	20	55.5
D50A07L	D50A07R	7	30	8	20	55.5
D50A08L	D50A08R	8	30	8	20	55.5
D50A09L	D50A09R	9	30	8	20	55.5
D50A10L	D50A10R	10	30	8	20	55.5
D50A11L	D50A11R	11	30	8	20	55.5
D50A12L	D50A12R	12	30	8	20	55.5

D50B 67MM DOWEL DRILLS
8MM DIAM. X 20MM LONG SHANK





APPLICATION:

» For blind flat bottom holes

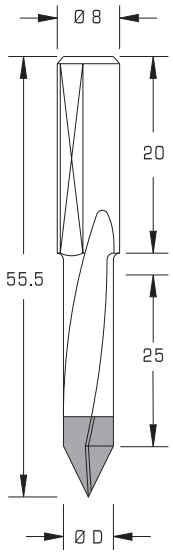
DESIGN:

» Carbide-tipped bradpoint drill end

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50B05L	D50B05R	5	40	8	20	67
D50B06L	D50B06R	6	40	8	20	67
D50B07L	D50B07R	7	40	8	20	67
D50B08L	D50B08R	8	40	8	20	67
D50B09L	D50B09R	9	40	8	20	67
D50B10L	D50B10R	10	40	8	20	67
D50B11L	D50B11R	11	40	8	20	67
D50B12L	D50B12R	12	40	8	20	67

D50C 55.5MM THROUGH HOLE DRILLS
8MM DIAM. X 20MM LONG SHANK





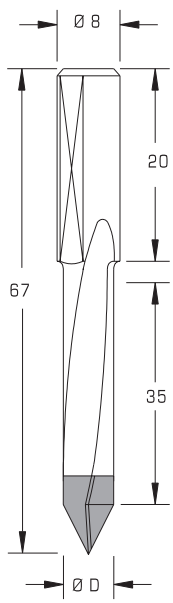
APPLICATION:
» For clean pass-through holes

DESIGN:
» Carbide-tipped V-point drill point

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50C05L	D50C05R	5	25	8	20	55.5
D50C08L	D50C08R	8	25	8	20	55.5

D50D 67MM THROUGH HOLE DRILLS
8MM DIAM. X 20MM LONG SHANK





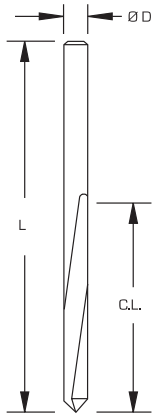
APPLICATION:
» For clean pass-through holes

DESIGN:
» Carbide-tipped V-point drill point

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50D05L	D50D05R	5	35	8	20	67
D50D08L	D50D08R	8	35	8	20	67

D50HS HIGH PRECISION THROUGH HOLE DRILLS
SOLID CARBIDE





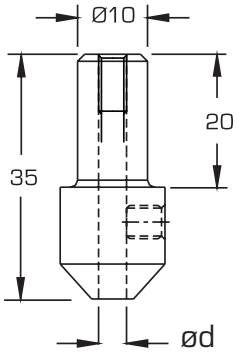
APPLICATION:
» Used to make accurate small diameter holes
» Recommended for high wear applications
» For CNC boring centers, use with D0020 drill adaptor

DESIGN:
» Precision ground diameter and shank
» Can be used with D0020 Drill Adaptors

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D50HS20L	D50HS20R	2	20	2	29	49
D50HS25L	D50HS25R	2.5	25	2.5	30	55
D50HS30L	D50HS30R	3	25	3	30	55
D50HS32L	D50HS32R	3.2	25	3.2	30	55
D50HS35L	D50HS35R	3.5	25	3.5	30	55
D50HS40L	D50HS40R	4	25	4	30	55

D0020 DRILL ADAPTORS
WITH RETAINING SCREW





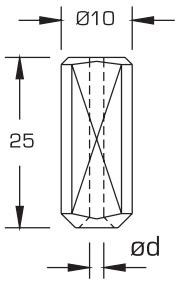
APPLICATION:
» For adapting small diameter round shanks to standard 10mm shank type
» Can be used with additional adaptors to match boring center connection type

DESIGN:
» Precision ground bore
» Retaining screw used to secure round and notched shank types

PART NO.	BORE DIAM. ød	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH
D0020	2	10	20	35
D0025	2.5	10	20	35
D0030	3	10	20	35
D0032	3.2	10	20	35
D0035	3.5	10	20	35
D0040	4	10	20	35

D00520 DRILL BUSHING
SPLIT TYPE





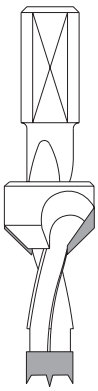
APPLICATION:
» For enlarging small diameter round shanks to standard 10mm shank type

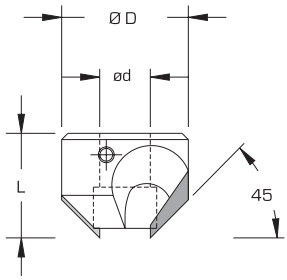
DESIGN:
» Split design allows for bushing to collapse onto shank

PART NO.	BORE DIAM. ød	OUTSIDE DIAM. ØD	OVERALL LENGTH
D00520	2	10	25
D00525	2.5	10	25
D00530	3	10	25
D00532	3.2	10	25
D00535	3.5	10	25
D00540	4	10	25

D50S 45° COUNTERSINK
FLUTE MOUNTED







APPLICATION:
» Provides clean 45° countersink cuts

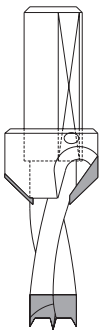
DESIGN:
» Drill diameter specific
» Mounts onto the drill twist
» Compatible with the following drill types:

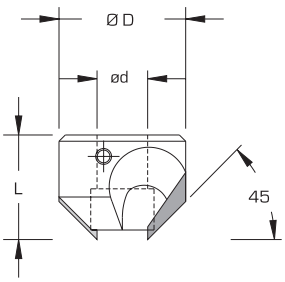
D50A D50E D50GX
D50B D50F D50H
D50C D50G D50K
D50D D50GL

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	DRILL DIAM. ød	CUTTING DIAM. ØD	COUNTERSINK ANGLE	OVERALL LENGTH L
D50S04L	D50S04R	4	14	45°	12
D50S05L	D50S05R	5	14	45°	12
D50S06L	D50S06R	6	16	45°	14
D50S07L	D50S07R	7	16	45°	14
D50S08L	D50S08R	8	16	45°	16
D50S09L	D50S09R	9	18	45°	16
D50S10L	D50S10R	10	20	45°	18
D50S11L	D50S11R	11	20	45°	18
D50S12L	D50S12R	12	20	45°	18
D50S1/4L	D50S1/4R	1/4"	16	45°	14

D50T:U 45° COUNTERSINK
SHANK MOUNTED







APPLICATION:
» Provides clean 45° countersink cuts with standard shank drills

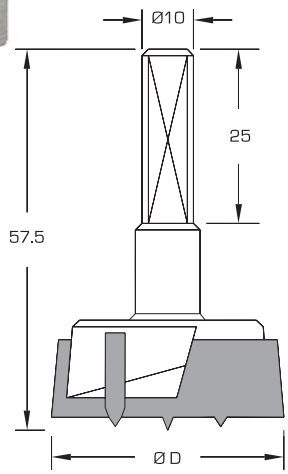
DESIGN:
» Mounts onto drill shanks 25mm, 27mm, 30mm, and 34mm long
» Compatible with the following drill types:

D50I D50N D50Z
D50L D50W
D50M D50Y

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	MIN. DRILL DIAM.	MAX. DRILL DIAM.	CUTTING DIAM. ØD	COUNTERSINK ANGLE	OVERALL LENGTH L
D50TL	D50TR	4	10	20	45°	15
D50UL	D50UR	11	12	22	45°	16

D14A 57.5MM BORING DRILLS, 2T+2 SPURS
10MM DIAM. X 25MM LONG SHANK



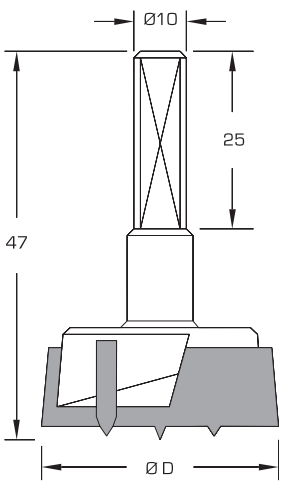


APPLICATION:
» For blind flat bottom holes

DESIGN:
» Wear resistant carbide teeth and spurs
» Center point reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO. OF CUTTING EDGES	OVERALL LENGTH
D14A15L	D14A15R	15	10	25	2+2	57.5
D14A16L	D14A16R	16	10	25	2+2	57.5
D14A18L	D14A18R	18	10	25	2+2	57.5
D14A20L	D14A20R	20	10	25	2+2	57.5
D14A22L	D14A22R	22	10	25	2+2	57.5
D14A24L	D14A24R	24	10	25	2+2	57.5
D14A25L	D14A25R	25	10	25	2+2	57.5
D14A26L	D14A26R	26	10	25	2+2	57.5
D14A28L	D14A28R	28	10	25	2+2	57.5
D14A30L	D14A30R	30	10	25	2+2	57.5
D14A32L	D14A32R	32	10	25	2+2	57.5
D14A34L	D14A34R	34	10	25	2+2	57.5
D14A35L	D14A35R	35	10	25	2+2	57.5
D14A36L	D14A36R	36	10	25	2+2	57.5
D14A38L	D14A38R	38	10	25	2+2	57.5
D14A40L	D14A40R	40	10	25	2+2	57.5
D14A5/8L	D14A5/8R	5/8"	10	25	2+2	57.5
D14A3/4L	D14A3/4R	3/4"	10	25	2+2	57.5
D14A7/8L	D14A7/8R	7/8"	10	25	2+2	57.5

D14A-H 47MM HOLZ-HER BORING DRILLS, 2T+2 SPURS
10MM DIAM. X 25MM LONG SHANK

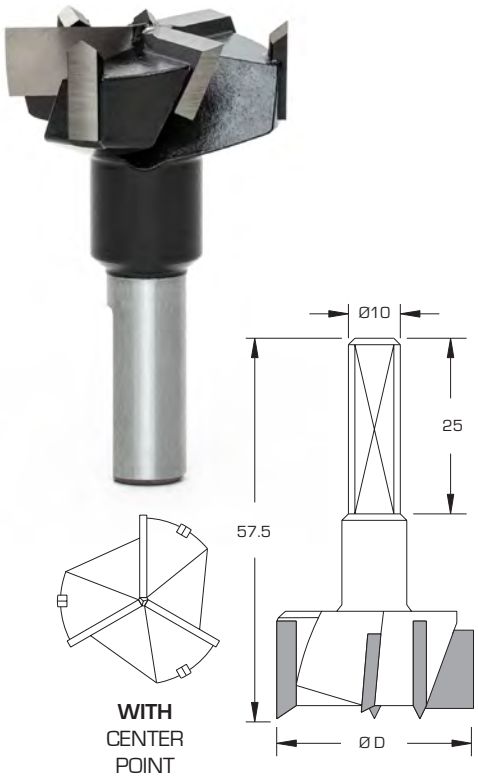


APPLICATION:
» 45mm length for Holz-Her machines
» For blind flat bottom holes

DESIGN:
» Wear resistant carbide teeth and spurs
» Center point reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO. OF CUTTING EDGES	OVERALL LENGTH
D14A30L-H	D14A30R-H	30	10	25	2+2	47
D14A35L-H	D14A35R-H	35	10	25	2+2	47

D14B 57.5MM BORING DRILLS, 3T+3 SPURS
10MM DIAM. X 25MM LONG SHANK



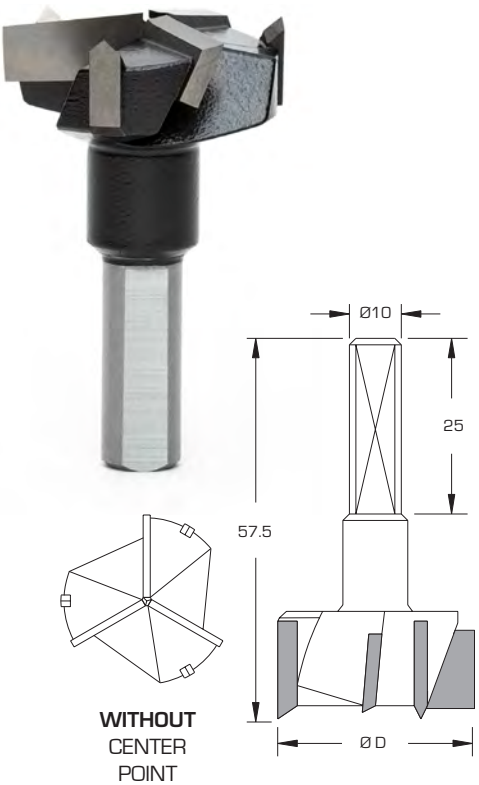
WITH CENTER POINT

APPLICATION:
» Used in high speed applications
» Can reduce chipping or tear-out in delicate materials

DESIGN:
» Wear resistant carbide teeth and spurs
» Center point reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO. OF CUTTING EDGES	OVERALL LENGTH
D14B25L	D14B25R	25	10	25	3+3	57.5
D14B30L	D14B30R	30	10	25	3+3	57.5
D14B35L	D14B35R	35	10	25	3+3	57.5
D14B40L	D14B40R	40	10	25	3+3	57.5

D14H 57.5MM NO CENTER POINT BORING DRILLS, 3T+3 SPURS
10MM DIAM. X 25MM LONG SHANK



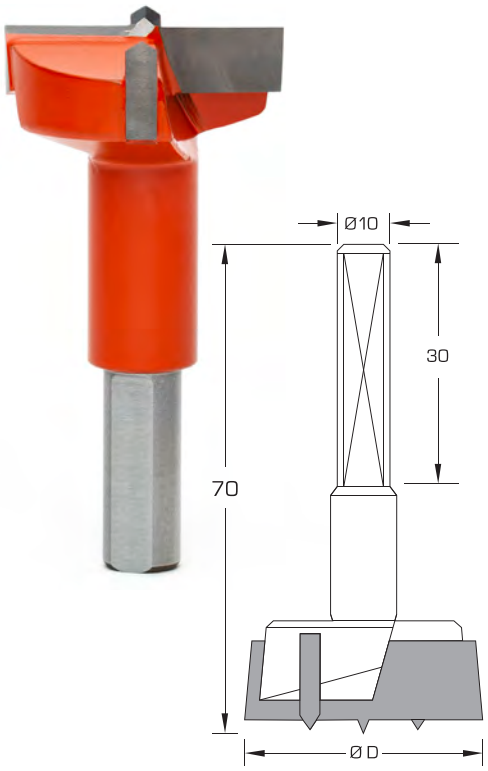
WITHOUT CENTER POINT

APPLICATION:
» Used in high speed applications
» Can reduce chipping or tear-out in delicate materials

DESIGN:
» Wear resistant carbide teeth and spurs
» No center point for flat bottom boring

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO. OF CUTTING EDGES	OVERALL LENGTH
D14H25L	D14H25R	25	10	25	3+3	57.5
D14H30L	D14H30R	30	10	25	3+3	57.5
D14H35L	D14H35R	35	10	25	3+3	57.5
D14H40L	D14H40R	40	10	25	3+3	57.5

D15A 70MM BORING DRILLS, 2T+2 SPURS
10MM DIAM. X 30MM LONG SHANK

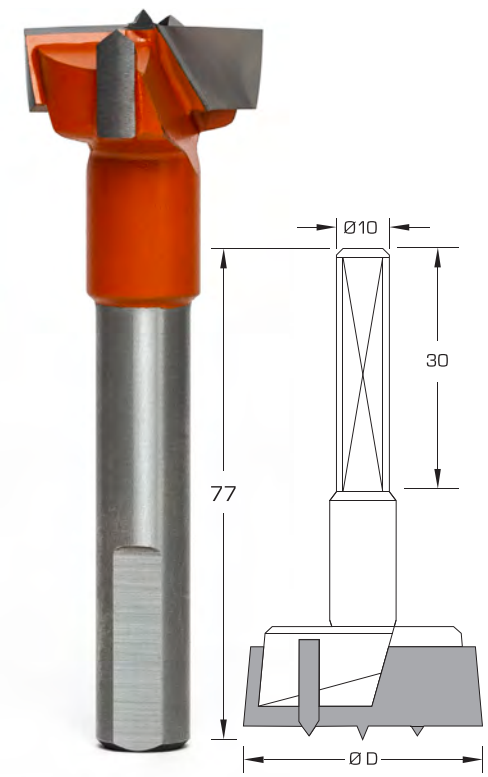


APPLICATION:
» For blind flat bottom holes

DESIGN:
» Wear resistant carbide teeth and spurs
» Center point reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO. OF CUTTING EDGES	OVERALL LENGTH
D15A15L	D15A15R	15	10	30	2+2	70
D15A20L	D15A20R	20	10	30	2+2	70
D15A25L	D15A25R	25	10	30	2+2	70
D15A26L	D15A26R	26	10	30	2+2	70
D15A30L	D15A30R	30	10	30	2+2	70
D15A35L	D15A35R	35	10	30	2+2	70
D15A9/16L	D15A9/16R	9/16"	10	30	2+2	70
D15A3/4L	D15A3/4R	3/4"	10	30	2+2	70

D16A 77MM BORING DRILLS, 2T+2 SPURS
10MM DIAM. X 30MM LONG SHANK



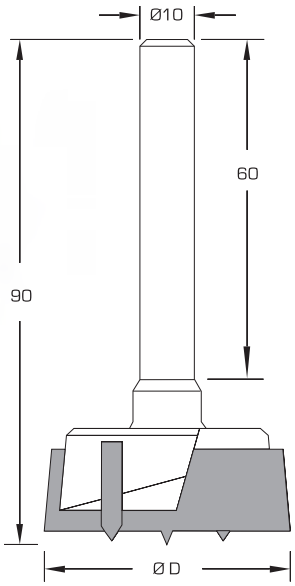
APPLICATION:
» For blind flat bottom holes

DESIGN:
» Wear resistant carbide teeth and spurs
» Center point reduces deflection

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO. OF CUTTING EDGES	OVERALL LENGTH
D16A15L	D16A15R	15	10	30	2+2	77
D16A20L	D16A20R	20	10	30	2+2	77
D16A25L	D16A25R	25	10	30	2+2	77
D16A26L	D16A26R	26	10	30	2+2	77
D16A30L	D16A30R	30	10	30	2+2	77
D16A35L	D16A35R	35	10	30	2+2	77

90MM BORING DRILLS, 2T+2 SPURS
10MM DIAM. X 60MM LONG SHANK





APPLICATION:
» For through hole boring

DESIGN:
» Cylindrical shank (no flat on shank)
» Two teeth + two spurs
» Wear resistant carbide wings

RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO. OF CUTTING EDGES	OVERALL LENGTH
D14D15	15	10	60	2+2	90
D14D16	16	10	60	2+2	90
D14D18	18	10	60	2+2	90
D14D20	20	10	60	2+2	90
D14D22	22	10	60	2+2	90
D14D24	24	10	60	2+2	90
D14D25	25	10	60	2+2	90
D14D26	26	10	60	2+2	90
D14D28	28	10	60	2+2	90
D14D30	30	10	60	2+2	90
D14D32	32	10	60	2+2	90
D14D34	34	10	60	2+2	90
D14D35	35	10	60	2+2	90
D14D35L •	35	10	60	2+2	90
D14D36	36	10	60	2+2	90
D14D38	38	10	60	2+2	90
D14D40	40	10	60	2+2	90
D14D5/8	5/8"	10	60	2+2	90
D14D3/4	3/4"	10	60	2+2	90

• Left-hand rotation

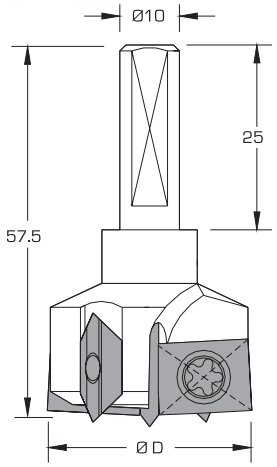
57.5MM INSERT BORING DRILLS, 2T+2 SPURS
10MM DIAM. X 25MM LONG SHANK



APPLICATION:
- For high production applications where cut quality is critical
- Ideal for abrasive applications such as HPL
- Precision ground inserts provide accurate cuts
- Carbide insert spurs provide clean cuts in delicate materials such as high gloss laminates

DESIGN:
- Extremely wear resistant carbide inserts
- Precision ground pockets allow for fast, accurate mounting of inserts

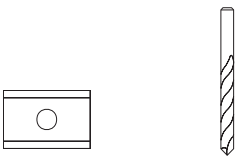
LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO. OF CUTTING EDGES	OVERALL LENGTH
D14E25L	D14E25R	25	10	25	2+2	57.5
D14E26L	D14E26R	26	10	25	2+2	57.5
D14E30L	D14E30R	30	10	25	2+2	57.5
D14E35L	D14E35R	35	10	25	2+2	57.5
D14E40L	D14E40R	40	10	25	2+2	57.5



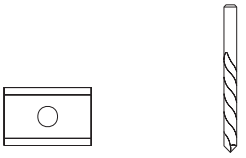
REPLACEMENT PARTS



SPUR	INSERT SCREW	SPUR SCREW	WRENCH
D14E40B	D14EM4F	D14EM4T	W400405

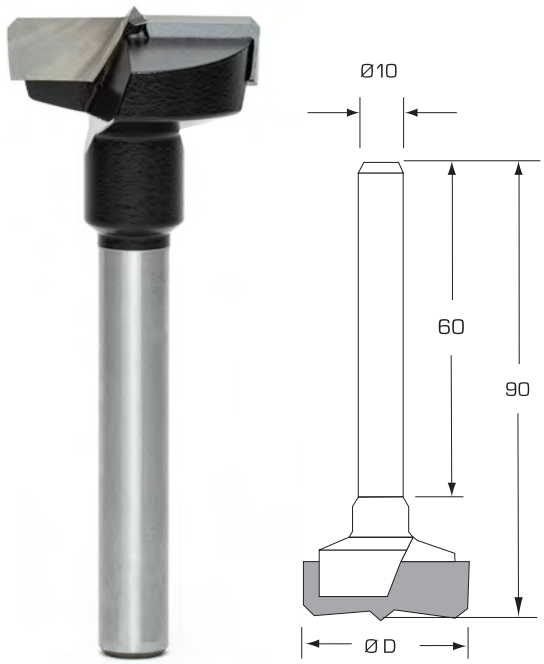


LEFT-HAND PART NO.	INSERT	LEFT-HAND CENTER POINT
D14E25L	D14E25A	D14E40CL
D14E26L	D14E26A	D14E40CL
D14E30L	D14E30A	D14E40CL
D14E35L	D14E35A	D14E40CL
D14E40L	D14E40A	D14E40CL



RIGHT-HAND PART NO.	INSERT	RIGHT-HAND CENTER POINT
D14E25R	D14E25A	D14E40CR
D14E26R	D14E26A	D14E40CR
D14E30R	D14E30A	D14E40CR
D14E35R	D14E35A	D14E40CR
D14E40R	D14E40A	D14E40CR

D14C 90MM THROUGH HOLE BORING DRILLS, 2 TEETH
10MM DIAM. X 60MM LONG SHANK

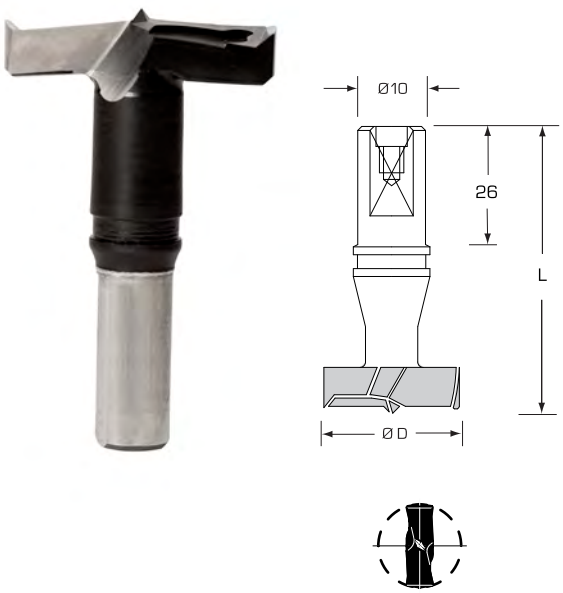


APPLICATION:
» For through hole boring with clean edges

DESIGN:
» Cylindrical shank (no flat on shank)
» Two teeth (without spurs)
» Long reach for thick materials
» Wear resistant carbide wings

RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO.OF CUTTING EDGES	OVERALL LENGTH
D14C15	15	10	60	2	90
D14C20	20	10	60	2	90
D14C25	25	10	60	2	90
D14C28	28	10	60	2	90
D14C30	30	10	60	2	90
D14C35	35	10	60	2	90
D14C38	38	10	60	2	90
D14C40	40	10	60	2	90

D30A 57MM SOLID CARBIDE BORING DRILLS, 2 TEETH
10MM DIAM. X 26MM SHANK



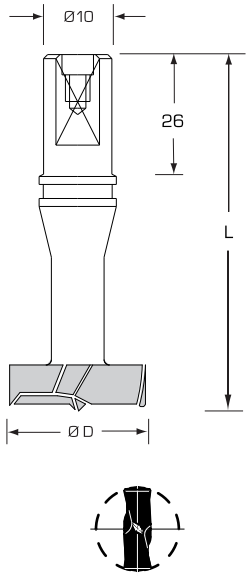
APPLICATION:
» For blind flat bottom holes

DESIGN:
» High performance micrograin solid carbide tips with high tensile strength steel shanks
» Rounded spurs provide expectional finish
» For high precision boring

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO.OF CUTTING EDGES	OVERALL LENGTH L
D30A15L	D30A15R	15	10	26	2	57
D30A20L	D30A20R	20	10	26	2	57
D30A25L	D30A25R	25	10	26	2	57
D30A30L	D30A30R	30	10	26	2	57
D30A35L	D30A35R	35	10	26	2	57

D35A 70MM SOLID CARBIDE BORING DRILLS, 2 TEETH
10MM DIAM. X 26MM SHANK





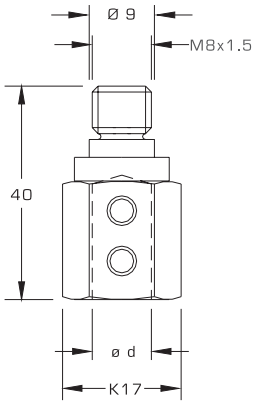
APPLICATION:
» For blind flat bottom holes

DESIGN:
» High performance micrograin solid carbide tips with high tensile strength steel shanks
» Rounded spurs provide expectional finish
» For high precision boring

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CUTTING DIAM. ØD	SHANK DIAM.	SHANK LENGTH	NO.OF CUTTING EDGES	OVERALL LENGTH L
D35A15L	D35A15R	15	10	26	2	70
D35A20L	D35A20R	20	10	26	2	70
D35A25L	D35A25R	25	10	26	2	70
D35A30L	D35A30R	30	10	26	2	70
D35A35L	D35A35R	35	10	26	2	70

D0012 THREADED DRILL ADAPTORS
M8 X 1.5 SHANK





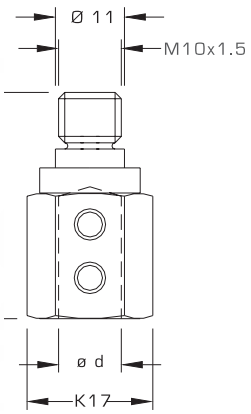
APPLICATION:
» Conversion adaptor to use standard shank types

DESIGN:
» Rotation and shank diameter specific

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CLAMPING DIAM. ød	COLLAR DIAM.	THREAD	OVERALL LENGTH
D001208L	D001208R	8	9	M8 x 1.5	40
D001210L	D001210R	10	9	M8 x 1.5	40

D0013 THREADED DRILL ADAPTORS
M10 X 1.5 SHANK





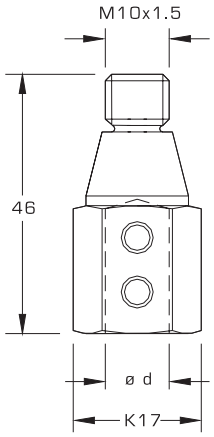
APPLICATION:
» Conversion adaptor to use standard shank types

DESIGN:
» Rotation and shank diameter specific

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CLAMPING DIAM. ød	COLLAR DIAM.	OVERALL LENGTH	THREAD
D001308L	D001308R	8	11	40	M10 x 1.5
D0013L	D0013R	10	11	40	M10 x 1.5

D0014 TAPERED THREADED DRILL ADAPTORS
M10 X 1.5 SHANK





APPLICATION:

» Conversion adaptor to use standard shank types

DESIGN:

» Rotation and shank diameter specific

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CLAMPING DIAM. ød	OVERALL LENGTH	THREAD
D001408L	D001408R	8	46	M10 x 1.5
D0014L	D0014R	10	46	M10 x 1.5

M140 QUICK CHANGE DRILL ADAPTORS
FOR MACHINES REQUIRING THREADED SHANKS

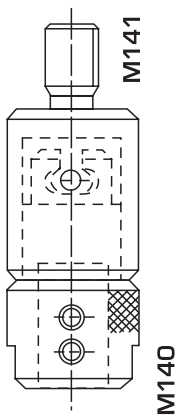


M141 Threaded Unit



M140 Drill Holder

ASSEMBLY



APPLICATION:

» Used to minimize downtime of tool changes of threaded drills

DESIGN:

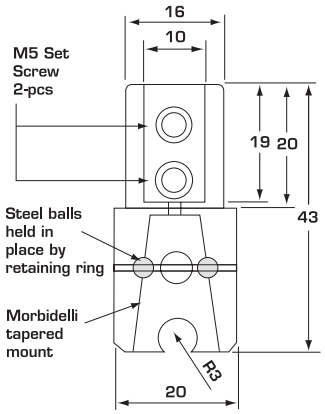
» Assembly requires 1pc M141 and 1pc M140
» M141 adaptor is rotation specific
» M140 adaptor mounts to standard 10mm shank types

LEFT-HAND PART NO.	RIGHT-HAND PART NO.	CLAMPING UNIT	THREAD	OVERALL LENGTH
M141L	M141R	M140	M10 x 1.5	40

PART NO.	CLAMPING DIAM.	DIAM.	OVERALL LENGTH
M140	10	20	43

M160 MORBIDELLI QUICK CHANGE DRILL ADAPTORS
TRACK STYLE





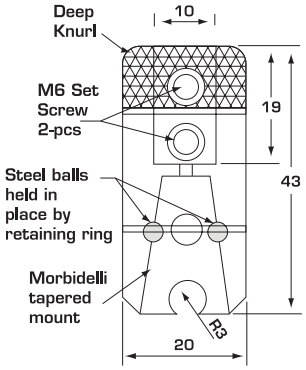
APPLICATION:
» Used to minimize downtime of tool changes on track style drilling centers

DESIGN:
» Suitable for both LH and RH rotations

PART NO.	CLAMPING DIAM.	DIAM.	OVERALL LENGTH
M160	10	20	43

M165 MORBIDELLI QUICK CHANGE DRILL ADAPTORS
STANDARD STYLE





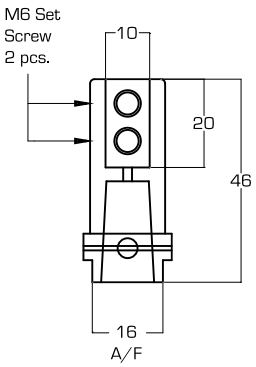
APPLICATION:
» Used to minimize downtime of tool changes on Morbidelli drilling centers

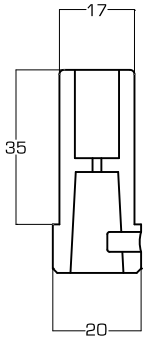
DESIGN:
» Suitable for both LH and RH rotations
» Adaptor mounts to standard 10mm shank types

PART NO.	CLAMPING DIAM.	DIAM.	OVERALL LENGTH
M165	10	20	43

M170 QUICK CHANGE DRILL ADAPTOR
FOR HOMAG THROUGHFEED DRILLING MACHINES





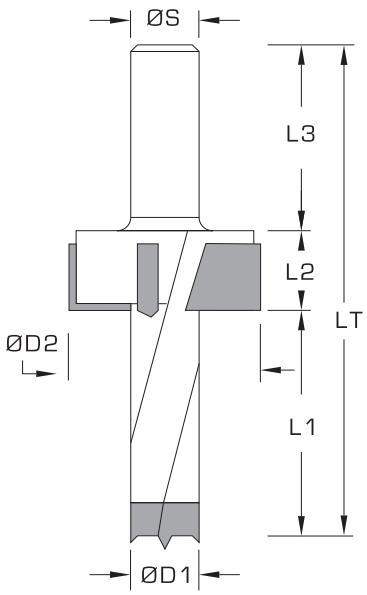


APPLICATION:
» Used to minimize downtime of tool changes on throughfeed drilling machines

DESIGN:
» Suitable for both LH and RH rotations

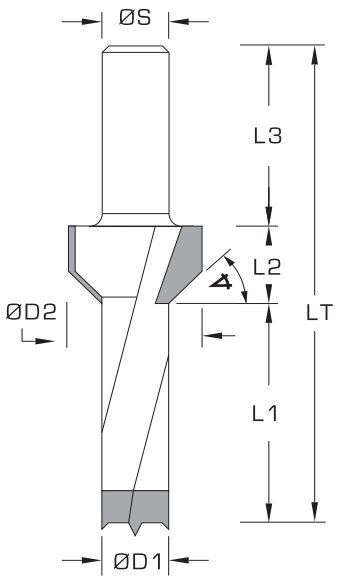
PART NO.	CLAMPING DIAM.	DIAM.	OVERALL LENGTH
M170	10	20	46

D60F1 CUSTOM COUNTERBORE BIT
WITH BRADPOINT DRILL



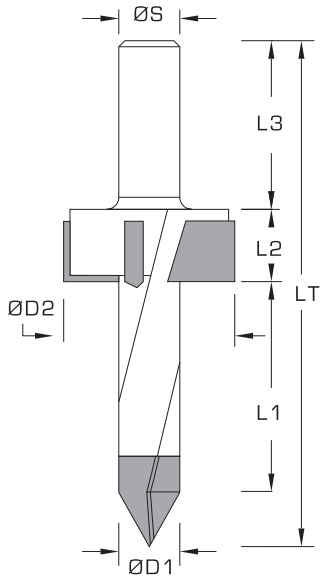
ØS	
ØD1	
ØD2	
L1	
L2	
L3	
LT	

D60F2 CUSTOM COUNTERSINK BIT
WITH BRADPOINT DRILL



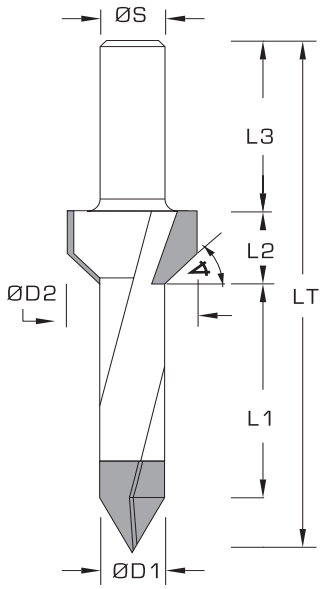
ØS	
ØD1	
ØD2	
L1	
L2	
L3	
LT	
∢	

D60N1 CUSTOM COUNTERBORE BIT
WITH THROUGH HOLE DRILL



ØS	
ØD1	
ØD2	
L1	
L2	
L3	
LT	

D60N2 CUSTOM COUNTERSINK BIT
WITH THROUGH HOLE DRILL



ØS	
ØD1	
ØD2	
L1	
L2	
L3	
LT	
∢	



ACCESSORIES

INDEX ACCESSORIES - TABLE OF CONTENTS

PRODUCT CATEGORY	PAGE NO.
BALL BEARING GUIDES	H1
BUSHINGS FOR SAW BLADES	H2
FLANGED SLEEVES	H2
FLANGES FOR CIRCULAR SAW BLADES	H3
MECHANICAL SLEEVES	H3
SLEEVES	H1
SPACERS	H1

INDEX ACCESSORIES - ALPHA-NUMERIC INDEX

PART NO.	PAGE NO.
054-3175-1 - 054-40-3175	H2
058-114001 - 058-040138	H2
W057114-3 - W057114-80	H1

053 SPACERS

METRIC I.D.

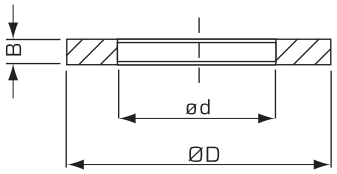
OUTSIDE DIAM. ØD MM	INSIDE DIAM. ød
50	30
55	35
60	40
70	50

IMPERIAL I.D.

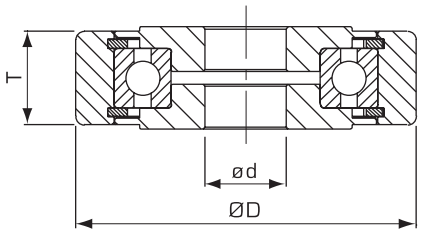
OUTSIDE DIAM. ØD MM	INSIDE DIAM. ød
50	1-1/4"
55	1-3/8"
60	1-9/16"
70	1-13/16"

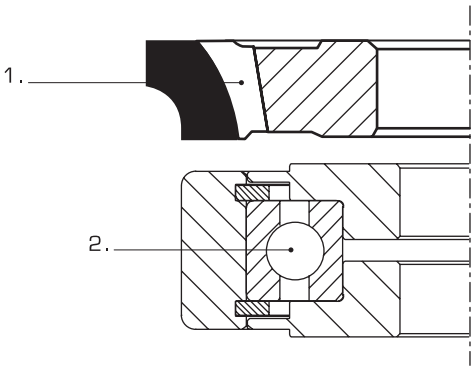
THICKNESS

THICKNESS B MM	THICKNESS B INCH
0.1 - 0.2-0.5 - 1.0	.004" - .008" -.020" - .040"
2.0	.040"
5.0	3/16"
10.0	25/64"
8.1-20	5/16"-3/4"
20.1-30	53/64"-1-3/16"
30.1-40	1-3/16"-1-9/16"
40.1-50	1-9/16"-2"



057 BALL BEARING GUIDES

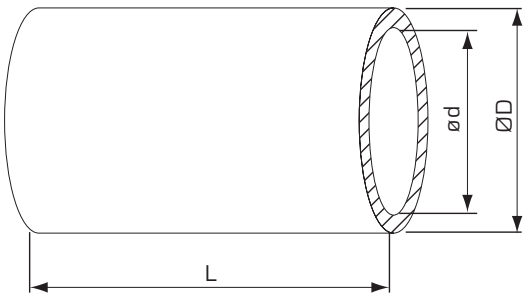




1 = CUTTER
2 = BALL BEARING GUIDE

PART NO.	OUTER DIAM. ØD	INNER DIAM. ød	THICKNESS T
W057114-3	3"	1-1/4"	7/8"
W057114-4	4"	1-1/4"	7/8"
W057114-80	80mm	40mm	18mm

035 SLEEVES



IMPERIAL I.D.

OUTSIDE DIAM. ØD	INSIDE DIAM. ød
1-1/4"	3/4"
1-13/16"	1-1/4"

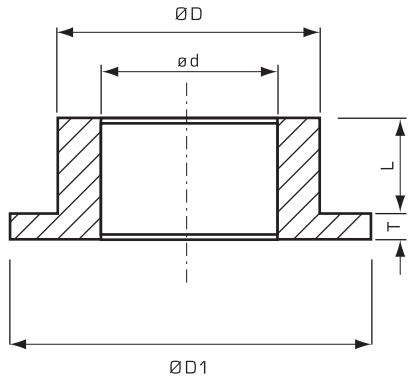
METRIC I.D.

OUTSIDE DIAM. ØD MM	INSIDE DIAM. ød MM
35	30
40	30-35
50	30-40

LENGTH

L MM	L INCH
2	5/64"
5	3/16"
10	3/8"
15	5/8"
20	3/4"
30	1-3/16"

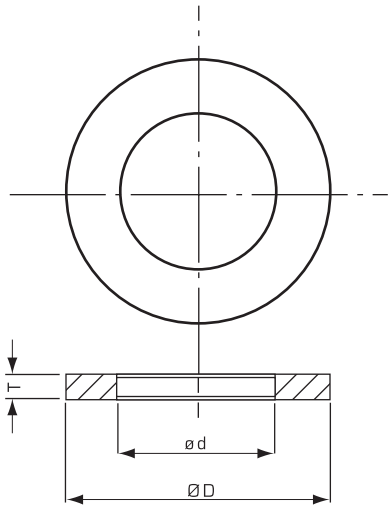
054 FLANGED SLEEVES



PART NO.	OUTER DIAM. ØD	INNER DIAM. ød	FLANGE DIAM. ØD1 MM	FLANGE THICK. T MM	LENGTH L MM
054-3175-1905	1-1/4"	3/4"	52	5	20
054-3175-34	1-1/4"	3/4"	45	3	15
054-3175-254	1-1/4"	1"	52	5	20
054-3175-1	1-1/4"	1"	45	3	15
054-40-3175	40mm	1-1/4"	60	5	20

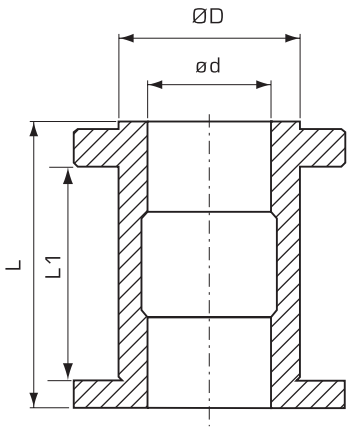
Other sizes available upon request

058 BUSHINGS FOR SAW BLADES



PART NO.	OUTER DIAM. ØD	INNER DIAM. ød	THICKNESS T MM
058-114001	1-1/4"	1"	2.1
058-114034	1-1/4"	3/4"	2.1
058-114058	1-1/4"	5/8"	2.1
058-118001	1-1/8"	1"	2.1
058-001034	1"	3/4"	2.1
058-001058	1"	5/8"	2.1
058-020038	20mm	3/8"	2.1
058-020058	20mm	5/8"	2.1
058-022020	22mm	20mm	2.1
058-022034	22mm	3/4"	2.1
058-022058	22mm	5/8"	2.1
058-034058	3/4"	5/8"	2.1
058-030001	30mm	1"	2.1
058-030034	30mm	3/4"	2.1
058-030058	30mm	5/8"	2.1
058-032020	32mm	20mm	2.1
058-040114	40mm	1-1/4"	2.1
058-040138	40mm	1-3/8"	2.1

059 MECHANICAL SLEEVES

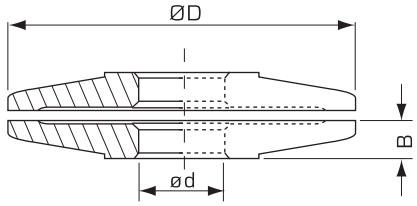


SPECIAL PRODUCTION

OUTER DIAM. ØD MM	INNER DIAM. ød	USABLE LENGTH L1 MM	OVERALL LENGTH L MM	ROTATION
50	1-1/4"	70	90	RH/LH
50	1-1/4"	85	105	RH/LH
50	1-1/2"	85	105	RH/LH
50	40mm	70	90	RH/LH
50	40mm	90	112	RH/LH
60	1-1/4"	85	105	RH/LH
60	1-1/2"	85	105	RH/LH
60	40mm	90	112	RH/LH

Other sizes available upon request

05020 FLANGES FOR CIRCULAR SAW BLADES



ØD MM	ød MM	ØD INCH	ød INCH
60	30	2-3/8"	5/8" - 1"
80	30	3-1/8"	5/8" - 1"
100	30	4"	5/8" - 1"
125	30	5"	5/8" - 1"
150	30	6"	5/8" - 1"

NOTES



www.fstoolcorp.com

QUALITY • SERVICE • PRIDE • TRADITION • INNOVATION

FS TOOL CORPORATION
71 Hobbs Gate • Markham, Ontario • L3R 9T9
TEL 1.800.387.9723 • **FAX** 905.475.0347

FS TOOL CORPORATION
210 South Eighth Street • P.O. Box 510 • Lewiston, NY 14092-0510
TEL 1.800.387.9723 • **FAX** 1.800.361.5010