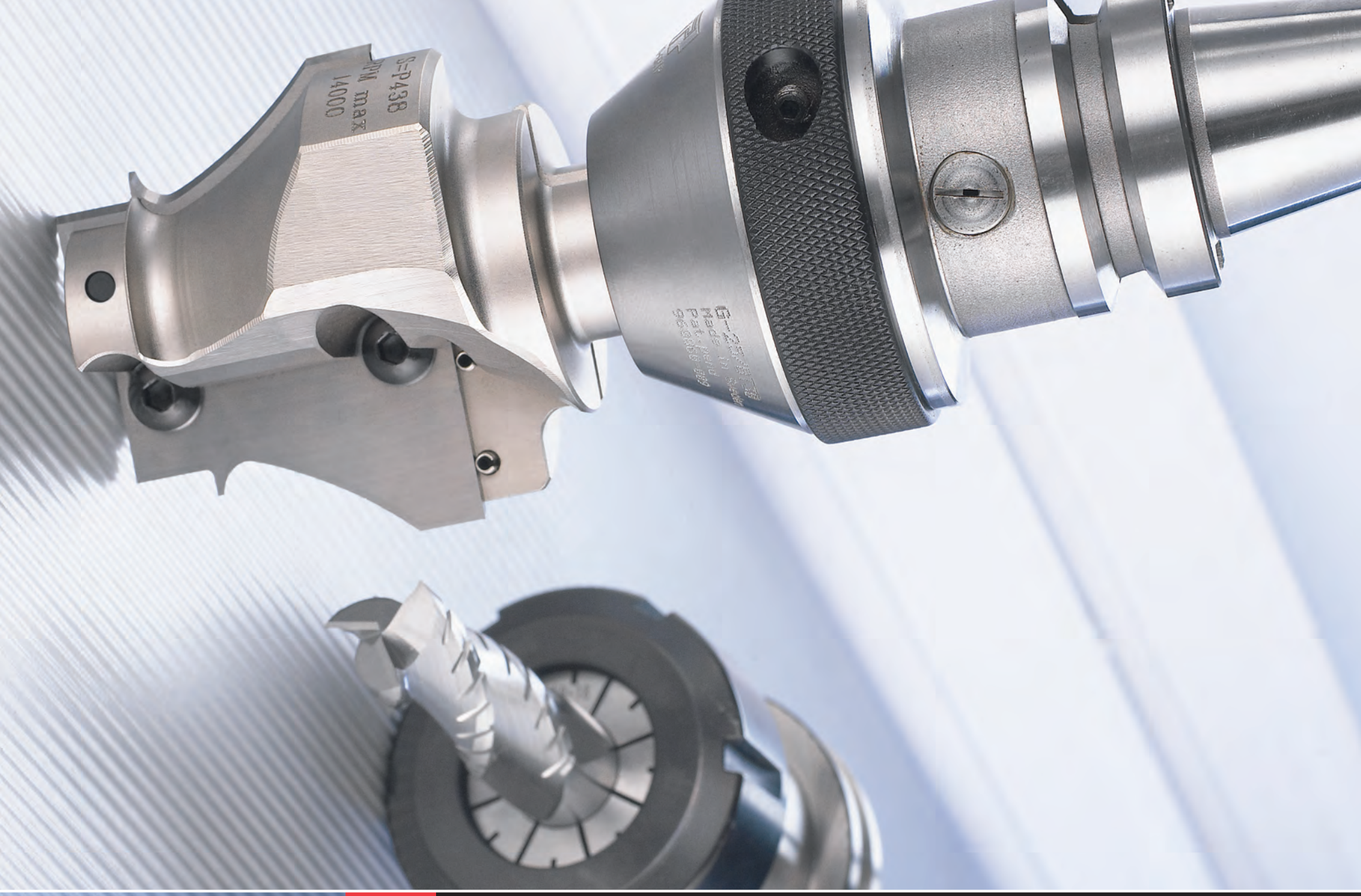
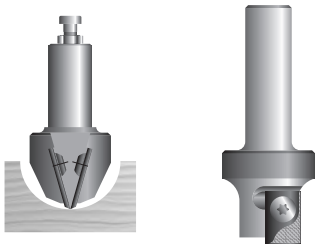


FC

PRECISION TOOLING FOR CNC MACHINES

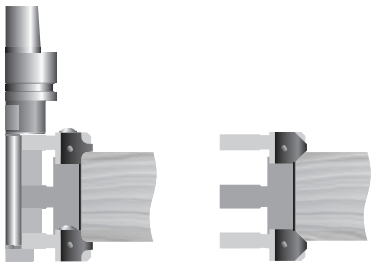
Spiral bits / Insert bits / Tool holders

PRECISION CNC TOOLING - TABLE OF CONTENTS



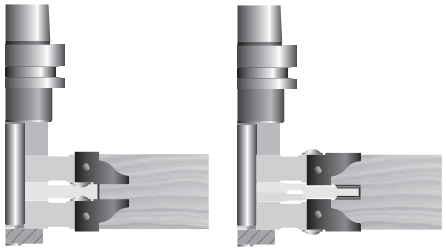
RD

Router Cutters,
Custom Insert Profile



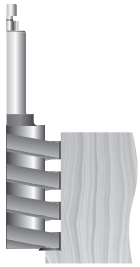
RD2770

Insert Router Cutters,
Adjustable Corner Rounding & Chamfering



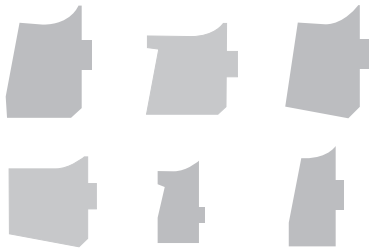
RD

Insert Router Cutters,
Stile and Rail



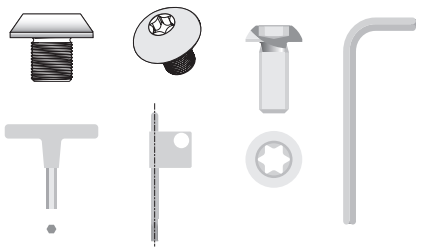
RD2810

Insert Router Cutters,
Staggered Tooth



W302411

Replacement Parts,
Wedges



WM350

Replacement Parts,
Screws & Wrenches

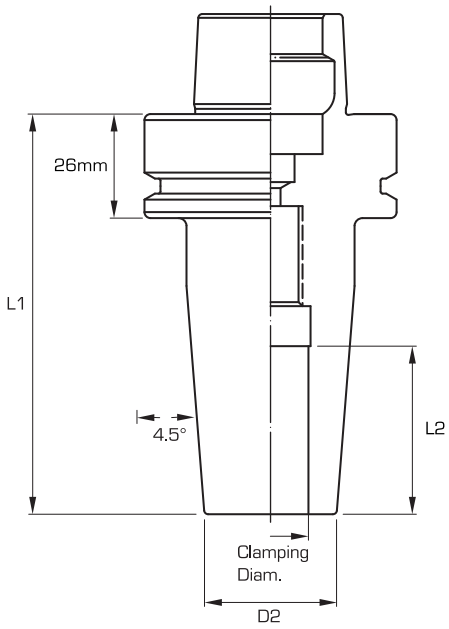
SHRKFH-HSK63F

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®

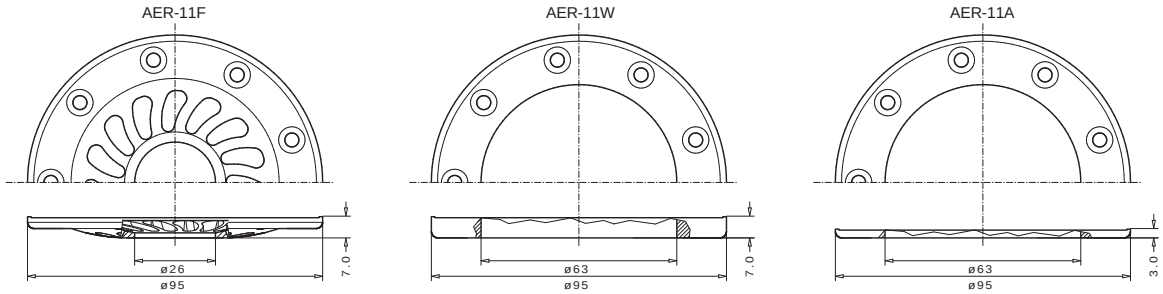
DESIGN:
» Hardened 58 HRC steel body
» Award winning Centrifugal design with arched fan blades provides safe dust extraction without the risk of debris being 'thrown'
» Proprietary HSK20C router bit connection
» Shrinkfit and monoblock tool bodies provide unmatched tool rigidity and increased tool life
» Proper mounting of tool requires tightening to the specified torque settings

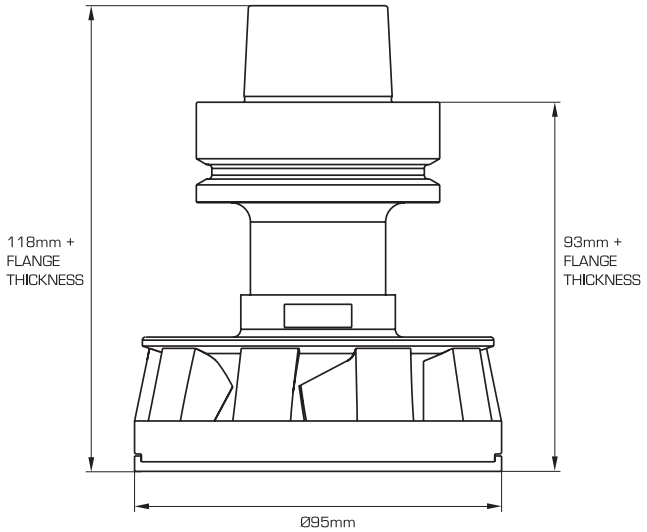
APPLICATION:
» Reduce combustible environmental dust during routing operations
» Increase production throughput by reducing or eliminating clean-up time between cuts and end of the shift
» Longer tool life due to HSK20C connection's increased tool rigidity
» Improved heat disipation provided by enhanced 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®

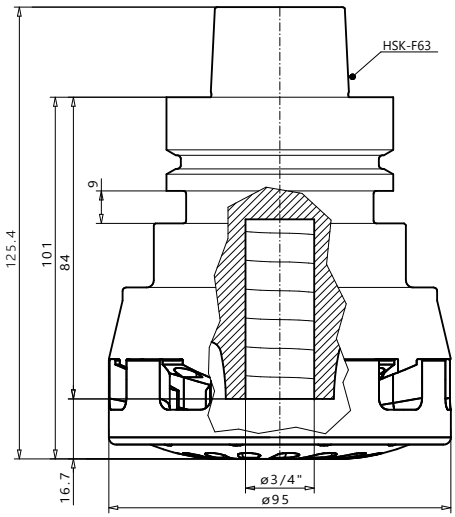
DESIGN:
- » Extended Extraction Flanges provide even more extraction power
- » Hardened 58 HRC steel body reduces wear
- » Award winning Centrifugal design with arched fan blades provides safe dust extraction without the risk of debris being 'thrown'
- » Hydraulic clamping chamber provides exceptional 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

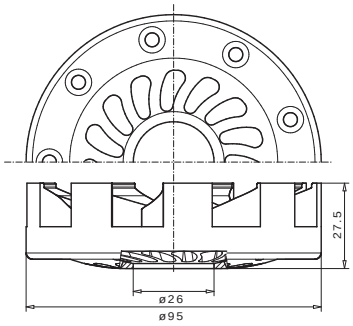
APPLICATION:
- » Reduce combustible environmental dust during routing operations
- » Increase production throughput by reducing or eliminating clean-up time between cuts and end of the shift
- » Fast tool changes
- » Longer tool life due to increased tool rigidity
- » Improved heat disipation provided 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.

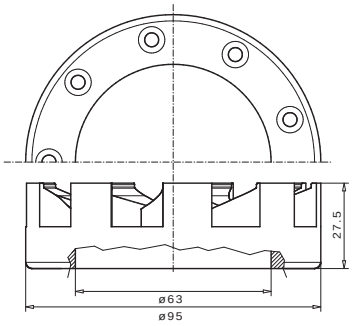
AEROTECH BODY

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

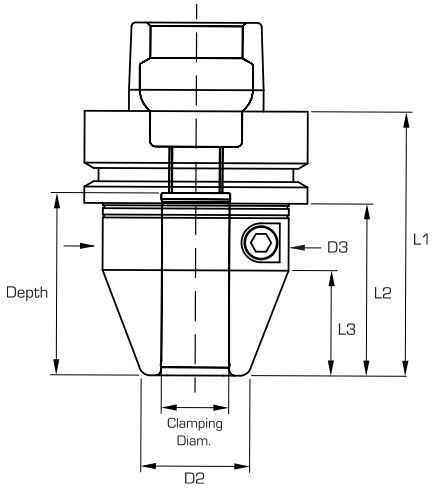
REPLACEMENT PARTS

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

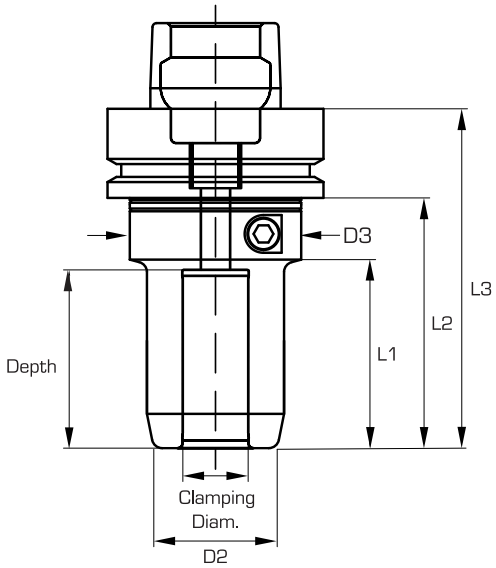
• Clamping diameter may be reduced using an ETP reduction sleeve (see page FC24 & FC25)

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

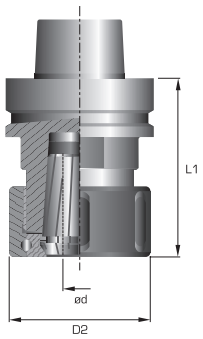
• Clamping diameter may be reduced using an ETP reduction sleeve (see page FC24 & FC25)

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

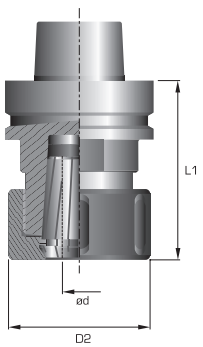
APPLICATION:
» Precision collet chuck for clamping shank type tools

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)

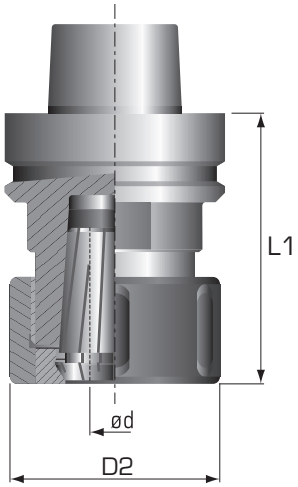
RCTH-HSK63F

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

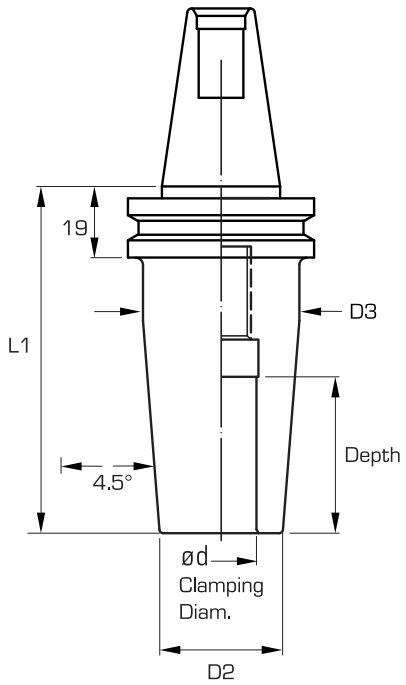


PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2090TH	ER32	2-20	50	72.5	RH	100 ft-lbs
RC2092TH	ER40	3-26	63	76.5	RH	130 ft-lbs
RC2094TH	OZ25	3-25.4	60	76.5	RH	90 ft-lbs

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®

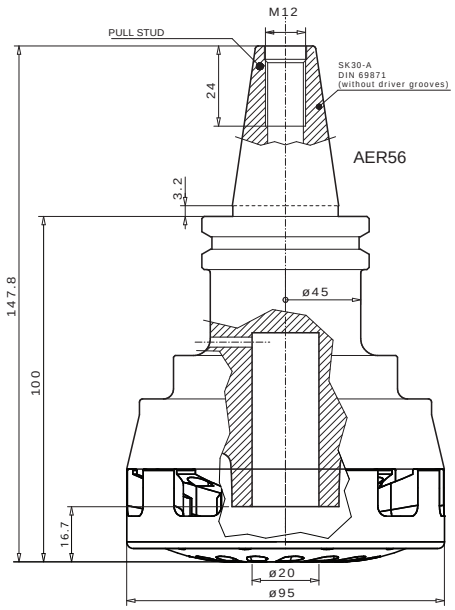
DESIGN:
- » Hardened 58 HRC steel body reduces wear
- » Award winning Centrifugal design with arched fan blades provides safe dust extraction without the risk of debris being 'thrown'
- » Hydraulic clamping chamber provides exceptional clamping power and significantly reduced run-out
- » Universal clamping 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

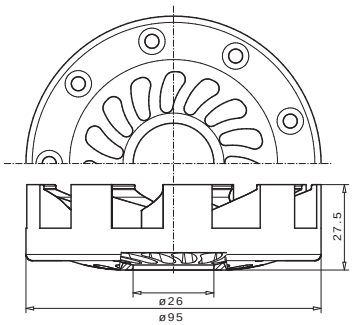
APPLICATION:
- » Reduce combustible environmental dust during routing operations
- » Increase production throughput by reducing or eliminating clean-up time between cuts and end of the shift
- » Fast tool changes
- » Longer tool life due to increased tool rigidity
- » Improved heat disipation provided 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.

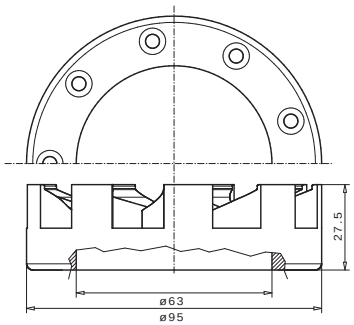
AEROTECH BODY

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

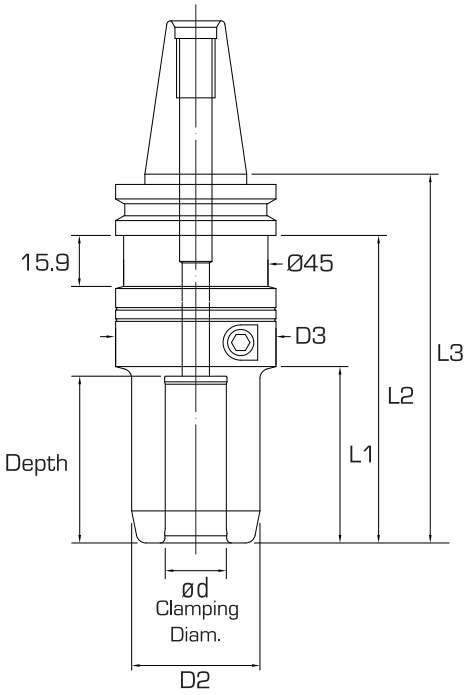
REPLACEMENT PARTS

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

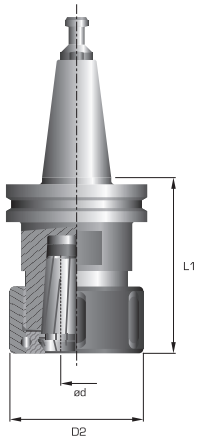
• Clamping diameter may be reduced using a reduction sleeve (see page FC24 & FC25)

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

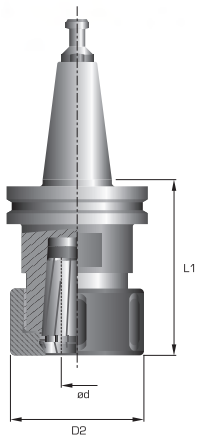
APPLICATION:
- » Precision collet chuck for clamping shank type tools

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

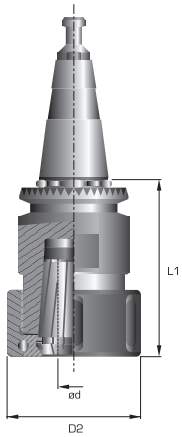
When ordering, specify pull stud type (see page FC14)

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

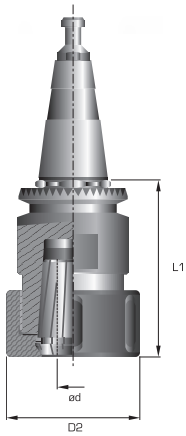
When ordering, specify pull stud type (see page FC14)

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

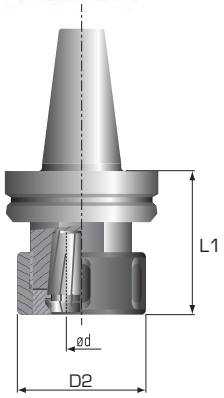


PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	D2 MM	L1 MM	ROTATION	TORQUE SETTING
RC2030	ER32	2-20	50	55	RH	100 ft-lbs
RC2032	ER32	2-20	50	55	LH	100 ft-lbs
RC2034	ER40	3-26	63	70	RH	130 ft-lbs
RC2036	ER40	3-26	63	70	LH	130 ft-lbs
RC2038	OZ25	3-25.4	60	72	RH	90 ft-lbs
RC2039	OZ25	2-25.4	60	72	LH	90 ft-lbs

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

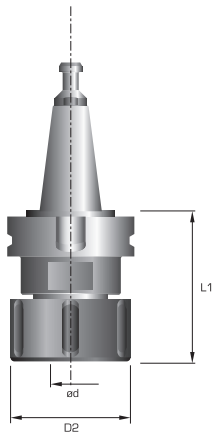
IMPORTANT:
» RC2014TH is not compatible with Thermwood's "Typewriter" style tool changer

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

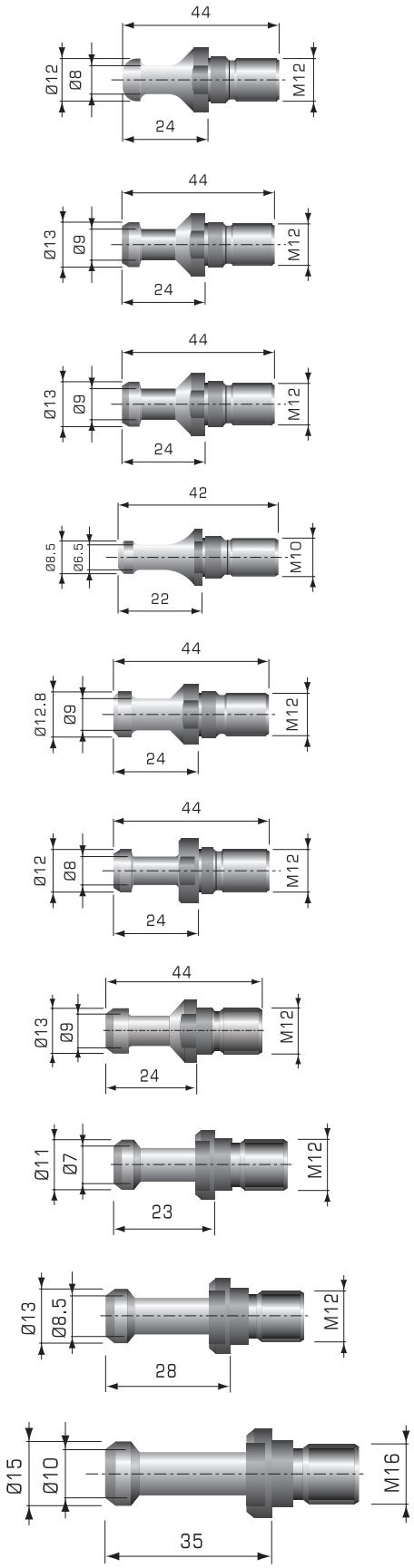
APPLICATION:
» Precision collet chuck for clamping shank type tools

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

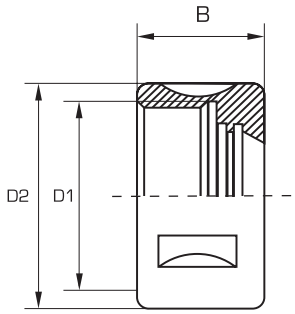
When ordering, specify pull stud type (see page FC14)

Spring collets not included (see pages FC18 - FC21)

• Special "No Knotch" Collet Chuck for Komo CNC Routers, use pull stud type PS1090

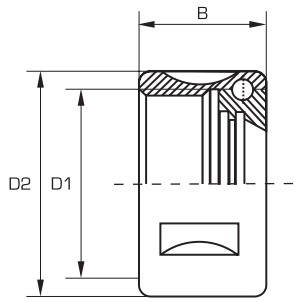


PART NO.	TOOLHOLDER TYPE	MACHINE
PS1020	ISO30	BIESSE (After 1992) MASTERWOOD
PS1030	ISO30	ALBERTI
PS1040	ISO30 / BT30	IMA, MAKA, WEEKE, BUSELLATO, BULLERI, COSMEC RICHENBACHER
PS1060	ISO30	SCM - MORBIDELLI
PS1070	ISO30	CMS
PS1080	ISO30	THERMWOOD, ESSETEAM
PS1090	BT30	KOMO
PS1100	BT30	SHODA
PS1110	BT35	HEIAN
PS1120	BT40	SHODA



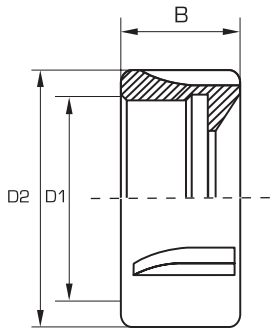
SLOTTED COLLET NUTS WITHOUT BALL BEARING

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



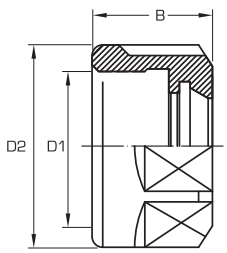
SLOTTED COLLET NUTS WITH BALL BEARING

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

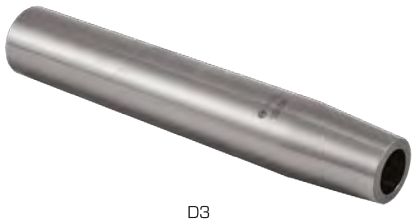
PART NO.	COLLET TYPE	DIN #	DIAM. D2 MM	THICKNESS B MM	DIAM. D1	ROTATION	TORQUE SETTING
CN23111	ER11	6499	16	12	M13 x 0.75	RH	12 ft-lbs
CN23116	ER16	6499	22	18	M19 x 1.0	RH	20 ft-lbs
CN23120	ER20	6499	28	19.5	M24 x 1.0	RH	22 ft-lbs
CN23125	ER25	6499	35	21	M30 x 1.0	RH	28 ft-lbs

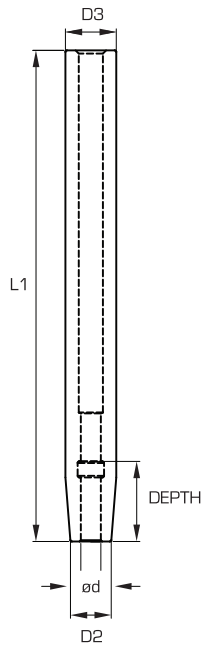


HEX COLLET NUTS WITHOUT BALL BEARING

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



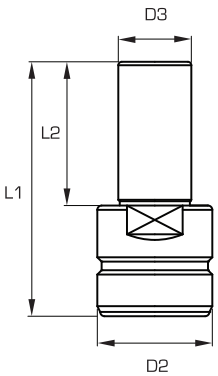


DESIGN:
- » Extension with shrinkfit interface provides the smallest nose diameter
- » Small diameter provides greatest access to confined cuts
- » Durable high quality steel
- » Precision ground interfaces
- » Capable of many accurate tool change cycles
- » Provides superior rigidity and accuracy
- » 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

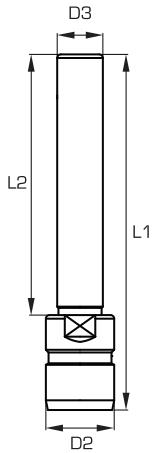


DESIGN:
- » Precision ground surfaces
- » Collet design allows for fast, easy tool changes of different shank diameters
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting
- » Tightens using standard collet nut wrench

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

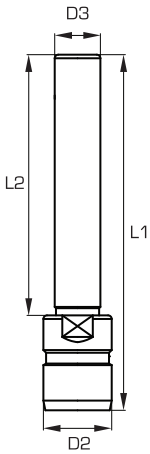


DESIGN:
- » Slotted mini-nut collet provides smaller nut diameters for improved access to more confined cuts
- » Precision ground surfaces
- » Collet design allows for fast, easy tool changes of different shank diameters
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires 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

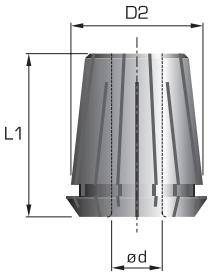


DESIGN:
- » Precision ground surfaces
- » Collet design allows for fast, easy tool changes of different shank diameters
- » Optimal concentricty, collet life, and proper clamping of tool shanks requires tightening to the specified torque setting
- » Requires wrench to tighten hex nuts

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

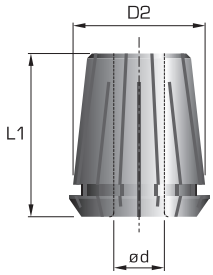
PART NO.	COLLET TYPE	CLAMPING RANGE ød MM	SHANK DIAM. D3	NUT DIAMETER D2 MM	OVERALL LENGTH L1 MM	SHANK LENGTH L2 MM	TORQUE SETTING	WRENCH PART NO.
RCEXT04855	ER11	0.5-7	1/2"	19	174.5	140	20 ft-lbs	WR04608
RCEXT04854	ER11	0.5-7	5/8"	19	174.5	140	50 ft-lbs	WR04608
RCEXT04832	ER16	1-10	5/8"	28	95.1	60	50 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

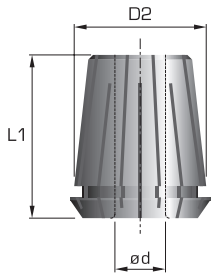
ER16 DIN 6499
ER16 PRECISION COLLETS
SPRING COLLETS



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

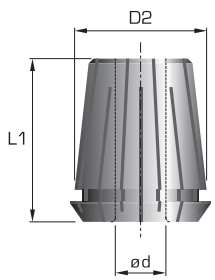
ER20 PRECISION COLLETS
SPRING COLLETS



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

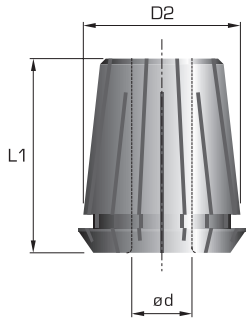
ER25 DIN 6499

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

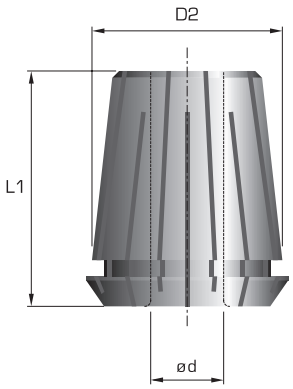
ER32 PRECISION COLLETS
SPRING COLLETS



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

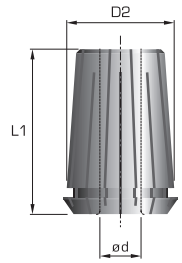
ER40 PRECISION COLLETS
SPRING COLLETS



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

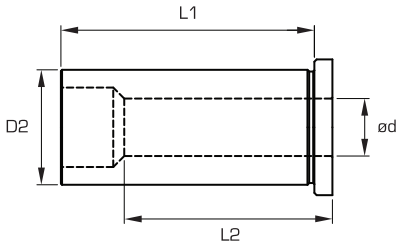
HEX COLLET KEY ADAPTERS

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

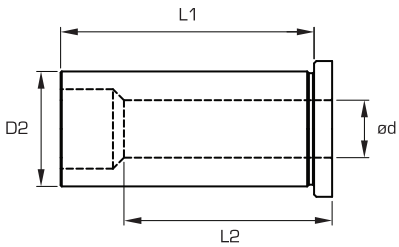
REDUCTION SLEEVES

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

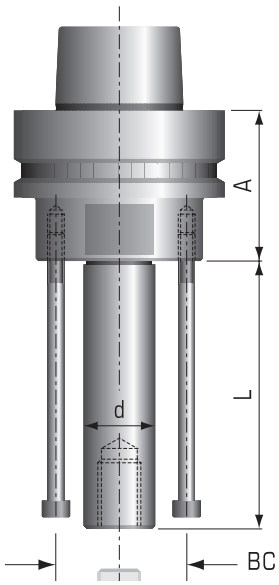
REDUCTION SLEEVES

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

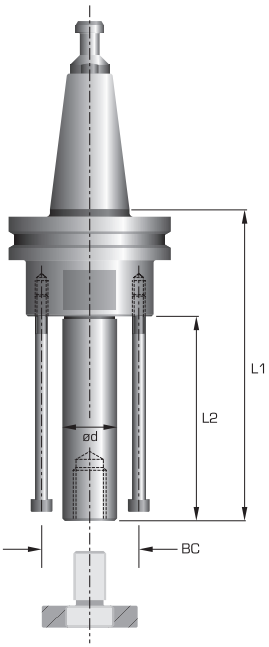
METRIC SIZES

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

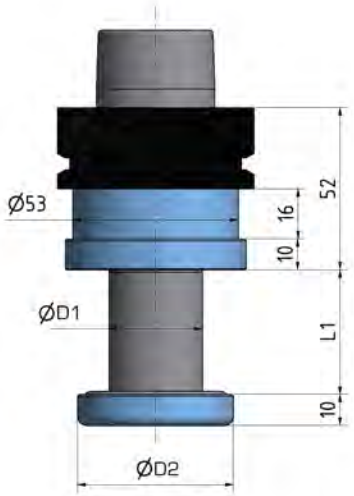
ETP-GE2 HSK63F HYDRO-GRIP® CUTTER ARBORS
TYPE: GE2

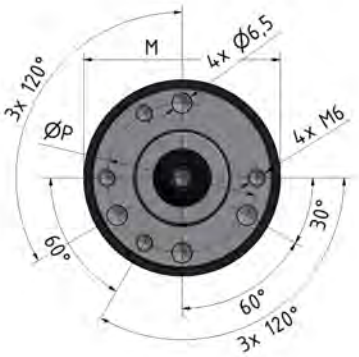
DESIGN:

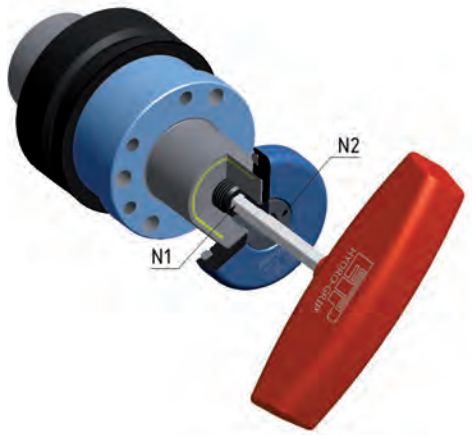
» Precision GE2 hydraulic chucks are available in HSK63F only
» Balanced for high speed machining
» Hydraulic clamping ensures exact radial running accuracy for optimum quality of cut and extended tool life
» Designed with safety ring in light metal
» Adapted for 3 wing cutters
» Suitable for both left 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

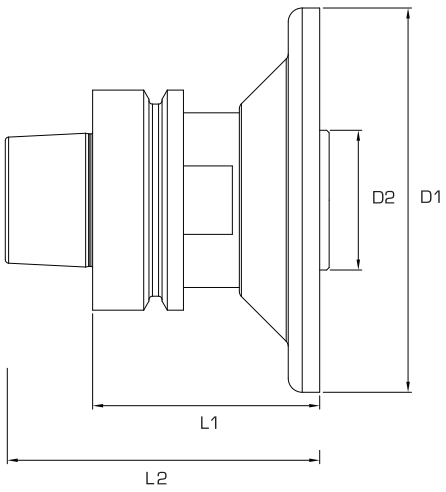
APPLICATION:
» For precise and rigid mounting of saw blades
» On CNC routers with manual or automatic tool change

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:

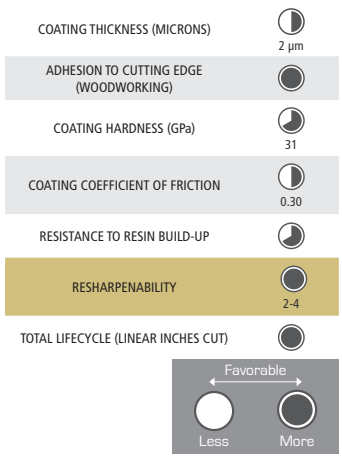
- Laminated panels
- Chipboard

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

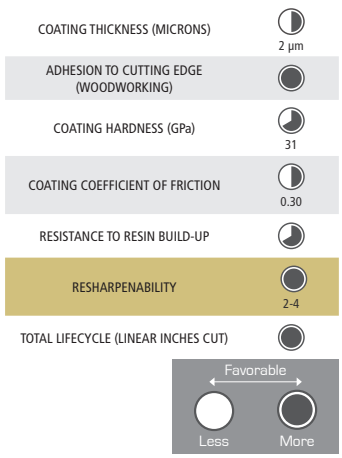
DESIGN:

» 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

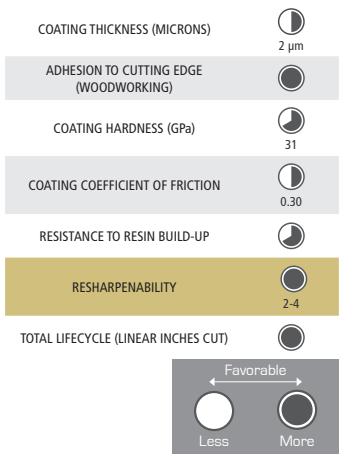
	PART NO.	CUTTING DIAM.	CUTTING LENGTH	SHANK DIAM.	UPCUT LENGTH	OVERALL LENGTH	NO. FLUTES
	RSF2058M-UD2	1/4"	7/8"	1/4"	4.8mm	2-1/2"	2+2
XLC	RSF2058MXLC-UD2	1/4"	7/8"	1/4"	4.8mm	2-1/2"	2+2
	RSF2059MS-UD2	3/8"	7/8"	3/8"	4.8mm	3"	2+2
	RSF2060-UD2	3/8"	1-1/8"	3/8"	7.4mm	3"	2+2
	RSF2059M-UD2	3/8"	1-1/4"	3/8"	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)

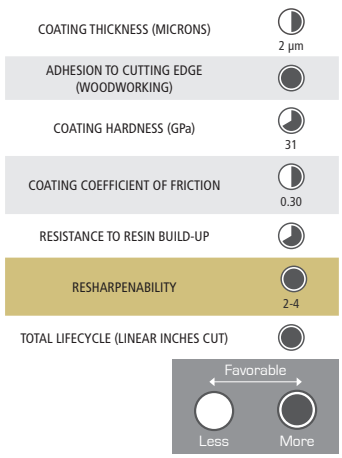
MATERIALS:
Excellent finish on:
- » Laminated panels
- » HPL
- » Chipboard
- » MDF

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

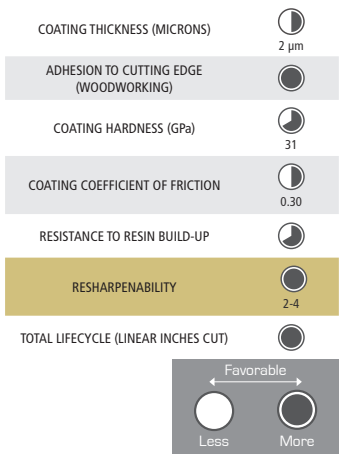
Good finish on:
- Softwoods and hardwoods
- Plywood
- OSB
- MDF
- HPL
- Solid surface

	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

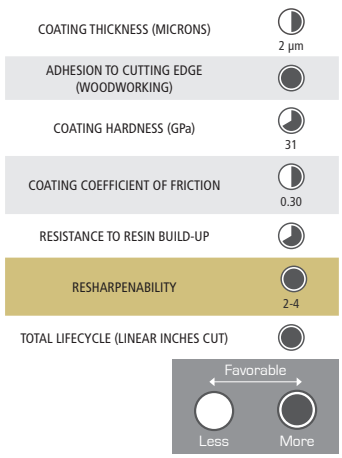
APPLICATION:
» For exceptionally smooth finishing cuts
» Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
» Improved cutting edge life when cutting hard materials
» Reduces noise levels during cutting operations of hard materials
» Ideal for plywood 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

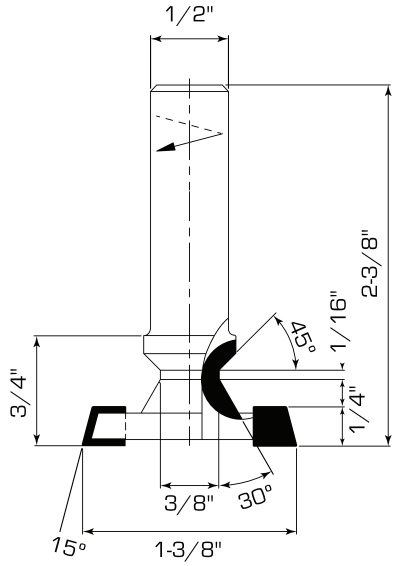
DESIGN:
» Excellent surface finish and exceptionally long run-time are provided by the Microfinish erosion process of each PCD diamond cutting edge
» Re-sharpenable

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

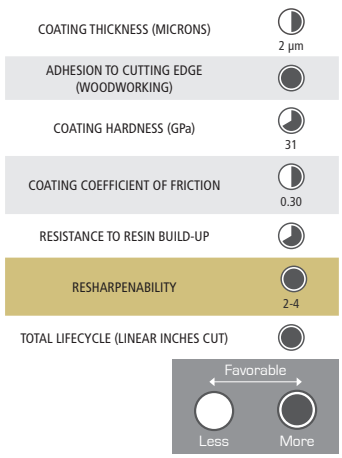
APPLICATION:
» Chipbreakers reduce tear-out and improve chipflow by reducing the size of chips
» Chipbreakers lower noise levels and cutting pressure
» Increased cutting edge life when frequently accelerating/decelerating or performing multiple passes
» Eliminates chipping, fuzzing, and tear-out when 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

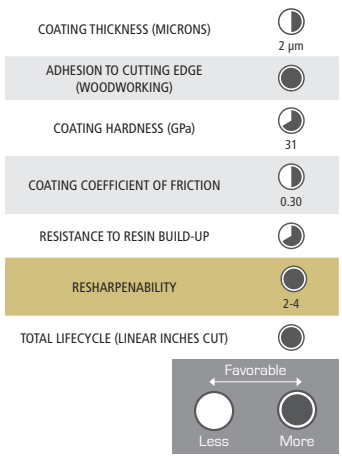
APPLICATION:
» Chipbreakers reduce tear-out and improve chipflow by reducing the size of chips
» Chipbreakers lower noise levels and cutting pressure
» Reduced run-out in parting cuts as 2 cutting edges are engaged at all times
» 3 cutting edges provide faster feed rates at low spindle speeds
» Ideal 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:

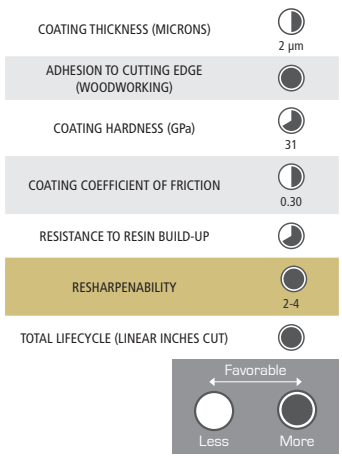
» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Scalloped edges produce smaller chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Improved cutting edge life when cutting hard and fibrous materials
» 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:

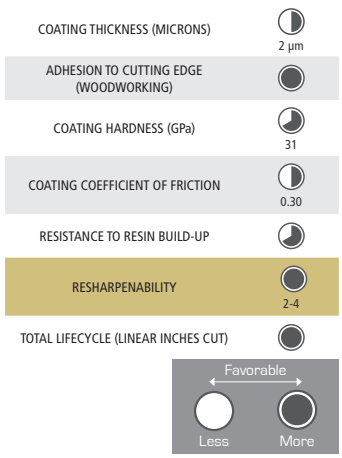
» Clean but uneven surface finish is produced by the aggressive scalloped cutting edge design
» Scalloped edges produce smaller chips, allowing higher feed rates with less cutting pressure in hard materials and roughing applications
» Improved cutting edge life when cutting hard and fibrous materials
» 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

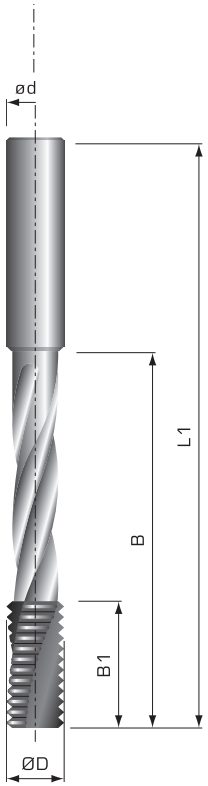
PART NO.	SHEAR DIRECTION	CUTTING DIAM.	MAX. DEPTH OF CUT	SHANK DIAM.	SHANK LENGTH	OVERALL LENGTH	NO. FLUTES
RSCH2046-U3	UPCUT	1"	4"	1"	2"	7"	3
RSCH2046-D3	DOWNCUT	1"	4"	1"	2"	7"	3

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

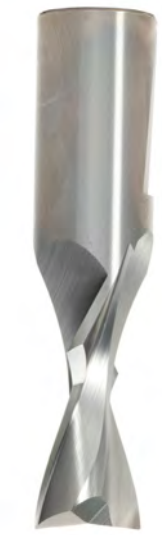
WHEN ORDERING SPECIFY:
» If your machines has an Eccentric Spindle, router bits will be custom manufactured

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

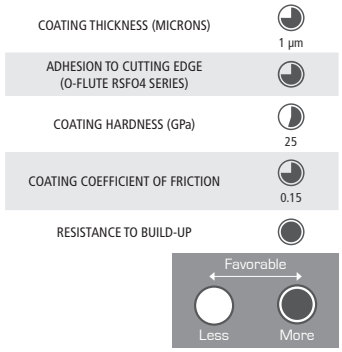
RSF04-U1 O-FLUTES OPTIMIZED FOR ALUMINUM
UPCUT, Z=1

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

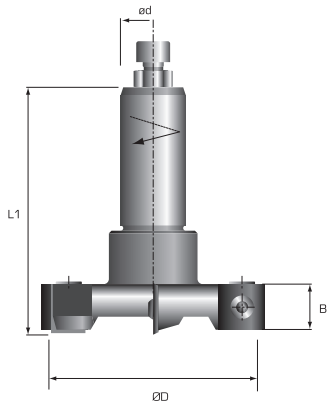
RD2562 SURFACING INSERT ROUTER BIT
0° SHEAR

DESIGN:
» High tensile steel body
» 0° shear provides smooth cutting on MDF
» Reversible tungsten carbide inserts with 4 cutting edges

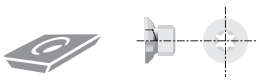
APPLICATION:
» MDF Spoilboard cutter for preparing nesting tables
» For surface cutting in workpieces with large areas
» For producing large rabbeting cuts with a single pass

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

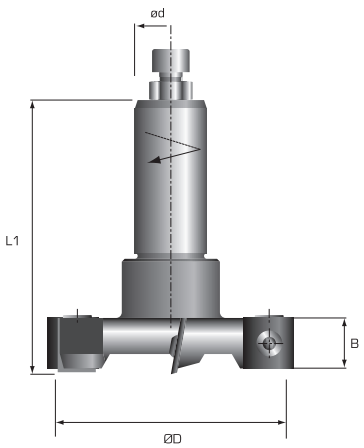
RD2560 SURFACING INSERT ROUTER BIT
10° SHEAR

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

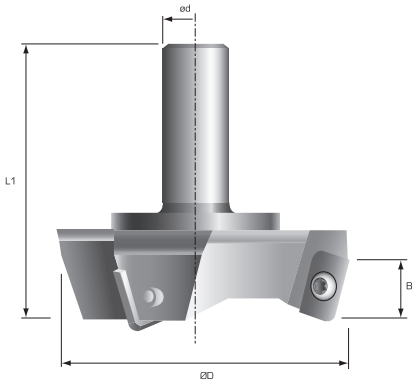
DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
PART NO.	301200	WM350-PL	W400405
DIMENSIONS	12x12x1.5	M3.5x6	T15 Torx

RD2570 SURFACING INSERT ROUTER BIT
5° SHEAR WITH RADIUS CORNERS

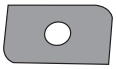
DESIGN:
» High tensile steel body
» Radius on cutting edges provides blending for smoothest surface finish
» 5° shear provides smooth cutting on a variety of materials including solid wood
» Reversible tungsten carbide insert with 2 cutting edges

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:

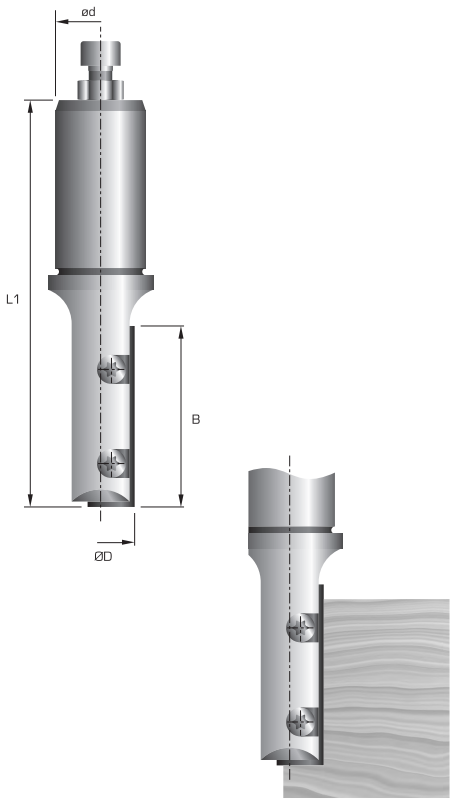
» For jointing, rabbeting, and grooving in solid wood and panel materials
» Suitable for ramp-in plunge cuts using Z and X or Y axis
» On stationary and CNC routers

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:

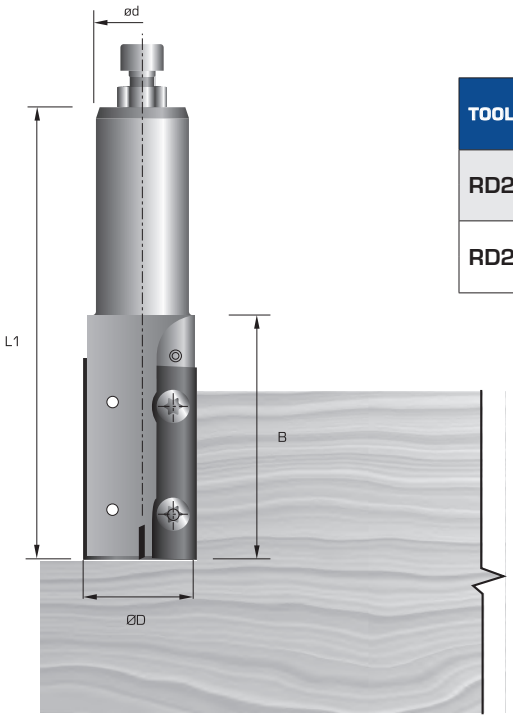
» High tensile steel body
» 2 straight and 1 plunge reversible tungsten carbide insert

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

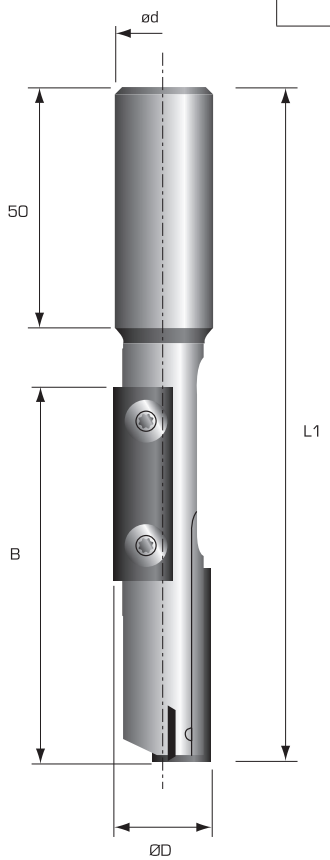
APPLICATION:
» For machining double sided laminated panels, solid wood, and wood composites
» Suitable for straight down plunge cuts and ramp-in plunge cuts
» On stationary and CNC routers

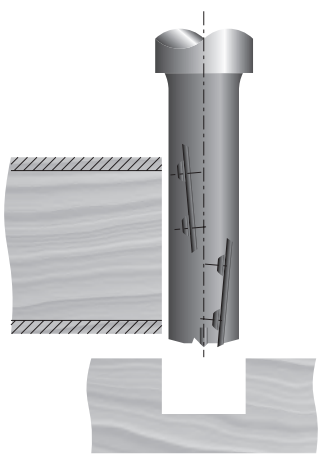
PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. FLUTES
RD2535	3/4"	58	3/4"	120	20000	1+1+1
RD2537	3/4"	78	3/4"	140	20000	1+1+1

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

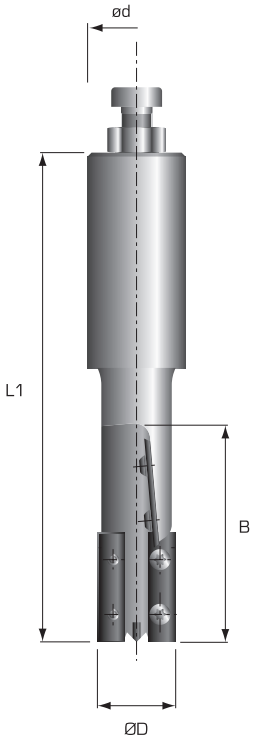
PART NO.	CUTTING DIAM. ØD	CUTTING LENGTH B MM	SHANK DIAM. ød MM	OVERALL LENGTH L1 MM	ROTATION	MAX. RPM	NO. FLUTES
RD2530	20	53	20	125	Right Hand	20000	2+2+1
RD2532	20	53	20	125	Left Hand	20000	2+2+1

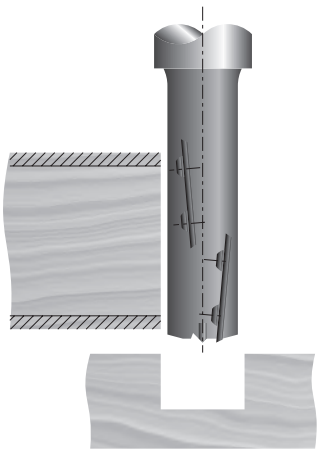
Other sizes available upon request

Supplied with brazed plunge point

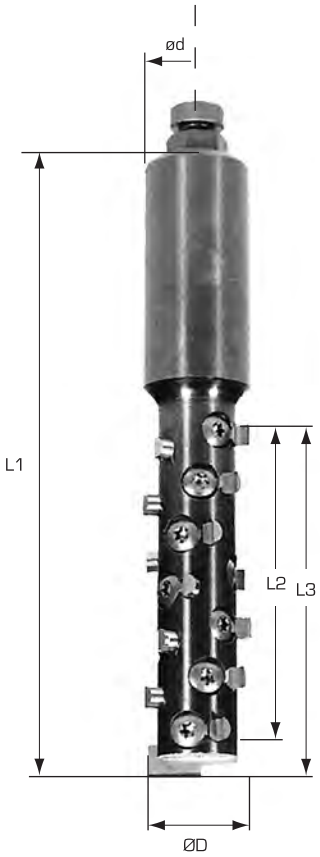
REPLACEMENT PARTS

DESCRIPTION	KNIFE	SCREW FOR KNIFE	WRENCH
PART NO.	**302810**	**W502331**	**W400401**
DIMENSIONS	28x7x1.5	M3x4	T9 Torx





RD2540 INSERT ROUTER BITS
ROUGHING & SIZING



DESIGN:

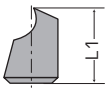
» High tensile steel body
» 3 wings of solid tungsten carbide cutting pins
» 1 tungsten carbide plunge point insert
» Standard version with straight cutting pins, optional with shear angle cutting pins, upshear or downshear can be inserted at any height
» High quality of cut achieved by helically positioned 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

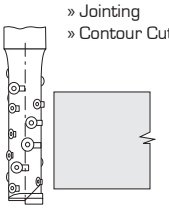
PART NO.	DIAM. ØD	CUTTING LENGTH L2 MM	CUTTING LENGTH L3 MM	SHANK DIAM. ød	OVERALL LENGTH L1 MM	MAX. RPM	NO. PINS	NO. OF WINGS
RD2540	16mm	42	48	14mm	110	24000	27	3
RD2542	16mm	56	62	14mm	125	24000	36	3
RD2543	3/4"	42	48	3/4"	105	24000	27	3
RD2544	3/4"	56	62	3/4"	119	24000	36	3

Other sizes available upon request

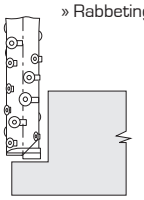


Interchangeable Solid Carbide Cutting Pins

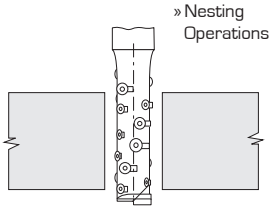
L1 = 5.5 mm



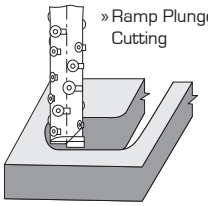
» Jointing
» Contour Cutting



» Rabbeting



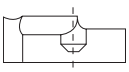
» Nesting Operations



» 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

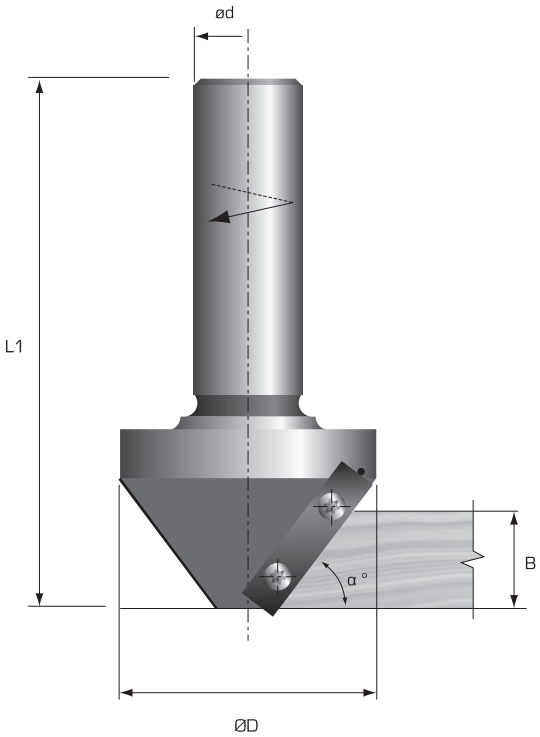
DESIGN:

» 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

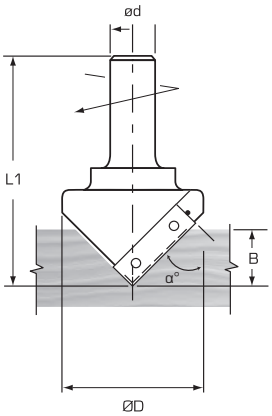
RD2571 V GROOVE INSERT ROUTER BIT
FOR CNC ROUTERS

DESIGN:
- » High tensile steel body with no shear
- » Precise center point on bottom

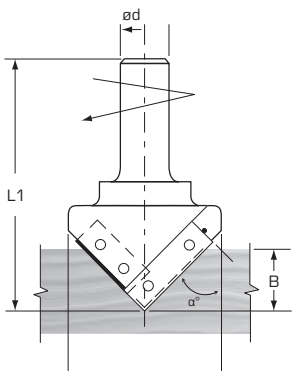
APPLICATION:
- » For chamfering, bevels, decorative grooving, and mitre folds in solid wood and panel materials
- » For Glue Folds, a 44.5° angle of cut (91° included angle) is recommended to allow for the addition of glue
- » Suitable for ramp-in plunge cuts or side entry
- » On stationary and CNC routers

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

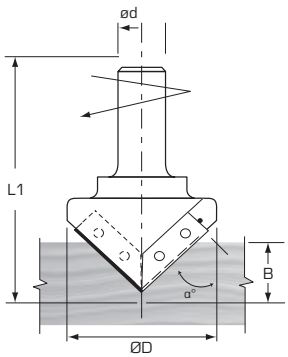
WING CONFIGURATION: Z = 1



WING CONFIGURATION: Z = 1+1

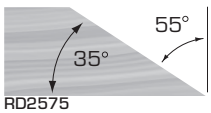


WING CONFIGURATION: Z = 2

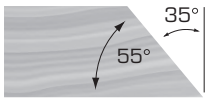


ANGLE OF CUT α°

RD2579

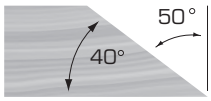


RD2575

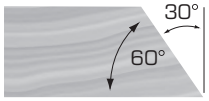


RD2572

RD2578, RD2589

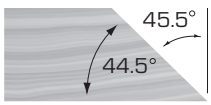


RD2574

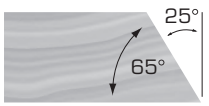


RD2571, RD2585

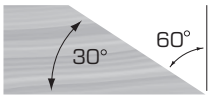
RD2577, RD2588



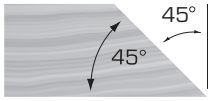
RD2573, RD2586



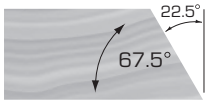
RD2571B



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:

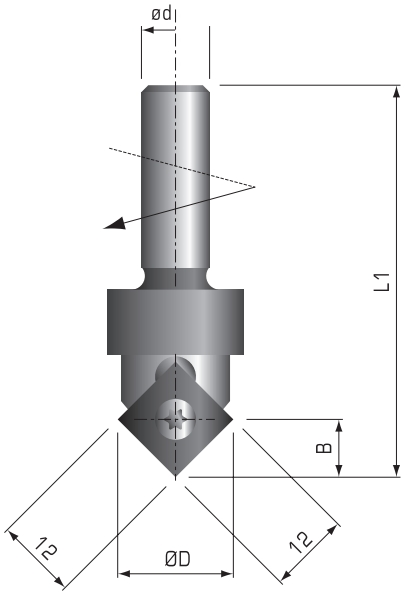
» High tensile steel body with 1 insert knife
» Tungsten carbide insert knife
» Tool body supplied with square insert for profile A. For other profiles, knives ordered separately (refer to chart at the bottom of this page)

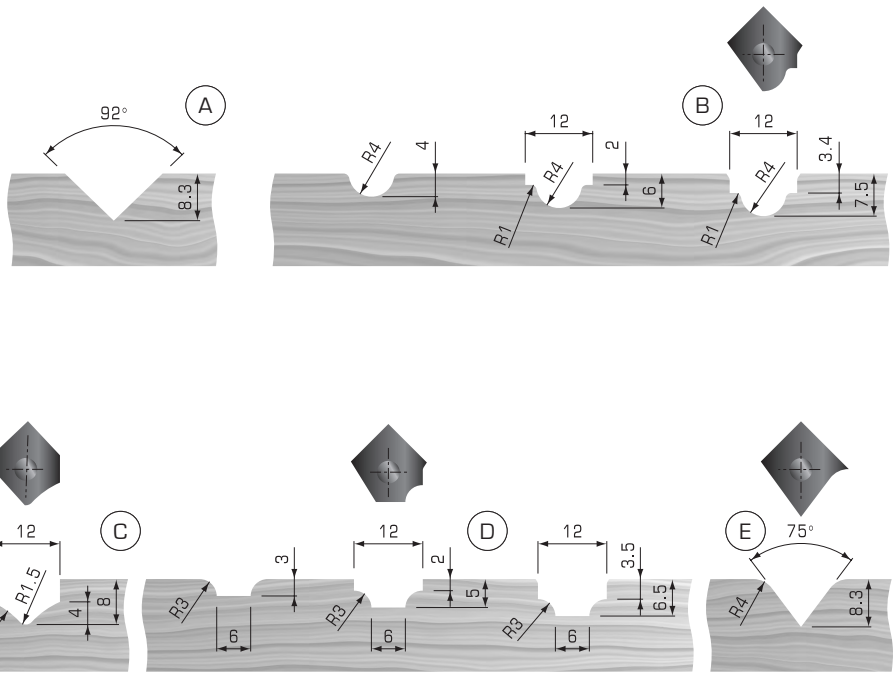
APPLICATION:

» 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

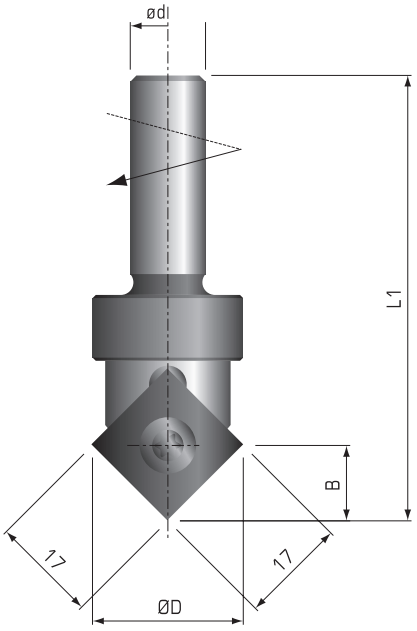
RD2610 INSERT ROUTER BIT
MULTI PROFILE

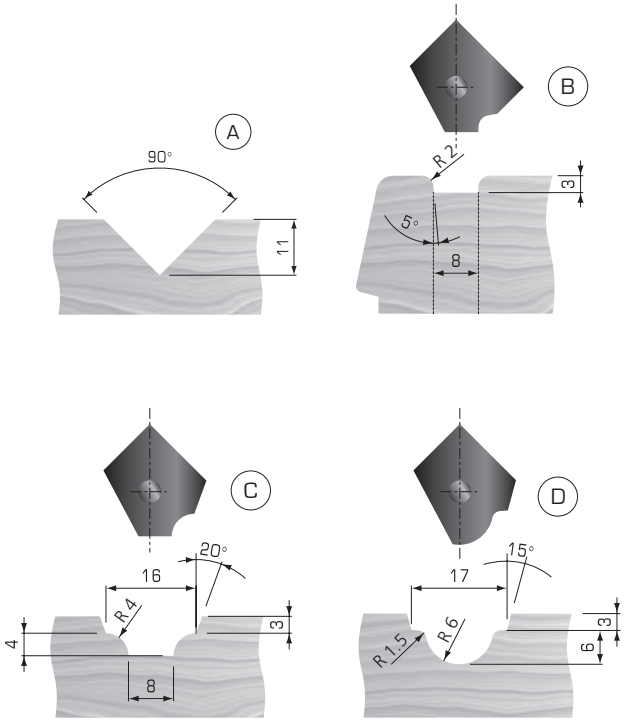
DESIGN:
» High tensile steel body with 1 tungsten carbide insert knife
» Tool body supplied with square insert for profile A. For other profiles, knives ordered separately (refer to chart at the bottom of this page)

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

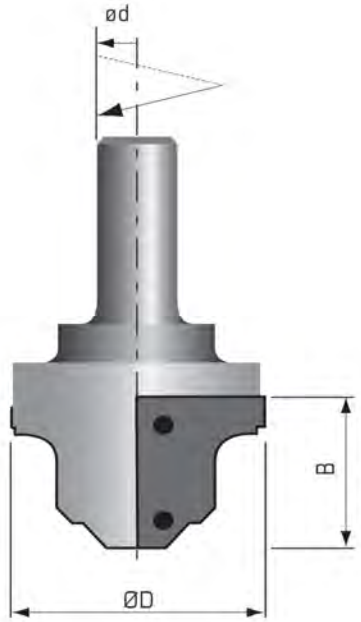




REPLACEMENT PARTS

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

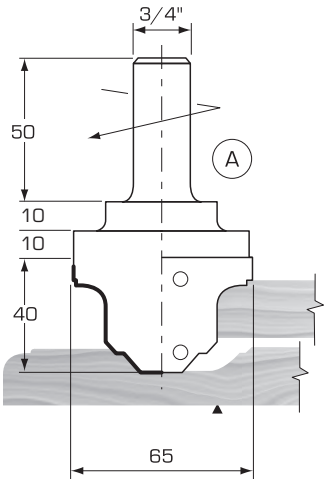


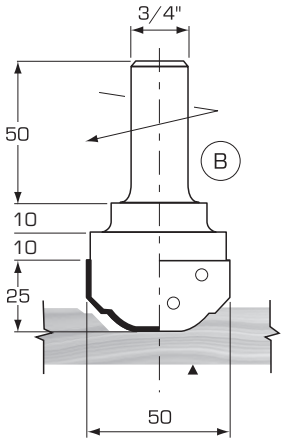
DESIGN:
» High tensile steel body with 1or 2 insert knives
» Tool body supplied with positioning pins for easy and accurate replacement of inserts
» Profiled tungsten carbide inserts with 1 cutting edge

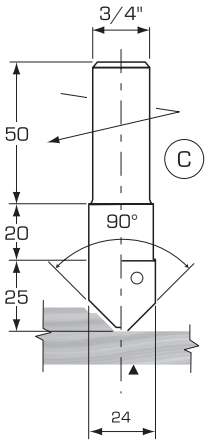
APPLICATION:
» For machining MDF cabinet doors
» On CNC routers

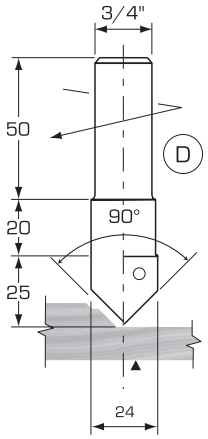
PART NO.	TOOL NO.	CUTTING DIAM. ØD MM	CUTTING DEPTH B MM	SHANK DIAM. ød	MAX. RPM	NO. TEETH
RD2620	A	65	40	3/4"	16000	2
RD2622	B	50	25	3/4"	18000	2
RD2624	C	24	25	3/4"	20000	1
RD2626	D	24	25	3/4"	20000	1

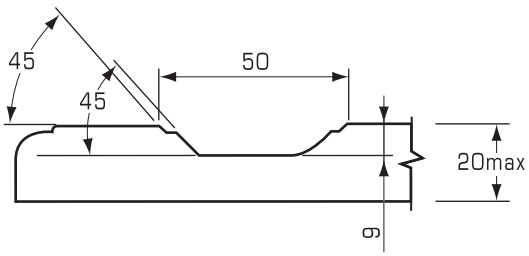
Other profiles available upon request







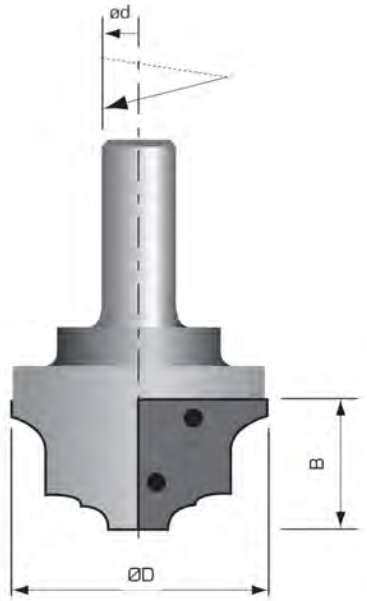




REPLACEMENT PARTS

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

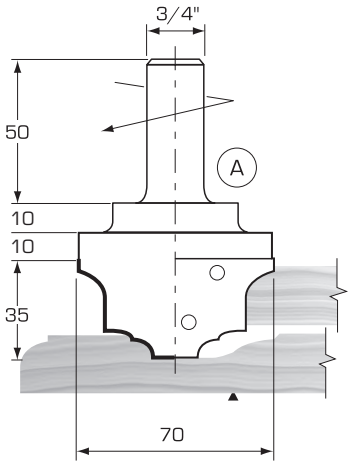


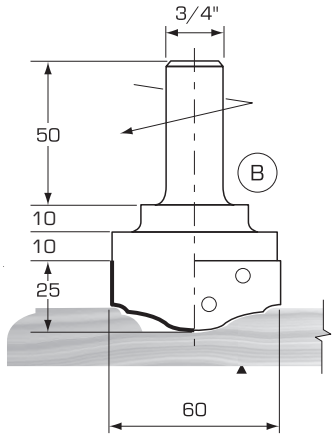
DESIGN:
» High tensile steel body with 2 insert knives
» Tool body pvositioning pins for easy and accurate replacement of inserts
» Profiled tungsten carbide inserts with 1 cutting edge

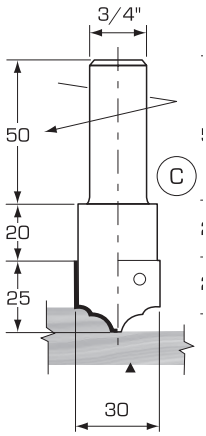
APPLICATION:
» For machining MDF cabinet doors
» On CNC routers

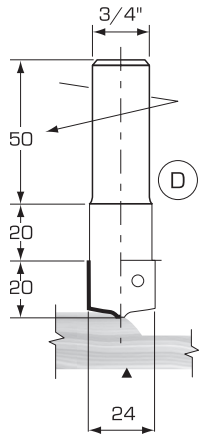
PART NO.	TOOL NO.	CUTTING DIAM. ØD MM	CUTTING DEPTH B MM	SHANK DIAM. ød	MAX. RPM	NO. TEETH
RD2630	A	70	35	3/4"	16000	2
RD2632	B	60	25	3/4"	18000	2
RD2634	C	30	25	3/4"	20000	2
RD2636	D	24	20	3/4"	20000	2

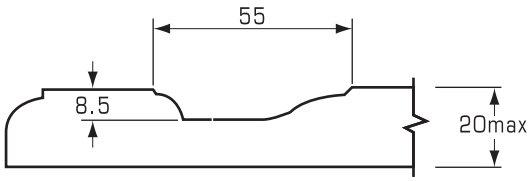
Other profiles available upon request







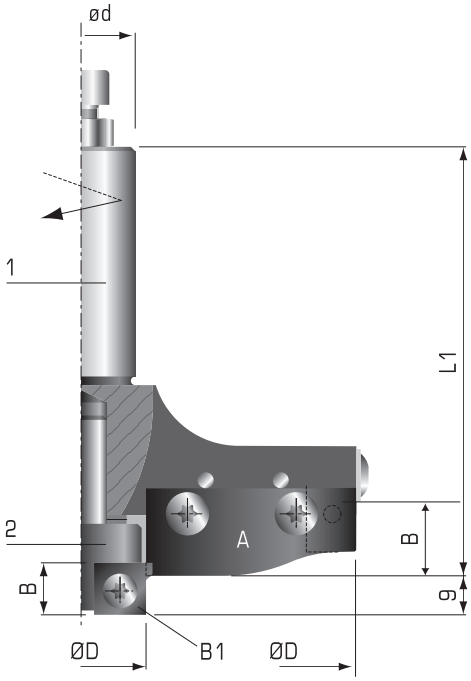


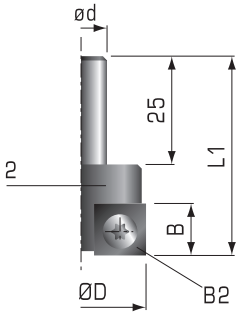


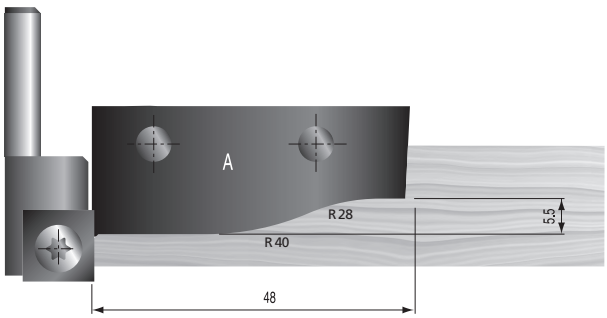
REPLACEMENT PARTS

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

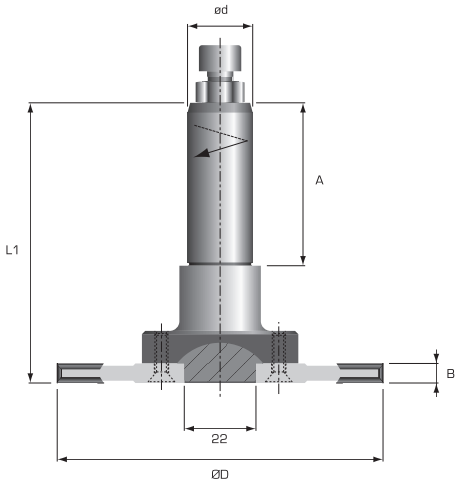
RD2760 INSERT ROUTER CUTTER
GROOVING

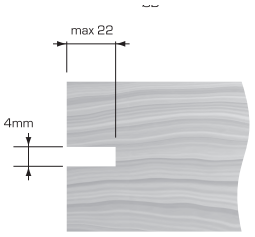
DESIGN:
» High tensile steel body
» 4 reversible tungsten carbide teeth + 4 reversible tungsten carbide spurs with 4 cutting edges

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

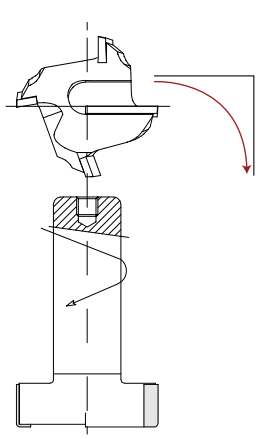
SHAKER Hogout	SHAKER Inside Radius	SHAKER Corner	SHAKER Highlight	SHAKER Cutout+Radius

- Perfect-finish, one-piece MDF Shaker door
- Increase your production throughput and eliminate sanding
- 5-piece PCD Diamond tool set

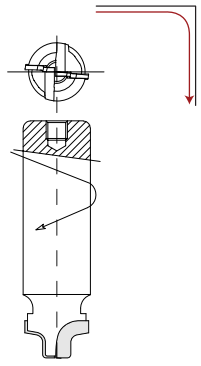
DRS01 MDF DOOR TOOLING SET
SHAKER

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

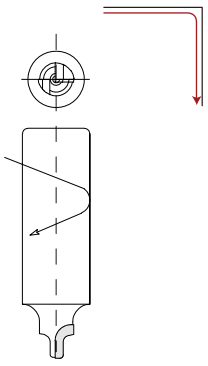
APPLICATION:
» For producing perfect paint ready, one-piece MDF Shaker doors
» Shaker - Hogout: Removes material from the pocket and leaves a smooth, clean surface
» Shaker - Inside Radius: Removes material from the perimeter of the pocket
» Shaker - Corner: Refines the inner corners of the pocket
» 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



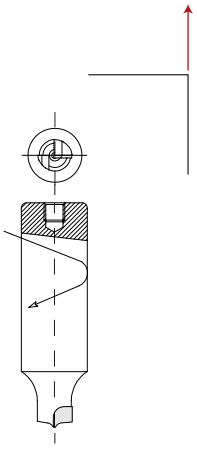
SHAKER - HOGOUT
PART NO. DRS01-D01



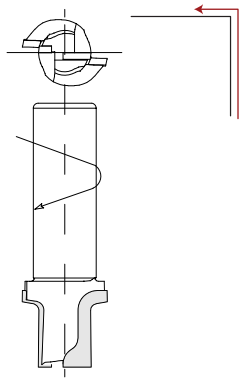
SHAKER - INSIDE RADIUS
PART NO. DRS01-D02



SHAKER - CORNER
PART NO. DRS01-D03



SHAKER - HIGHLIGHT
PART NO. DRS01-D04



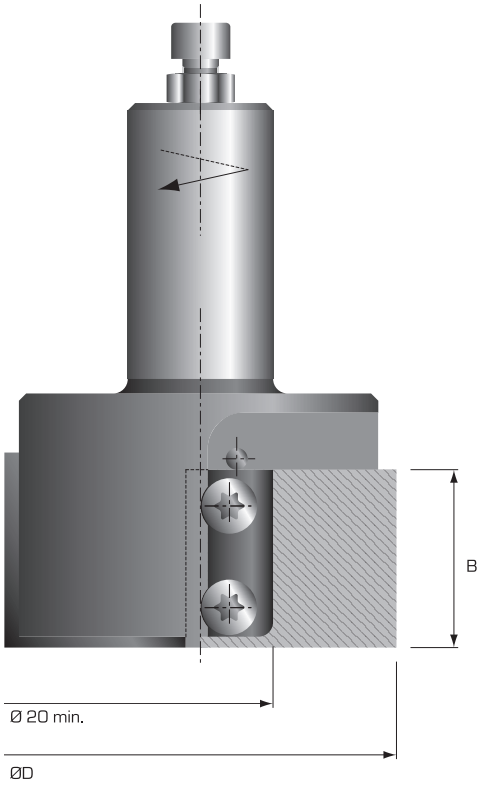
SHAKER - CUTOUT + RADIUS
PART NO. DRS01-D05

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

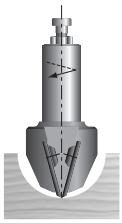


DESIGN:

» 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



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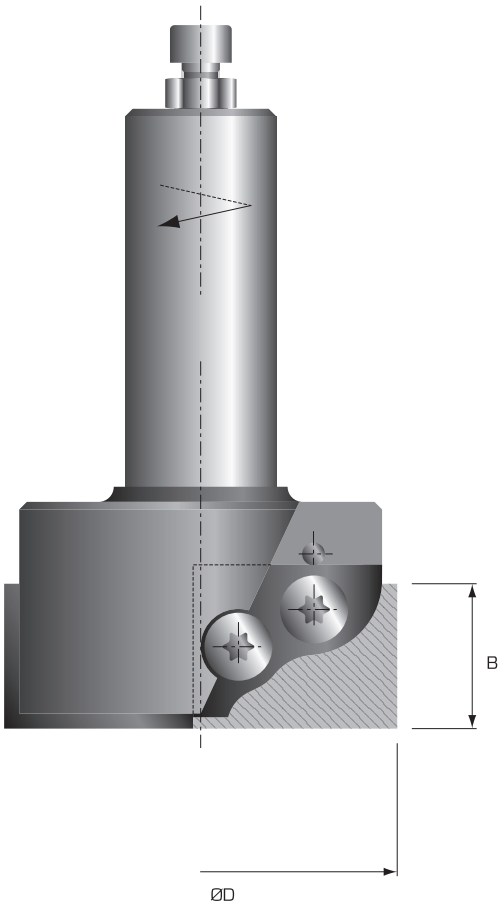
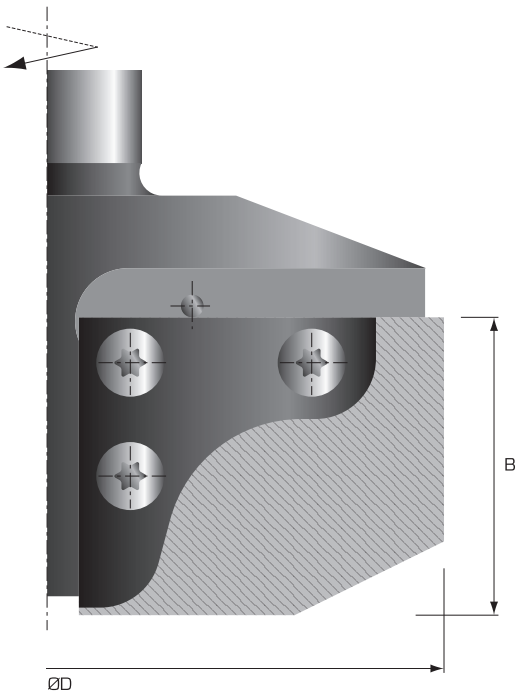


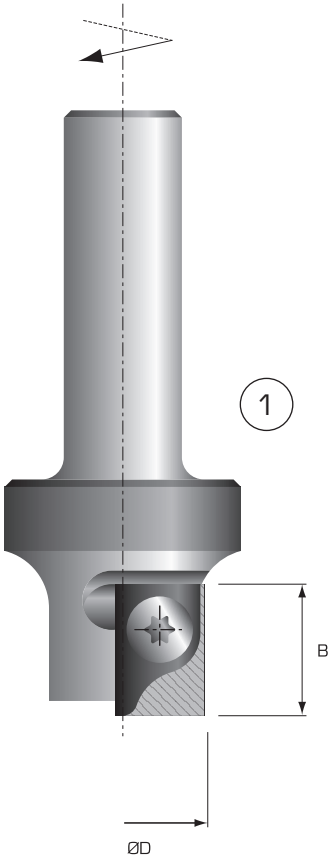


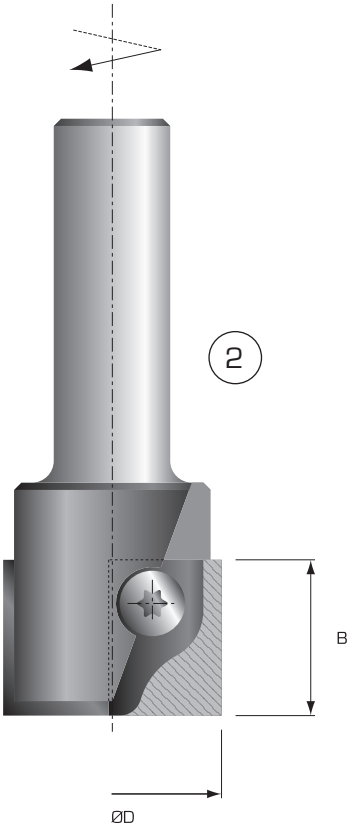
DESIGN:

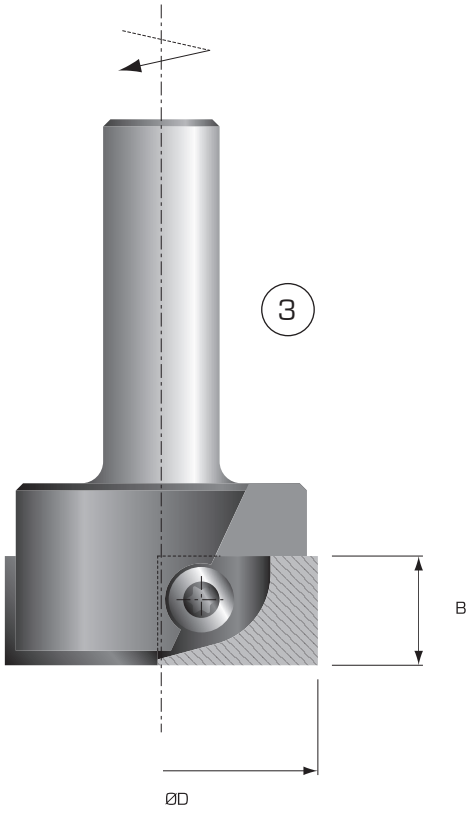
» High tensile steel body with 1 or 2 profiled inserts, up-shear angle
» Profiles produced to customer's specifications
» Light shaded section of insert indicates profiling area
» Tungsten carbide insert knives

APPLICATION:

» To produce decorative profiles for furniture and cabinet door production
» On stationary and CNC routers







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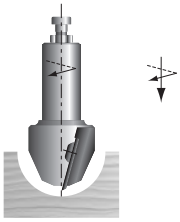

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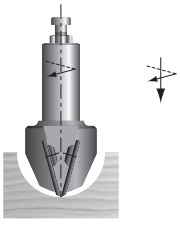
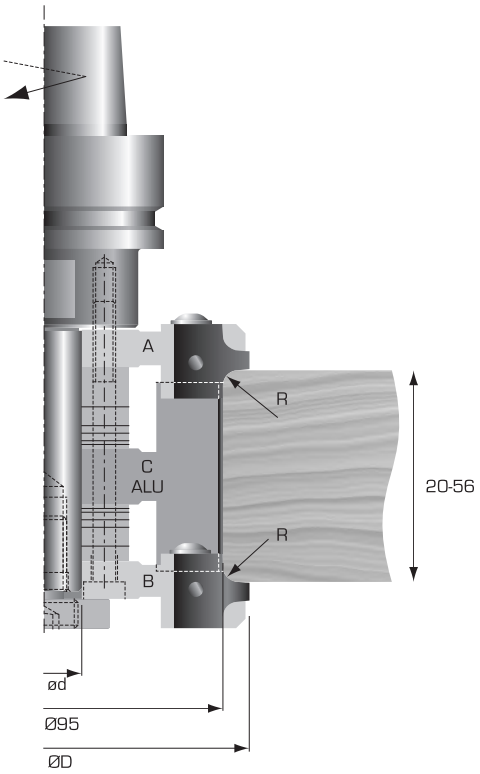
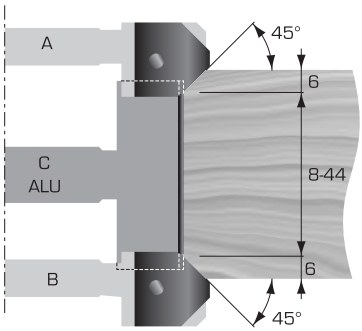






DESIGN:

- » 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

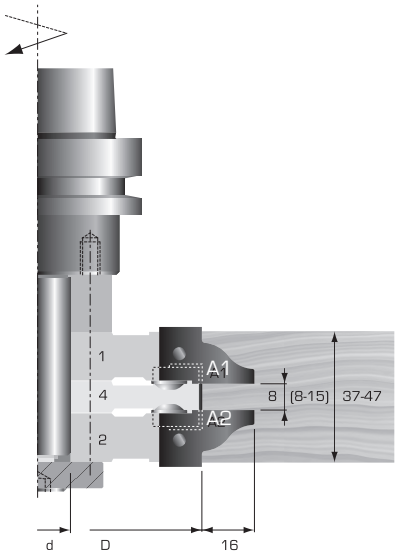
TOOL NO.	DESCRIPTION	GIB	SCREW FOR GIB	WRENCH
RD2770A RD2770B	PART NO.	W341001	W501403	W400114
	DIMENSIONS	16	M8x16	4mm Hex
RD2770C	PART NO.	W341002	W501403	W400114
	DIMENSIONS	46	M8x16	4mm Hex

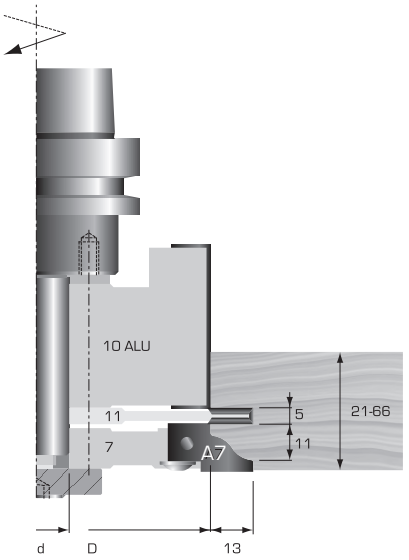
DESIGN:

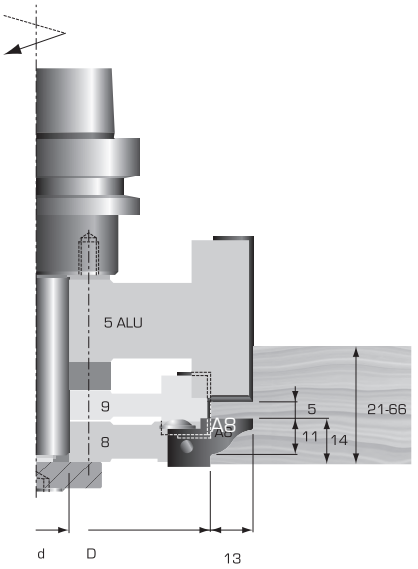
» Router cutters custom manufactured to customer's specifications
» Tungsten carbide inserts

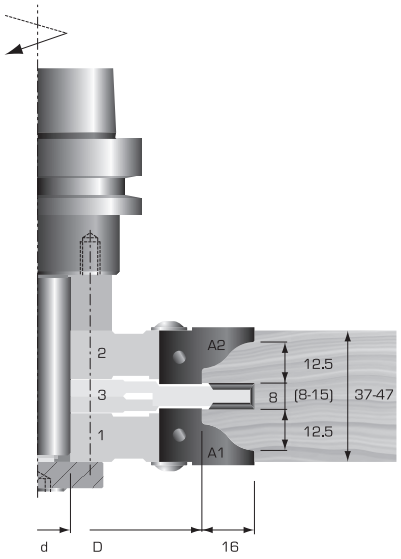
APPLICATION:

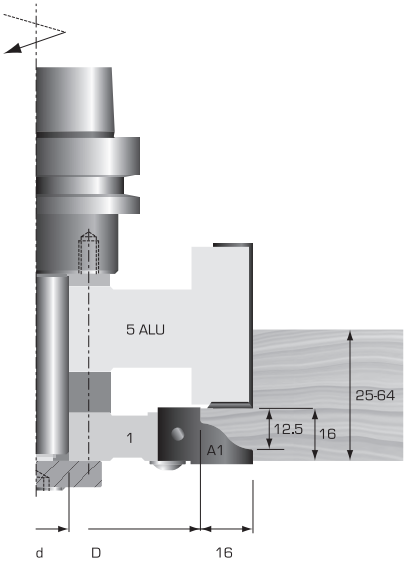
» To produce stile and rails in solid wood
» On stationary and CNC routers

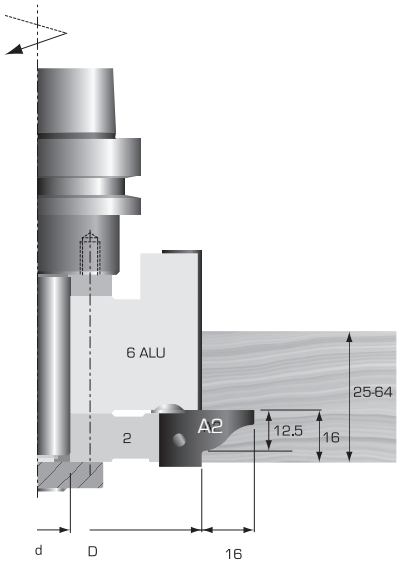


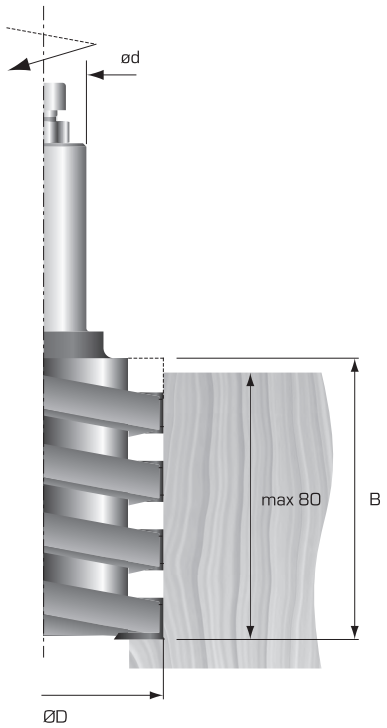












DESIGN:

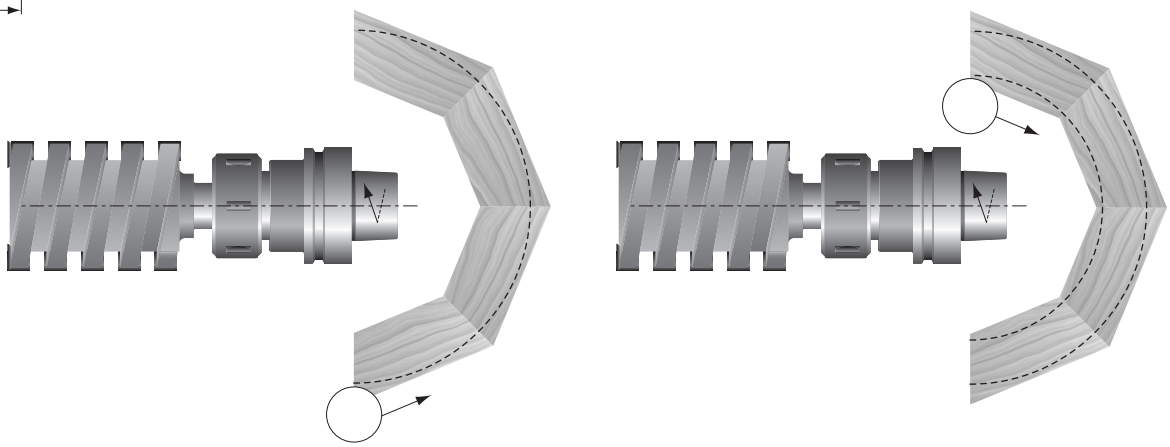
» High tensile steel body
» Spiral and staggered tooth design with reversible tungsten carbide inserts with 4 cutting edges
» 2 reversible tungsten carbide spurs

APPLICATION:

» For jointing and shaping solid wood components
» Ideal for arched window frame manufacturing
» On stationary and CNC routers

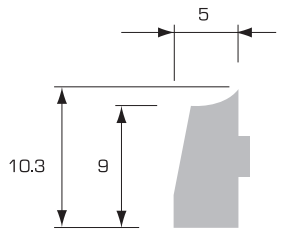
PART NO.	CUTTING DIAM. ØD MM	CUTTING LENGTH B MM	SHANK DIAM. ød	OVERALL LENGTH MM	MAX. RPM	NO. SPURS	NO. TEETH
RD2810	70	82	3/4"	140	14000	2	4/16

Other sizes available upon request



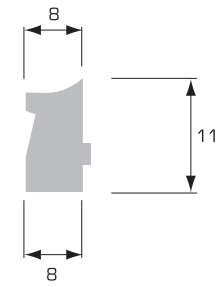
REPLACEMENT PARTS

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



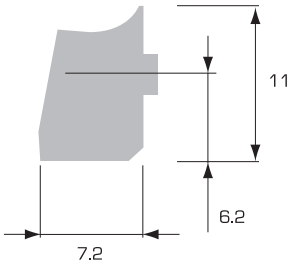
WEDGES

PART NO.	LENGTH MM
W302411	32
W302410	54



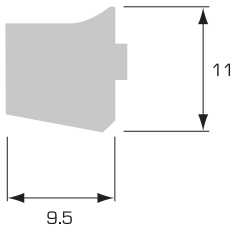
WEDGES

PART NO.	LENGTH MM
W303017	37
W303016	47
W303015	57



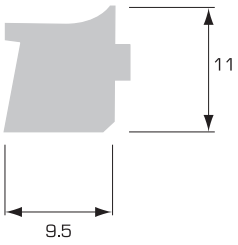
WEDGES

PART NO.	LENGTH MM
W340033	9
W340034	27



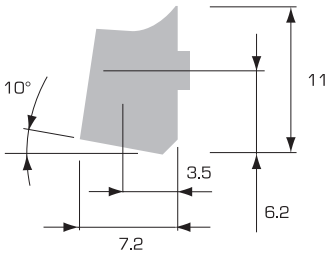
WEDGES

PART NO.	LENGTH MM
W340032	42
W340035	47



WEDGES

PART NO.	LENGTH MM
W341001	16
W341099	38
W341002	46



WEDGES

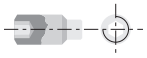
PART NO.	LENGTH MM
W340037	9

WEDGES

PART NO.	DIMENSIONS MM
W300803	28x5x2.0
W300805	26x9.5x2.5
W300806	46x9.5x2.5
W300905	26x9.5x3.5
W300906	46x9.5x3.5

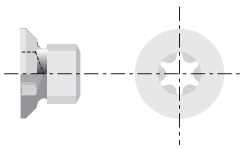
WEDGE SCREWS

PART NO.	DIMENSIONS MM
W501306	M6x10



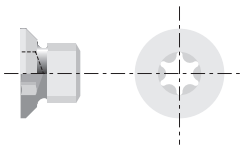
WEDGE SCREWS

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

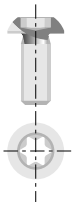
PART NO.	DIMENSIONS MM
WM350	3.5x6.0

TORX SCREWS

PART NO.	DIMENSIONS MM
WM350-PL	3.5x6.0

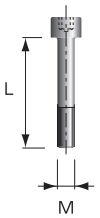
TORX SCREWS

PART NO.	DIMENSIONS MM
WM355	M3x5.5
WM356	M3.5x6.0
WM380	M3x8.0
WM420	M4x2.0



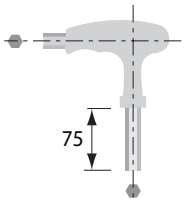
TORX SCREWS

PART NO.	DIMENSIONS MM
W502301	M4x6.0
W502302	M4x10
W502303	M4x12
W502306	M4x8
W502310	M3.5x4.8
W502315	M5x8
W502331	M3x4



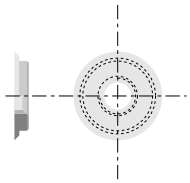
HEX SCREWS

PART NO.	DIMENSIONS MM
W501731	M6x75



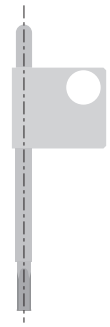
T-HANDLE DUAL ALLEN WRENCHES

PART NO.	DIMENSIONS MM
W400113	3



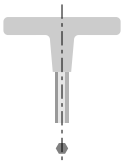
THREADED RINGS

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



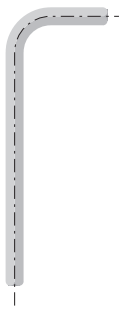
TORX WRENCHES

PART NO.	DIMENSIONS MM
W400406	T8
W400401	T9
W400405	T15



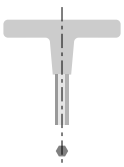
T-HANDLE TORX WRENCHES

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