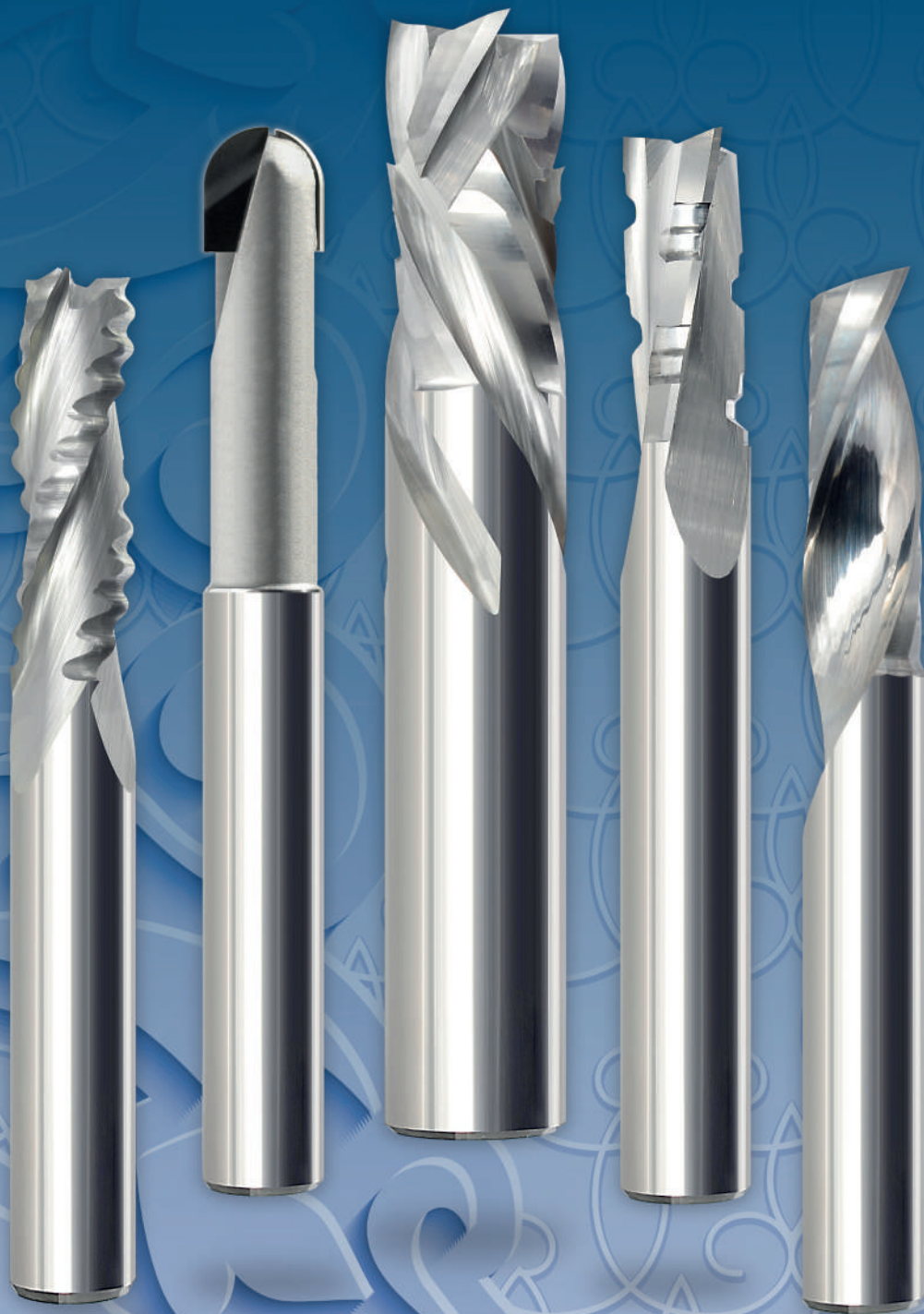


Merlin



Tools Ltd

Solid Carbide Performance Routers



OUR SERVICE



Design

Our tools are designed using CAD then exported to 3D simulation software for virtual testing of the grinding tool paths. Each grinding operation is highlighted in a different colour to give a full 3D representation of the tool. Once a viable virtual model is designed, physical prototypes are ground to perfect the tool prior to full production



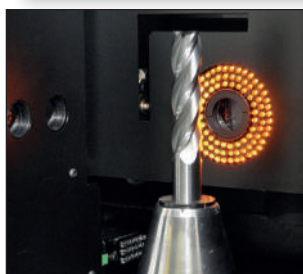
Raw Material

All of our tools are manufactured using the highest quality raw materials with 90% tungsten and 10% cobalt micro-grain K30. The raw material passes through a centreless grinding system to ensure an exacting tolerance of h6.



Manufacture

Our certified ISO 9001-2008 production format combines the finest in micro-grain carbide substrate, the latest in tool-path design/simulation software, world class CNC grind machinery, laser and CCTV Quality Assurance inspection and proven PVD coatings, all with a view to ensuring our tooling remains consistent across differing batch dates.



Inspection and Quality

Continuous batch testing on all the tools is performed via 'state of the art' laser-measurement diagnostic instruments, thus ensuring incredibly tight tolerances and products of the highest quality. A final manual inspection is performed during the cleaning process to ensure our tools are 100% quality controlled



Despatch

We carry an extensive range of tools in stock ensuring a fast turn around on all orders with same day despatch on all standard products. Our Tools go through a final visual inspection before being carefully packed and despatched.

If you have any question regarding the production of our products please do not hesitate to call the team at Merlin Tools.

Merlin Tools is committed to providing our customers with a cost effective solution to their routing requirements.

In addition to our extensive range of tools we offer a comprehensive regrind, recoating and modification service.

Call our sales team to discuss your requirements.

01509 610300

Below are some visual aids to assist you with the understanding and navigation of this catalogue.

Technical information for a tool can be found on the pages indicated



Recommended material use for tool indicated

SW	Soft wood
HW	Hard wood
CW	Composite wood
LW	Laminated wood
SP	Soft plastic
HP	Hard plastic
AC	Acrylic
CP	Composite
GF	Glass Fibre
SS	Solid surface
A	Aluminium
F	Foam



Specials, Regrinds and Modification

At Merlin Tools we pride ourselves on understanding the needs of our clients. We know you expect quality and precision not only from our impressive range of ex stock tooling but also when you need something special.

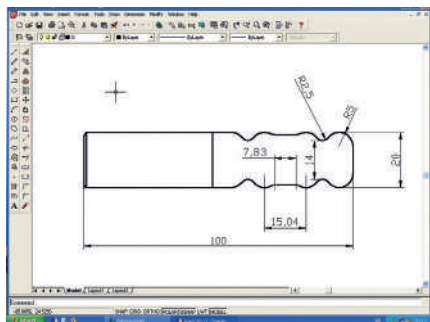
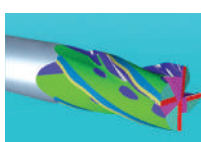
Merlin Tools provides a full service capability that is dedicated to providing you with the highest quality in precision manufactured cutting tools to meet the most demanding requirements.

Our bespoke tool manufacturing service builds on this reputation and provides you with the exacting precision performance tool tailored for your specific needs.

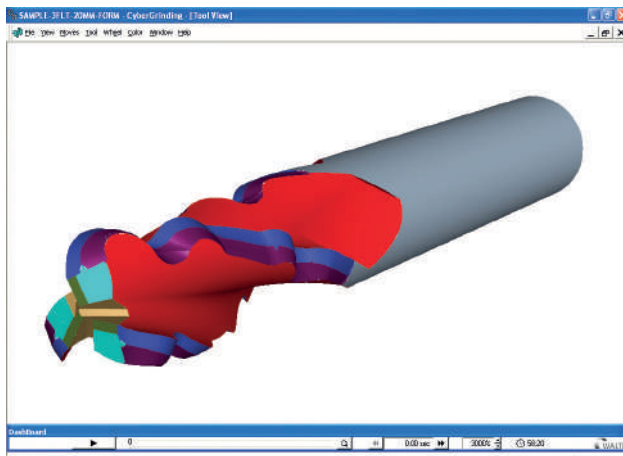


Tool Design, Simulation and Manufacture

The tool development process in many ways is straight forward. The careful and precise interpretation of the component profile is transferred to CAD where adjustments can be more easily applied. Our knowledge of materials, machining speeds and tolerances are used to calculate a precise cutting profile ready to be transposed into full CAD simulation.



The CAD simulation is a full 3 dimensional image of the tool that can be rotated and positioned in a virtual spatial environment for client approval. It is fully colour coded for simple designation of depth and cutting angles. Working closely with our clients, we refine the design of the tool prior to manufacture.



Our CNC manufacturing equipment is state of the art. These machines calibrate perfectly with our CAD software to produce flawless precision grinding. The fully automated system can run 24/7 producing quantities of high quality, consistently accurate tools to your specification at highly competitive prices.



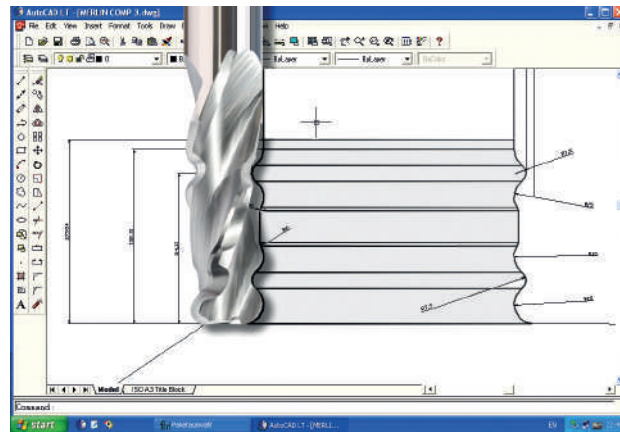
Specials, Regrinds and Modification

Tool Inspection



Full inspection takes place at key stages in the production process. Careful assessment of the tool, both through state-of-the-art automated inspection and traditional craftsman analysis, ensure that the level of precision we have come to be recognised for is achieved every time.

From Drawing to Tool



Modification of Standard Stock Tools

Merlin Tools will modify one of our existing stock tools to fit the job, if it's appropriate to do so, saving on the cost of our full design and manufacture service.

Call or email our technical team who will be happy to discuss your options with you.

Radius modification

Chamfer modification

Steps added to standard drills

Profiles added to standard drills

Diameter modifications

Shank reduction

Neck Relief



A full coating service is available to all modified tools.

A Full Tool Rescue Service

Our special Tool Rescue service offers the opportunity for us to Regrind, Recondition and Repair your existing tools. This service will breath new life into those tools that have worked so hard for you and produce a cost effective machining solution, returning tools to you as new. Original coating can be re-applied to tools on request.

A Tool Rescue box is available upon request. Whenever you need to use the service give our sales team a call and we will arrange courier collection of your Tool Box for delivery to our technical department.



page

18 1 Flute Routers

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32 2 Flute Routers

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64 3 Flute Routers

page

75 4 Flute Routers

page

80 Application Tools

page

86 ER Collets & Accessories

page

103 Technical Information

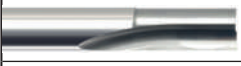
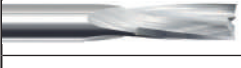
Merlin Tools Ltd

Quality • Precision • Performance

Product Range Index



	Description	Series	Page	Soft Wood	Hard Wood	Composite Wood	Laminated Wood	Soft Plastics	Hard Plastics	Acrylic	Composites	Glass Fibre	Solid Surface	Aluminium	Foam
				SW	HW	CW	LW	SP	HP	AC	CP	GF	SS	A	F
1 Flute Solid Carbide Routers															
	1 Flute Upcut O-Flute Xtreme Polished	6230	18	●	●	●		●	●	●			●	●	
	1 Flute Downcut O-Flute Xtreme Polished	6231	18	●	●	●		●	●	●			●	●	
	1 Flute Upcut O-Flute Xtreme Polished	7230	18	●	●	●		●	●	●			●	●	
	1 Flute Downcut O-Flute Xtreme Polished	7231	18	●	●	●		●	●	●			●	●	
	1 Flute Straight O-Flute Crescent End	6001	19					●	●	●					
	1 Flute Straight O-Flute Crescent End	7001	19					●	●	●					
	1 Flute Straight O-Flute Crescent End	7002	20	●										●	
	1 Flute Upcut O-Flute Spiral Soft Plastics	6010	21					●					●		
	1 Flute Downcut O-Flute Spiral Soft Plastics	6012	21					●					●		
	1 Flute Upcut O-Flute Spiral Soft Plastics	7010	21					●					●		
	1 Flute Downcut O-Flute Spiral Soft Plastics	7011	21					●					●		
	1 Flute Upcut O-Flute Spiral Hard Plastics	6013	22						●	●			●		
	1 Flute Downcut O-Flute Spiral Hard Plastics	6014	22						●	●			●		
	1 Flute Upcut O-Flute Spiral Hard Plastics	7013	22						●	●			●		
	1 Flute Downcut O-Flute Spiral Hard Plastics	7014	22						●	●			●		
	1 Flute Upcut O-Flute Spiral Aluminium	6015	23											●	
	1 Flute Downcut O-Flute Spiral Aluminium	6016	23											●	
	1 Flute Upcut O-Flute Spiral Aluminium	7015	23											●	
	1 Flute Downcut O-Flute Spiral Aluminium	7016	23											●	
	1 Flute Straight O-Flute Edge Rounding	7003	24					●	●				●		
	1 Flute Spiral O-Flute Edge Rounding	7004	24					●	●				●		
	1 Flute Upcut Spiral	6020	25						●		●			●	
	1 Flute Downcut Spiral	6021	25						●		●			●	

	Description	Series	Page	Soft Wood	Hard Wood	Composite Wood	Laminated Wood	Soft Plastics	Hard Plastics	Acrylic	Composites	Glass Fibre	Solid Surface	Aluminium	Foam
				SW	HW	CW	LW	SP	HP	AC	CP	GF	SS	A	F
1 Flute Solid Carbide Routers															
	1 Flute Upcut Spiral	7020	25						●		●			●	
	1 Flute Downcut Spiral	7021	25						●		●			●	
	1 Flute Upcut Spiral	7023	26	●	●	●									
	1 Flute Downcut Spiral	7024	26	●	●	●									
	1 Flute Upcut Spiral Reinforced Shank	153	26					●	●	●				●	
	1 Flute Upcut Spiral Stub Length	154	27					●	●	●				●	
	1 Flute Upcut Spiral Long Length	155	27					●	●	●				●	
	1 Flute Upcut Spiral	151	28					●	●	●				●	
	1 Flute Upcut Spiral Stub Length	152	28					●	●	●				●	
	1 Flute Compression Spiral	6026	29	●	●	●	●								
	1 Flute Mortise Compression	6028	29	●	●	●	●								
	1 Flute Compression Spiral	7026	29	●	●	●	●								
	1 Flute Mortise Compression	7028	29	●	●	●	●								
	1 Flute High Wear Compression	7029	30	●	●	●	●								
	1 Flute Straight V-Flute	7000	30	●	●	●									
2 Flute Solid Carbide Routers															
	2 Flute Straight O-Flute	6037	32					●	●	●					
	2 Flute Straight O-Flute	7037	32					●	●	●					
	2 Flute Upcut Slow Spiral O-Flute	6060	33					●	●	●			●		
	2 Flute Downcut Slow Spiral O-Flute	6061	33					●	●	●			●		
	2 Flute Upcut Slow Spiral O-Flute	7060	33					●	●	●			●		
	2 Flute Downcut Slow Spiral O-Flute	7061	33					●	●	●			●		
	2 Flute Upcut Spiral Fishtail End	6040	34	●	●	●		●					●		
	2 Flute Downcut Spiral Fishtail End	6042	34	●	●	●		●					●		

	Description	Series	Page	Soft Wood	Hard Wood	Composite Wood	Laminated Wood	Soft Plastics	Hard Plastics	Acrylic	Composites	Glass Fibre	Solid Surface	Aluminium	Foam
				SW	HW	CW	LW	SP	HP	AC	CP	GF	SS	A	F
2 Flute Solid Carbide Routers															
	2 Flute Upcut Spiral Fishtail End	7040	35	●	●	●		●					●		
	2 Flute Downcut Spiral Fishtail End	7042	35	●	●	●		●					●		
	2 Flute Upcut Spiral Mill End	6050	36						●	●	●		●	●	
	2 Flute Downcut Spiral Mill End	6051	36						●	●	●		●	●	
	2 Flute Upcut Spiral Mill End	7050	36						●	●	●		●	●	
	2 Flute Downcut Spiral Mill End	7051	36						●	●	●		●	●	
	2 Flute Upcut High Impact Fishtail End	7048	37	●	●	●									
	2 Flute Downcut High Impact Fishtail End	7049	37	●	●	●									
	2 Flute Upcut Spiral Bottom Surface	6112	38					●	●	●				●	
	2 Flute Upcut Spiral Corner Radius	7112	38					●	●	●				●	
	2 Flute Upcut Slow Spiral	7070	39					●	●			●			
	2 Flute Downcut Slow Spiral	7071	39					●	●			●			
	2 Flute Upcut Ball Nosed 3° Helix	7110	40	●	●	●	●	●	●				●		
	2 Flute Upcut Ball Nosed	7080	40	●	●	●		●	●				●	●	
	2 Flute Downcut Ball Nosed	7081	40	●	●	●		●	●				●	●	
	2 Flute Upcut Chipbreaker Finisher	6090	41		●	●									
	2 Flute Downcut Chipbreaker Finisher	6091	41		●	●									
	2 Flute Upcut Chipbreaker Finisher	7090	41		●	●									
	2 Flute Downcut Chipbreaker Finisher	7091	41		●	●									
	2 Flute Upcut High Impact Chipbreaker Finisher	7092	42	●	●	●									
	2 Flute Downcut High Impact Chipbreaker Finisher	7093	42	●	●	●									
	2 Flute Compression Spiral	6100	43	●	●	●	●								
	2 Flute Mortise Compression	6102	43	●	●	●	●								
	2 Flute Compression Spiral	7100	43	●	●	●	●								

	Description	Series	Page	Soft Wood	Hard Wood	Composite Wood	Laminated Wood	Soft Plastics	Hard Plastics	Acrylic	Composites	Glass Fibre	Solid Surface	Aluminium	Foam
				SW	HW	CW	LW	SP	HP	AC	CP	GF	SS	A	F
2 Flute Solid Carbide Routers															
	2 Flute Mortise Compression	7102	43	●	●	●	●								
	2 Flute High-Wear Compression Spiral	7101	44				●								
	2 Flute High-Wear Mortise Compression	7101	44				●								
	2-Flute Compression Chipbreaker Finisher	6103	45		●	●	●								
	2 Flute Compression Chipbreaker Finisher	7103	45		●	●	●								
	2 Flute Upcut 55° Helix	254	46					●	●	●				●	
	2 Flute Upcut <i>TiALN</i>	214	46	●	●			●	●	●					
	2 Flute Upcut Spiral	211	47	●	●			●	●	●				●	
	2 Flute Upcut Spiral	211	47	●	●			●	●	●				●	
	2 Flute Upcut Ball Nosed	216	48	●	●			●	●	●				●	
	2 Flute Upcut Ball Nosed	216	48	●	●			●	●	●				●	
	2 Flute Upcut Long Length	221	49	●	●			●	●	●				●	
	2 Flute Upcut Long Length	221	49	●	●			●	●	●				●	
	2 Flute Upcut Ball Nosed Long Length	236	50	●	●			●	●	●				●	
	2 Flute Upcut Ball Nosed Long Length	236	50	●	●			●	●	●				●	
	2 Flute Upcut Extra Long Length	222	51	●	●			●	●	●				●	
	2 Flute Upcut Ball Nosed Extra Long Length	226	51	●	●			●	●	●				●	
	2 Flute Upcut Miniature	200	52	●	●			●	●	●				●	
	2 Flute Upcut Miniature <i>TiALN</i>	204	52	●	●			●	●	●					
	2 Flute Rout & Chamfer	6111	53					●	●	●					
	2 Flute Rout & Chamfer	7111	53					●	●	●					
	2 Flute Straight O-Flute	7038	54					●	●	●			●		●
	2 Flute Straight O-Flute Edge Rounding	6036	55					●	●	●			●		
	2 Flute Straight O-Flute Edge Rounding	7036	55					●	●	●			●		

	Description	Series	Page	Soft Wood	Hard Wood	Composite Wood	Laminated Wood	Soft Plastics	Hard Plastics	Acrylic	Composites	Glass Fibre	Solid Surface	Aluminium	Foam
				SW	HW	CW	LW	SP	HP	AC	CP	GF	SS	A	F
2 Flute Solid Carbide Routers															
	2 Flute Straight V-Flute Edge Rounding	6034	56					●	●	●			●		
	2 Flute Straight V-Flute Edge Rounding	7034	56					●	●	●			●		
	2 Flute Straight Flute Mill End	6030	57						●	●	●		●		●
	2 Flute Straight Flute Mill End	7030	57						●	●	●		●		●
	2 Flute Straight Flute	271	58						●	●	●		●		
	2 Flute Straight Flute <i>TiALN</i>	279	58						●	●	●		●		
	2 Flute Straight Flute Fishtail End	6031	59	●	●	●									
	2 Flute Straight Flute Fishtail End	7031	59	●	●	●									
	2 Flute Straight Flute	7032	60						●		●		●		●
	2 Flute Straight Flute V Bottom	7035	60	●	●	●	●	●	●				●		
	2 Flute PCD Corner Radius	800	61						●		●			●	
	2 Flute PCD Corner Radius Extra Long	801	61						●		●			●	
	2 Flute PCD Ball Nosed	802	62						●		●			●	
	2 Flute PCD Ball Nosed Extra Long	803	62						●		●			●	
3 Flute Solid Carbide Routers															
	3 Flute Straight Flute	7120	64								●				
	3 Flute Upcut Spiral	6130	65	●	●	●									
	3 Flute Downcut Spiral	6131	65	●	●	●									
	3 Flute Upcut Spiral	7130	65	●	●	●									
	3 Flute Downcut Spiral	7131	65	●	●	●									
	3 Flute Upcut Slow Spiral	6140	66	●	●	●			●		●		●		
	3 Flute Downcut Slow Spiral	6141	66	●	●	●			●		●		●		
	3 Flute Upcut Slow Spiral	7140	66	●	●	●			●		●		●		
	3 Flute Downcut Slow Spiral	7141	66	●	●	●			●		●		●		

	Description	Series	Page	Soft Wood	Hard Wood	Composite Wood	Laminated Wood	Soft Plastics	Hard Plastics	Acrylic	Composites	Glass Fibre	Solid Surface	Aluminium	Foam
				SW	HW	CW	LW	SP	HP	AC	CP	GF	SS	A	F
3 Flute Solid Carbide Routers															
	3 Flute Upcut Slow Spiral Ripper	6150	67	●	●	●		●	●		●				
	3 Flute Downcut Slow Spiral Ripper	6151	67	●	●	●		●	●		●				
	3 Flute Upcut Slow Spiral Ripper	7150	67	●	●	●		●	●		●				
	3 Flute Downcut Slow Spiral Ripper	7151	67	●	●	●		●	●		●				
	3 Flute Upcut High Spiral Ripper	6152	68	●	●	●		●	●		●				
	3 Flute Downcut High Spiral Ripper	6153	68	●	●	●		●	●		●				
	3 Flute Upcut High Spiral Ripper	7152	68	●	●	●		●	●		●				
	3 Flute Downcut High Spiral Ripper	7153	68	●	●	●		●	●		●				
	3 Flute Upcut High Impact Ripper	7154	69	●	●	●		●	●		●				
	3 Flute Downcut High Impact Ripper	7155	69	●	●	●		●	●		●				
	3 Flute Upcut Lock Mortise	6156	70	●	●	●									
	3 Flute Upcut Lock Mortise	7156	70	●	●	●									
	3 Flute Upcut Chipbreaker Finisher	6161	71	●	●	●									
	3 Flute Downcut Chipbreaker Finisher	6162	71	●	●	●									
	3 Flute Upcut Chipbreaker Finisher	7161	71	●	●	●									
	3 Flute Downcut Chipbreaker Finisher	7162	71	●	●	●									
	3 Flute Upcut Phenolic	7170	72								●				
	3 Flute Downcut Phenolic	7171	72								●				
	3 Flute Compression Spiral	7180	72	●	●	●	●								
	3 Flute Mortise Compression	7182	72	●	●	●	●								
	3 Flute High-Wear Compression Spiral	7181	73				●								
	3 Flute High-Wear Mortise Compression	7181	73				●								

	Description	Series	Page	Soft Wood	Hard Wood	Composite Wood	Laminated Wood	Soft Plastics	Hard Plastics	Acrylic	Composites	Glass Fibre	Solid Surface	Aluminium	Foam
				SW	HW	CW	LW	SP	HP	AC	CP	GF	SS	A	F
4 Flute Solid Carbide Routers															
	4 Flute Straight Flute	471	75						●	●	●		●		
	4 Flute Straight Flute <i>TiALN</i>	479	75						●	●	●		●		
	4 Flute Upcut Spiral	7190	76						●		●	●			
	4 Flute Downcut Spiral	7191	76						●		●	●			
	4 Flute Upcut Glass Fibre	7192	76									●			
	4 Flute Downcut Glass Fibre	7193	76									●			
	4 Flute Upcut Combination Spiral	7200	77	●	●	●									
	4 Flute Downcut Combination Spiral	7201	77	●	●	●									
	4 Flute Combination Compression	7202	77	●	●	●	●								
	4 Flute Compression Spiral	7210	78	●	●	●	●								
	4 Flute Mortise Compression	7211	78	●	●	●	●								
Application Tooling															
	1 Flute Straight Flute Flush Laminate Trimmer	7220	80				●								
	1 Flute Veining Bit	7025	80	●	●	●		●	●						
	Engraving tool 30° 60° or 90°	001	81	●	●			●	●				●	●	
	Engraving tool with Flat 60°	002	81	●	●			●	●				●	●	
	Multi-Flute Diamond Cut Fibreglass Router	FG	82								●	●			
	Multi-Flute Diamond Cut Fibreglass Router	FG	82								●	●			
	4 Flute Chamfer Tool	113	83					●	●					●	
	4 Flute Chamfer Tool <i>TiALN</i>	114	83					●	●					●	
	4 Flute Corner Rounding	112	84					●	●					●	
	4 Flute Corner Rounding <i>TiALN</i>	122	84					●	●					●	

ER Collets, Straight Shank Holders and Accessories

ER Collets DIN 6499-B - Metric



ER 8 Collets General, High & Top Accuracy	ER 8	86	ER 25 Collets General, High & Top Accuracy	ER 25	90
ER 11 Collets General, High & Top Accuracy	ER 11	87	ER 32 Collets General, High & Top Accuracy	ER 32	91
ER 16 Collets General, High & Top Accuracy	ER 16	88	ER 40 Collets General, High & Top Accuracy	ER 40	92
ER 20 Collets General, High & Top Accuracy	ER 20	89	ER 50 Collets General, High & Top Accuracy	ER 50	93

ER Collet Sets



ER 8 - 9 Piece Set General, High & Top Accuracy	ER8 SET	94	ER 25 - 15 Piece Set General, High & Top Accuracy	ER25 SET	96
ER 11 - 13 Piece Set General, High & Top Accuracy	ER11 SET	94	ER 32 - 18 Piece Set General, High & Top Accuracy	ER32 SET	96
ER 16 - 10 Piece Set General, High & Top Accuracy	ER16 SET	95	ER 40 - 23 Piece Set General, High & Top Accuracy	ER40 SET	97
ER 20 - 12 Piece Set General, High & Top Accuracy	ER20 SET	95	ER 50 - 12 Piece Set General, High & Top Accuracy	ER 50 SET	97

ER Collets DIN 6499-B - Imperial



Imperial Precision Collets General purpose ER 8, 11, 16, 20, 25, 32, 40	ER	98	Imperial Precision Collets TOPAC Top Accuracy ER 8, 11, 16, 20, 25, 32, 40	ER	99
Imperial Precision Collets Higher Accuracy ER 8, 11, 16, 20, 25, 32, 40	ER	98			

Straight Shank Toolholders & Accessories



Locknuts	NER	100	Straight Shank Collet Holders	ER	102
Spanners	SPER	101			

Technical Information

103

Router Technical Information

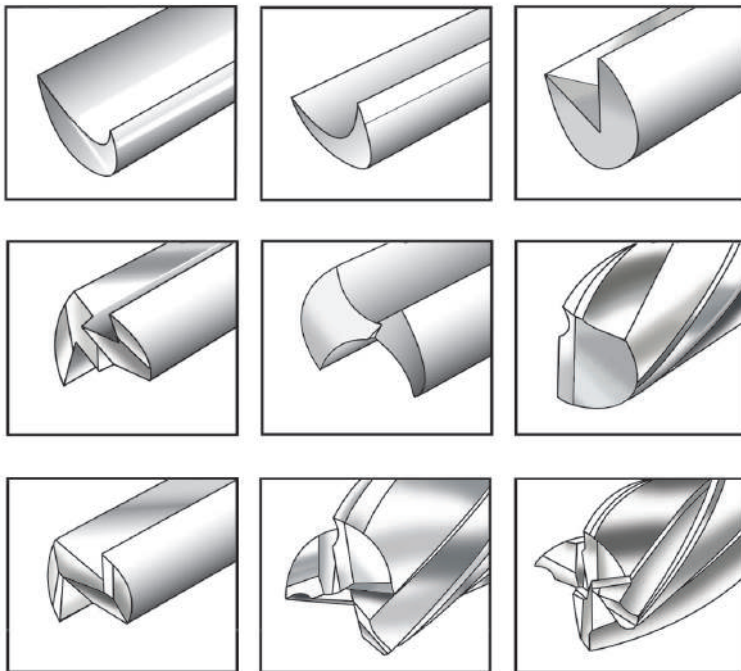
Straight Flute vs. Spiral Routers.

Straight flute routers are generally used for routing plastics and other soft materials.

They are a great choice for hand feed operations.

Spiral flute routers should only be used in automatic feed operations.

They are good for use on all materials.



Crescent End

Crescent end profiles are typically found on 1 flute routers. They are good for both plunging and flat bottom cutting.

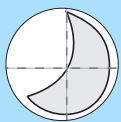
Fishtail End

Fishtail end profiles are the most commonly used profiles in the wood router industry. They are perfect when a rigid plunge point is required.

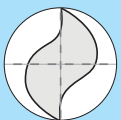
Mill End

Mill End profiles are most often found on 3 and 4 flute routers. They are good for achieving a smooth finish on a flat bottom surface, and are commonly used in the plastic routing industry.

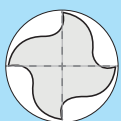
Number of Flutes



1 Flute are a good choice for softer materials. They provide a good finish with faster feed rates.



2 Flute are a good choice for a better material finish on harder materials.



Multi flute are a good choice for an excellent material finish on harder materials.

Router Technical Information

Flute Geometry

Straight flute.

Straight flute offers a neutral cutting action.

Upcut spiral flute.

The upcut spiral is a right hand spiral with a right hand cut.

They are used when a good bottom finish is required on the material.

Chip flow is in an upward direction.

Downcut spiral flute.

The downcut spiral is a left hand spiral with a right hand cut.

They are used when a good top finish is required on the material.

Chip flow is in a downward direction.

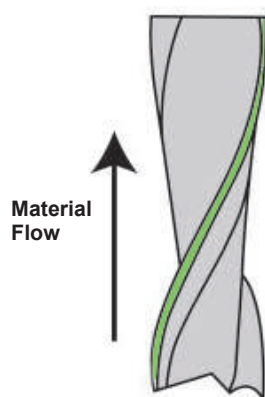
Compression spiral.

The compression spiral is designed with both upcut and downcut flutes.

The upcut and downcut flutes compress the material which eliminates chipping.

Compression spirals are best for double sided laminates.

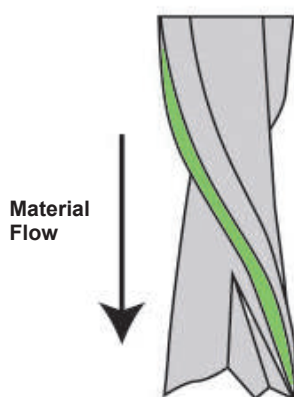
Chip flow is in a sideways direction.



Upcut

Good Bottom Finish

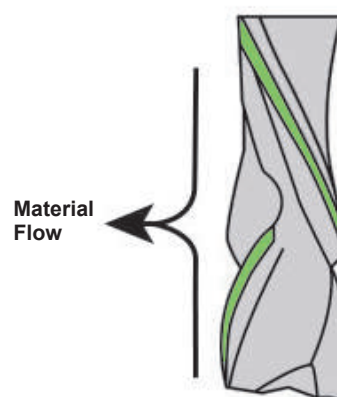
**Right hand spiral.
Right hand cut.**



Downcut

Good Top Finish

**Left hand spiral.
Right hand cut.**



Compression

Good Top and Bottom Finish

Optimising speed and feeds

Commence using the recommended chip load and RPM for your material.

Increase the feed rate until the quality of the material finish starts to decline, then decrease the feed by 10 to 15%.

Then decrease the RPM until the material finish starts to decline again, then start to increase your RPM until you achieve a desired finish to your material.

You have now achieved optimal speed and feed by taking the largest chip possible.

1 Flute Routers

Range

Stub, Standard, and Long Length, O-Flute, Spiral Flute, V-Flute, Mill End and Crescent Profiles.

Size

Metric : 1mm through to 16mm
Imperial: 1/16" through to 3/4"

Options

Tools are available in Straight Flute, Upcut, Downcut and Compression.

Delivery

Over 150,000 tools available from stock for Same-Day despatch.



6230 6231

Materials



Solid Carbide 1-Flute O-Flute Xtreme Router 25° Helix



The polished flutes allows for sharp cutting and easy chip evacuation.

Materials

Soft and hard plastics, aluminium, wood and solid surface.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3	3	6	50	6230-02	6231-02
3	3	12	50	6230-04	6231-04
3	6	6	50	6230-06	6231-06
3	6	12	50	6230-08	6231-08
3	6	12	63	6230-10	6231-10
4	6	14	50	6230-12	6231-12
4	6	12	63	6230-14	6231-14
5	5	10	50	6230-16	6231-16
5	6	10	50	6230-18	6231-18
5	6	16	50	6230-20	6231-20
6	6	19	63	6230-22	6231-22
6	6	30	75	6230-24	6231-24
10	10	28	75	6230-26	6231-26

7230 7231

Materials



Solid Carbide 1-Flute O-Flute Xtreme Router 25° Helix



The polished flutes allows for sharp cutting and easy chip evacuation.

Materials

Soft and hard plastics, aluminium, wood and solid surface.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/16	1/8	1/4	2	7230-02	7231-02
1/8	1/8	1/4	2	7230-04	7231-04
1/8	1/4	1/4	2	7230-06	7231-06
1/8	1/8	1/2	2	7230-08	7231-08
1/8	1/4	1/2	2	7230-10	7231-10
5/32	1/4	9/16	2	7230-12	7231-12
3/16	3/16	3/8	2	7230-14	7231-14
3/16	3/16	5/8	2	7230-16	7231-16
3/16	1/4	3/8	2	7230-18	7231-18
3/16	1/4	1/2	2	7230-20	7231-20
3/16	1/4	5/8	2	7230-22	7231-22
7/32	1/4	3/4	2-1/2	7230-24	7231-24
1/4	1/4	5/8	2	7230-26	7231-26
1/4	1/4	3/4	2-1/2	7230-28	7231-28
1/4	1/4	1-1/4	3	7230-30	7231-30
3/8	3/8	1-1/8	3	7230-32	7231-32
1/2	1/2	1	3	7230-34	7231-34
1/2	1/2	2	4	7230-36	7231-36

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK

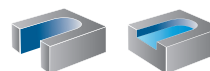


Solid Carbide 1-Flute Straight O-Flute Router Crescent End

Materials
SP HP AC

6001

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
4	6	16	64	6001-02
5	6	20	64	6001-04
6	6	25	64	6001-06
8	8	25	64	6001-08
10	10	35	88	6001-10
12	12	35	88	6001-12



Developed for free cutting utilising the O flute geometry, particularly good for small diameters.

Materials

Polypropylene, polyethylene, polystyrene, PVC, polycarbonate, extruded acrylic, HDPE, UHMW and hard plastic.



Solid Carbide 1-Flute Straight O-Flute Router Crescent End

Materials
SP HP AC

7001

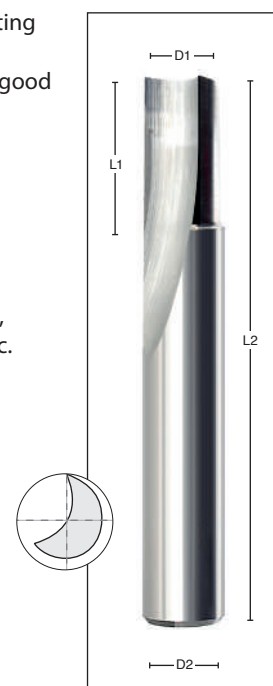
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/8	1/2	2	7001-02
1/8	1/8	5/8	3	7001-04
1/8	1/4	5/16	2	7001-06
1/8	1/4	1/2	2	7001-08
1/8	1/4	1/2	2	7001-10 Left hand
1/8	1/4	5/8	4	7001-12
5/32	1/4	9/16	2	7001-14
3/16	3/16	5/8	2-1/2	7001-16
3/16	1/4	3/8	2	7001-18
3/16	1/4	5/8	2	7001-20
3/16	1/4	5/8	2	7001-22 Left hand
3/16	1/4	1	4	7001-24
7/32	1/4	5/8	2-1/2	7001-26
1/4	1/4	3/8	2-1/2	7001-28
1/4	1/4	3/4	2-1/2	7001-30
1/4	1/4	3/4	2-1/2	7001-32 Left hand
1/4	1/4	3/4	3-1/2	7001-34
1/4	1/4	3/4	3-1/2	7001-36 Left hand
1/4	1/4	1-1/4	4	7001-38
1/4	1/4	1	2-1/2	7001-40
1/4	1/4	1	3-1/4	7001-42
3/8	3/8	5/8	2-1/2	7001-44
3/8	3/8	7/8	2-1/2	7001-46
3/8	3/8	1-5/8	6	7001-48
1/2	1/2	1-5/8	4	7001-50
1/2	1/2	2-1/8	6	7001-52
1/2	1/2	1	3	7001-54



Developed for free cutting utilising the O flute geometry, particularly good for small diameters.

Materials

Polypropylene, polyethylene, polystyrene, PVC, polycarbonate, extruded acrylic, HDPE, UHMW and hard plastic.



Modifications
Regrinds & Specials

7002

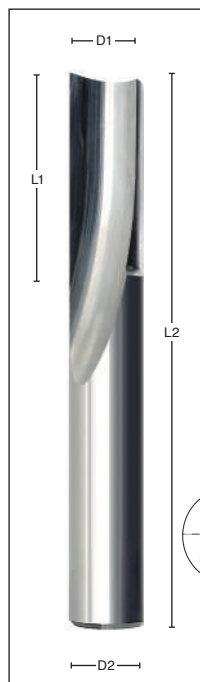
Materials

SW A

Solid Carbide 1-Flute Straight O-Flute Router Crescent End

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104-
112
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Developed for free cutting utilising the O flute geometry, particularly good for small diameters.

Materials

Natural wood and aluminium.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	1/2	2	7002-02
5/32	1/4	9/16	2	7002-04
3/16	1/4	5/8	2	7002-06
7/32	1/4	5/8	2-1/2	7002-08
1/4	1/4	3/4	2-1/2	7002-10
9/32	3/8	3/4	2-1/2	7002-12
5/16	3/8	13/16	2-1/2	7002-14
3/8	3/8	7/8	2-1/2	7002-16
7/16	1/2	1	3	7002-18
1/2	1/2	1	3	7002-20

Modifications
Regrinds & Specials

Merlin Tools Ltd manufactured



Solid Carbide 1-Flute Spiral O-Flute Router 21° Helix for Soft Plastics

Materials
SP SS

6010 6012



Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
2	2	8	50	6010-02	6012-02
2	6	8	64	6010-04	6012-04
2.5	2.5	8	50	6010-06	6012-06
2.5	6	8	64	6010-08	6012-08
3	3	8	50	6010-10	6012-10
3	6	8	64	6010-12	6012-12
3	3	12	64	6010-14	6012-14
3	6	12	64	6010-16	6012-16
4	4	8	64	6010-18	6012-18
4	4	12	64	6010-20	6012-20
4	4	20	64	6010-22	6012-22
4	6	20	64	6010-24	6012-24
4	4	30	64	6010-26	6012-26
5	5	16	64	6010-28	6012-28
5	6	16	64	6010-30	6012-30
5	5	30	64	6010-32	6012-32
6	6	8	64	6010-34	6012-34
6	6	12	64	6010-36	6012-36
6	6	20	64	6010-38	6012-38
6	6	30	76	6010-40	6012-40
6	6	38	76	6010-42	6012-42
8	8	25	64	6010-44	6012-44
8	8	38	76	6010-46	6012-46
10	10	30	76	6010-48	6012-48



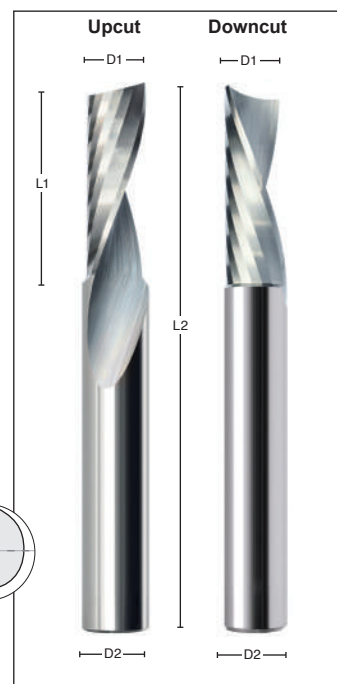
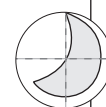
Upcut

Downcut

Developed to give a smooth finish particularly in soft plastics.

Materials

HDPE, HIPS, UHMW, ABS, polycarbonate, PE, polypropylene, acetal, polystyrene, PET and solid surface.



Solid Carbide 1-Flute Spiral O-Flute Router 21° Helix for Soft Plastics

Materials
SP SS

7010 7011



Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/16	1/4	1/4	2	7010-04	7011-04
1/8	1/8	1/4	2	7010-06	7011-06
1/8	1/4	1/4	2	7010-08	7011-08
1/8	1/8	1/2	2	7010-10	7011-10
1/8	1/4	1/2	2	7010-12	7011-12
5/32	1/4	9/16	2	7010-14	7011-14
3/16	3/16	3/8	2	7010-16	7011-16
3/16	3/16	5/8	2	7010-18	7011-18
3/16	1/4	3/8	2	7010-20	7011-20
3/16	1/4	5/8	2	7010-22	7011-22
7/32	1/4	3/4	2-1/2	7010-24	7011-24
1/4	1/4	3/8	2	7010-26	7011-26
1/4	1/4	3/4	2-1/2	7010-28	7011-28
1/4	1/4	1-1/4	3	7010-30	7011-30
3/8	3/8	1-1/8	3	7010-32	7011-32



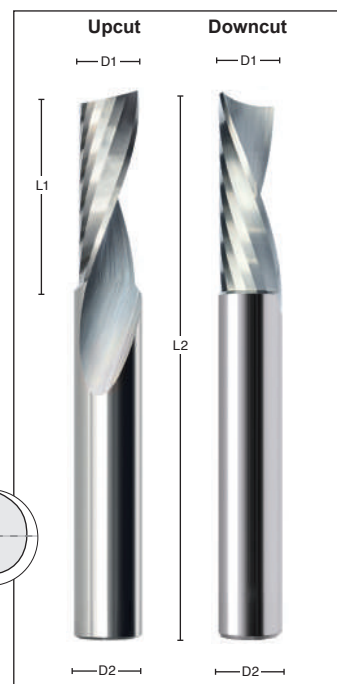
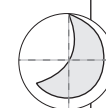
Upcut

Downcut

Developed to give a smooth finish particularly in soft plastics.

Materials

HDPE, HIPS, UHMW, ABS, polycarbonate, PE, polypropylene, acetal, polystyrene, PET and solid surface.



6013 6014

Materials

HP AC

SS

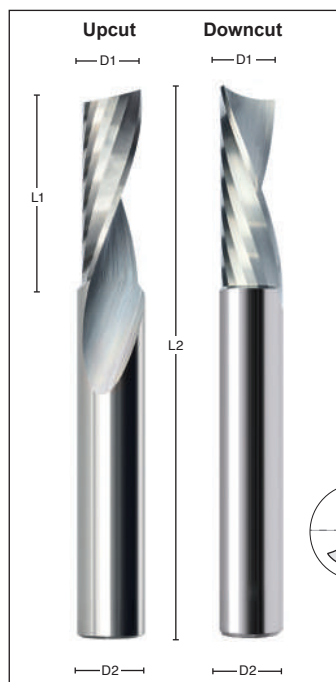
Solid Carbide 1-Flute Spiral O-Flute Router 21° Helix for Hard Plastics


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Upcut



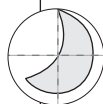
Downcut



Developed to give a smooth finish particularly in hard plastics and solid surfaces.

Materials

Acrylic, nylon, PVC, polycarbonate and solid surface.



Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
2	2	8	50	6013-02	6014-02
2	6	8	64	6013-04	6014-04
2.5	2.5	8	50	6013-06	6014-06
2.5	6	8	64	6013-08	6014-08
3	3	8	50	6013-10	6014-10
3	6	8	64	6013-12	6014-12
3	3	12	64	6013-14	6014-14
3	6	12	64	6013-16	6014-16
4	4	8	64	6013-18	6014-18
4	4	12	64	6013-20	6014-20
4	4	20	64	6013-22	6014-22
4	6	20	64	6013-24	6014-24
4	4	30	64	6013-26	6014-26
5	5	16	64	6013-28	6014-28
5	6	16	64	6013-30	6014-30
5	5	30	64	6013-32	6014-32
6	6	8	64	6013-34	6014-34
6	6	12	64	6013-36	6014-36
6	6	20	64	6013-38	6014-38
6	6	30	76	6013-40	6014-40
6	6	38	76	6013-42	6014-42
8	8	25	64	6013-44	6014-44
8	8	38	76	6013-46	6014-46
10	10	30	76	6013-48	6014-48
10	10	35	76	6013-50	6014-50

7013 7014

Materials

HP AC

SS

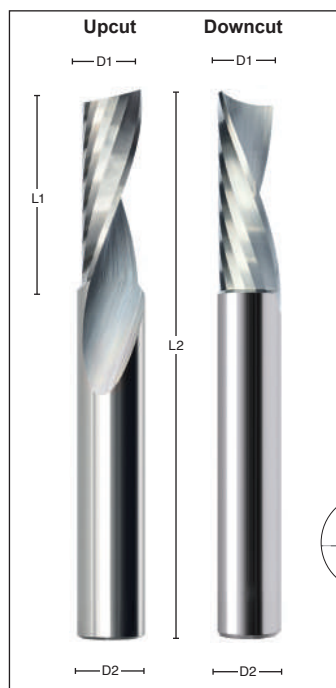
Solid Carbide 1-Flute Spiral O-Flute Router 21° Helix for Hard Plastics


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Upcut



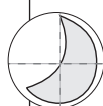
Downcut



Developed to give a smooth finish particularly in hard plastics and solid surfaces.

Materials

Acrylic, nylon, PVC, polycarbonate and solid surface.



Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/16	1/4	1/4	2	7013-04	7014-04
1/8	1/8	1/4	2	7013-06	7014-06
1/8	1/8	1/2	2	7013-08	7014-08
1/8	1/4	1/4	2	7013-10	7014-10
1/8	1/4	1/2	2	7013-12	7014-12
5/32	1/4	9/16	2	7013-14	7014-14
3/16	3/16	3/8	2	7013-16	7014-16
3/16	3/16	5/8	2	7013-18	7014-18
3/16	1/4	3/8	2	7013-20	7014-20
3/16	1/4	5/8	2	7013-22	7014-22
7/32	1/4	3/4	2-1/2	7013-24	7014-24
1/4	1/4	3/8	2	7013-26	7014-26
1/4	1/4	3/4	2-1/2	7013-28	7014-28
1/4	1/4	1-1/4	3	7013-30	7014-30
3/8	3/8	1-1/8	3	7013-32	7014-32

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK





Solid Carbide 1-Flute Spiral O-Flute Router 21° Helix for Aluminium

Materials

A

6015 6016

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
2	2	6	50	6015-02	6016-02
2	6	6	64	6015-04	6016-04
2.5	2.5	6	50	6015-06	6016-06
2.5	6	6	64	6015-08	6016-08
3	3	8	50	6015-10	6016-10
3	6	8	64	6015-12	6016-12
3	3	12	64	6015-14	6016-14
3	6	12	64	6015-16	6016-16
4	4	8	64	6015-18	6016-18
4	4	12	64	6015-20	6016-20
4	4	20	64	6015-22	6016-22
4	6	20	64	6015-24	6016-24
4	4	30	64	6015-26	6016-26
5	5	16	64	6015-28	6016-28
5	6	16	64	6015-30	6016-30
5	5	30	64	6015-32	6016-32
6	6	8	64	6015-34	6016-34
6	6	12	64	6015-36	6016-36
6	6	20	64	6015-38	6016-38
6	6	30	76	6015-40	6016-40
6	6	38	76	6015-42	6016-42
8	8	25	64	6015-44	6016-44
8	8	38	76	6015-46	6016-46
10	10	30	76	6015-48	6016-48

Upcut



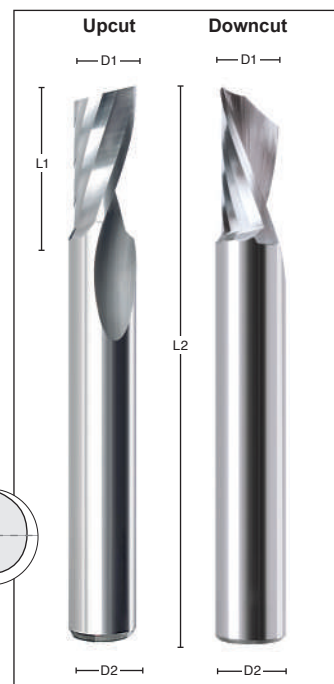
Downcut



Developed for high speed machining of aluminium block, plate and sheet.

Materials

Single and multi-sheet aluminium plate.



Solid Carbide 1-Flute Spiral O-Flute Router 21° Helix for Aluminium

Materials

A

7015 7016

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/8	1/4	1/8	1-1/2	7015-02	7016-02
1/8	1/4	1/4	2	7015-04	7016-04
1/8	1/4	1/2	2	7015-06	7016-06
3/16	3/16	3/8	1-1/2	7015-08	7016-08
3/16	1/4	3/8	2	7015-10	7016-10
3/16	1/4	5/8	2	7015-12	7016-12
1/4	1/4	3/8	2	7015-14	7016-14
1/4	1/4	3/4	2-1/2	7015-16	7016-16
1/4	1/4	1-1/4	3	7015-18	7016-18
3/8	3/8	3/4	3	7015-20	7016-20
3/8	3/8	1-1/8	3	7015-22	7016-22
5/16	1/2	3/4	3	7015-24	7016-24
21/64	1/2	3/4	3	7015-26	7016-26

Upcut



Downcut



Developed for high speed machining of aluminium block, plate and sheet.

Materials

Single and multi-sheet aluminium plate.



7003

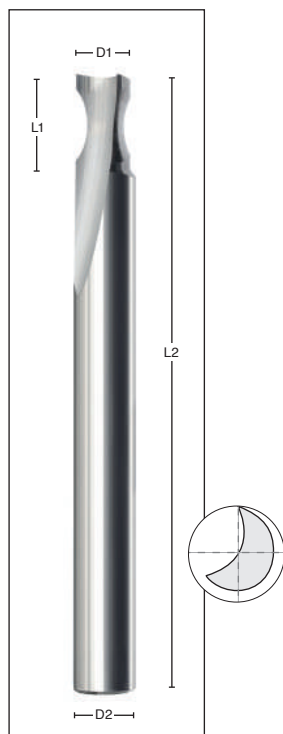
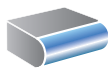
Materials

SP HP SS

Solid Carbide 1-Flute Straight O-Flute Router Crescent End - Edge Rounding


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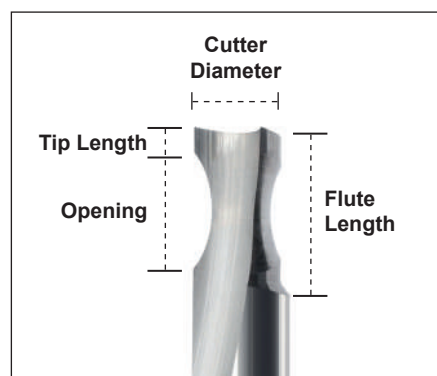


Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Opening	Radius	Small Dia	Tip Length	Part Number
1/4	1/4	3/8	2-1/2	5/32	1/8	.195	1/16	7003-02
1/4	1/4	3/8	2-1/2	7/32	3/16	.180	1/16	7003-04
1/4	1/4	3/8	2-1/2	9/32	1/4	.163	1/16	7003-06

Developed for edge rounding of components or sheets.

Materials

Soft plastics, hard plastics and solid surface.



7004

Materials

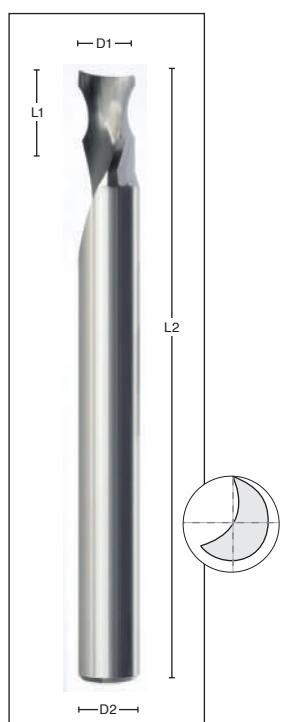
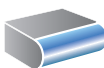
SP HP SS

Solid Carbide 1-Flute Upcut Spiral O-Flute Router Crescent End - Edge Rounding


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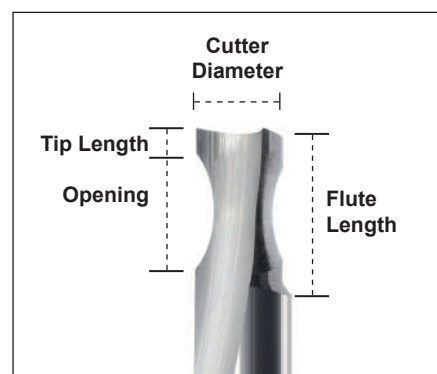


Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Opening	Radius	Small Dia	Tip Length	Part Number
1/4	1/4	3/8	2-1/2	5/32	1/8	.195	1/16	7004-02
1/4	1/4	3/8	2-1/2	7/32	3/16	.180	1/16	7004-04
1/4	1/4	3/8	2-1/2	9/32	1/4	.163	1/16	7004-06

Developed for edge rounding of components or sheets.

Materials

Soft plastics, hard plastics and solid surface.



Modifications
Regrinds & Specials


 Merlin Tools Ltd
manufactured



Solid Carbide 1-Flute Spiral Router 30° Helix

Materials
HP CP A

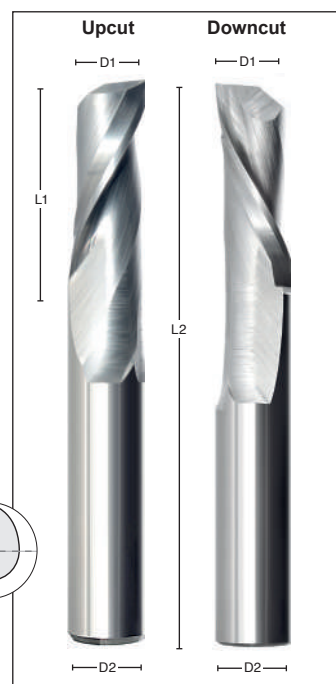
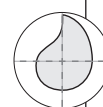
6020 6021

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
4	6	16	64	6020-02	6021-02
5	6	20	64	6020-04	6021-04
6	6	25	64	6020-06	6021-06
8	8	25	64	6020-08	6021-08



Developed for routing in Aluminium and abrasive plastics providing quality finish and long tool life.

Materials
Aluminium, glass fibre, phenolics and hard plastics.



Solid Carbide 1-Flute Spiral Router 30° Helix

Materials
HP CP A

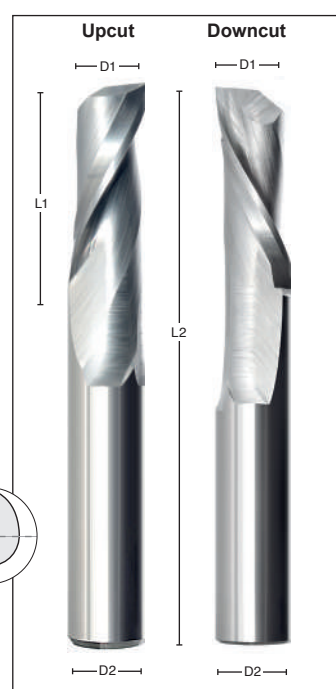
7020 7021

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/8	1/4	1/2	2	7020-02	7021-02
5/32	1/4	9/16	2	7020-04	7021-04
3/16	1/4	5/8	2	7020-06	7021-06
7/32	1/4	5/8	2-1/2	7020-08	7021-08
1/4	1/4	3/4	2-1/2	7020-10	7021-10
9/32	3/8	3/4	2-1/2	7020-12	7021-12
5/16	3/8	13/16	2-1/2	7020-14	7021-14
3/8	3/8	7/8	2-1/2	7020-16	7021-16
7/16	1/2	1	3	7020-18	7021-18
1/2	1/2	1	3	7020-20	7021-20



Developed for routing in Aluminium and abrasive plastics providing quality finish and long tool life.

Materials
Aluminium, glass fibre, phenolics and hard plastics.



7023 7024

Materials

SW HW CW

Solid Carbide 1-Flute Spiral Router 30° Helix


 PAGE
104-
112


Developed for aggressive upward and downward chip removal in routing applications specifically on wood and wood composites.

Materials

Soft and hard natural woods and wood composites.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/8	1/4	1/2	2	7023-02	7024-02
3/16	1/4	3/4	2	7023-04	7024-04
1/4	1/4	7/8	2-1/2	7023-06	7024-06
1/4	1/4	1	2-1/2	7023-08	7024-08
5/16	5/16	1-1/8	3	7023-10	7024-10
3/8	3/8	1-1/8	3	7023-12	7024-12
1/2	1/2	1-1/8	3	7023-14	7024-14

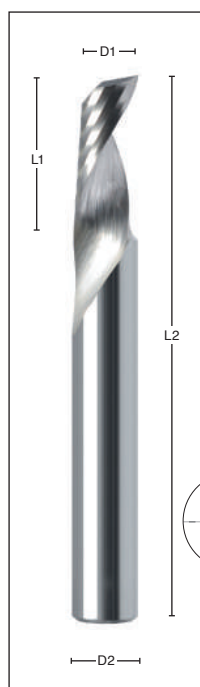
153

Materials

SP HP AC

A

Solid Carbide 1-Flute Upcut Spiral Router Reinforced Shank 30° Helix


 PAGE
104-
112


Developed for aluminium and plastics with the added benefit of a reinforced 6mm shank which allows collet changes to be kept to a minimum.

Materials

Aluminium, hard and soft plastics, PVC and acrylic.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
2	6	7	50	153-10103
2.5	6	8	50	153-10103
3	6	10	50	153-10105
3.5	6	10	50	153-10106
4	6	10	50	153-10107
4.5	6	12	50	153-10108
5	6	12	50	153-10109
5.5	6	14	50	153-10010
6	6	14	50	153-10110

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured







Solid Carbide 1-Flute Upcut Spiral Router Stub Length 30° Helix

Materials
SP HP AC
A

154

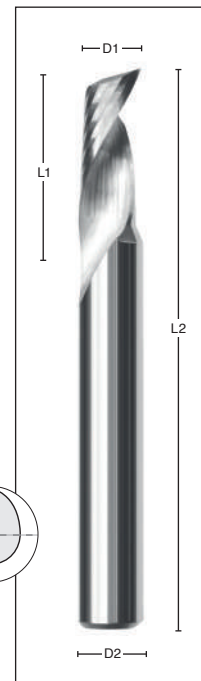
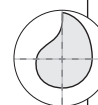
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
2	3	7	38	154-10103
3	3	8	38	154-10105
4	4	10	50	154-10107
6	6	14	50	154-10110



Developed for aluminium, plastics and other non-ferrous materials. Combines single flute design and reduced overall length to provide excellent finish and swarf clearance.

Materials

Aluminium, hard and soft plastics, PVC and acrylic.



Solid Carbide 1-Flute Upcut Spiral Router Long Length 30° Helix

Materials
SP HP AC
A

155

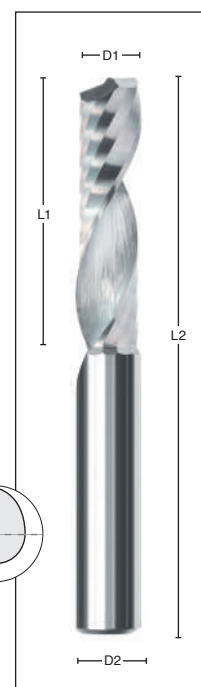
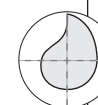
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
2	3	10	38	155-10103
3	3	10	38	155-10105
4	4	14	50	155-10107
5	5	16	60	155-10109
6	6	20	60	155-10110
8	8	30	100	155-10112
10	10	40	100	155-10114
12	12	50	100	155-10116



Developed for aluminium, plastics and Acrylic, providing excellent swarf clearance with the added benefit of longer flute and overall length.

Materials

Aluminium, glass fibre, hard and soft plastics, PVC and acrylic.

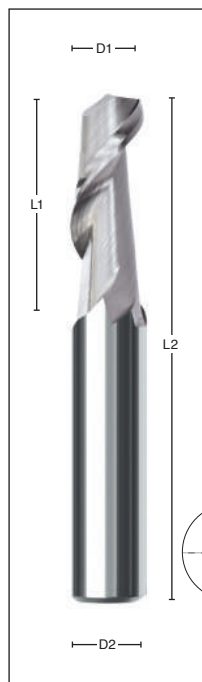


151

Materials

SP HP AC

A

Solid Carbide 1-Flute Upcut Spiral Router
45° HelixT_i PAGE
104-
112

Developed for aluminium, plastics and acrylic. This high helix router provides excellent finish and swarf clearance with the added benefit of a strong short flute length.

Materials

Aluminium, glass fibre, hard and soft plastics, PVC and acrylic.

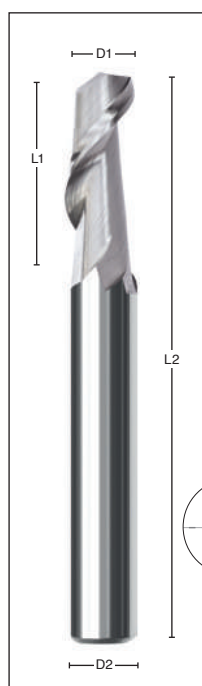
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1	3	3	38	151-10101
1.5	3	4	38	151-10102
2.5	3	7	38	151-10104
3	3	8	38	151-10105
4	4	11	50	151-10107
5	5	13	50	151-10109
6	6	13	63	151-10110
8	8	19	63	151-10112
10	10	22	70	151-10114
12	12	26	75	151-10116

152

Materials

SP HP AC

A

Solid Carbide 1-Flute Upcut Spiral Router
Stub Length 45° HelixT_i PAGE
104-
112

Developed with shorter flute length for strength. This high helix router provide an excellent finish on aluminium, plastics and acrylics..

Materials

Aluminium, glass fibre, hard and soft plastics, PVC and acrylic.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3	3	5	38	152-10105
4	4	6	50	152-10107
5	5	7	50	152-10109
6	6	8	50	152-10110

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK



Solid Carbide 1-Flute Compression Router 30° Helix

Materials



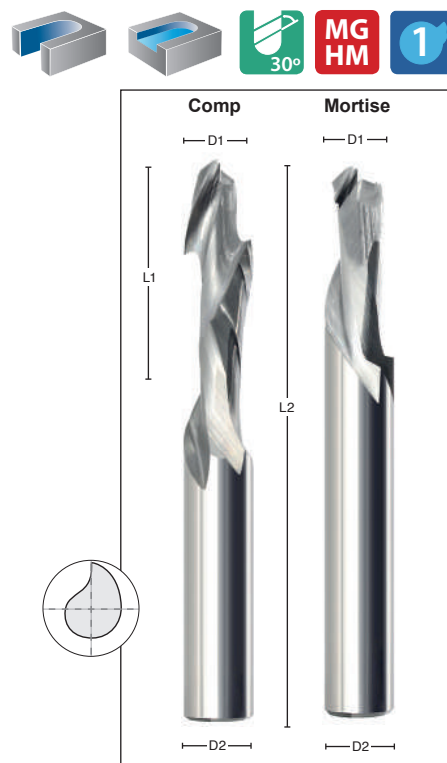
6026 6028

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Comp Part No	Mortise Part No
6	6	22	64	4.4		6028-02
6	6	25	64	11.2	6026-02	
8	8	22	64	4.8		6028-04
8	8	25	64	11.2	6026-04	
10	10	22	76	4.8		6028-06
10	10	35	76	15.4	6026-06	
12	12	22	76	5.1		6028-08
12	12	35	76	15.4	6026-08	
16	16	55	100	5.1		6028-10
16	16	55	100	24.2	6026-10	

Developed with compression design for excellent surface and edge finish. Particularly good on both sides of laminate with faster feed rates.

Materials

Natural wood and wood composites, double sided laminates and veneers.



Solid Carbide 1-Flute Compression Router 30° Helix

Materials



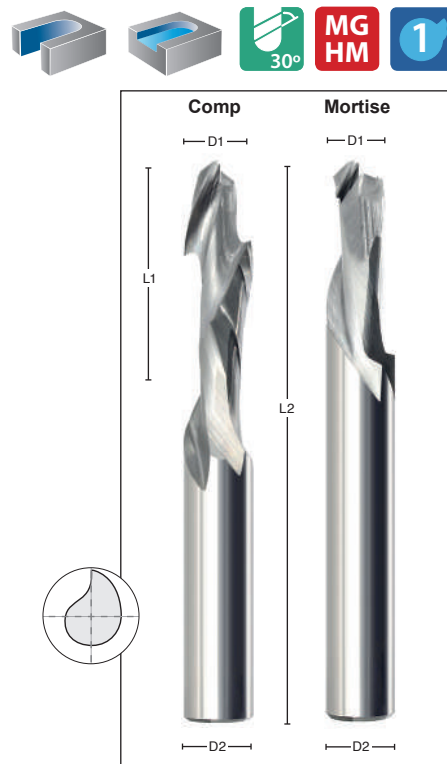
7026 7028

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Comp Part No	Mortise Part No
1/8	1/4	3/8	2-1/2	.165	7026-02	
3/16	1/4	5/8	2-1/2	.275	7026-04	
1/4	1/4	7/8	2-1/2	.175		7028-02
1/4	1/4	7/8	2-1/2	.560	7026-06	
3/8	3/8	7/8	3	.188		7028-04
3/8	3/8	1-1/8	3	.495	7026-08	
1/2	1/2	7/8	3	.200		7028-06
1/2	1/2	7/8	3	.200		7028-06 LH
1/2	1/2	1	3	.440	7026-10	
1/2	1/2	1-1/8	3	.495	7026-12	
1/2	1/2	1-3/8	3-1/2	.605	7026-14	
1/2	1/2	1-5/8	3-1/2	.200		7028-10
1/2	1/2	1-5/8	3-1/2	.715	7026-16	
1/2	1/2	1-5/8	3-1/2	.715	7026-18 LH	
5/8	5/8	2-1/4	4	.990	7026-20	
3/4	3/4	2	4	.880	7026-22	

Developed with compression design for excellent surface and edge finish. Particularly good on both sides of laminate with faster feed rates.

Materials

Natural wood and wood composites, double sided laminates and veneers.



7029

Materials



Solid Carbide 1-Flute High Wear Compression Router 30° Helix

 PAGE
104-
112


Developed for low speed but high feed rate applications to give a good edge finish on both sides of laminated materials.

Materials

Natural wood and wood composites with double sided laminates and veneers.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Comp Part No
1/2	1/2	1	3	.440	7029-02
1/2	1/2	1-1/8	3	.495	7029-04

7000

Materials



Solid Carbide 1-Flute Straight Router V-Flute

 PAGE
104-
112


Developed with straight V flute to provide long tool life and fast and free cutting action.

Materials

Wood composites, natural wood.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	1/2	2	7000-02
3/16	1/4	3/4	2	7000-04
1/4	1/4	7/8	2-1/2	7000-06
1/4	1/4	1	2-1/2	7000-08
5/16	5/16	1-1/8	3	7000-10
3/8	3/8	1-1/8	3	7000-12
1/2	1/2	1-1/8	3	7000-14

 Modifications
Regrinds & Specials

 Merlin Tools Ltd
manufactured


2 Flute Routers

Range

Standard, Long Length and Extra Long Length. O-Flute, Spiral Flute and V-Flute.
Mill End and Fishtail Profiles.

Size

Metric : 1mm through to 16mm
Imperial: 1/32" through to 1"

Options

Tools are available in Straight Flute, Upcut, Downcut and Compression.

Delivery

Over 150,000 tools available from stock for Same-Day despatch.



6037

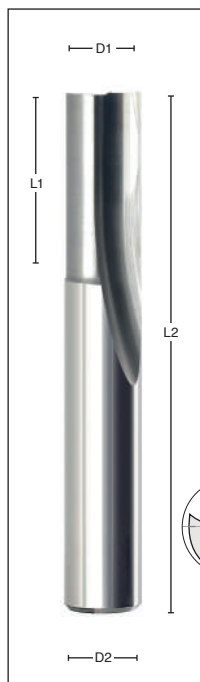
Materials

SP HP AC

Solid Carbide 2-Flute Straight O-Flute Router


 PAGE
104-
112
MG
HM

2



Developed with O flute geometry for free cutting and a smooth finish.

Materials

Acrylic, polystyrene, polypropylene, PE, PVC, acetal, UHMW polycarbonate, ABS, HIPS, HDPE, PET.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
4	6	16	64	6037-02
5	6	20	64	6037-04
6	6	25	64	6037-06
8	8	25	76	6037-08
10	10	35	88	6037-10
12	12	35	88	6037-12

7037

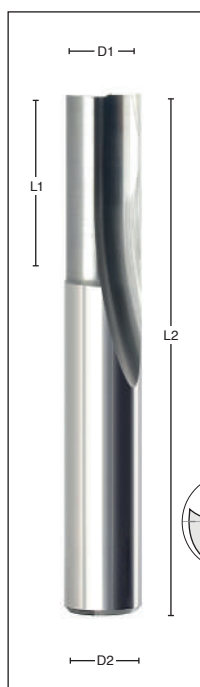
Materials

SP HP AC

Solid Carbide 2-Flute Straight O-Flute Router


 PAGE
104-
112
MG
HM

2



Developed with O flute geometry for free cutting and a smooth finish.

Materials

Acrylic, polystyrene, polypropylene, PE, PVC, acetal, UHMW polycarbonate, ABS, HIPS, HDPE, PET.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	5/16	2	7037-02
1/8	1/4	1/2	2	7037-04
1/8	1/4	5/8	4	7037-06
3/16	1/4	3/8	2	7037-08
3/16	1/4	5/8	2	7037-10
3/16	1/4	1	4	7037-12
1/4	1/4	3/8	2-1/2	7037-14
1/4	1/4	1	2-1/2	7037-16
1/4	1/4	1	2-1/2	7037-18 Left Hand
1/4	1/4	1	3-1/4	7037-20
1/4	1/4	1-1/4	4	7037-22
3/8	7/8	7/8	2-1/2	7037-24
3/8	3/8	1	4	7037-26
1/2	1/2	1	3	7037-28
1/2	1/2	1	4	7037-30
1/2	1/2	1-3/4	4	7037-32
1/2	1/2	2-1/8	6	7037-34

 Modifications
Regrinds & Specials


 Merlin Tools Ltd
manufactured


Solid Carbide 2-Flute Spiral O-Flute Router 11° Helix - Mill End

Materials
SP HP AC
SS

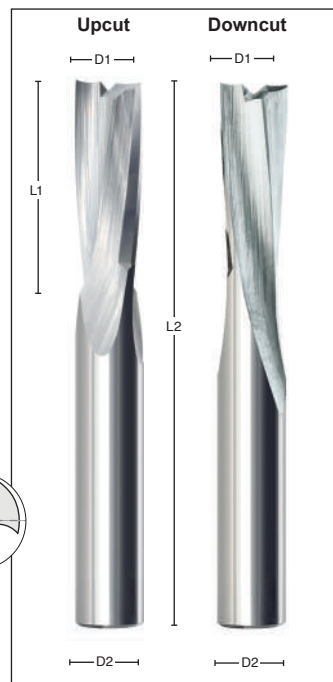
6060 6061

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
6	6	25	64	6060-02	6061-02
8	8	25	76	6060-04	6061-04
10	10	25	76	6060-06	6061-06
12	12	35	88	6060-08	6061-08



Developed with slow helix geometry designed to give a smooth finish.

Materials
Soft and hard plastic, acrylic, nylon, ABS, PE, acetal, PET, HDPE, UHMW, polycarbonate and solid surface.



Solid Carbide 2-Flute Spiral O-Flute Router 11° Helix - Mill End

Materials
SP HP AC
SS

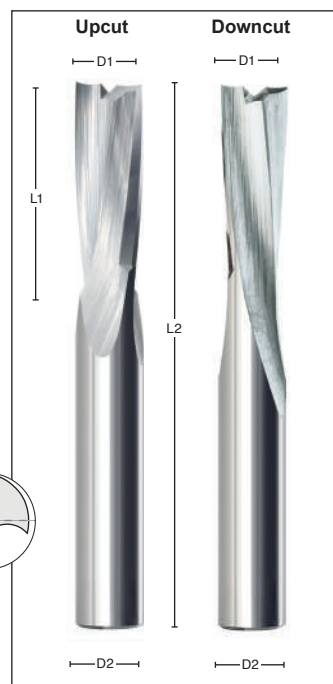
7060 7061

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/4	1/4	3/8	2-1/2	7060-02	7061-02
1/4	1/4	3/4	2-1/2	7060-04	7061-04
3/8	3/8	1	3	7060-06	7061-06
1/2	1/2	1-1/8	3-1/2	7060-08	7061-08



Developed with slow helix geometry designed to give a smooth finish.

Materials
Soft and hard plastic, acrylic, nylon, ABS, PE, acetal, PET, HDPE, UHMW, polycarbonate and solid surface.



6040 6042

Materials



Solid Carbide 2-Flute Spiral Router 30° Helix - Fishtail End

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104-
112


Developed to give excellent finish and long tool life. Fishtail end improves plunging ability.

Materials

Hard and soft woods, wood composites, soft plastic and solid surface.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
4	6	16	64	6040-02	6042-02
5	6	20	64	6040-04	6042-04
6	6	25	64	6040-06	6042-06
8	8	25	64	6040-08	6042-08
10	10	35	76	6040-10	6042-10
12	12	35	76	6040-12	6042-12
14	14	50	88	6040-14	6042-14
16	16	55	100	6040-16	6042-16
18	18	60	120	6040-18	6042-18
20	20	60	120	6040-20	6042-20

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK

Solid Carbide 2-Flute Spiral Router 30° Helix - Fishtail End

Materials
SW HW CW
SP SS

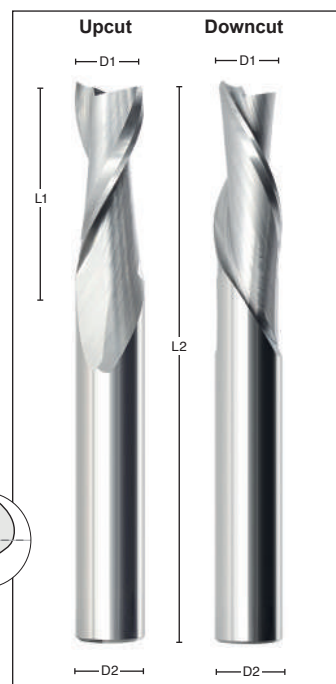
7040 7042

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/32	1/8	9/32	1-1/2	7040-02	7042-02
1/8	1/8	1/2	2	7040-04	7042-04
1/8	1/4	1/2	2	7040-06	7042-06
1/8	1/4	1/2	2	7040-08	7042-08 Left Hand
5/32	1/4	5/8	2	7040-10	7042-10
5/32	1/4	1/2	2-1/2	7040-12	7042-12
3/16	3/16	3/4	2	7040-14	7042-14
3/16	1/4	3/4	2	7040-16	7042-16
3/16	1/4	3/4	2	7040-18	7042-18 Left Hand
3/16	1/4	3/4	2-1/2	7040-20	7042-20
7/32	1/4	3/4	2-1/2	7040-22	7042-22
7/32	1/4	1	2-1/2	7040-24	7042-24
1/4	1/4	7/8	2-1/2	7040-26	7042-26
1/4	1/4	1	2-1/2	7040-28	7042-28
1/4	1/4	1	2-1/2	7040-30	7042-30 Left Hand
1/4	1/4	1-1/8	3	7040-32	7042-32
9/32	5/16	1	2-1/2	7040-34	7042-34
5/16	5/16	1	2-1/2	7040-36	7042-36
5/16	5/16	1-1/8	3	7040-38	7042-38
5/16	5/16	1-1/4	3	7040-40	7042-40
5/16	1/2	1-1/8	3	7040-42	7042-42
5/16	1/2	1-1/8	3	7040-44	7042-44 Left Hand
5/16	5/16	1-3/4	4	7040-46	7042-46
3/8	3/8	1	2-1/2	7040-48	7042-48
3/8	3/8	1	3	7040-50	7042-50
3/8	3/8	1-1/8	3	7040-52	7042-52
3/8	3/8	1-1/4	3	7040-54	7042-54
3/8	3/8	1-1/4	3	7040-56	7042-56 Left Hand
3/8	1/2	1-1/4	3	7040-58	7042-58
7/16	1/2	1	3	7040-60	7042-60
1/2	1/2	1-1/8	3	7040-62	7042-62
1/2	1/2	1-1/4	3-1/2	7040-64	7042-64
1/2	1/2	1-5/8	3-1/2	7040-66	7042-66
1/2	1/2	1-5/8	3-1/2	7040-68	7042-68 Left Hand
1/2	1/2	2-1/8	4	7040-70	7042-70
17/32	1/2	1-1/8	3	7040-72	7042-72
5/8	5/8	1-5/8	3-1/2	7040-74	7042-74
5/8	5/8	2-1/8	4	7040-76	7042-76
5/8	5/8	2-1/8	4	7040-78	7042-78 Left Hand
3/4	3/4	1-5/8	4	7040-80	7042-80
3/4	3/4	2-1/8	4	7040-82	7042-82
3/4	3/4	2-1/8	4	7040-84	7042-84 Left Hand
1	1	3	5	7040-86	7042-86



Developed to give excellent finish and long tool life. Fishtail end improves plunging ability.

Materials
Hard and soft woods, wood composites, soft plastic and solid surface.

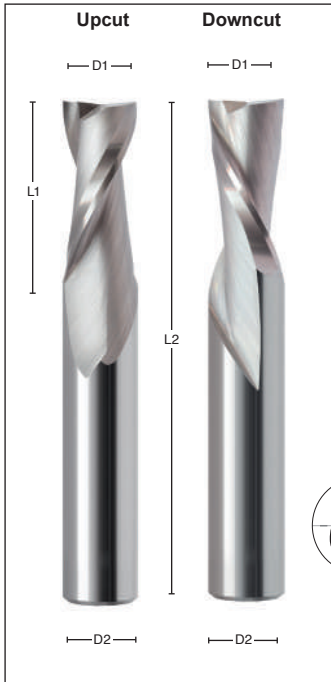


6050 6051

Materials



Solid Carbide 2-Flute Spiral Router 30° Helix - Mill End



Developed to give longer tool life than high speed steel versions.

Materials

Aluminium slab,
phenolic, glass fibre,
acetal, solid surface,
acrylic and hard plastics.

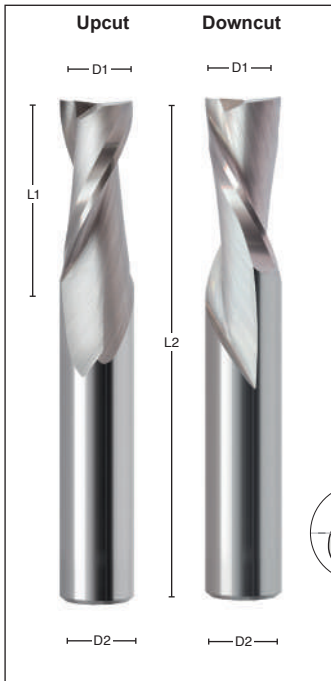
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3	3	12	50	6050-02	6051-02
4	4	12	50	6050-04	6051-04
5	5	17	50	6050-06	6051-06
6	6	17	60	6050-08	6051-08
8	8	32	70	6050-10	6051-10
10	10	32	70	6050-12	6051-12
10	10	42	100	6050-14	6051-14
12	12	32	80	6050-16	6051-16

7050 7051

Materials



Solid Carbide 2-Flute Spiral Router 30° Helix - Mill End



Developed to give longer tool life than high speed steel versions.

Materials

Aluminium slab,
phenolic, glass fibre,
acetal, solid surface,
acrylic and hard plastics.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/8	1/4	1/2	2	7050-02	7051-02
5/32	1/4	9/16	2	7050-04	7051-04
3/16	1/4	5/8	2	7050-06	7051-06
3/16	1/4	5/8	2	7050-08	7051-08 Left Hand
7/32	1/4	5/8	2-1/2	7050-10	7051-10
1/4	1/4	3/4	2-1/2	7050-12	7051-12
1/4	1/4	3/4	2-1/2	7050-14	7051-14 Left Hand
9/32	3/8	3/4	2-1/2	7050-16	7051-16
5/16	3/8	13/16	2-1/2	7050-18	7051-18
3/8	3/8	7/8	2-1/2	7050-20	7051-20
7/16	1/2	1	3	7050-22	7051-22
1/2	1/2	1	3	7050-24	7051-24

Modifications
Regrinds & Specials



Solid Carbide 2-Flute High Impact Spiral Router 30° Helix - Fishtail End

Materials
SW HW CW

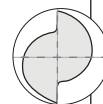
7048 7049

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/4	1/4	7/8	2-1/2	7048-02	7049-02
3/8	3/8	7/8	3	7048-04	7049-04
3/8	3/8	1-1/8	3	7048-06	7049-06
3/8	3/8	1-1/4	3	7048-08	7049-08
1/2	1/2	1-1/4	3	7048-10	7049-10



Developed for difficult applications. Fishtail end improves plunging ability.

Materials
Hard and soft wood and wood composites.

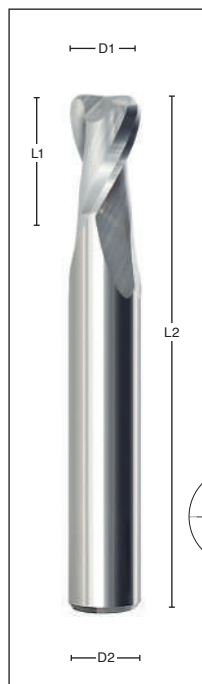


6112

Materials



Solid Carbide 2-Flute Upcut Spiral Router Bottom Surface 30° Helix



Developed to give a smooth finish in pocketing applications.

Materials

Aluminium, hard and soft plastics and acrylic.

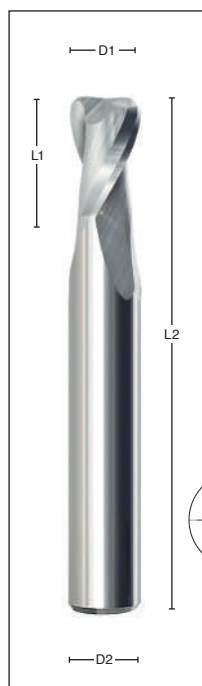
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3	3	6	40	6112-02
3	6	6	51	6112-04
6	6	10	51	6112-06
8	8	12	64	6112-08
12	12	20	76	6112-10

7112

Materials



Solid Carbide 2-Flute Upcut Spiral Router Bottom Surface 30° Helix - Corner Radius



Developed to give a smooth finish in pocketing applications with added benefit of corner radius.

Materials

Aluminium, hard and soft plastics and acrylic.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Corner Radius	Part Number
1/8	1/8	1/4	2	0.020"	7112-02
1/8	1/4	1/4	2	0.020"	7112-04
1/4	1/4	3/8	2	0.030"	7112-06
3/8	3/8	5/8	2-1/2	0.030"	7112-08
1/2	1/2	7/8	3	0.030"	7112-10
1/2	1/2	7/8	3	0.002"	7112-12

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured

Solid Carbide 2-Flute Slow Spiral Router 15° Helix

Materials



7070 7071

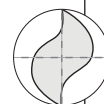
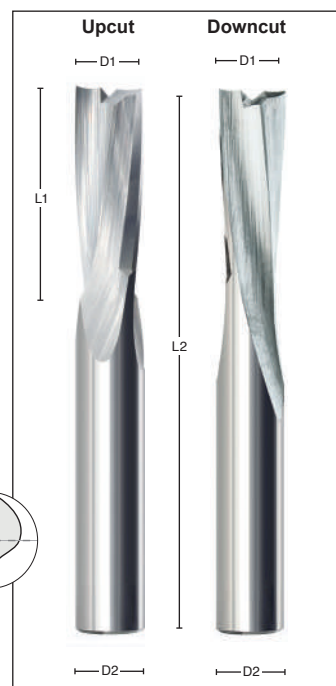
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/8	1/4	1/2	2	7070-02	7071-02
5/32	1/4	5/8	2-1/2	7070-04	7071-04
3/16	1/4	5/8	2	7070-06	7071-06
7/32	1/4	1	2-1/2	7070-08	7071-08
1/4	1/4	3/4	2-1/2	7070-10	7071-10
1/4	1/4	1	2-1/2	7070-12	7071-12
1/4	1/4	1-1/8	3	7070-14	7071-14
9/32	5/16	1	2-1/2	7070-16	7071-16
5/16	1/2	1-1/8	3	7070-18	7071-18
3/8	3/8	1	2-1/2	7070-20	7071-20
3/8	1/2	1-1/4	3	7070-22	7071-22
3/8	3/8	1-1/4	3	7070-24	7071-24
1/2	1/2	1-1/4	3	7070-26	7071-26
1/2	1/2	1-5/8	3-1/2	7070-28	7071-28



General purpose with extended life several times longer than high speed counterparts.

Materials

Phenolic, glass fibre, acetal, aluminium slab and solid surface.



7110

Materials



Solid Carbide 2-Flute Upcut Slow Spiral Router

3° Helix - Ball Nosed

PAGE 104-112



Developed with slow spiral, these ball nosed routers are ideal for grooving and detail cutting.

Materials

Plastic and solid surface, natural wood, wood composites, laminates and veneers, plastic and solid surface.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	3/8	2	7110-02
3/16	1/4	5/8	2	7110-04
1/4	1/4	3/4	2	7110-06
3/8	3/8	3/4	2-1/4	7110-08

7080 7081

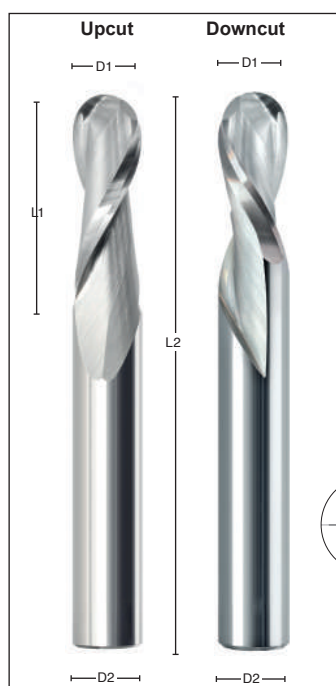
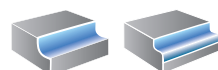
Materials



Solid Carbide 2-Flute Spiral Router

30° Helix - Ball Nosed

PAGE 104-112



Developed to give excellent finish due to enhanced geometry in modelling and carving applications.

Materials

Hard and soft wood, wood composites, aluminium, plastics and solid surface.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/8	1/4	1/2	2	7080-02	
1/8	1/4	1/2	3	7080-04	
3/16	1/4	3/4	2	7080-06	
3/16	1/4	3/4	3	7080-08	
1/4	1/4	7/8	2-1/2	7080-10	7081-10
1/4	1/4	1	4	7080-12	7081-12
3/8	3/8	1-1/8	3	7080-14	
3/8	3/8	1-1/4	4	7080-16	
1/2	1/2	1-1/8	3	7080-18	
1/2	1/2	1-1/2	5	7080-20	

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in USA and UK

Solid Carbide 2-Flute Spiral Router Chipbreaker Finisher 30° Helix

Materials
HW **CW**

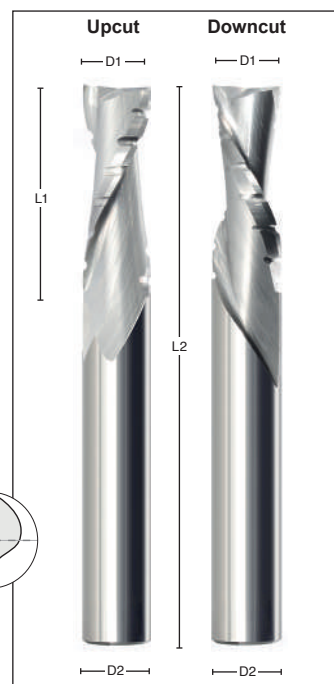
6090 6091

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
8	8	25	64	6090-02	6091-02
10	10	35	76	6090-04	6091-04
12	12	35	76	6090-06	6091-06
16	16	55	100	6090-08	6091-08
18	18	60	120	6090-10	6091-10



Developed to give a smooth finish with increased feed rate.

Materials
Wood composites and natural wood.



Solid Carbide 2-Flute Spiral Router Chipbreaker Finisher 30° Helix

Materials
HW **CW**

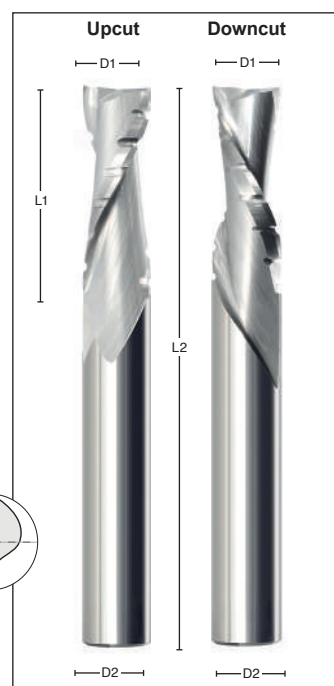
7090 7091

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/8	3/8	1-1/8	3	7090-02	7091-02
1/2	1/2	1-1/8	3	7090-04	7091-04
1/2	1/2	1-5/8	3-1/2	7090-06	7091-06
1/2	1/2	1-7/8	3-1/2	7090-08	7091-08
1/2	1/2	2-1/8	4	7090-10	7091-10
5/8	5/8	2-1/8	4	7090-12	7091-12
3/4	3/4	2-1/8	4	7090-14	7091-14



Developed to give a smooth finish with increased feed rate.

Materials
Wood composites and natural wood.



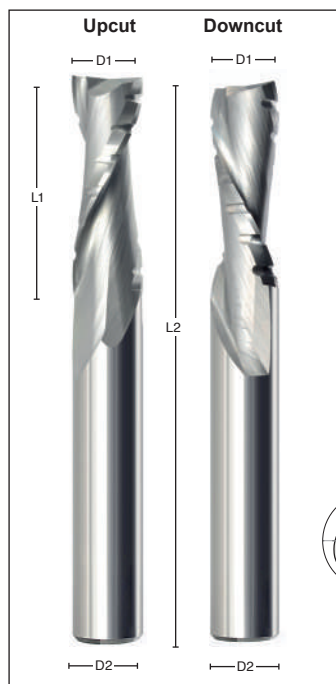
7092 7093

Materials

SW HW CW

Solid Carbide 2-Flute Spiral Router

High Impact - Chipbreaker Finisher 30° Helix


 PAGE
104-
112


Developed to give a smooth finish with increased feed rate for heavy duty applications.

Materials

Wood composites and natural wood.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/8	3/8	1-1/8	3	7092-02	7093-02
1/2	1/2	1-1/8	3	7092-04	7093-04
1/2	1/2	1-5/8	3-1/2	7092-06	7093-06
1/2	1/2	2-1/8	4	7092-08	7093-08

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured



Solid Carbide 2-Flute Compression & Mortise Router 30° Helix

Materials



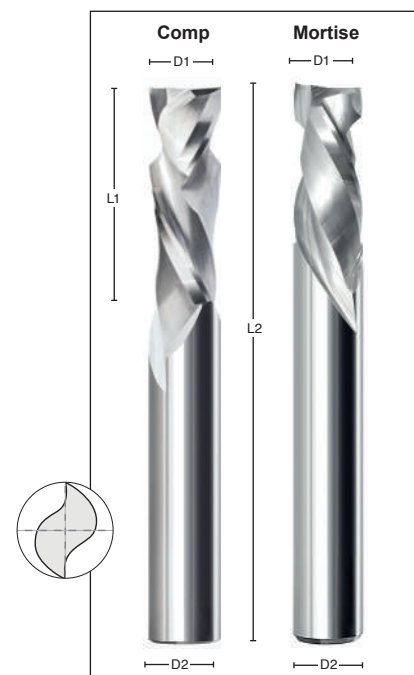
6100 6102

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Comp Part No	Mortise Part No
6	6	25	64	11.2	6100-02	
8	8	25	64	11.2	6100-04	
10	10	22	76	4.8		6102-02
10	10	35	76	15.4	6100-06	
12	12	22	76	5.1		6102-04
12	12	35	76	15.4	6100-08	
20	20	50	100	22.4	6100-10	

Developed with compression design to provide excellent edge finish on both sides of laminated materials.

Materials

Natural wood and wood composites with double sided laminate or veneer.



Solid Carbide 2-Flute Compression & Mortise Router 30° Helix

Materials



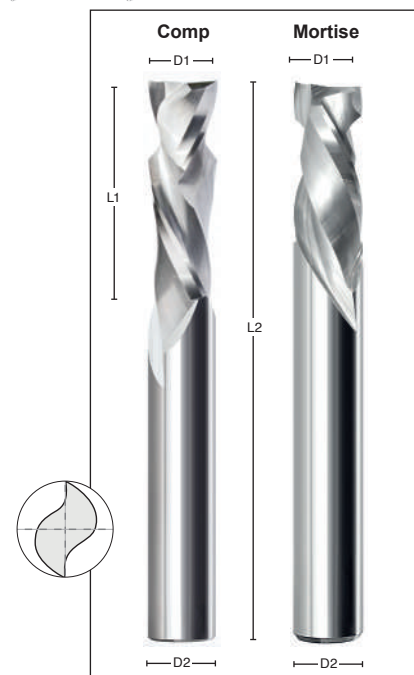
7100 7102

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Comp Part No	Mortise Part No
1/4	1/4	7/8	2-1/2	.188		7102-02
1/4	1/4	7/8	2-1/2	.276	7100-30	
1/4	1/4	7/8	2-1/2	.385	7100-20	
3/8	3/8	7/8	3	.188		7102-04
3/8	1/2	1	3	.354	7100-34	
3/8	1/2	1	3	.440	7100-24	
3/8	3/8	1-1/8	3	.188		7102-10
3/8	3/8	1-1/8	3	.188		7102-12 LH
3/8	1/2	1-1/8	3	.354	7100-26	
3/8	3/8	1-1/8	3	.495	7100-02	
3/8	3/8	1-1/4	3	.354	7100-32	
1/2	1/2	7/8	3	.200		7102-06
1/2	1/2	1	3	.440	7100-04	
1/2	1/2	1-1/8	3	.495	7100-06	
1/2	1/2	1-1/4	3	.250		7102-14
1/2	1/2	1-5/16	3	.577	7100-22	
1/2	1/2	1-3/8	3-1/2	.200		7102-08
1/2	1/2	1-3/8	3-1/2	.605	7100-08	
1/2	1/2	1-5/8	3-1/2	.433	7100-28	
1/2	1/2	1-5/8	4	.715	7100-10	
1/2	1/2	1-5/8	4	.715	7100-12 LH	
5/8	5/8	2-1/4	5	.990	7100-14	
3/4	3/4	1-7/8	4	.825	7100-16	
3/4	3/4	2-1/2	5	1.10	7100-18	

Developed with compression design to provide excellent edge finish on both sides of laminated materials.

Materials

Natural wood and wood composites with double sided laminate or veneer.



Modifications
Regrinds & Specials

7101

Materials

LW

Solid Carbide 2-Flute

High Wear Compression & Mortise Router 30° Helix


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Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Comp Part No	Mortise Part No
3/8	3/8	7/8	3	.188		7101-02
3/8	3/8	7/8	3	.385	7101-14	
1/2	1/2	7/8	3	.200		7101-04
1/2	1/2	7/8	3	.385	7101-16	
1/2	1/2	1-1/8	3	.495	7101-12	
1/2	1/2	1-1/4	3	.550	7101-06	
1/2	1/2	1-3/8	3-1/2	.605	7101-08	
1/2	1/2	1-5/8	3-1/2	.715	7101-10	
1/2	1/2	1-5/8	3-1/2	.433	7101-18	

Developed with compression design to provide excellent edge finish on both sides of laminated materials.

Materials

Double sided laminates and veneers.

Modifications
Regrinds & Specials

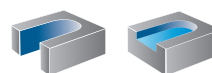
Merlin Tools Ltd manufactured  

Solid Carbide 2-Flute Compression Router Chipbreaker Finisher 30° Helix

Materials
HW CW LW

6103

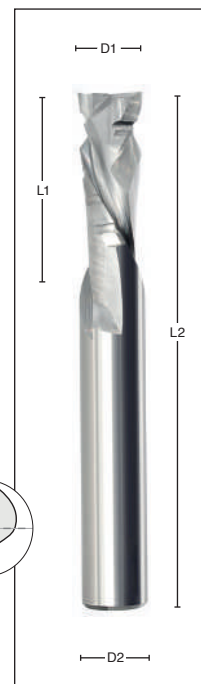
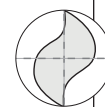
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Part Number
8	8	25	64	11.2	6103-02
10	10	35	76	15.4	6103-04
12	12	35	76	15.4	6103-06
20	20	50	100	22.4	6103-08



Developed to give improved finish with increased feed rates. Chipbreaker reduces tool pressure and reduces sizes of chips to give excellent finish.

Materials

Natural wood and wood composites with double sided laminate or veneers.



Solid Carbide 2-Flute Compression Router Chipbreaker Finisher 30° Helix

Materials
HW CW LW

7103

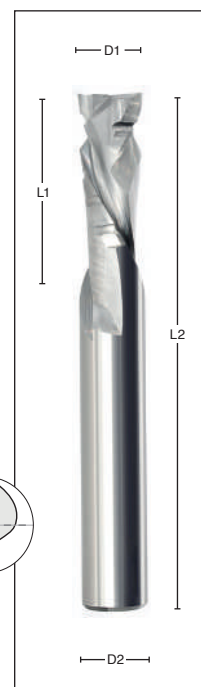
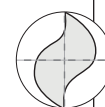
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Part Number
3/8	3/8	7/8	3	.385	7103-02
3/8	3/8	1-1/8	3	.495	7103-04
1/2	1/2	7/8	3	.385	7103-18
1/2	1/2	1	3	.440	7103-06
1/2	1/2	1-1/8	3	.495	7103-08
1/2	1/2	1-3/8	3-1/2	.605	7103-10
1/2	1/2	1-5/8	4	.715	7103-12
5/8	5/8	2-1/4	5	.990	7103-14
3/4	3/4	1-7/8	4	.825	7103-16



Developed to give improved finish with increased feed rates. Chipbreaker reduces tool pressure and reduces sizes of chips to give excellent finish.

Materials

Natural wood and wood composites with double sided laminate or veneers.

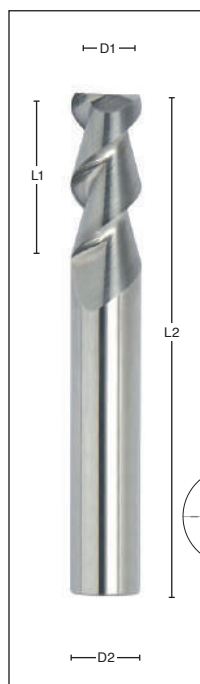


254

Materials



Solid Carbide 2-Flute Upcut Spiral Router 55° Helix

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112


Developed with fast helix for Aluminium and non-ferrous materials. Particularly effective in pocketing applications, providing excellent swarf clearance and finish.

Materials

Aluminium, non-ferrous materials, plastics and acrylics.

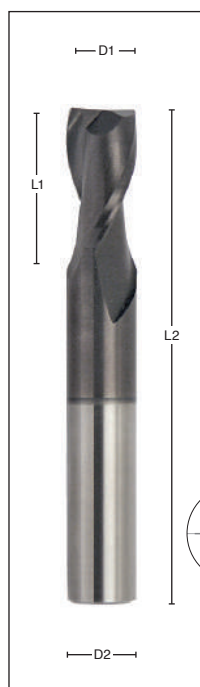
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3	3	12	38	254-11305
4	4	14	50	254-11307
5	5	19	50	254-11309
6	6	19	63	254-11310
8	8	19	63	254-11312
10	10	22	70	254-11314
12	12	25	83	254-11316
14	14	30	88	254-11318
16	16	32	88	254-11320
20	20	38	100	254-11324

214

Materials



Solid Carbide 2-Flute Upcut Spiral Router 30° Helix- *TiALN*

 PAGE
104-
112


Developed with *TiALN* coating to provide increased tool life.

Materials

Wide variety of materials.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1	3	3	38	214-10301
1.5	3	5	38	214-10302
2	3	6	38	214-10303
2.5	3	7	38	214-10304
3	3	12	38	214-10305
3.5	4	12	50	214-10306
4	4	14	50	214-10307
4.5	5	14	50	214-10308
5	5	16	50	214-10309
6	6	19	63	214-10310
7	8	19	63	214-10311
8	8	19	63	214-10312
9	10	22	70	214-10313
10	10	22	70	214-10314
11	11	25	70	214-10315
12	12	25	75	214-10316
14	14	30	88	214-10318
16	16	32	88	214-10320
18	18	36	100	214-10322
20	20	38	100	214-10324

Modifications
Regrinds & Specials

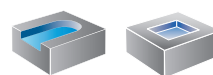
Merlin Tools Ltd
manufactured

Solid Carbide 2-Flute Upcut Spiral Router 30° Helix

Materials
HP SP AC
A HW SW

211

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1	3	3	38	211-10301
1.5	3	5	38	211-10302
2	3	6	38	211-10303
2.5	3	7	38	211-10304
3	3	12	38	211-10305
3.5	4	12	50	211-10306
4	4	14	50	211-10307
4.5	5	14	50	211-10308
5	5	16	50	211-10309
6	6	19	63	211-10310
7	8	19	63	211-10311
8	8	19	63	211-10312
9	10	22	70	211-10313
10	10	22	70	211-10314
11	11	25	70	211-10315
12	12	25	75	211-10316
14	14	30	88	211-10318
16	16	32	88	211-10320
18	18	36	100	211-10322
20	20	38	100	211-10324



Developed as a general purpose router with 2 flute upward spiral. A cost effective tool for routing a wide variety of materials.

Materials
Wide variety of materials.

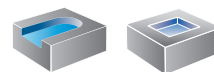


Solid Carbide 2-Flute Upcut Spiral Router 30° Helix

Materials
HP SP AC
A HW SW

211

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/32	1/8	3/32	1-1/2	211-00302
1/16	1/8	1/4	1-1/2	211-00304
3/32	1/8	3/8	1-1/2	211-00306
1/8	1/8	1/2	1-1/2	211-00308
5/32	3/16	9/16	2	211-00310
3/16	3/16	5/8	2	211-00312
7/32	1/4	5/8	2-1/2	211-00314
1/4	1/4	3/4	2-1/2	211-00316
9/32	5/16	7/8	2-1/2	211-00318
5/16	5/16	7/8	2-1/2	211-00320
3/8	3/8	7/8	2-1/2	211-00324
7/16	7/16	1	2-1/2	211-00328
1/2	1/2	1	3	211-00332
9/16	9/16	1-1/4	3-1/2	211-00336
5/8	5/8	1-1/4	3-1/2	211-00340
3/4	3/4	1-1/2	4	211-00348
7/8	7/8	1-1/2	4	211-00356
1	1	1-1/2	4	211-00364



Developed as a general purpose router with 2 flute upward spiral. A cost effective tool for routing a wide variety of materials.

Materials
Wide variety of materials.

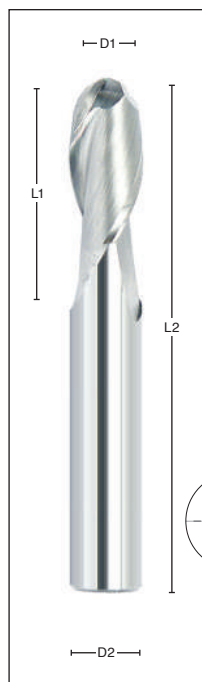


216

Materials



Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Ball Nosed

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104-112


Developed as a general purpose ball nosed router with 2 flute upward spiral. A cost effective tool for routing contoured surfaces as an added benefit.

Materials

Wide variety of materials.

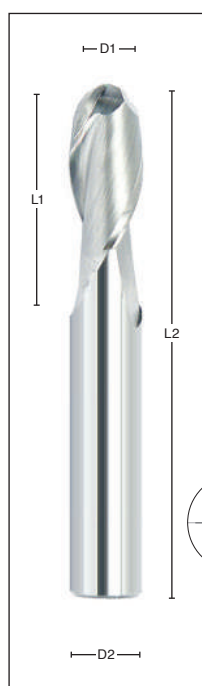
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1	3	3	38	216-17501
1.5	3	5	38	216-17502
2	3	6	38	216-17503
2.5	3	7	38	216-17504
3	3	12	38	216-17505
3.5	4	12	50	216-17506
4	4	14	50	216-17507
4.5	5	14	50	216-17507
5	5	16	50	216-17509
6	6	19	63	216-17510
7	8	19	63	216-17511
8	8	19	63	216-17512
9	10	22	70	216-17513
10	10	22	70	216-17514
11	11	25	70	216-17515
12	12	25	75	216-17516
14	14	30	88	216-17518
16	16	32	88	216-17520
18	18	36	100	216-17522
20	20	38	100	216-17524
22	22	38	100	216-17526
25	25	38	100	216-17529

216

Materials



Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Ball Nosed

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104-112


Developed as a general purpose ball nosed router with 2 flute upward spiral. A cost effective tool for routing contoured surfaces as an added benefit.

Materials

Wide variety of materials.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/16	1/8	1/4	1-1/2	216-07504
3/32	1/8	3/8	1-1/2	216-07506
1/8	1/8	1/2	1-1/2	216-07508
5/32	3/16	9/16	2	216-07510
3/16	3/16	5/8	2	216-07512
7/32	1/4	5/8	2-1/2	216-07514
1/4	1/4	3/4	2-1/2	216-07516
9/32	5/16	7/8	2-1/2	216-07518
5/16	5/16	7/8	2-1/2	216-07520
3/8	3/8	7/8	2-1/2	216-07524
7/16	7/16	1	2-1/2	216-07528
1/2	1/2	1	3	216-07532
5/8	5/8	1-1/4	3-1/2	216-07540
3/4	3/4	1-1/4	4	216-07548
7/8	7/8	1-1/2	4	216-07556
1	1	1-1/2	4	216-07564

Modifications
 Regrinds & Specials

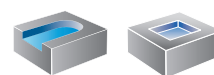
 Tools Ltd
 manufactured


Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Long Length

Materials
HP **SP** **AC**
A **HW** **SW**

221

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3	3	25	65	221-10605
4	4	25	65	221-10607
5	5	25	75	221-10609
6	6	25	75	221-10610
8	8	25	75	221-10612
10	10	38	100	221-10614
12	12	50	100	221-10616
16	16	75	150	221-10618
18	18	75	150	221-10620
20	20	75	150	221-10624



Developed as a general purpose router with 2 flute upward spiral. An extended reach and overall length for deeper applications.

Materials
Wide variety of materials.

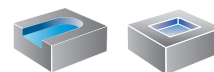


Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Long Length

Materials
HP **SP** **AC**
A **HW** **SW**

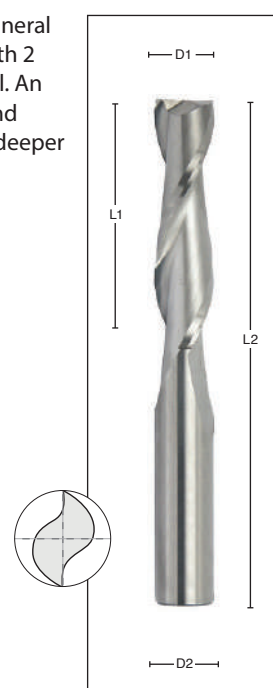
221

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/4	1/4	1-1/8	3	221-00616
5/16	5/16	1-1/8	3	221-00620
3/8	3/8	1-1/8	3	221-00624
7/16	7/16	2	4	221-00628
1/2	1/2	2	4	221-00632
5/8	5/8	2-1/4	5	221-00640
3/4	3/4	2-1/4	5	221-00648



Developed as a general purpose router with 2 flute upward spiral. An extended reach and overall length for deeper applications.

Materials
Wide variety of materials.



236

Materials



Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Ball Nosed Long Length

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Developed as a general purpose ball nosed router with 2 flute upward spiral. Extended reach and overall length for deeper applications.

Materials

Wide variety of materials.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3	3	25	65	236-17505
4	4	25	65	236-17507
5	5	25	75	236-17509
6	6	25	75	236-17510
8	8	25	75	236-17512
10	10	38	100	236-17514
12	12	50	100	236-17516
16	16	75	150	236-17520
20	20	75	150	236-17524
25	25	75	150	236-17529

236

Materials



Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Ball Nosed Long Length

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104-
112


Developed as a general purpose ball nosed router with 2 flute upward spiral. Extended reach and overall length for deeper applications.

Materials

Wide variety of materials.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/4	1/4	1-1/8	3	236-00916
5/16	5/16	1-1/8	3	236-00920
3/8	3/8	1-1/8	3	236-00924
7/16	7/16	2	4	236-00928
1/2	1/2	2	4	236-00932
5/8	5/8	2-1/4	5	236-00940
3/4	3/4	2-1/4	5	236-00948
1	1	3	6	236-00964

Modifications
Regrinds & Specials

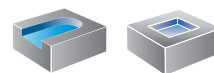
Merlin Tools Ltd
manufactured

Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Extra Long Length

Materials
HP SP AC
A HW SW

222

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
6	6	38	100	222-10061
6	6	75	150	222-15061
6	8	75	200	222-20061
8	8	42	100	222-10062
8	8	75	150	222-15062
8	8	75	200	222-20062
8	10	75	200	222-20063
10	10	75	150	222-15064
10	10	75	200	222-20064
12	12	75	150	222-15065
12	12	75	200	222-20065
14	14	62	125	222-10066
14	16	75	150	222-15066
14	16	75	200	222-20066
16	16	75	200	222-20067
18	18	75	200	222-20068
20	20	75	200	222-20069



Developed as a general purpose router with 2 flute upward spiral. Extended reach and overall length for even deeper applications than series 221.

Materials
Wide variety of materials.



Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Ball Nosed Extra Long Length

Materials
HP SP AC
A HW SW

226

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
6	6	38	100	226-10081
6	6	75	150	226-15081
6	6	75	200	226-20081
8	8	42	100	226-10082
8	8	75	150	226-15082
8	8	75	200	226-20082
8	10	75	200	226-20083
10	10	75	150	226-15084
10	10	75	200	226-20084
12	12	75	150	226-15085
12	12	75	200	226-20085
14	14	62	125	226-10086
14	14	75	150	226-15086
14	16	75	200	226-20086
16	16	75	200	226-20087
18	18	75	200	226-20088
20	20	75	200	226-20089



Developed as a general purpose router with 2 flute upward spiral. Extended reach and overall length for even deeper applications than series 236.

Materials
Wide variety of materials.

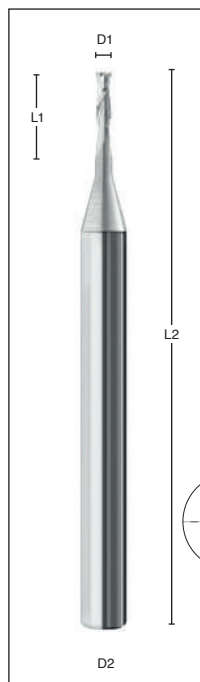


200

Materials



Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Miniature



Developed as a precision 2 flute router with upward spiral for miniature applications. Designed with standard shank to provide strength and rigidity.

Materials

Wide variety of materials.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
0.2	3	0.6	38	200-38302
0.3	3	0.9	38	200-38303
0.4	3	1.2	38	200-38304
0.5	3	1.5	38	200-38305
0.6	3	1.8	38	200-38306
0.7	3	2.1	38	200-38307
0.8	3	2.4	38	200-38308
0.9	3	2.7	38	200-38309
1	3	3	38	200-38301
1.1	3	3.3	38	200-38311
1.2	3	3.6	38	200-38322
1.3	3	3.9	38	200-38313
1.4	3	4.2	38	200-38314
1.5	3	4.5	38	200-38315
1.6	3	4.8	38	200-38316
1.7	3	5.1	38	200-38317
1.8	3	5.4	38	200-38318
1.9	3	5.7	38	200-38319
2	3	6	38	200-38312

204

Materials



Solid Carbide 2-Flute Upcut Spiral Router 30° Helix - Miniature *TiALN*



Developed as a precision 2 flute router with upward spiral for miniature applications. With the added benefit of *TiALN* coating for longer tool life. Designed with a standard shank for strength and rigidity.

Materials

Wide variety of materials.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
0.2	3	0.6	38	204-38302
0.3	3	0.9	38	204-38303
0.4	3	1.2	38	204-38304
0.5	3	1.5	38	204-38305
0.6	3	1.8	38	204-38306
0.7	3	2.1	38	204-38307
0.8	3	2.4	38	204-38308
0.9	3	2.7	38	204-38309
1	3	3	38	204-38301
1.1	3	3.3	38	204-38311
1.2	3	3.6	38	204-38322
1.3	3	3.9	38	204-38313
1.4	3	4.2	38	204-38314
1.5	3	4.5	38	204-38315
1.6	3	4.8	38	204-38316
1.7	3	5.1	38	204-38317
1.8	3	5.4	38	204-38318
1.9	3	5.7	38	204-38319
2	3	6	38	204-38312

Modifications
Regrinds & Specials

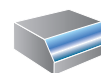
Merlin Tools Ltd
manufactured

Solid Carbide 2-Flute Rout and Chamfer Tool

Materials
SP **HP** **AC**

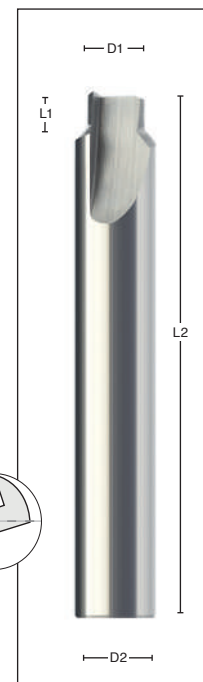
6111

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Material Thickness	Part Number
6	10	5	70	3	6111-02
6	10	6	70	4	6111-04
6	10	8	70	6	6111-06
8	12	5	76	3	6111-08
8	12	6	76	4	6111-10
8	12	8	76	6	6111-12



Developed to provide up to 1.5mm top face chamfer and a finished side edge on plastic parts or sheets.

Materials
Soft and hard plastics.



Solid Carbide 2-Flute Rout and Chamfer Tool

Materials
SP **HP** **AC**

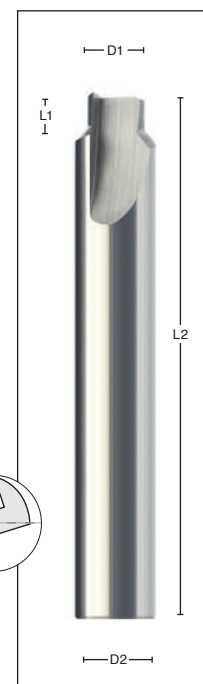
7111

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Material Thickness	Part Number
1/4	3/8	3/16	2-1/4	1/8	7111-02
1/4	3/8	1/4	2-1/4	3/16	7111-04
1/4	3/8	5/16	2-1/4	1/4	7111-06
3/8	1/2	3/16	3	1/8	7111-08
3/8	1/2	1/4	3	3/16	7111-10
3/8	1/2	5/16	3	1/4	7111-12



Developed to provide up to 1/16 top face chamfer and a finished side edge on plastic parts or sheets.

Materials
Soft and hard plastics.



7038

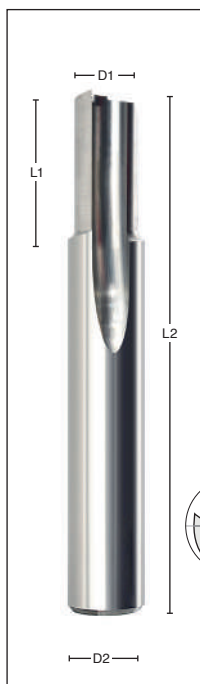
Materials



Solid Carbide 2-Flute Straight O-Flute Router

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Developed to give a smooth finish with free cutting O flute design.

Materials

Acrylic, polystyrene, polypropylene, PE, PVC, acetal, UHMW, polycarbonate, ABS, HIPS, HDPE, PET and foam.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	1/4	2	7038-02
3/16	1/4	3/8	2	7038-04
3/16	1/4	5/8	2	7038-06
3/16	1/4	5/8	2	7038-08 Left Hand
3/16	1/4	5/8	4	7038-10
1/4	1/4	3/8	2-1/2	7038-12
1/4	1/4	3/4	2-1/2	7038-14
1/4	1/4	3/4	2-1/2	7038-16 Left Hand
1/4	1/4	1-1/4	4	7038-18
3/8	3/8	5/8	2-1/2	7038-20
3/8	3/8	7/8	2-1/2	7038-22
3/8	3/8	7/8	2-1/2	7038-24 Left Hand
3/8	3/8	1-5/8	6	7038-26
1/2	1/2	1	3	7038-28
1/2	1/2	1	3	7038-30 Left Hand
1/2	1/2	2-1/8	6	7038-32

Modifications
Regrinds & Specials

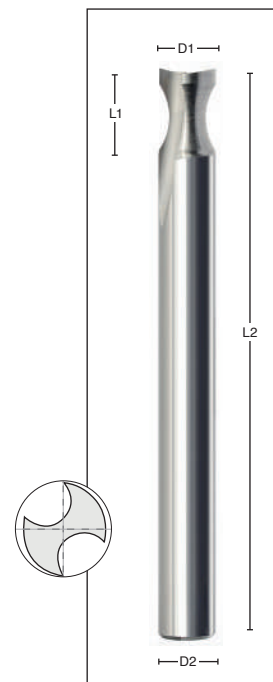
Merlin Tools Ltd
manufactured

Solid Carbide 2-Flute Straight O-Flute Router Edge Rounding

Materials
SP HP AC
SS

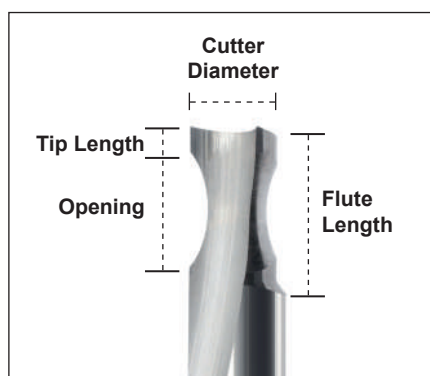
6036

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Opening	Radius	Small Dia	Tip Length	Part Number
6	6	10	64	4	3	4.47	1.5	6036-02
6	6	10	64	5	4	4.24	1.5	6036-04
6	6	10	64	6	5	3.96	1.5	6036-06
6	6	10	64	7	6	3.73	1.5	6036-08



Developed for edge rounding
of sheets or parts.

Materials
Soft and Hard plastics,
solid surface and acrylic.

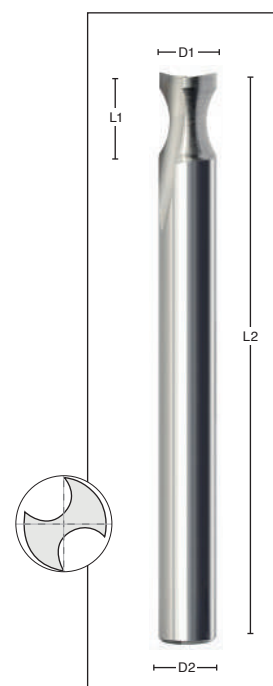


Solid Carbide 2-Flute Straight O-Flute Router Edge Rounding

Materials
SP HP AC
SS

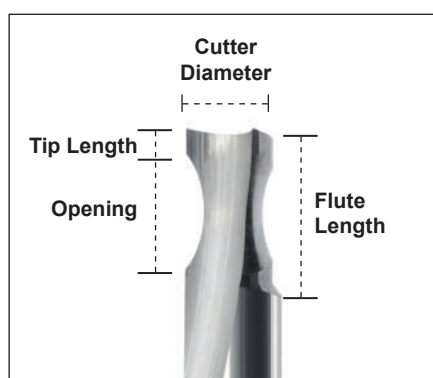
7036

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Opening	Radius	Small Dia	Tip Length	Part Number
1/4	1/4	3/8	2-1/2	5/32	1/8	.195	1/16	7036-02
1/4	1/4	3/8	2-1/2	7/32	3/16	.180	1/16	7036-04
1/4	1/4	3/8	2-1/2	9/32	1/4	.163	1/16	7036-06



Developed for edge rounding
of sheets or parts.

Materials
Soft and Hard plastics,
solid surface and acrylic.



6034

Materials

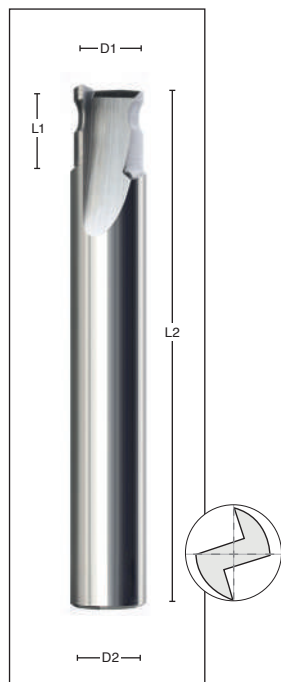
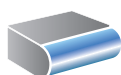
SP HP AC

SS

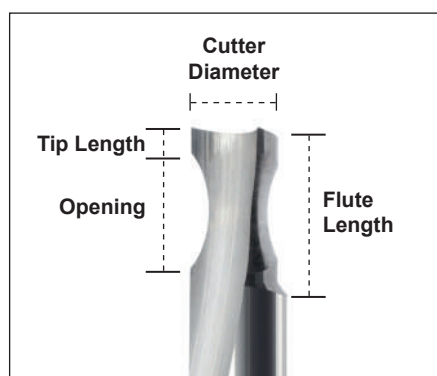
Solid Carbide 2-Flute Straight V-Flute Router Edge Rounding


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Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Opening	Radius	Small Dia	Tip Length	Part Number
8	8	12	64	9	8	5.21	1.5	6034-02
10	10	14	70	11	10	6.68	1.5	6034-04
12	12	16	76	13	12	8.18	1.5	6034-06



Developed for edge rounding
of sheets or parts.

Materials

Soft and Hard plastics,
solid surface, and acrylic.

7034

Materials

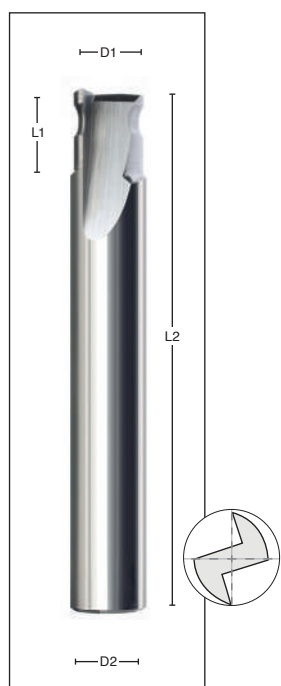
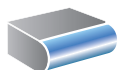
SP HP AC

SS

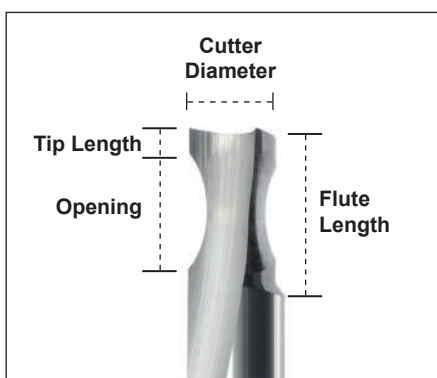
Solid Carbide 2-Flute Straight V-Flute Router Edge Rounding


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Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Opening	Radius	Small Dia	Tip Length	Part Number
3/8	3/8	3/8	2-1/2	5/32	1/8	.320	1/16	7034-02
3/8	3/8	3/8	2-1/2	7/32	3/16	.305	1/16	7034-04
3/8	3/8	3/8	2-1/2	9/32	1/4	.288	1/16	7034-06
3/8	3/8	1/2	2-1/2	13/32	3/8	.255	1/16	7034-08
1/2	1/2	3/8	3	5/32	1/8	.445	1/16	7034-10
1/2	1/2	3/8	3	7/32	3/16	.430	1/16	7034-12
1/2	1/2	3/8	3	9/32	1/4	.413	1/16	7034-14
1/2	1/2	5/8	3	17/32	1/2	.347	1/16	7034-16



Developed for edge rounding
of sheets or parts.

Materials

Soft and Hard plastics,
solid surface and acrylic.

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured



Solid Carbide 2-Flute Straight Flute Router Mill End

Materials
HP **AC** **CP**
SS **F**

6030

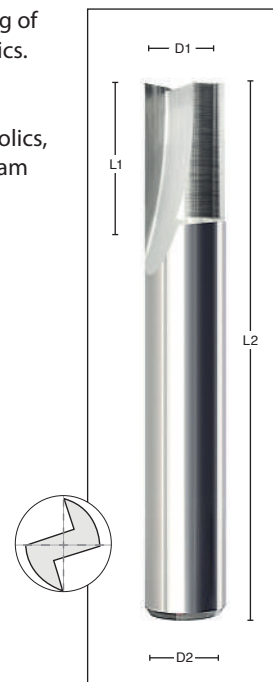
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
4	6	16	64	6030-02
5	6	20	64	6030-04
6	6	25	64	6030-06
8	8	25	76	6030-08
10	10	35	88	6030-10
12	12	35	88	6030-12



Developed for the routing of rigid and hardened plastics.

Materials

Acrylic, nylon, PVC, phenolics, acetal ABS, glass fibre, foam and solid surface.



Solid Carbide 2-Flute Straight Flute Router Mill End

Materials
HP **AC** **CP**
SS **F**

7030

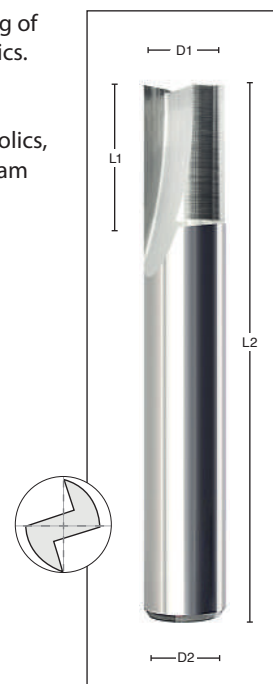
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	1/4	2	7030-02
3/16	1/4	3/8	2	7030-04
3/16	1/4	5/8	2	7030-06
3/16	1/4	5/8	2	7030-08 Left Hand
3/16	1/4	5/8	4	7030-10
1/4	1/4	3/8	2-1/2	7030-12
1/4	1/4	3/4	2-1/2	7030-16 Left Hand
1/4	1/4	1-1/4	4	7030-18
3/8	3/8	5/8	2-1/2	7030-20
3/8	3/8	7/8	2-1/2	7030-22
3/8	3/8	7/8	2-1/2	7030-24 Left Hand
3/8	3/8	1-5/8	6	7030-26
1/2	1/2	1	3	7030-28
1/2	1/2	1	3	7030-30 Left Hand
1/2	1/2	2-1/8	6	7030-32



Developed for the routing of rigid and hardened plastics.

Materials

Acrylic, nylon, PVC, phenolics, acetal ABS, glass fibre, foam and solid surface.



271

Materials

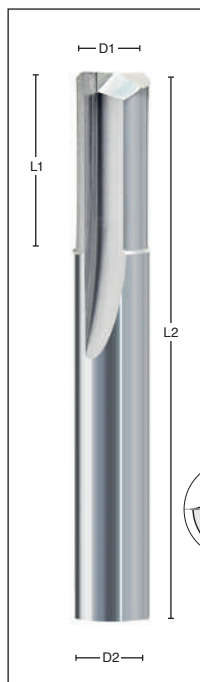
HP AC CP

SS

Solid Carbide 2-Flute Straight Flute Router

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Developed as a 2 flute straight flute router, particularly good on hard and composite plastics. The 2 flute style provides excellent swarf clearance especially in rigid set ups.

Materials

PVC, ABS, phenolic, acrylic, nylon, acetal and solid surface

Cutter Dia d1	Shank Dia d2	FL L1	OAL L2	Part Number
3	3	12	38	271-22005
4	4	14	50	271-22007
5	5	16	50	271-22009
6	6	19	63	271-22010
8	8	19	63	271-22012
10	10	22	70	271-22014
12	12	25	75	271-22016
16	16	32	88	271-22020

279

Materials

HP AC CP

SS

Solid Carbide 2-Flute Straight Flute Router

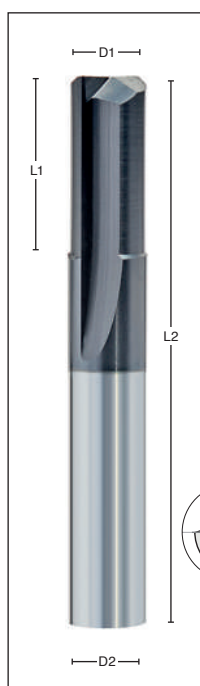
TiALN

Ti
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112

TiALN

MG
HM

2



Developed as a 2 flute straight flute router, particularly good on hard and composite plastics. The 2 flute style provides excellent swarf clearance especially in rigid set ups. With the added benefit of TiALN coating for longer tool life.

Materials

PVC, ABS, phenolic, acrylic, nylon, acetal and solid surface

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3	3	12	38	279-22005
4	4	14	50	279-22007
5	5	16	50	279-22009
6	6	19	63	279-22010
8	8	19	63	279-22012
10	10	22	70	279-22014
12	12	25	75	279-22016
16	16	32	88	279-22020

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK

Solid Carbide 2-Flute Straight Flute Router Fishtail End

Materials
SW HW CW

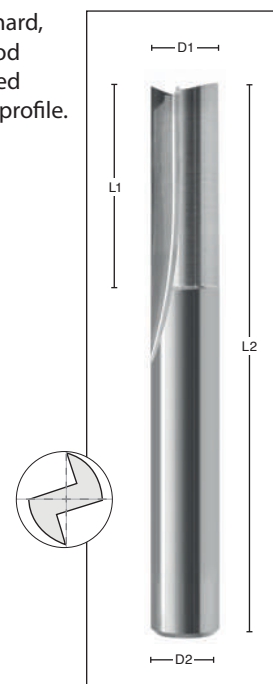
6031

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
4	6	16	64	6031-02
5	6	20	64	6031-04
6	6	25	64	6031-06
8	8	25	64	6031-08
10	10	35	76	6031-10
12	12	35	76	6031-12



Developed for routing hard, soft and composite wood materials. With the added benefit of a fishtail end profile.

Materials
Wood composites and Natural wood.



Solid Carbide 2-Flute Straight Flute Router Fishtail End

Materials
SW HW CW

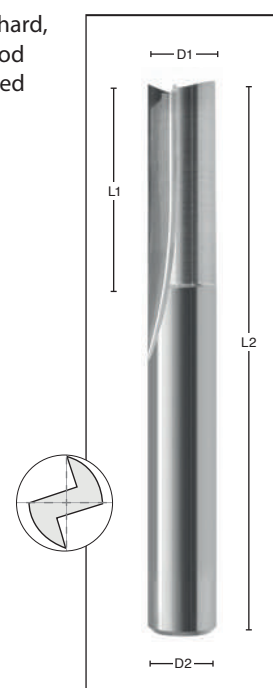
7031

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	1/2	2	7031-02
5/32	1/4	5/8	2	7031-04
3/16	1/4	3/4	2	7031-06
7/32	1/4	3/4	2-1/2	7031-08
1/4	1/4	7/8	2-1/2	7031-10
1/4	1/4	1	2-1/2	7031-14
1/4	1/4	1-1/8	3	7031-16
9/32	5/16	1	2-1/2	7031-18
5/16	5/16	1-1/8	3	7031-20
5/16	1/2	1-1/8	3	7031-22
3/8	3/8	1-1/8	3	7031-24
3/8	3/8	1-1/4	3	7031-26
3/8	1/2	1-1/4	3	7031-28
7/16	1/2	1	3	7031-30
1/2	1/2	1-1/8	3	7031-32
1/2	1/2	1-1/4	3-1/2	7031-34
1/2	1/2	1-5/8	3-1/2	7031-36
17/32	1/2	1-1/8	3	7031-38
5/8	5/8	2-1/8	4	7031-40
3/4	3/4	1-5/8	4	7031-42
3/4	3/4	2-1/8	4	7031-44



Developed for routing hard, soft and composite wood materials. With the added benefit of a fishtail end profile.

Materials
Wood composites and Natural wood.



7032

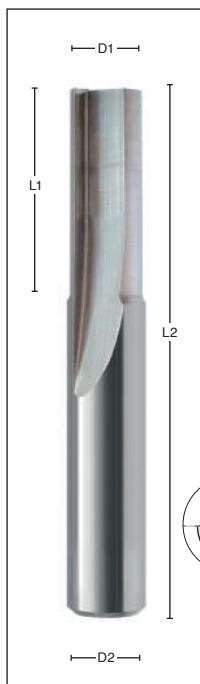
Materials



Solid Carbide 2-Flute Straight Flute Router

MG
HM

2



Developed as a 2 flute straight flute router, particularly good on hard and composite plastics. The 2 flute style provides excellent swarf clearance especially in rigid set-ups.

Materials

Hard, soft and composite plastics, foam and solid surface.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	1/2	2	7032-02
5/32	1/4	9/16	2	7032-04
3/16	1/4	5/8	2	7032-06
7/32	1/4	5/8	2-1/2	7032-08
1/4	1/4	3/4	2-1/2	7032-10
1/4	1/4	3/4	3-1/4	7032-12
9/32	3/8	3/4	2-1/2	7032-14
5/16	3/8	1-3/16	2-1/2	7032-16
3/8	3/8	7/8	2-1/2	7032-18
7/16	1/2	1	3	7032-20
1/2	1/2	1	3	7032-22

7035

Materials

Solid Carbide 2-Flute Straight Flute Router
90° V BottomMG
HM

2



Developed for V grooving or bevelling 90° applications

Materials

Hard and soft wood, plastics, solid surface, laminated and veneered woods.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3/16	1/4	5/8	2	7035-02
1/4	1/4	3/4	2	7035-04
3/8	3/8	3/4	2-1/2	7035-06

Modifications
Regrinds & Specials



Extreme Performance PCD Solid Carbide Body Corner Radius

Materials



800

Cutter Dia D1	Shank Dia D2	FL L1	Reach	No. of Teeth	Radius	OAL L2	Part Number
2	6	2	10	1	0.2	75	800-20103
3	6	3	15	2	0.2	75	800-20105
4	6	4	20	2	0.2	75	800-20107
5	6	5	25	2	0.2	75	800-20109
5	6	5	25	2	0.5	75	800-20209
5	6	5	25	2	1.0	75	800-20309
6	6	8	30	2	0.2	100	800-20110
6	6	8	30	2	0.3	100	800-20210
6	6	8	30	2	0.5	100	800-20310
6	6	8	30	2	1.0	100	800-20410
8	8	10	40	2	0.2	100	800-20112
8	8	10	40	2	0.5	100	800-20212
8	8	10	40	2	1.0	100	800-20312
8	8	10	40	2	2.0	100	800-20412
10	10	12	40	2	0.2	100	800-20114
10	10	12	45	2	0.5	100	800-20214
10	10	12	45	2	1.0	100	800-20314
10	10	12	45	2	3.0	100	800-20414
12	12	12	45	2	0.2	100	800-20116
12	12	12	45	2	0.5	100	800-20216
12	12	12	45	2	1.0	100	800-20316
12	12	12	45	2	4.0	100	800-20416
16	16	16	50	2	5.0	150	800-20120
20	20	20	50	2	6.0	150	800-20124



Developed for high speed machining of glass and carbon fibre composites and aluminium. Manufactured with a solid carbide shank this series comes complete with corner radius and necked for extended reach.

Materials

Graphite, metal matrix, hard, soft and composite plastics and aluminium.



Extreme Performance PCD Solid Carbide Body 2-Flute - Extra Long Corner Radius

Materials



801

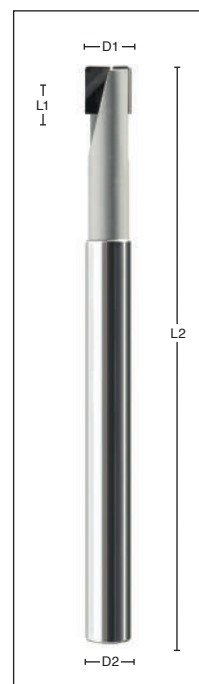
Cutter Dia D1	Shank Dia D2	FL L1	Reach	Radius	OAL L2	Part Number
8	8	10	40	0.2	150	801-30112
8	8	10	40	0.5	150	801-30212
8	8	10	40	1.0	150	801-30312
10	10	12	45	0.2	150	801-30114
10	10	12	45	0.5	150	801-30214
10	10	12	45	1.0	150	801-30314
12	12	12	45	0.2	150	801-30116
12	12	12	45	0.5	150	801-30216
12	12	12	45	1.0	150	801-30316



Developed for high speed machining of glass and carbon fibre composites and aluminium. Manufactured with a solid carbide shank this series comes complete with corner radius and extended overall length.

Materials

Graphite, metal matrix, hard, soft and composite plastics and aluminium.



802

Materials



Extreme Performance PCD Solid Carbide Body Ball Nosed

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Developed for high speed machining of glass and carbon fibre composites and aluminium. Manufactured with a solid carbide shank this series is Ball Nosed.

Materials

Graphite, metal matrix, hard, soft and composite plastics and aluminium.

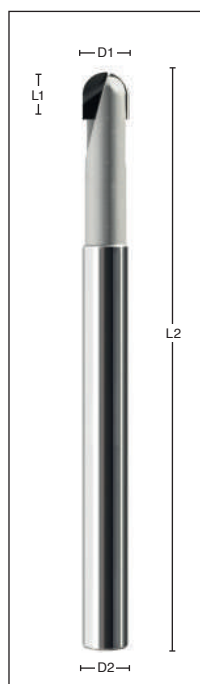
Cutter Dia D1	Shank Dia D2	FL L1	Reach	No. of Teeth	OAL L2	Part Number
2	6	2	10	1	75	802-40103
3	6	3	15	2	75	802-40105
4	6	4	20	2	75	802-40107
5	6	5	25	2	75	802-40109
6	6	8	30	2	100	802-40110
8	8	10	40	2	100	802-40112
10	10	12	45	2	100	802-40114
12	12	12	45	2	100	802-40116
16	16	16	50	2	150	802-40120
20	20	20	50	2	150	802-40124

803

Materials



Extreme Performance PCD Solid Carbide Body Ball Nosed Extra Long

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104-
112


Developed for high speed machining of glass and carbon fibre composites and aluminium. Manufactured with a solid carbide shank this series Ball Nosed with extended overall length.

Materials

Graphite, metal matrix, hard, soft and composite plastics and aluminium.

Cutter Dia D1	Shank Dia D2	FL L1	Reach	OAL L2	Part Number
8	8	10	40	150	803-50112
10	10	12	45	150	803-50114
12	12	12	45	150	803-50116

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK

3 Flute Routers

Range

Standard, Long Length,
Spiral Flute, Mill End Profile.

Size

Metric : 6mm through to 20mm
Imperial: 1/8" through to 3/4"

Options

Tools are available in Straight
Flute, Upcut , Downcut and
Compression.

Delivery

Over 150,000 tools available from
stock for Same-Day despatch.



7120

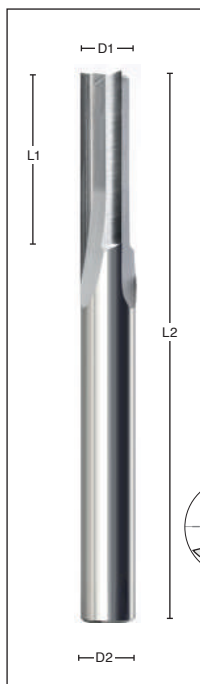
Materials

CP

Solid Carbide 3-Flute Straight Flute Router


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112
MG
HM

3



Developed for very hard materials in routing applications.

Materials
Composites.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/8	1/4	1/2	2	7120-02
1/4	1/4	3/4	2-1/2	7120-04

Modifications
Regrinds & Specials

Merlin Tools Ltd manufactured 

Solid Carbide 3-Flute Spiral Router 30° Helix - Mill End

Materials
SW HW CW

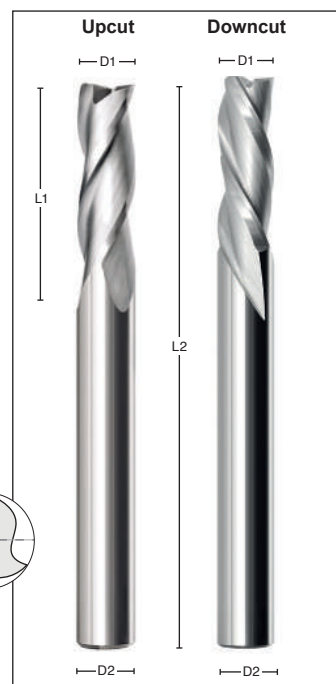
6130 6131

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
6	6	25	76	6130-02	6131-02
8	8	25	76	6130-04	6131-04
10	10	35	76	6130-06	6131-06
12	12	35	88	6130-08	6131-08
16	16	55	120	6130-10	6131-10
18	18	60	120	6130-12	6131-12



Developed with superior clearance and rake to produce smooth finish at increased feed rates.

Materials
Wood composites, plywood, and natural wood.



Solid Carbide 3-Flute Spiral Router 30° Helix - Mill End

Materials
SW HW CW

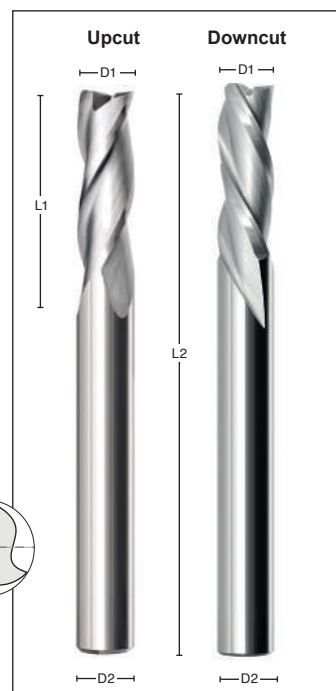
7130 7131

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/8	1/4	1/2	2	7130-02	7131-02
3/16	1/4	5/8	2	7130-04	7131-04
1/4	1/4	3/4	2-1/2	7130-06	7131-06
3/8	3/8	1-1/4	3	7130-08	7131-08
1/2	1/2	1-1/2	3-1/2	7130-10	7131-10
1/2	1/2	2	4	7130-12	7131-12
5/8	5/8	2	4	7130-14	7131-14



Developed with superior clearance and rake to produce smooth finish at increased feed rates.

Materials
Wood composites, plywood, and natural wood.



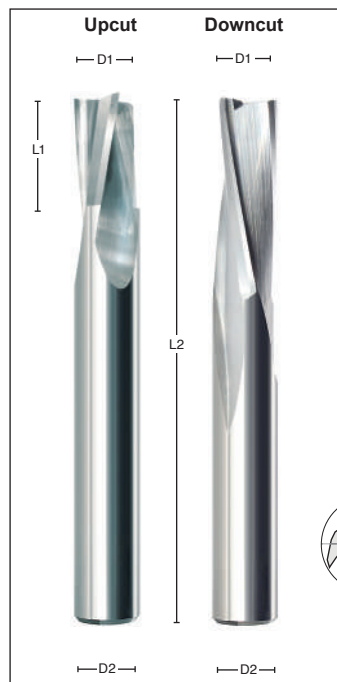
6140 6141

Materials



Solid Carbide 3-Flute Slow Spiral Router

10° Helix - Mill End



Developed to produce a very smooth finish over an extensive range of speeds.

Materials

Natural wood, solid surface, plastics and composite plastics.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
6	6	25	76	6140-02	6141-02
8	8	25	76	6140-04	6141-04
10	10	35	76	6140-06	6141-06
12	12	35	88	6140-08	6141-08
14	14	45	110	6140-10	6141-10
16	16	55	120	6140-12	6141-12
18	18	60	120	6140-14	6141-14

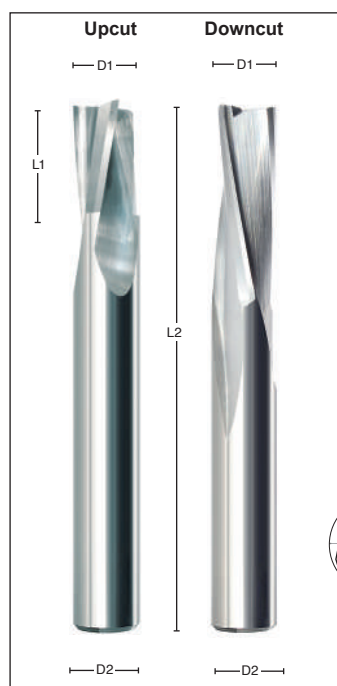
7140 7141

Materials



Solid Carbide 3-Flute Slow Spiral Router

10° Helix - Mill End



Developed to produce a very smooth finish over an extensive range of speeds.

Materials

Natural wood, solid surface, plastic and composite plastics.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/4	1/4	3/8	3	7140-02	7141-02
1/4	1/4	7/8	3	7140-04	7141-04
3/8	3/8	5/8	3	7140-06	7141-06
3/8	3/8	1-1/8	3	7140-08	7141-08
1/2	1/2	1-1/8	3-1/2	7140-10	7141-10
1/2	1/2	1-5/8	4	7140-12	7141-12
1/2	1/2	2-1/8	4-1/2	7140-14	7141-14
3/4	3/4	1-5/8	4	7140-16	7141-16
3/4	3/4	2-1/8	5	7140-18	7141-18

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK



Solid Carbide 3-Flute Slow Spiral Ripper 10° Helix - Mill End

Materials
SW HW CW
SP HP CP

6150 6151

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
12	12	25	76	6150-02	6151-02
16	16	55	120	6150-04	6151-04
18	18	60	120	6150-06	6151-06



Developed to give excellent roughing performance and longer tool life. Particularly applicable in solid wood applications.

Materials
Natural wood, wood composites, plastic and composite plastics.



Solid Carbide 3-Flute Slow Spiral Ripper 10° Helix - Mill End

Materials
SW HW CW
SP HP CP

7150 7151

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/8	3/8	1-1/8	3-1/2	7150-02	7151-02
1/2	1/2	1-1/8	3-1/2	7150-04	7151-04
1/2	1/2	1-5/8	4	7150-06	7151-06
5/8	5/8	1-5/8	4	7150-08	7151-08
5/8	5/8	2-1/8	5	7150-10	7151-10
3/4	3/4	1-5/8	4	7150-12	7151-12
3/4	3/4	2-1/8	5	7150-14	7151-14



Developed to give excellent roughing performance and longer tool life. Particularly applicable in solid wood applications.

Materials
Natural wood, wood composites, plastic and composite plastics.

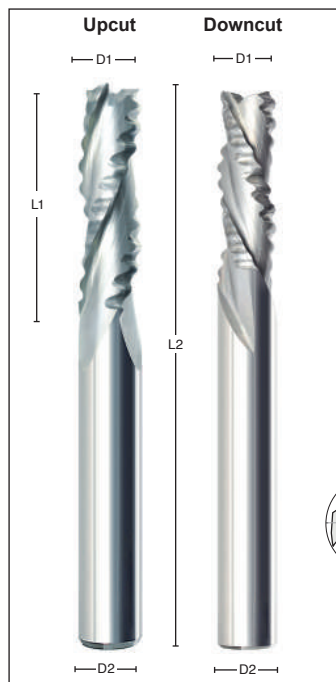


6152 6153

Materials



Solid Carbide 3-Flute High Spiral Ripper 30° Helix - Mill End

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112


Developed to give excellent roughing performance and longer tool life. Particularly applicable in solid wood applications.

Materials

Natural wood, plastic, composite plastics and composite wood.

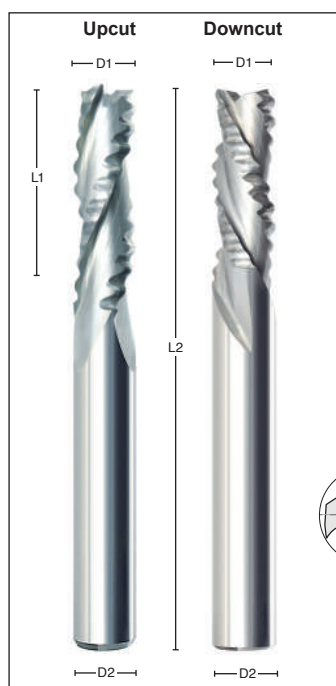
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
12	12	25	76	6152-02	6153-02
16	16	55	120	6152-04	6153-04
18	18	60	120	6152-06	6153-06

7152 7153

Materials



Solid Carbide 3-Flute High Spiral Ripper 30° Helix - Mill End

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104-
112


Developed to give excellent roughing performance and longer tool life. Particularly applicable in solid wood applications.

Materials

Natural wood, plastic, composite plastics and composite wood.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/8	3/8	1-1/8	3-1/2	7152-02	7153-02
1/2	1/2	1-1/8	3-1/2	7152-04	7153-04
1/2	1/2	1-5/8	4	7152-06	7153-06
5/8	5/8	1-5/8	4	7152-08	7153-08
5/8	5/8	2-1/2	5	7152-10	7153-10
3/4	3/4	1-5/8	4	7152-12	7153-12
3/4	3/4	2-1/8	5	7152-14	7153-14

Modifications
Regrinds & Specials

Merlin Tools Ltd manufactured

Solid Carbide 3-Flute High Spiral Impact Ripper 30° Helix - Mill End

Materials



7154 7155

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/8	3/8	1-1/8	3	7154-02	7155-02
1/2	1/2	1-1/8	3	7154-04	7155-04
1/2	1/2	1-5/8	3-1/2	7154-06	7155-06
1/2	1/2	2-1/8	4	7154-08	7155-08



Developed for heavy stock removal and applications where excessive cutting forces are present.

Materials

Natural wood, composite plastics and wood composites.



6156

Materials

SW HW CW

Solid Carbide 3-Flute Upcut Spiral Router
30° Helix - Lock Mortise - Mill EndPAGE
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112

Developed for fast stock removal in vertical and horizontal lock mortise routing.

Materials

Wood composites and natural wood.

Cutter Dia D1	Shank Dia D2	FL L1	Reach	OAL L2	Upcut Part No
16	16	50	114	170	6156-02

7156

Materials

SW HW CW

Solid Carbide 3-Flute Upcut Spiral Router
30° Helix - Lock Mortise - Mill EndPAGE
104-
112

Developed for fast stock removal in vertical and horizontal lock mortise routing.

Materials

Wood composites and natural wood.

Cutter Dia D1	Shank Dia D2	FL L1	Reach	OAL L2	Upcut Part No
5/8	5/8	2	4-1/2	6-1/2	7156-02

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured



Solid Carbide 3-Flute Spiral Router Chipbreaker Finisher 30° Helix - Mill End

Materials
SW HW CW

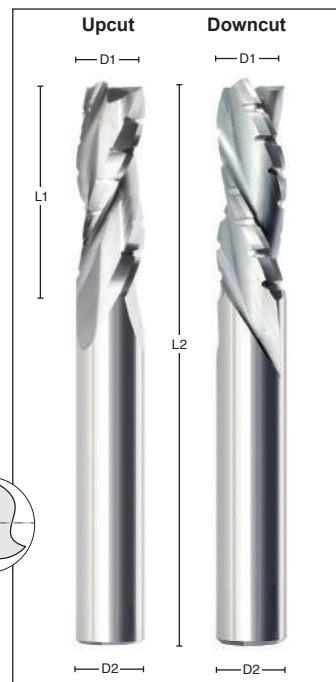
6161 6162

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
8	8	25	64	6161-02	6162-02
10	10	35	76	6161-04	6162-04
12	12	35	76	6161-06	6162-06
16	16	55	100	6161-08	6162-08
18	18	60	120	6161-10	6162-10



Developed to create smooth finish at fast speeds.

Materials
Wood composites and natural wood.



Solid Carbide 3-Flute Spiral Router Chipbreaker Finisher 30° Helix - Mill End

Materials
SW HW CW

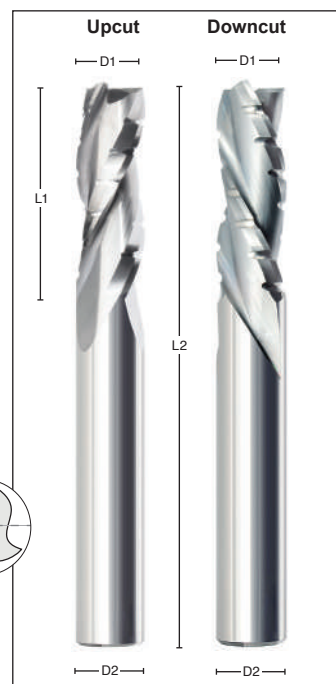
7161 7162

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/8	3/8	1-1/8	3	7161-02	7162-02
1/2	1/2	1-1/8	3	7161-04	7162-04
1/2	1/2	1-3/8	3-1/2	7161-06	7162-06
1/2	1/2	1-5/8	3-1/2	7161-08	7162-08
5/8	5/8	1-5/8	4	7161-10	7162-10
3/4	3/4	1-5/8	4	7161-12	7162-12
3/4	3/4	2-1/4	4	7161-14	7162-14
3/4	3/4	3-1/8	6	7161-16	7162-16



Developed to create smooth finish at fast speeds.

Materials
Wood composites and natural wood.

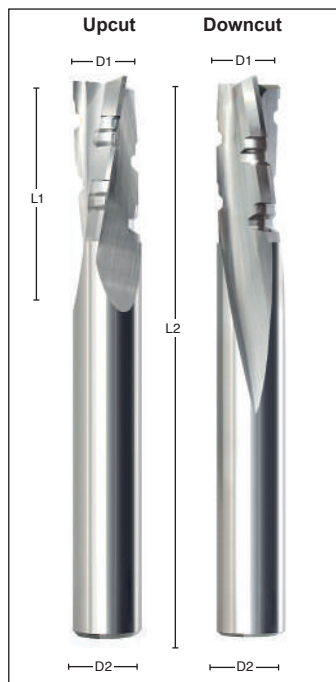


7170 7171

Materials



Solid Carbide 3-Flute Spiral Phenolic Router 10° Helix - Mill End

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112


Developed to give a better finish when operating at both slow and fast speeds.

Materials
Phenolic.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/8	3/8	7/8	3	7170-02	7171-02
1/2	1/2	1-1/8	3-1/2		7171-04
1/2	1/2	1-1/4	3-1/2	7170-04	
1/2	1/2	2-1/8	4	7170-06	7171-06

7180 7182

Materials



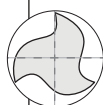
Solid Carbide 3-Flute Compression & Mortise Router 30° Helix

 PAGE
104-
112


Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Comp Part No	Mortise Part No
3/8	3/8	7/8	3	.200		7182-02
3/8	3/8	1-1/8	3	.495	7180-02	
1/2	1/2	7/8	3	.200		7182-04
1/2	1/2	1-1/8	3	.495	7180-04	
1/2	1/2	1-3/8	3-1/2	.200		7182-06
1/2	1/2	1-5/8	3-1/2	.715	7180-06	
3/4	3/4	2	4	.200		7182-08
3/4	3/4	2	4	.880	7180-08	

Developed with compression design to provide excellent edge finish on both sides of laminated materials.

Materials
Double sided laminate, natural wood and wood composites.



Modifications
Regrinds & Specials

Merlin

Solid Carbide 3-Flute High Wear Compression & Mortise Router 30° Helix

Materials

LW

7181 1741

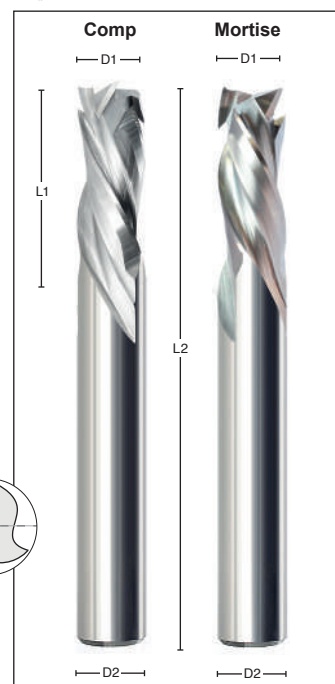
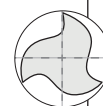
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut	Comp Part No	Mortise Part No
3/8	3/8	7/8	3	.200		7181-02
3/8	3/8	7/8	3	.385	7181-04	



Developed to give superior finish particularly in abrasive and high wear applications. Short upcut on mortise compressions allow mortise cut with downcut action.

Materials

Double sided laminated and veneered materials.



4 Flute Routers

Range

Standard, Long Length,
Spiral Flute and Mill End Profile.

Size

Metric : 3mm through to 16mm
Imperial: 1/8" through to 3/4"

Options

Tools are available in Straight
Flute, Upcut, Downcut and
Compression.

Delivery

Over 150,000 tools available from
stock for Same-Day despatch.



Solid Carbide 4-Flute Straight Flute Router

Materials



471

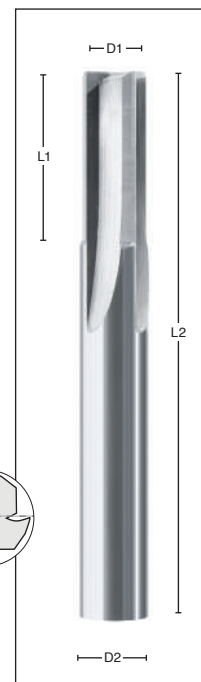
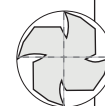
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3	3	12	38	471-44005
4	4	14	50	471-44007
5	5	16	50	471-44009
6	6	19	63	471-44010
8	8	19	63	471-44012
10	10	22	70	471-44014
12	12	25	75	471-44016
16	16	32	88	471-44020



Developed as a 4 flute straight flute router particularly good on hard and composite plastics.

Materials

PVC, ABS, phenolic, acrylic, nylon, acetal and solid surface



Solid Carbide 4-Flute Straight Flute Router *TiALN*

Materials



479

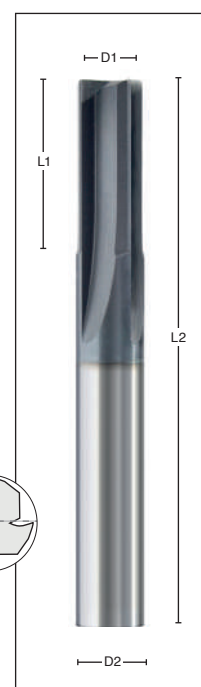
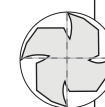
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
3	3	12	38	479-44005
4	4	14	50	479-44007
5	5	16	50	479-44009
6	6	19	63	479-44010
8	8	19	63	479-44012
10	10	22	70	479-44014
12	12	25	75	479-44016
16	16	32	88	479-44020



Developed as a 4 flute straight flute router particularly good on hard and composite plastics. With the added benefit of *TiALN* coating for longer tool life.

Materials

PVC, ABS, phenolic, acrylic, nylon, acetal and solid surface.

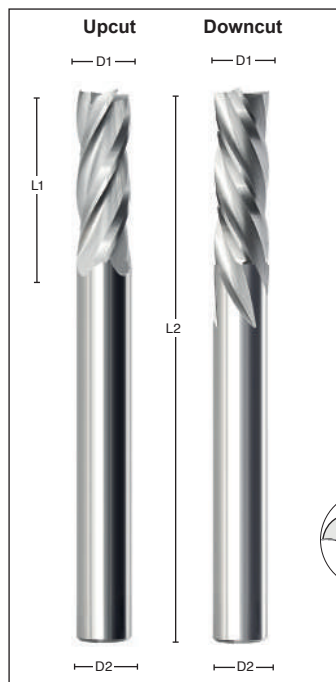


7190 7191

Materials



Solid Carbide 4-Flute Spiral Router 30° Helix



Developed to give a better finish in free cutting applications and can be used at slow or fast spindle speeds.

Materials

Composites, phenolic, glass fibre and hard plastics.

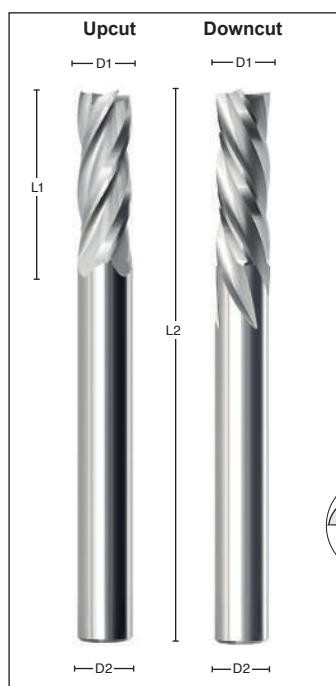
Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/8	1/4	1/2	2	7190-02	7191-02
5/32	1/4	9/16	2	7190-04	7191-04
3/16	1/4	5/8	2	7190-06	7191-06
1/4	1/4	3/4	2-1/2	7190-08	7191-08

7192 7193

Materials



Solid Carbide 4-Flute Spiral Fibreglass Router 30° Helix



Developed to give a better finish in free cutting applications on glass fibre and can be used at slow or fast spindle speeds.

Materials

Fibreglass

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
3/8	3/8	5/8	3	7192-02	7193-02
3/8	3/8	1-1/8	3	7192-04	7193-04
1/2	1/2	5/8	3-1/2	7192-06	7193-06
1/2	1/2	1-1/8	3-1/2	7192-08	7193-08

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in USA and UK

Solid Carbide 4-Flute Combination Spiral Router 30° Helix

Materials
SW HW CW

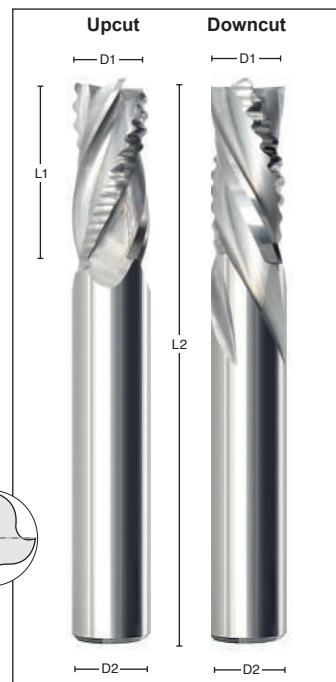
7200 7201

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Part No	Downcut Part No
1/2	1/2	1-1/8	3-1/2	7200-02	7201-02
1/2	1/2	1-5/8	4	7200-04	7201-04
1/2	1/2	2-1/8	4-1/2	7200-06	7201-06
5/8	5/8	2-1/8	5	7200-08	7201-08
3/4	3/4	2-1/8	5	7200-10	7201-10



Developed for roughing and finishing in one operation to produce a good finish at high feed rates.

Materials
Hard and soft woods, wood composites, double sided laminated and veneered surfaces.



Solid Carbide 4-Flute Combination Compression Router 30° Helix

Materials
SW HW CW LW

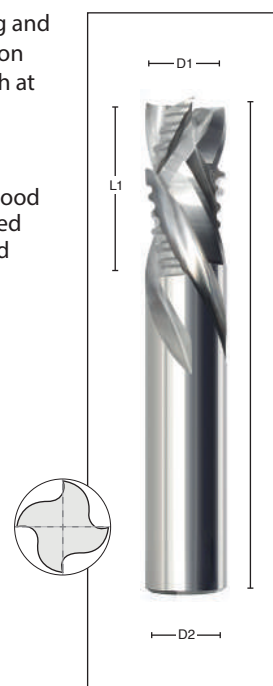
7202

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Part Number
1/2	1/2	1	3	.440	7202-02
1/2	1/2	1-1/8	3	.495	7202-04
1/2	1/2	1-3/8	3-1/2	.605	7202-06
1/2	1/2	1-5/8	4	.715	7202-08
5/8	5/8	2-1/4	5	.990	7202-10
3/4	3/4	1-7/8	4	.825	7202-12
3/4	3/4	2-1/2	5	1.100	7202-14



Developed for roughing and finishing in one operation to produce a good finish at high feed rates.

Materials
Hard and soft woods, wood composites, double sided laminated and veneered surfaces.



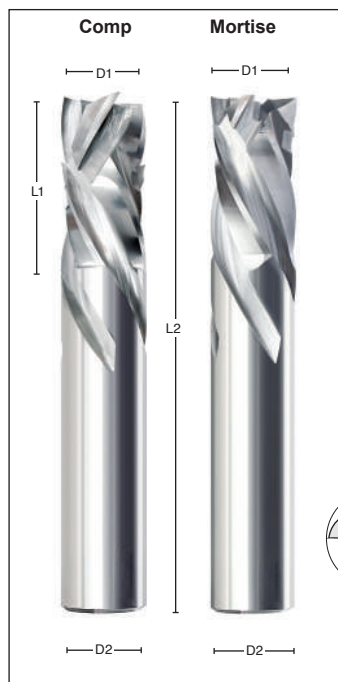
7210 7211

Materials



Solid Carbide 4-Flute Compression & Mortise Router 30° Helix

PAGE 104-112



Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Upcut Flute Lgth	Comp Part No	Mortise Part No
1/2	1/2	7/8	3	.200		7211-02
1/2	1/2	1	3	.440	7210-02	
1/2	1/2	1-1/8	3	.495	7210-04	
1/2	1/2	1-3/8	3-1/2	.200		7211-04
1/2	1/2	1-3/8	3-1/2	.605	7210-06	
1/2	1/2	1-5/8	4	.715	7210-08	
5/8	5/8	2-1/4	5	.990	7210-10	
3/4	3/4	1-7/8	4	.825	7210-12	
3/4	3/4	2-1/2	5	1.100	7210-14	

Developed to provide an excellent finish at high feed rates. The compression design allows for short upcut and mortise downcut capabilities.

Materials

Natural wood, wood composites, double sided laminate and veneered surface.

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK

Application Tooling

Range

Standard, Chamfer and Corner Rounding Tools, Engraving Tools, Laminate Trimmer and Veining Bit.

Size

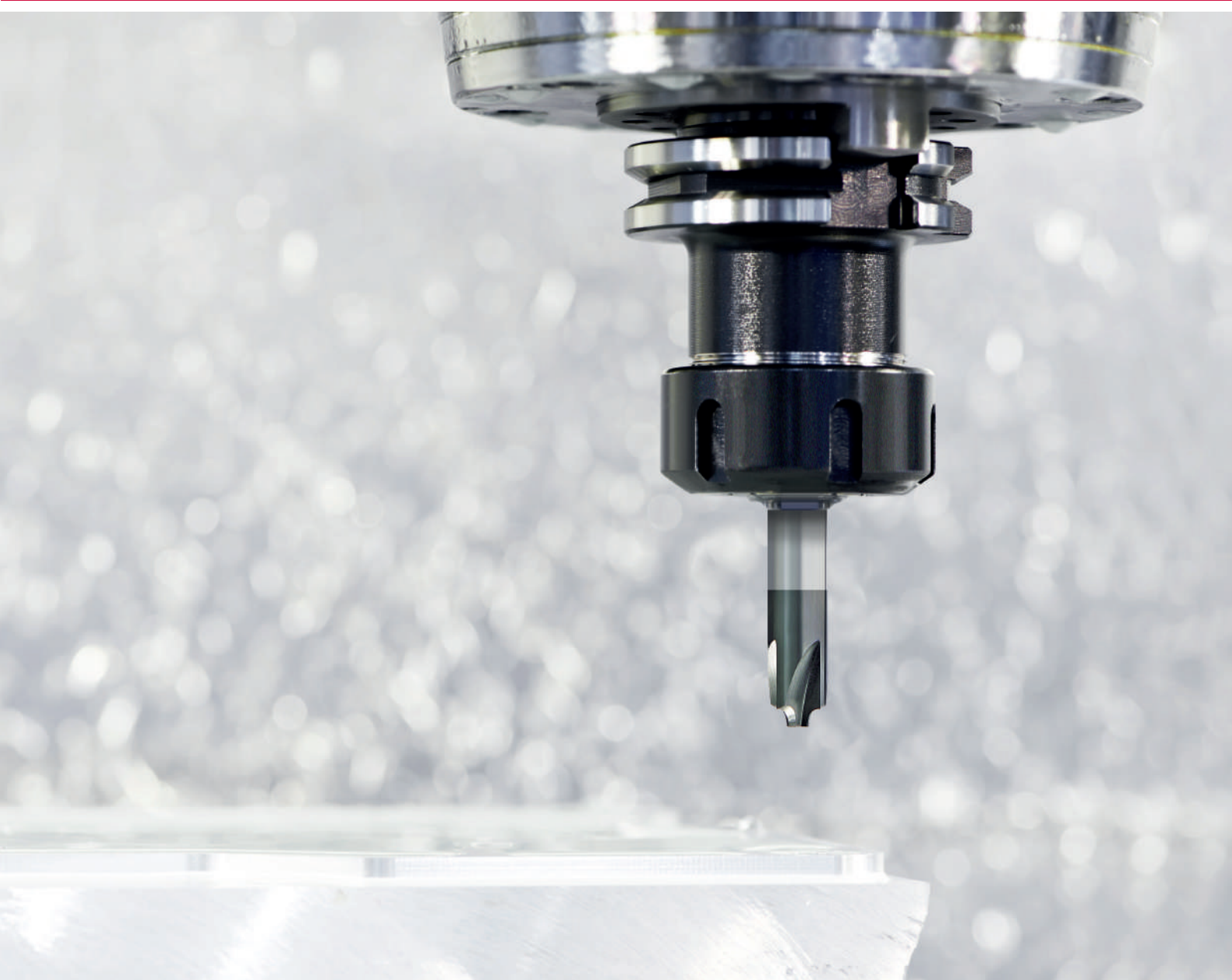
Metric : 1.5mm through to 12mm
Imperial: 1/16" through to 1/2"

Options

Tools are available in Straight Flute.

Delivery

Over 150,000 tools available from stock for Same-Day despatch.



7220

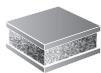
Materials

LW

Solid Carbide 1-Flute Straight Flush Laminate Trimmer

MG
HM

1



Developed for trimming of counter tops. Designed so the pilot acts as a guide on the finished surface.

Materials

Laminated chipboard and plywood.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Style	Part Number
1/4	1/4	3/8	1-1/2	Flush	7220-02
1/4	1/4	1/4	1-1/2	Flush	7220-04
1/4	1/4	1/4	1-1/2	7° Bevel	7220-06

7025

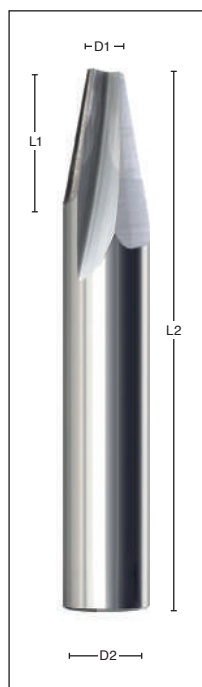
Materials

SW HW CW
SP HP

Solid Carbide 1-Flute Veining Bit

MG
HM

1



Developed to make decorative cuts in a wide variety of materials. The tapered design is excellent for routing out wood letters in signs and other detailed design applications.

Materials

Hard and soft wood, wood composites, hard and soft plastics.

Cutter Dia D1	Shank Dia D2	FL L1	OAL L2	Part Number
1/16	1/4	1/4	1-1/2	7025-02
3/32	1/4	1/4	1-1/2	7025-04
1/8	1/4	1/4	1-1/2	7025-06

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured

Solid Carbide General Engraving Tool 30° 60° 90°

Materials



001

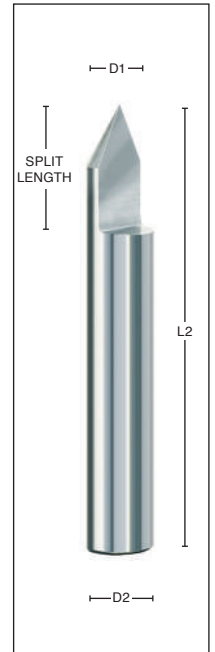
Cutter Dia D1	Shank Dia D2	Included Angle	Split Length	OAL L2	Part Number
3	3	30°	8	38	001-3305
6	6	30°	12	50	001-6308
3	3	60°	8	38	001-3605
6	6	60°	12	50	001-6608
3	3	90°	8	38	001-3905
6	6	90°	12	50	001-6908
1/8	1/8	60°	3/8	1-1/2	001-1860
1/4	1/4	60°	3/8	2-1/2	001-1460



Developed to give excellent performance when engraving a wide variety of materials. The half round style is available in 30°, 60° and 90°.

Materials

Soft and hard woods, aluminium, solid surface, soft and hard plastics.



Solid Carbide General Engraving Tool 60° with Flats

Materials



002

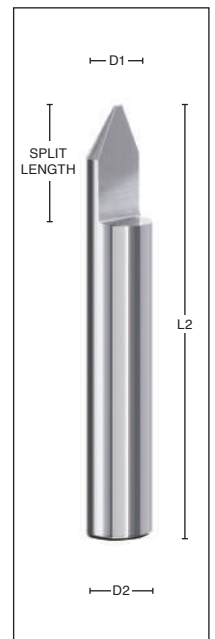
Cutter Dia D1	Shank Dia D2	Flat	Included Angle	Split Length	OAL L2	Part Number
6	6	0.25	60°	8	50	002-6025
6	6	0.50	60°	8	50	002-6050
6	6	0.75	60°	8	50	002-6075
6	6	1.00	60°	8	50	002-6010
6	6	1.25	60°	8	50	002-6012
6	6	1.50	60°	8	50	002-6015
6	6	2.00	60°	8	50	002-6020



Developed to give excellent performance when engraving a wide variety of materials. The half round style is available in 60° with flats.

Materials

Soft and hard woods, aluminium, solid surface, soft and hard plastics.



FG

Materials

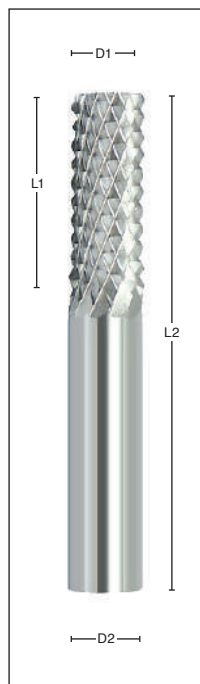
CP GF

Solid Carbide Diamond Cut - Fibreglass Router

Good Surface Finish on Both Hand & CNC Applications

MG
HM

MULTI



Cutter Dia-D1	Shank Dia-D2	FL L1	OAL L2	No End Cut	Drill Point	End Mill Cut	Burr End Cut
				Part Number	Part Number	Part Number	Part Number
1.5	3	5	38	FG1 - 80100	FG1 - 80101	FG1 - 80102	FG1 - 80103
2	3	10	38	FG2 - 80200	FG2 - 80201	FG2 - 80202	FG2 - 80203
3	3	12	38	FG3 - 80300	FG3 - 80301	FG3 - 80302	FG3 - 80303
5	5	16	50	FG4 - 80400	FG4 - 80401	FG4 - 80402	FG4 - 80403
5	6	16	50	FG5 - 80500	FG5 - 80501	FG5 - 80502	FG5 - 80503
6	6	18	50	FG6 - 80600	FG6 - 80601	FG6 - 80602	FG6 - 80603
6	6	18	63	FG7 - 80700	FG7 - 80701	FG7 - 80702	FG7 - 80703
6	6	25	63	FG8 - 80800	FG8 - 80801	FG8 - 80802	FG8 - 80803
6	6	18	75	FG9 - 80900	FG9 - 80901	FG9 - 80902	FG9 - 80903
6	6	25	75	FG10 - 81000	FG10 - 81001	FG10 - 81002	FG10 - 81003
6	6	38	75	FG11 - 81100	FG11 - 81101	FG11 - 81102	FG11 - 82203
8	8	25	63	FG12 - 81200	FG12 - 81201	FG12 - 81202	FG12 - 81203
10	10	25	63	FG13 - 81300	FG13 - 81301	FG13 - 81302	FG13 - 81303
12	12	25	75	FG14 - 81400	FG14 - 81401	FG14 - 81402	FG14 - 81403

Developed as a multi-flute finishing tool with the added benefit of four different end cut styles.

Materials

Fibreglass and phenolics.

FG

Materials

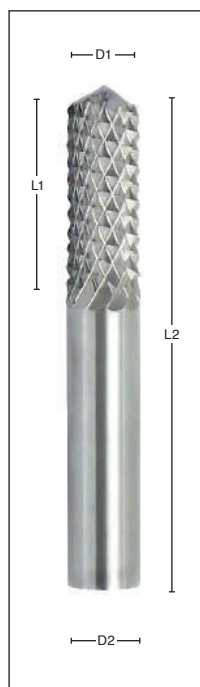
CP GF

Solid Carbide Diamond Cut - Fibreglass Router

Good Surface Finish on Both Hand & CNC Applications

MG
HM

MULTI



Cutter Dia-D1	Shank Dia-D2	FL L1	OAL L2	No End Cut	Drill Point	End Mill Cut	Burr End Cut
				Part Number	Part Number	Part Number	Part Number
1/16	1/8	3/16	1-1/2	FG1 - 70100	FG1 - 70101	FG1 - 70102	FG1 - 70103
3/32	1/8	3/8	1-1/2	FG2 - 70200	FG2 - 70201	FG2 - 70202	FG2 - 70203
1/8	1/8	1/2	1-1/2	FG3 - 70300	FG3 - 70301	FG3 - 70302	FG3 - 70303
3/16	3/16	5/8	2	FG4 - 70400	FG4 - 70401	FG4 - 70402	FG4 - 70403
3/16	1/4	5/8	2	FG5 - 70500	FG5 - 70501	FG5 - 70502	FG5 - 70503
1/4	1/4	3/4	2	FG6 - 70600	FG6 - 70601	FG6 - 70602	FG6 - 70603
1/4	1/4	3/4	2-1/2	FG7 - 70700	FG7 - 70701	FG7 - 70702	FG7 - 70703
1/4	1/4	1	2-1/2	FG8 - 70800	FG8 - 70801	FG8 - 70802	FG8 - 70803
1/4	1/4	3/4	3	FG9 - 70900	FG9 - 70901	FG9 - 70902	FG9 - 70903
1/4	1/4	1	3	FG10 - 71000	FG10 - 71001	FG10 - 71002	FG10 - 71003
1/4	1/4	1-1/2	3	FG11 - 71100	FG11 - 71101	FG11 - 71102	FG11 - 72203
5/16	5/16	1	2-1/2	FG12 - 71200	FG12 - 71201	FG12 - 71202	FG12 - 71203
3/8	3/8	1	2-1/2	FG13 - 71300	FG13 - 71301	FG13 - 71302	FG13 - 71303
1/2	1/2	1	3	FG14 - 71400	FG14 - 71401	FG14 - 71402	FG14 - 71403

Developed as a multi-flute finishing tool with the added benefit of four different end cut styles.

Materials

Fibreglass and phenolics.

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK

Solid Carbide 4-Flute Chamfer Tool 60° 82° 90°

Materials



113

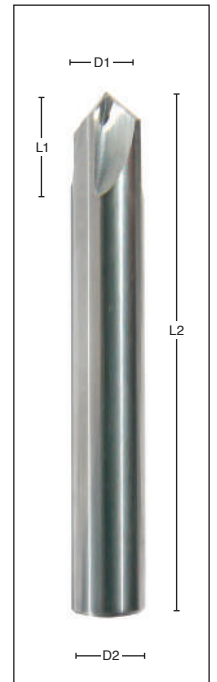
Cutter Dia-D1	Shank Dia-D2	OAL L2	Angle	Part Number
4	4	50	60°	113 - 42260
4	4	50	82°	113 - 42282
4	4	50	90°	113 - 42290
5	5	50	60°	113 - 52260
5	5	50	82°	113 - 52282
5	5	50	90°	113 - 52290
6	6	64	60°	113 - 62260
6	6	64	82°	113 - 62282
6	6	64	90°	113 - 62290
8	8	64	60°	113 - 82260
8	8	64	82°	113 - 82282
8	8	64	90°	113 - 82290
10	10	70	60°	113 - 10260
10	10	70	82°	113 - 10282
10	10	70	90°	113 - 10290
12	12	76	60°	113 - 12260
12	12	76	82°	113 - 12282
12	12	76	90°	113 - 12290



Developed to chamfer and countersink a broad range of materials. An excellent finish and smoother cutting action is created by the engineered tooth design.

Materials

Aluminium, soft and hard plastics.



Solid Carbide 4-Flute Chamfer Tool 60° 82° 90° - TiALN

Materials



114

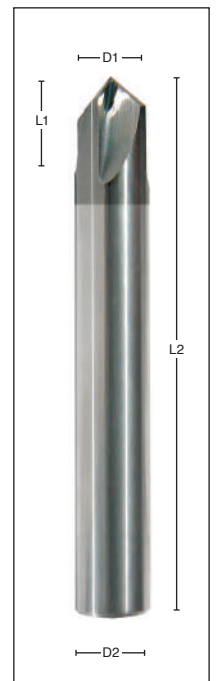
Cutter Dia-D1	Shank Dia-D2	OAL L2	Angle	Part Number
4	4	50	60°	114 - 42260
4	4	50	82°	114 - 42282
4	4	50	90°	114 - 42290
5	5	50	60°	114 - 52260
5	5	50	82°	114 - 52282
5	5	50	90°	114 - 52290
6	6	64	60°	114 - 62260
6	6	64	82°	114 - 62282
6	6	64	90°	114 - 62290
8	8	64	60°	114 - 82260
8	8	64	82°	114 - 82282
8	8	64	90°	114 - 82290
10	10	70	60°	114 - 10260
10	10	70	82°	114 - 10282
10	10	70	90°	114 - 10290
12	12	76	60°	114 - 12260
12	12	76	82°	114 - 12282
12	12	76	90°	114 - 12290



Developed to chamfer and countersink a broad range of materials. An excellent finish and smoother cutting action is created by the engineered tooth design. With the added benefit of TiALN coating for longer tool life.

Materials

Aluminium, soft and hard plastics.



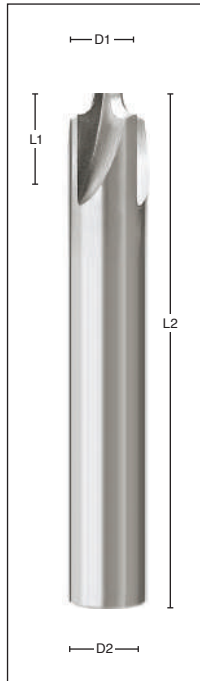
112

Materials

SP HP
ASolid Carbide 4-Flute Corner Rounding
90° Radius plus Run-OutMG
HM

4

±0.025



Developed with an internal radius, this 4 flute corner rounding tool has a full 90° radius plus run-out.

Materials

Aluminium, soft and hard plastics.

Radius	OAL L2	Shank Dia-D2	Part Number
0.5	64	8	112 -41105
1.0	64	8	112 -41110
1.5	70	10	112 -41115
2.0	70	10	112 -41120
2.5	76	12	112 -41125
3.0	76	12	112 -41130
3.5	89	16	112 -41135
4.0	89	16	112 -41140
4.5	89	16	112 -41145
5.0	89	16	112 -41150
5.5	100	20	112 -41155
6.0	100	20	112 -41160

122

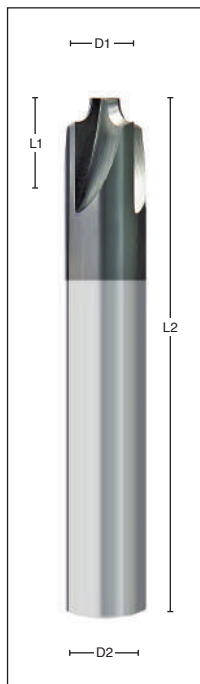
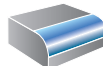
Materials

SP HP
ASolid Carbide 4-Flute Corner Rounding
90° Radius plus Run-Out - *TiALN*MG
HM

4

TiALN

±0.025



Developed with an internal radius, this 4 flute corner rounding tool has a full 90° radius plus run-out. With the added benefit of *TiALN* coating for longer tool life.

Materials

Aluminium, soft and hard plastics.

Radius	OAL L2	Shank Dia-D2	Part Number
0.5	64	8	122 -41105
1.0	64	8	122 -41110
1.5	70	10	122 -41115
2.0	70	10	122 -41120
2.5	76	12	122 -41125
3.0	76	12	122 -41130
3.5	89	16	122 -41135
4.0	89	16	122 -41140
4.5	89	16	122 -41145
5.0	89	16	122 -41150
5.5	100	20	122 -41155
6.0	100	20	122 -41160

Modifications
Regrinds & Specials

Merlin Tools Ltd
manufactured in the USA and UK

ER Collets, Toolholders & Accessories

Range

Standard, Straight Shank
Toolholders, Locknuts and Spanners.

Size

Metric : ER8 1mm through to
ER50 34mm
Imperial: ER8 1/16' through to ER40 1".

Options

ER Collets available in 5 micron, 10 micron
and 15-20 micron accuracy.
ER Collets available Individually or in Sets

Delivery

Over 150,000 tools available from stock
for Same-Day despatch.



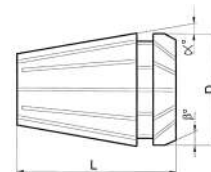
ER 8

ER 8 - Precision Collets DIN 6499-B 15-20 Micron General Purpose



Clamping Range Ø	Part Number
1.0 - 0.5	ER08 -0102
1.5 - 1.0	ER08 -0152
2.0 - 1.5	ER08 -0202
2.5 - 2.0	ER08 -0252
3.0 - 2.5	ER08 -0302
3.5 - 3.0	ER08 -0352
4.0 - 3.5	ER08 -0402
4.5 - 4.0	ER08 -0452
5.0 - 4.5	ER08 -0502

D	8.5mm
L	13mm
Clamping Range	1.0-5.0mm
Clamping Steps	0.5mm



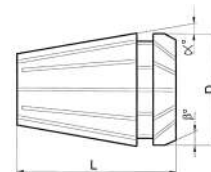
ER 8

ER 8 - Super Precision Collets DIN 6499-B 10 Micron Higher Accuracy



Clamping Range Ø	Part Number
1.0 - 0.5	ER08 -0101
1.5 - 1.0	ER08 -0151
2.0 - 1.5	ER08 -0201
2.5 - 2.0	ER08 -0251
3.0 - 2.5	ER08 -0301
3.5 - 3.0	ER08 -0351
4.0 - 3.5	ER08 -0401
4.5 - 4.0	ER08 -0451
5.0 - 4.5	ER08 -0501

D	8.5mm
L	13mm
Clamping Range	1.0-5.0mm
Clamping Steps	0.5mm



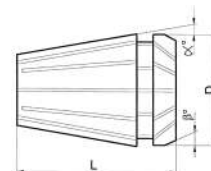
ER 8

ER 8 - Ultra Precision Collets TOPAC 5 Micron Top Accuracy



Clamping Range Ø	Part Number
1.0 - 0.5	ER08 -010T
1.5 - 1.0	ER08 -015T
2.0 - 1.5	ER08 -020T
2.5 - 2.0	ER08 -025T
3.0 - 2.5	ER08 -030T
3.5 - 3.0	ER08 -035T
4.0 - 3.5	ER08 -040T
4.5 - 4.0	ER08 -045T
5.0 - 4.5	ER08 -050T

D	8.5mm
L	13mm
Clamping Range	1.0-5.0mm
Clamping Steps	0.5mm



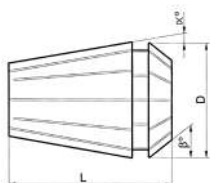
Merlin Tools Ltd
manufactured



ER 11 - Precision Collets DIN 6499-B 15-20 Micron General Purpose

ER 11

D	11.5mm
L	18mm
Clamping Range	1.0-7.0mm
Clamping Steps	0.5mm



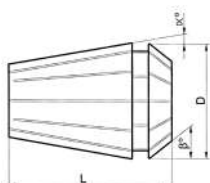
Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER11 -0102	4.5 - 4.0	ER11 -0452
1.5 - 1.0	ER11 -0152	5.0 - 4.5	ER11 -0502
2.0 - 1.5	ER11 -0202	5.5 - 5.0	ER11 -0552
2.5 - 2.0	ER11 -0252	6.0 - 5.5	ER11 -0602
3.0 - 2.5	ER11 -0302	6.5 - 6.0	ER11 -0652
3.5 - 3.0	ER11 -0352	7.0 - 6.5	ER11 -0702
4.0 - 3.5	ER11 -0402		



ER 11 - Super Precision Collets DIN 6499-B 10 Micron Higher Accuracy

ER 11

D	11.5mm
L	18mm
Clamping Range	1.0-7.0mm
Clamping Steps	0.5mm



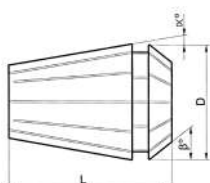
Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER11 -0101	4.5 - 4.0	ER11 -0451
1.5 - 1.0	ER11 -0151	5.0 - 4.5	ER11 -0501
2.0 - 1.5	ER11 -0201	5.5 - 5.0	ER11 -0551
2.5 - 2.0	ER11 -0251	6.0 - 5.5	ER11 -0601
3.0 - 2.5	ER11 -0301	6.5 - 6.0	ER11 -0651
3.5 - 3.0	ER11 -0351	7.0 - 6.5	ER11 -0701
4.0 - 3.5	ER11 -0401		



ER 11 - Ultra Precision Collets TOPAC 5 Micron Top Accuracy

ER 11

D	11.5mm
L	18mm
Clamping Range	1.0-7.0mm
Clamping Steps	0.5mm



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER11 -010T	4.5 - 4.0	ER11 -045T
1.5 - 1.0	ER11 -015T	5.0 - 4.5	ER11 -050T
2.0 - 1.5	ER11 -020T	5.5 - 5.0	ER11 -055T
2.5 - 2.0	ER11 -025T	6.0 - 5.5	ER11 -060T
3.0 - 2.5	ER11 -030T	6.5 - 6.0	ER11 -065T
3.5 - 3.0	ER11 -035T	7.0 - 6.5	ER11 -070T
4.0 - 3.5	ER11 -040T		

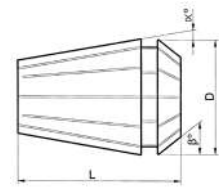


ER 16 - Precision Collets DIN 6499-B 15-20 Micron General Purpose



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER16 -0102	6.0 - 5.0	ER16 -0602
1.5 - 1.0	ER16 -0152	6.5 - 5.5	ER16 -0652
2.0 - 1.5	ER16 -0202	7.0 - 6.0	ER16 -0702
2.5 - 2.0	ER16 -0252	7.5 - 6.5	ER16 -0752
3.0 - 2.5	ER16 -0302	8.0 - 7.0	ER16 -0802
3.5 - 2.5	ER16 -0352	8.5 - 7.5	ER16 -0852
4.0 - 3.0	ER16 -0402	9.0 - 8.0	ER16 -0902
4.5 - 3.5	ER16 -0452	9.5 - 8.5	ER16 -0952
5.0 - 4.0	ER16 -0502	10.0 - 9.0	ER16 -1002
5.5 - 4.5	ER16 -0552		

D	17mm
L	27.5mm
Clamping Range	1.0-10mm
Clamping Steps	1.0mm



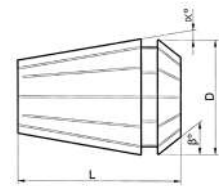
Up to Ø3mm the collapsing capacity is 0.5mm

ER 16 - Super Precision Collets DIN 6499-B 10 Micron Higher Accuracy



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER16 -0101	6.0 - 5.0	ER16 -0601
1.5 - 1.0	ER16 -0151	6.5 - 5.5	ER16 -0651
2.0 - 1.5	ER16 -0201	7.0 - 6.0	ER16 -0701
2.5 - 2.0	ER16 -0251	7.5 - 6.5	ER16 -0751
3.0 - 2.5	ER16 -0301	8.0 - 7.0	ER16 -0801
3.5 - 2.5	ER16 -0351	8.5 - 7.5	ER16 -0851
4.0 - 3.0	ER16 -0401	9.0 - 8.0	ER16 -0901
4.5 - 3.5	ER16 -0451	9.5 - 8.5	ER16 -0951
5.0 - 4.0	ER16 -0501	10.0 - 9.0	ER16 -1001
5.5 - 4.5	ER16 -0551		

D	17mm
L	27.5mm
Clamping Range	1.0-10mm
Clamping Steps	1.0mm

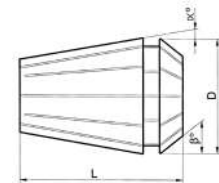


ER 16 - Ultra Precision Collets TOPAC 5 Micron Top Accuracy



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER16 -010T	6.0 - 5.0	ER16 -060T
1.5 - 1.0	ER16 -015T	6.5 - 5.5	ER16 -065T
2.0 - 1.5	ER16 -020T	7.0 - 6.0	ER16 -070T
2.5 - 2.0	ER16 -025T	7.5 - 6.5	ER16 -075T
3.0 - 2.5	ER16 -030T	8.0 - 7.0	ER16 -080T
3.5 - 2.5	ER16 -035T	8.5 - 7.5	ER16 -085T
4.0 - 3.0	ER16 -040T	9.0 - 8.0	ER16 -090T
4.5 - 3.5	ER16 -045T	9.5 - 8.5	ER16 -095T
5.0 - 4.0	ER16 -050T	10.0 - 9.0	ER16 -100T
5.5 - 4.5	ER16 -055T		

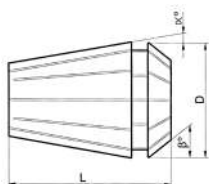
D	17mm
L	27.5mm
Clamping Range	1.0-10mm
Clamping Steps	1.0mm



ER 20 - Precision Collets DIN 6499-B 15-20 Micron General Purpose

ER 20

D	21mm
L	31.5mm
Clamping Range	1.0-13mm
Clamping Steps	1.0mm



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER20 -0102	6.0 - 5.0	ER20 -0602
1.5 - 1.0	ER20 -0152	7.0 - 6.0	ER20 -0702
2.0 - 1.5	ER20 -0202	8.0 - 7.0	ER20 -0802
2.5 - 2.0	ER20 -0252	9.0 - 8.0	ER20 -0902
3.0 - 2.5	ER20 -0302	10.0 - 9.0	ER20 -1002
3.5 - 2.5	ER20 -0352	11.0 -10.0	ER20 -1102
4.0 - 3.0	ER20 -0402	12.0 -11.0	ER20 -1202
4.5 - 3.5	ER20 -0452	13.0 -12.0	ER20 -1302
5.0 - 4.0	ER20 -0502		

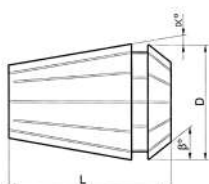


Up to Ø3mm the collapsing capacity is 0.5mm

ER 20 - Super Precision Collets DIN 6499-B 10 Micron Higher Accuracy

ER 20

D	21mm
L	31.5mm
Clamping Range	1.0-13mm
Clamping Steps	1.0mm



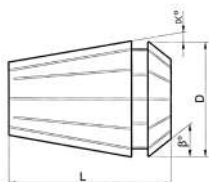
Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER20 -0101	6.0 - 5.0	ER20 -0601
1.5 - 1.0	ER20 -0151	7.0 - 6.0	ER20 -0701
2.0 - 1.5	ER20 -0201	8.0 - 7.0	ER20 -0801
2.5 - 2.0	ER20 -0251	9.0 - 8.0	ER20 -0901
3.0 - 2.5	ER20 -0301	10.0 - 9.0	ER20 -1001
3.5 - 2.5	ER20 -0351	11.0 -10.0	ER20 -1101
4.0 - 3.0	ER20 -0401	12.0 - 11.0	ER20 -1201
4.5 - 3.5	ER20 -0451	13.0 -12.0	ER20 -1301
5.0 - 4.0	ER20 -0501		



ER 20 - Ultra Precision Collets TOPAC 5 Micron Top Accuracy

ER 20

D	21mm
L	31.5mm
Clamping Range	1.0-13mm
Clamping Steps	1.0mm



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER20 -010T	6.0 - 5.0	ER20 -060T
1.5 - 1.0	ER20 -015T	7.0 - 6.0	ER20 -070T
2.0 - 1.5	ER20 -020T	8.0 - 7.0	ER20 -080T
2.5 - 2.0	ER20 -025T	9.0 - 8.0	ER20 -090T
3.0 - 2.5	ER20 -030T	10.0 - 9.0	ER20 -100T
3.5 - 2.5	ER20 -035T	11.0 -10.0	ER20 -110T
4.0 - 3.0	ER20 -040T	12.0 -11.0	ER20 -120T
4.5 - 3.5	ER20 -045T	13.0 -12.0	ER20 -130T
5.0 - 4.0	ER20 -050T		



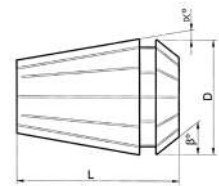
ER 25

ER 25 - Precision Collets DIN 6499-B 15-20 Micron General Purpose



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER25 -0102	7.0 - 6.0	ER25 -0702
1.5 - 1.0	ER25 -0152	8.0 - 7.0	ER25 -0802
2.0 - 1.5	ER25 -0202	9.0 - 8.0	ER25 -0902
2.5 - 2.0	ER25 -0252	10.0 - 9.0	ER25 -1002
3.0 - 2.5	ER25 -0302	11.0 -10.0	ER25 -1102
3.5 - 2.5	ER25 -0352	12.0 -11.0	ER25 -1202
4.0 - 3.0	ER25 -0402	13.0 -12.0	ER25 -1302
4.5 - 3.5	ER25 -0452	14.0 -13.0	ER25 -1402
5.0 - 4.0	ER25 -0502	15.0 -14.0	ER25 -1502
6.0 - 5.0	ER25 -0602	16.0 -15.0	ER25 -1602

D	26mm
L	34mm
Clamping Range	1.0-16mm
Clamping Steps	1.0mm



Up to Ø3mm the collapsing capacity is 0.5mm

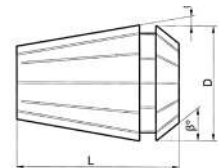
ER 25

ER 25 - Super Precision Collets DIN 6499-B 10 Micron Higher Accuracy



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER25 -0101	7.0 - 6.0	ER25 -0701
1.5 - 1.0	ER25 -0151	8.0 - 7.0	ER25 -0801
2.0 - 1.5	ER25 -0201	9.0 - 8.0	ER25 -0901
2.5 - 2.0	ER25 -0251	10.0 - 9.0	ER25 -1001
3.0 - 2.5	ER25 -0301	11.0 -10.0	ER25 -1101
3.5 - 2.5	ER25 -0351	12.0 -11.0	ER25 -1201
4.0 - 3.0	ER25 -0401	13.0 -12.0	ER25 -1301
4.5 - 3.5	ER25 -0451	14.0 -13.0	ER25 -1401
5.0 - 4.0	ER25 -0501	15.0 -14.0	ER25 -1501
6.0 - 5.0	ER25 -0601	16.0 -15.0	ER25 -1601

D	26mm
L	34mm
Clamping Range	1.0-16mm
Clamping Steps	1.0mm



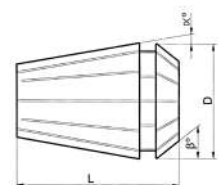
ER 25

ER 25 - Ultra Precision Collets TOPAC 5 Micron Top Accuracy



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER25 -010T	7.0 - 6.0	ER25 -070T
1.5 - 1.0	ER25 -015T	8.0 - 7.0	ER25 -080T
2.0 - 1.5	ER25 -020T	9.0 - 8.0	ER25 -090T
2.5 - 2.0	ER25 -025T	10.0 - 9.0	ER25 -100T
3.0 - 2.5	ER25 -030T	11.0 -10.0	ER25 -110T
3.5 - 2.5	ER25 -035T	12.0 -11.0	ER25 -120T
4.0 - 3.0	ER25 -040T	13.0 -12.0	ER25 -130T
4.5 - 3.5	ER25 -045T	14.0 -13.0	ER25 -140T
5.0 - 4.0	ER25 -050T	15.0 -14.0	ER25 -150T
6.0 - 5.0	ER25 -060T	16.0 -15.0	ER25 -160T

D	26mm
L	34mm
Clamping Range	1.0-16mm
Clamping Steps	1.0mm



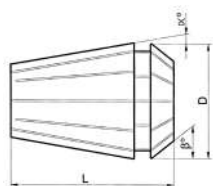
Merlin Tools Ltd
manufactured



ER 32 - Precision Collets DIN 6499-B 15-20 Micron General Purpose

ER 32

D	33mm
L	40mm
Clamping Range	1.0-25mm
Clamping Range	1.0mm



Up to Ø3mm the collapsing capacity is 0.5mm

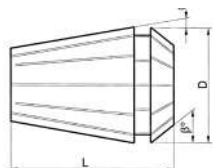
Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER32 -0102	10.0 - 9.0	ER32 -1002
1.5 - 1.0	ER32 -0152	11.0 - 10.0	ER32 -1102
2.0 - 1.5	ER32 -0202	12.0 - 11.0	ER32 -1202
2.5 - 2.0	ER32 -0252	13.0 - 12.0	ER32 -1302
3.0 - 2.5	ER32 -0302	14.0 - 13.0	ER32 -1402
3.5 - 2.5	ER32 -0352	15.0 - 14.0	ER32 -1502
4.0 - 3.0	ER32 -0402	16.0 - 15.0	ER32 -1602
4.5 - 3.5	ER32 -0452	17.0 - 16.0	ER32 -1702
5.0 - 4.0	ER32 -0502	18.0 - 17.0	ER32 -1802
6.0 - 5.0	ER32 -0602	19.0 - 18.0	ER32 -1902
7.0 - 6.0	ER32 -0702	20.0 - 19.0	ER32 -2002
8.0 - 7.0	ER32 -0802	25.0 - 24.0	ER32 -2502
9.0 - 8.0	ER32 -0902		



ER 32 - Super Precision Collets DIN 6499-B 10 Micron Higher Accuracy

ER 32

D	33mm
L	40mm
Clamping Range	1.0-25mm
Clamping Range	1.0mm



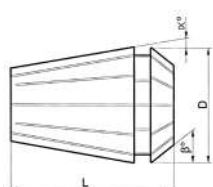
Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER32 -0101	10.0 - 9.0	ER32 -1001
1.5 - 1.0	ER32 -0151	11.0 - 10.0	ER32 -1101
2.0 - 1.5	ER32 -0201	12.0 - 11.0	ER32 -1201
2.5 - 2.0	ER32 -0251	13.0 - 12.0	ER32 -1301
3.0 - 2.5	ER32 -0301	14.0 - 13.0	ER32 -1401
3.5 - 2.5	ER32 -0351	15.0 - 14.0	ER32 -1501
4.0 - 3.0	ER32 -0401	16.0 - 15.0	ER32 -1601
4.5 - 3.5	ER32 -0451	17.0 - 16.0	ER32 -1701
5.0 - 4.0	ER32 -0501	18.0 - 17.0	ER32 -1801
6.0 - 5.0	ER32 -0601	19.0 - 18.0	ER32 -1901
7.0 - 6.0	ER32 -0701	20.0 - 19.0	ER32 -2001
8.0 - 7.0	ER32 -0801	25.0 - 24.0	ER32 -2501
9.0 - 8.0	ER32 -0901		



ER 32 - Ultra Precision Collets TOPAC 5 Micron Top Accuracy

ER 32

D	33mm
L	40mm
Clamping Range	1.0-25mm
Clamping Range	1.0mm



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
1.0 - 0.5	ER32 -010T	10.0 - 9.0	ER32 -100T
1.5 - 1.0	ER32 -015T	11.0 - 10.0	ER32 -110T
2.0 - 1.5	ER32 -020T	12.0 - 11.0	ER32 -120T
2.5 - 2.0	ER32 -025T	13.0 - 12.0	ER32 -130T
3.0 - 2.5	ER32 -030T	14.0 - 13.0	ER32 -140T
3.5 - 2.5	ER32 -035T	15.0 - 14.0	ER32 -150T
4.0 - 3.0	ER32 -040T	16.0 - 15.0	ER32 -160T
4.5 - 3.5	ER32 -045T	17.0 - 16.0	ER32 -170T
5.0 - 4.0	ER32 -050T	18.0 - 17.0	ER32 -180T
6.0 - 5.0	ER32 -060T	19.0 - 18.0	ER32 -190T
7.0 - 6.0	ER32 -070T	20.0 - 19.0	ER32 -200T
8.0 - 7.0	ER32 -080T	25.0 - 24.0	ER32 -250T
9.0 - 8.0	ER32 -090T		

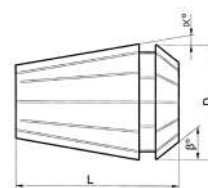


ER 40 - Precision Collets DIN 6499-B 15-20 Micron General Purpose



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
2.0 - 1.5	ER40 -0202	14.0 - 13.0	ER40 -1402
2.5 - 2.0	ER40 -0252	15.0 - 14.0	ER40 -1502
3.0 - 2.5	ER40 -0302	16.0 - 15.0	ER40 -1602
3.5 - 2.5	ER40 -0352	17.0 - 16.0	ER40 -1702
4.0 - 3.0	ER40 -0402	18.0 - 17.0	ER40 -1802
4.5 - 3.5	ER40 -0452	19.0 - 18.0	ER40 -1902
5.0 - 4.0	ER40 -0502	20.0 - 19.0	ER40 -2002
6.0 - 5.0	ER40 -0602	21.0 - 20.0	ER40 -2102
7.0 - 6.0	ER40 -0702	22.0 - 21.0	ER40 -2202
8.0 - 7.0	ER40 -0802	23.0 - 22.0	ER40 -2302
9.0 - 8.0	ER40 -0902	24.0 - 23.0	ER40 -2402
10.0 - 9.0	ER40 -1002	25.0 - 24.0	ER40 -2502
11.0 - 10.0	ER40 -1102	26.0 - 25.0	ER40 -2602
12.0 - 11.0	ER40 -1202	30.0 - 29.0	ER40 -3002
13.0 - 12.0	ER40 -1302	32.0 - 31.0	ER40 -3202

D	41mm
L	46mm
Clamping Range	2.0-32mm
Clamping Steps	1.0mm



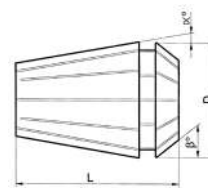
Up to Ø3mm the collapsing capacity is 0.5mm

ER 40 - Super Precision Collets DIN 6499-B 10 Micron Higher Accuracy



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
2.0 - 1.5	ER40 -0201	14.0 - 13.0	ER40 -1401
2.5 - 2.0	ER40 -0251	15.0 - 14.0	ER40 -1501
3.0 - 2.5	ER40 -0301	16.0 - 15.0	ER40 -1601
3.5 - 2.5	ER40 -0351	17.0 - 16.0	ER40 -1701
4.0 - 3.0	ER40 -0401	18.0 - 17.0	ER40 -1801
4.5 - 3.5	ER40 -0451	19.0 - 18.0	ER40 -1901
5.0 - 4.0	ER40 -0501	20.0 - 19.0	ER40 -2001
6.0 - 5.0	ER40 -0601	21.0 - 20.0	ER40 -2101
7.0 - 6.0	ER40 -0701	22.0 - 21.0	ER40 -2201
8.0 - 7.0	ER40 -0801	23.0 - 22.0	ER40 -2301
9.0 - 8.0	ER40 -0901	24.0 - 23.0	ER40 -2401
10.0 - 9.0	ER40 -1001	25.0 - 24.0	ER40 -2501
11.0 - 10.0	ER40 -1101	26.0 - 25.0	ER40 -2601
12.0 - 11.0	ER40 -1201	30.0 - 29.0	ER40 -3001
13.0 - 12.0	ER40 -1301	32.0 - 31.0	ER40 -3201

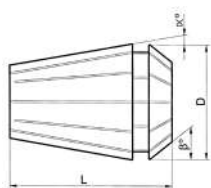
D	41mm
L	46mm
Clamping Range	2.0-32mm
Clamping Steps	1.0mm



ER 40 - Precision Collets TOPAC 5 Micron Top Accuracy

ER 40

D	41mm
L	46mm
Clamping Range	2.0-32mm
Clamping Steps	1.0mm



Clamping Range Ø	Part Number	Clamping Range Ø	Part Number
2.0 - 1.5	ER40 -020T	14.0 - 13.0	ER40 -140T
2.5 - 2.0	ER40 -025T	15.0 - 14.0	ER40 -150T
3.0 - 2.5	ER40 -030T	16.0 - 15.0	ER40 -160T
3.5 - 2.5	ER40 -035T	17.0 - 16.0	ER40 -170T
4.0 - 3.0	ER40 -040T	18.0 - 17.0	ER40 -180T
4.5 - 3.5	ER40 -045T	19.0 - 18.0	ER40 -190T
5.0 - 4.0	ER40 -050T	20.0 - 19.0	ER40 -200T
6.0 - 5.0	ER40 -060T	21.0 - 20.0	ER40 -210T
7.0 - 6.0	ER40 -070T	22.0 - 21.0	ER40 -220T
8.0 - 7.0	ER40 -080T	23.0 - 22.0	ER40 -230T
9.0 - 8.0	ER40 -090T	24.0 - 23.0	ER40 -240T
10.0 - 9.0	ER40 -100T	25.0 - 24.0	ER40 -250T
11.0 - 10.0	ER40 -110T	26.0 - 25.0	ER40 -260T
12.0 - 11.0	ER40 -120T	30.0 - 29.0	ER40 -300T
13.0 - 12.0	ER40 -130T	32.0 - 31.0	ER40 -320T



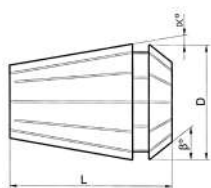
Up to Ø3mm the collapsing capacity is 0.5mm

The length of ER40 30mm collet is 39mm
The length of ER40 32mm collet is 33mm

ER 50 - Precision Collets DIN 6499-B 15-20 Micron General Purpose

ER 50

D	52mm
L	60mm
Clamping Range	12.0-34mm
Clamping Steps	2.0mm



Clamping Range Ø	Part Number
12.0 - 10.0	ER50 - 1202
14.0 - 12.0	ER50 - 1402
16.0 - 14.0	ER50 - 1602
18.0 - 16.0	ER50 - 1802
20.0 - 18.0	ER50 - 2002
22.0 - 20.0	ER50 - 2202
24.0 - 22.0	ER50 - 2402
25.0 - 23.0	ER50 - 2502
26.0 - 24.0	ER50 - 2602
28.0 - 26.0	ER50 - 2802
30.0 - 28.0	ER50 - 3002
32.0 - 30.0	ER50 - 3202
34.0 - 32.0	ER50 - 3402



ER8 SET2

ER 8 - Collet Set - 9pcs DIN 6499-B 15-20 Micron General Purpose

Clamping Range Ø	Part Number
9pcs ER8 collets	ER08 - SET2
Ø1 to 5mm in	
0.5mm increment	



ER8 SET1

ER 8 - Collet Set - 9pcs DIN 6499-B 10 Micron Higher Accuracy

Clamping Range Ø	Part Number
9pcs ER8 collets	ER08 - SET1
Ø1 to 5mm in	
0.5mm increment	

ER8 SETT

ER 8 - Collet Set - 9pcs TOPAC 5 Micron Top Accuracy

Clamping Range Ø	Part Number
9pcs ER8 collets	ER08 - SETT
Ø1 to 5mm in	
0.5mm increment	

ER11 SET2

ER 11 - Collet Set - 13pcs DIN 6499-B 15-20 Micron General Purpose

Clamping Range Ø	Part Number
13pcs ER11 collets	ER11 - SET2
Ø1 to 7mm in	
0.5mm increment	



ER11 SET1

ER 11 - Collet Set - 13pcs DIN 6499-B 10 Micron Higher Accuracy

Clamping Range Ø	Part Number
13pcs ER11 collets	ER11 - SET1
Ø1 to 7mm in	
0.5mm increment	

ER11 SETT

ER 11 - Collet Set - 13pcs TOPAC 5 Micron Top Accuracy

Clamping Range Ø	Part Number
13pcs ER11 collets	ER11 - SETT
Ø1 to 7mm in	
0.5mm increment	

Merlin Tools Ltd
manufactured



ER 16 - Collet Set - 10pcs DIN 6499-B 15-20 Micron General Purpose

ER16 SET2

Clamping Range Ø	Part Number
10pcs ER16 collets	
Ø1 to 10mm in	ER16 - SET2
1.0mm increment	

ER 16 - Collet Set - 10pcs DIN 6499-B 10 Micron Higher Accuracy

ER16 SET1

Clamping Range Ø	Part Number
10pcs ER16 collets	
Ø1 to 10mm in	ER16 - SET1
1.0mm increment	

ER 16 - Collet Set - 10pcs TOPAC 5 Micron Top Accuracy

ER16 SETT

Clamping Range Ø	Part Number
10pcs ER16 collets	
Ø1 to 10mm in	ER16 - SETT
1.0mm increment	



ER 20 - Collet Set - 12pcs DIN 6499-B 15-20 Micron General Purpose

ER20 SET2

Clamping Range Ø	Part Number
12pcs ER20 collets	
Ø2 to 13mm in	ER20 - SET2
1.0mm increment	

ER 20 - Collet Set - 12pcs DIN 6499-B 10 Micron Higher Accuracy

ER20 SET1

Clamping Range Ø	Part Number
12pcs ER20 collets	
Ø2 to 13mm in	ER20 - SET1
1.0mm increment	

ER 20 - Collet Set - 12pcs TOPAC 5 Micron Top Accuracy

ER20 SETT

Clamping Range Ø	Part Number
12pcs ER20 collets	
Ø2 to 13mm in	ER20 - SETT
1.0mm increment	



ER25 SET2

ER 25 - Collet Set - 15pcs DIN 6499-B 15-20 Micron General Purpose

Clamping Range Ø	Part Number
15pcs ER25 collets Ø2 to 16mm in 1.0mm increment	ER25 - SET2



ER25 SET1

ER 25 - Collet Set - 15pcs DIN 6499-B 10 Micron Higher Accuracy

Clamping Range Ø	Part Number
15pcs ER25 collets Ø2 to 16mm in 1.0mm increment	ER25 - SET1

ER25 SETT

ER 25 - Collet Set - 15pcs TOPAC 5 Micron Top Accuracy

Clamping Range Ø	Part Number
15pcs ER25 collets Ø2 to 16mm in 1.0mm increment	ER25 - SETT

ER32 SET2

ER 32 - Collet Set - 18pcs DIN 6499-B 15-20 Micron General Purpose

Clamping Range Ø	Part Number
18pcs ER32 collets Ø3 to 20mm in 1.0mm increment	ER32 - SET2



ER32 SET1

ER 32 - Collet Set - 18pcs DIN 6499-B 10 Micron Higher Accuracy

Clamping Range Ø	Part Number
18pcs ER32 collets Ø3 to 20mm in 1.0mm increment	ER32 - SET1

ER32 SETT

ER 32 - Collet Set - 18pcs TOPAC 5 Micron Top Accuracy

Clamping Range Ø	Part Number
18pcs ER32 collets Ø3 to 20mm in 1.0mm increment	ER32 - SETT

Merlin Tools Ltd
manufactured



ER 40 - Collet Set - 23pcs DIN 6499-B 15-20 Micron General Purpose

ER 40 SET2

Clamping Range Ø	Part Number
23pcs ER40 collets Ø4 to 26mm in 1.0mm increment	ER40 - SET2

ER 40 - Collet Set - 23pcs DIN 6499-B 10 Micron Higher Accuracy

ER 40 SET1

Clamping Range Ø	Part Number
23pcs ER40 collets Ø4 to 26mm in 1.0mm increment	ER40 - SET1

ER 40 - Collet Set - 23pcs TOPAC 5 Micron Top Accuracy

ER 40 SETT

Clamping Range Ø	Part Number
23pcs ER40 collets Ø4 to 26mm in 1.0mm increment	ER40 - SETT



ER 50 - Collet Set - 12pcs DIN 6499-B 15-20 Micron General Purpose

ER 50 SET2

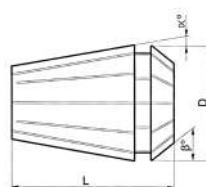
Clamping Range Ø	Part Number
12pcs ER50 collets Ø12 to 34mm in 2.0mm increment	ER50 - SET2



ER Precision Collets - Imperial DIN 6499-B 15-20 Micron General Purpose

Clamping Ø inch	Part # ER 8	Part # ER 11	Part # ER 16	Part # ER 20	Part # ER 25	Part # ER 32	Part # ER 40
1/16	ER08 -01592	ER11 -01592	ER16 -01592	ER20 -01592	ER25 -01592		
1/8	ER08 -03182	ER11 -03182	ER16 -03182	ER20 -03182	ER25 -03182	ER32 -03182	ER40 -03182
3/16	ER08 -04762	ER11 -04762	ER16 -04762	ER20 -04762	ER25 -04762	ER32 -04762	ER40 -04762
1/4		ER11 -06352	ER16 -06352	ER20 -06352	ER25 -06352	ER32 -06352	ER40 -06352
5/16			ER16 -07942	ER20 -07942	ER25 -07942	ER32 -07942	ER40 -07942
3/8			ER16 -09532	ER20 -09532	ER25 -09532	ER32 -09532	ER40 -09532
7/16				ER20 -11112	ER25 -11112	ER32 -11112	ER40 -11112
1/2				ER20 -12702	ER25 -12702	ER32 -12702	ER40 -12702
9/16					ER25 -14292	ER32 -14292	ER40 -14292
5/8					ER25 -15882	ER32 -15882	ER40 -15882
11/16						ER32 -17642	ER40 -17642
3/4						ER32 -19052	ER40 -19052
7/8							ER40 -22232
15/16							ER40 -23812
1							ER40 -25402

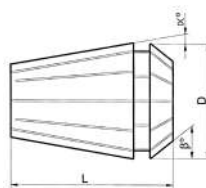
Clamping capacity for inch sized collets are the same as the metric sized ER collets:
That is for ER8 and ER11 clamping capacity down to 0.5mm (0.0197inch) and for ER16-ER20-ER25-ER32-ER40 it is 1.0mm (0.0394 inch).



ER Super Precision Collets - Imperial DIN 6499-B 10 Micron Higher Accuracy

Clamping Ø inch	Part # ER 8	Part # ER 11	Part # ER 16	Part # ER 20	Part # ER 25	Part # ER 32	Part # ER 40
1/16	ER08 -01591	ER11 -01591	ER16 -01591	ER20 -01591	ER25 -01591		
1/8	ER08 -03181	ER11 -03181	ER16 -03181	ER20 -03181	ER25 -03181	ER32 -03181	ER40 -03181
3/16	ER08 -04761	ER11 -04761	ER16 -04761	ER20 -04761	ER25 -04761	ER32 -04761	ER40 -04761
1/4		ER11 -06351	ER16 -06351	ER20 -06351	ER25 -06351	ER32 -06351	ER40 -06351
5/16			ER16 -07941	ER20 -07941	ER25 -07941	ER32 -07941	ER40 -07941
3/8			ER16 -09531	ER20 -09531	ER25 -09531	ER32 -09531	ER40 -09531
7/16				ER20 -11111	ER25 -11111	ER32 -11111	ER40 -11111
1/2				ER20 -12701	ER25 -12701	ER32 -12701	ER40 -12701
9/16					ER25 -14291	ER32 -14291	ER40 -14291
5/8					ER25 -15881	ER32 -15881	ER40 -15881
11/16						ER32 -17641	ER40 -17641
3/4						ER32 -19051	ER40 -19051
7/8							ER40 -22231
15/16							ER40 -23811
1							ER40 -25401

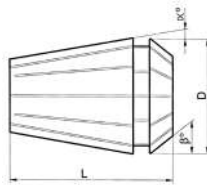
Clamping capacity for inch sized collets are the same as the metric sized ER collets:
That is for ER8 and ER11 clamping capacity down to 0.5mm (0.0197inch) and for ER16-ER20-ER25-ER32-ER40 it is 1.0mm (0.0394 inch).



ER Ultra Precision Collets - Imperial TOPAC 5 Micron Top Accuracy

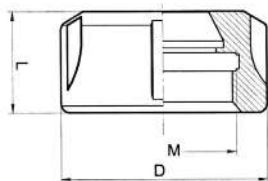
Imperial

Clamping Ø inch	Part # ER 8	Part # ER 11	Part # ER 16	Part # ER 20	Part # ER 25	Part # ER 32	Part # ER 40
1/16	ER08 -0159T	ER11 -0159T	ER16 -0159T	ER20 -0159T	ER25 -0159T		
1/8	ER08 -0318T	ER11 -0318T	ER16 -0318T	ER20 -0318T	ER25 -0318T	ER32 -0318T	ER40 -0318T
3/16	ER08 -0476T	ER11 -0476T	ER16 -0476T	ER20 -0476T	ER25 -0476T	ER32 -0476T	ER40 -0476T
1/4		ER11 -0635T	ER16 -0635T	ER20 -0635T	ER25 -0635T	ER32 -0635T	ER40 -0635T
5/16			ER16 -0794T	ER20 -0794T	ER25 -0794T	ER32 -0794T	ER40 -0794T
3/8			ER16 -0953T	ER20 -0953T	ER25 -0953T	ER32 -0953T	ER40 -0953T
7/16				ER20 - 1111T	ER25 -1111T	ER32 - 1111T	ER40 -1111T
1/2				ER20 -1270T	ER25 -1270T	ER32 -1270T	ER40 -1270T
9/16					ER25 -1429T	ER32 -1429T	ER40 -1429T
5/8					ER25 -1588T	ER32 -1588T	ER40 -1588T
11/16						ER32 -1764T	ER40 -1764T
3/4						ER32 -1905T	ER40 -1905T
7/8							ER40 -2223T
15/16							ER40 -2381T
1							ER40 -2540T



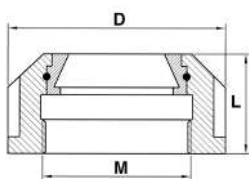
Clamping capacity for inch sized collets are the same as the metric sized ER collets:
That is for ER8 and ER11 clamping capacity down to 0.5mm (0.0197inch) and for ER16-ER20-ER25-ER32-ER40 it is 1.0mm (0.0394 inch).

Locknuts ER Standard



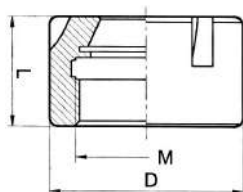
ER Type	Part Number	D	L	M
ER 16	NER -16S	32	17.5	M 22 x 1.5
ER 20	NER -20S	35	19	M 25 x 1.5
ER 25	NER -25S	42	20	M 32 x 1.5
ER 32	NER -32S	50	22.5	M 40 x 1.5
ER 40	NER -40S	63	25.5	M 50 x 1.5
ER 50	NER -50S	78	35	M 64 x 2.0

Locknuts ER Standard with bearing



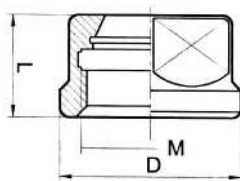
ER Type	Part Number	D	L	M
ER 25	NER -25B	42	23	M 32 x 1.5
ER 32	NER -32B	50	25	M 40 x 1.5
ER 40	NER -40B	63	28.5	M 50 x 1.5

Locknuts ER Mini



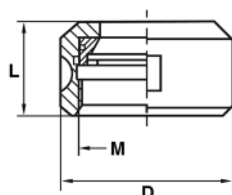
ER Type	Part Number	D	L	M
ER 8 mini	NER -08M	12	11	M 10 x 0.75
ER 11 mini	NER -11M	16	11.8	M 13 x 0.75
ER 16 mini	NER -16M	22	19	M 19 x 1
ER 20 mini	NER -20M	28	19	M 24 x 1
ER 25 mini	NER -25M	35	20	M 30 x 1

Locknuts ER Hexagon



ER Type	Part Number	D	L	M
ER 11	NER -11H	19	13.5	M 14 x 0.75
ER 16	NER -16H	28	17	M 22 x 1.5
ER 20	NER -20H	34	19	M 25 x 1.5

Locknuts DIN 638-25 Locknut



Part Number	D	L	M
NOZ25B	60	33	M 48 x 2

Spanners ER Standard

ER Type	Part Number
ER 16	SPER -16S
ER 20	SPER -20S
ER 25	SPER -25S
ER 32	SPER -32S
ER 40	SPER -40S
ER 50	SPER -50S



Spanners ER Mini

ER Type	Part Number
ER 8	SPER -08M
ER 11	SPER -11M
ER 16	SPER -16M
ER 20	SPER -20M
ER 25	SPER -25M
ER 50	SPER -50S



Spanners ER Hexagon

ER Type	Part Number
ER 11	SPER -11H
ER 16	SPER -16H
ER 20	SPER -20H



Spanners DIN 6388-25

Type	Part Number
DIN6388B-25	SPOZ25



Precision ER Straight Shank Collet Holders

Part Number ER08	D	D1	L	Collet Type Ø Clamping Range
ER08 - 08085M	8	12	85	ER8 Ø1 - 5mm
ER08 - 10095M	10	12	95	ER8 Ø1 - 5mm
ER08 - 12095M	12	12	95	ER8 Ø1 - 5mm

ER11				
ER11 - 12100M	12	16	100	ER11 Ø1 - 7mm
ER11 - 16115M	16	16	115	ER11 Ø1 - 7mm
ER11 - 16165M	16	16	165	ER11 Ø1 - 7mm
ER11 - 16115H	16	19	115	ER11 Ø1 - 7mm

ER16				
ER16 - 20130M	20	22	130	ER16 Ø1 - 10mm
ER16 - 20200M	20	22	200	ER16 Ø1 - 10mm
ER16 - 20130H	20	28	130	ER16 Ø1 - 10mm
ER16 - 20130S	20	32	130	ER16 Ø1 - 10mm

ER20				
ER20 - 20140M	20	28	140	ER20 Ø2 - 13mm
ER20 - 20140H	20	34	140	ER20 Ø2 - 13mm
ER20 - 20140S	20	35	140	ER20 Ø2 - 13mm
ER20 - 25110H	25	34	110	ER20 Ø2 - 13mm
ER20 - 25110S	25	35	110	ER20 Ø2 - 13mm
ER20 - 25200M	25	28	200	ER20 Ø2 - 13mm

ER25				
ER25 - 20145M	20	35	145	ER25 Ø2 - 16mm
ER25 - 25145M	25	35	145	ER25 Ø2 - 16mm
ER25 - 25200M	25	35	200	ER25 Ø2 - 16mm
ER25 - 254200M	25.4	35	200	ER25 Ø2 - 16mm
ER25 - 32105S	32	42	105	ER25 Ø2 - 16mm

ER32				
ER32 - 25110S	25	50	110	ER32 Ø3 - 20mm
ER32 - 32110S	32	50	110	ER32 Ø3 - 20mm
ER32 - 40110S	40	50	110	ER32 Ø3 - 20mm

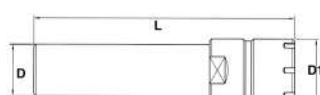
ER40				
ER40 - 32140S	32	63	140	ER40 Ø4 - 26mm
ER40 - 40140S	40	63	140	ER40 Ø4 - 26mm

Suffix on the codes shows:

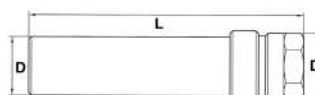
M = WITH ER MINI LOCKNUT

H = WITH HEXAGON LOCKNUT

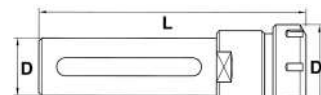
S = WITH ER STANDARD LOCKNUT



M



H



S



Technical Data

**Suggested Chip Load Data by
Material Specification.**

**This data is based on a spindle
speed of between 10,000 and
25,000 RPM.**



Soft Wood - Chip Load Per Tooth

SW											
Series	6230 6231 7230 7231	7002	7023 7024	6026 6028 7026 7028	7029	7000	6040 6042 7040 7042 7048 7049	7092 7093	6100 6102 7100 7102	214 211 216 200 204	6031 7031
Page	18	20	26	29	30	30	34 35 37	42	43	46 47 48 52	59
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.03-0.08									0.08-0.013	
1/16"	0.001-0.003"									0.003-0.005"	
3mm	0.05-0.10	0.20-0.25	0.05-0.11	0.28-0.33		0.20-0.25	0.13-0.18			0.13-0.18	0.10-0.15
1/8"	0.002-0.004"	0.008-0.010"	0.002-0.005"	0.011-0.013"		0.008-0.010"	0.005-0.007"			0.005-0.007"	0.004-0.006"
6mm	0.10-0.15	0.25-0.30	0.10-0.16	0.38-0.43		0.25-0.30	0.18-0.23		0.46-0.51	0.18-0.23	0.015-0.19
1/4"	0.004-0.006"	0.010-0.012"	0.004-0.007"	0.015-0.017"		0.010-0.012"	0.007-0.009"		0.018-0.020"	0.007-0.009"	0.006-0.008"
10mm	0.13-0.18	0.28-0.33	0.13-0.19	0.43-0.48		0.28-0.33	0.20-0.25	0.60-0.66	0.51-0.56	0.20-0.25	0.18-0.23
3/8"	0.005-0.007"	0.011-0.013"	0.005-0.008"	0.017-0.019"		0.011-0.013"	0.008-0.010"	0.024-0.026"	0.020-0.022"	0.008-0.010"	0.007-0.009"
12mm	0.18-0.23	0.31-0.36	0.18-0.24	0.48-0.53	0.48-0.53	0.31-0.36	0.23-0.28	0.66-0.71	0.56-0.61	0.23-0.28	0.19-0.25
1/2"	0.007-0.009"	0.012-0.014"	0.007-0.010"	0.019-0.021"	0.019-0.021"	0.012-0.014"	0.009-0.011"	0.026-0.028"	0.022-0.024"	0.009-0.011"	0.008-0.010"
16mm				0.53-0.58					0.61-0.66	0.25-0.31	
5/8"				0.021-0.023"					0.024-0.026"	0.010-0.012"	
20mm									0.66-0.71	0.31-0.33	0.25-0.31
3/4"									0.026-0.028"	0.011-0.013"	0.010-0.012"

Soft Wood - Chip Load Per Tooth

SW											
Series	7035	6130 6131 7130 7131	6140 6141 7140 7141	6150 6151 7150 7151	6152 6153 7152 7153	7154 7155	6156 7156	6161 6162 7161 7162	7180 7182	7200 7201 7202	7210 7211
Page	60	65	66	67	68	69	70	71	72	77	78
Diameter	1/2xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm											
1/16"											
3mm		0.20-0.25									
1/8"		0.008-0.010"									
6mm	0.05-0.10	0.25-0.30	0.13-0.18								
1/4"	0.002-0.004"	0.010-0.012"	0.005-0.007"								
10mm		0.30-0.36	0.15-0.20	0.33-0.38	0.40-0.46	0.43-0.48		0.43-0.48	0.48-0.53		
3/8"		0.012-0.014"	0.006-0.008"	0.013-0.015"	0.016-0.018"	0.017-0.019"		0.017-0.019"	0.019-0.021"		
12mm		0.36-0.40	0.18-0.23	0.38-0.43	0.45-0.51	0.45-0.51		0.48-0.53	0.53-0.58	0.48-0.53	0.38-0.43
1/2"		0.014-0.016"	0.007-0.009"	0.015-0.017"	0.018-0.020"	0.018-0.020"		0.019-0.021"	0.021-0.023"	0.019-0.021"	0.015-0.017"
16mm							0.13-0.18			0.53-0.58	0.43-0.48
5/8"							0.005-0.007"			0.021-0.023"	0.017-0.019"
20mm			0.20-0.25	0.48-0.53	0.55-0.61			0.53-0.58		0.58-0.64	0.48-0.53
3/4"			0.008-0.010"	0.019-0.021"	0.022-0.024"			0.021-0.023"		0.023-0.025"	0.019-0.021"

Depth of Cut

1 x D Use suggested chip load.
2 x D Decrease chip load by 25%.
3 x D Decrease chip load by 50%.

Formulae:

RPM = Feed Rate / (Number of Flutes x Chip Load)
Feed Rate = RPM x Number of Flutes x Chip Load
Chip Load = Feed rate / (RPM x Number of Flutes)

Hard Wood - Chip Load Per Tooth

HW										
Series	6230 6231 7230 7231	7023 7024	6026 6028 7026 7028	7029	7000	6040 6042 7040 7042	7048 7049	7092 7093	6100 6102 7100 7102	6103 7103
Page	18	26	29	30	30	34 35	37	42	43	45
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.03-0.08									
1/16"	0.001-0.003"									
3mm	0.05-0.10	0.05-0.11	0.28-0.33		0.20-0.25					
1/8"	0.002-0.004"	0.002-0.005"	0.011-0.013"		0.008-0.010"					
6mm	0.10-0.15	0.10-0.16	0.38-0.43		0.25-0.30	0.12-0.17	0.15-0.20		0.36-0.40	
1/4"	0.004-0.006"	0.004-0.007"	0.015-0.017"		0.010-0.012"	0.005-0.007"	0.006-0.008"		0.014-0.016"	
10mm	0.13-0.18	0.13-0.19	0.43-0.48		0.28-0.33	0.15-0.20	0.18-0.23	0.48-0.53	0.40-0.46	0.48-0.53
3/8"	0.005-0.007"	0.005-0.008"	0.017-0.019"		0.011-0.013"	0.006-0.008"	0.007-0.009"	0.019-0.021"	0.016-0.018"	0.019-0.021"
12mm	0.18-0.23	0.18-0.24	0.48-0.53	0.48-0.53	0.31-0.36	0.17-0.22	0.18-0.23	0.53-0.58	0.46-0.51	0.53-0.58
1/2"	0.007-0.009"	0.007-0.010"	0.019-0.021"	0.019-0.021"	0.012-0.014"	0.007-0.009"	0.007-0.009"	0.021-0.023"	0.018-0.020"	0.021-0.023"
16mm			0.53-0.58						0.51-0.56	0.58-0.64
5/8"			0.021-0.023"						0.020-0.022"	0.023-0.025"
20mm									0.56-0.61	0.64-0.69
3/4"									0.022-0.024"	0.025-0.027"

Hard Wood - Chip Load Per Tooth

HW										
Series	214 211 216 200 204	6031 7031	7035	6150 6151 7150 7151	6152 6153 7152 7153	7154 7155	6156 7156	7180 7182	7200 7201 7202	7210 7211
Page	46 47 48 52	59	60	67	68	69	70	72	77	78
Diameter	1xD	1xD	1/2xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.08-0.013									
1/16"	0.003-0.005"									
3mm	0.13-0.18	0.08-0.13								
1/8"	0.005-0.007"	0.003-0.005"								
6mm	0.18-0.23	0.13-0.17	0.05-0.10							
1/4"	0.007-0.009"	0.005-0.007"	0.002-0.004"							
10mm	0.20-0.25	0.15-0.20	0.05-0.10	0.33-0.38	0.38-0.43	0.38-0.43		0.48-0.53		
3/8"	0.008-0.010"	0.006-0.008"	0.002-0.004"	0.013-0.015"	0.015-0.017"	0.015-0.017"		0.019-0.021"		
12mm	0.23-0.28	0.17-0.22		0.36-0.40	0.43-0.48	0.38-0.43		0.53-0.58	0.45-0.50	0.33-0.38
1/2"	0.009-0.011"	0.007-0.009"		0.014-0.016"	0.017-0.019"	0.015-0.017"		0.021-0.023"	0.018-0.020"	0.013-0.015"
16mm	0.25-0.31	0.20-0.24		0.40-0.46	0.48-0.53		0.12-0.17		0.50-0.55	0.38-0.43
5/8"	0.010-0.012"	0.008-0.010"		0.016-0.018"	0.019-0.021"		0.005-0.007"		0.020-0.022"	0.015-0.017"
20mm	0.31-0.33	0.23-0.28		0.43-0.48	0.53-0.58	0.48-0.53		0.63-0.68	0.55-0.60	0.40-0.45
3/4"	0.011-0.013"	0.009-0.011"		0.017-0.019"	0.021-0.023"	0.019-0.021"		0.025-0.027"	0.022-0.024"	0.016-0.018"

Depth of Cut

- 1 x D Use suggested chip load.
- 2 x D Decrease chip load by 25%.
- 3 x D Decrease chip load by 50%.

Formulae:

- $RPM = \text{Feed Rate} / (\text{Number of Flutes} \times \text{Chip Load})$
- $\text{Feed Rate} = RPM \times \text{Number of Flutes} \times \text{Chip Load}$
- $\text{Chip Load} = \text{Feed rate} / (RPM \times \text{Number of Flutes})$

MDF - Chip Load Per Tooth

CW											
Series	6230 6231 7230 7231	7023 7024	6026 6028 7026 7028	7029	7000	6040 6042 7040 7042	7048 7049	7092 7093 6090 6091 7090 7091	6100 6102 7100 7102	6103 7103	6031 7031
Page	18	26	29	30	30	34 35	37	41 42	43	45	59
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.02-0.07										
1/16"	0.001-0.003"										
3mm	0.05-0.10	0.25-0.30	0.25-0.30		0.17-0.22						0.07-0.12
1/8"	0.002-0.004"	0.010-0.012"	0.010-0.012"		0.007-0.009"						0.003-0.005"
6mm	0.10-0.15	0.30-0.35	0.33-0.38		0.22-0.27	0.12-0.17	0.15-0.20		0.33-0.38		0.12-0.17
1/4"	0.004-0.006"	0.012-0.014"	0.013-0.015"		0.009-0.011"	0.005-0.007"	0.006-0.008"		0.013-0.015"		0.005-0.007"
10mm	0.12-0.17	0.33-0.38	0.35-0.40		0.25-0.30	0.15-0.20	0.17-0.22	0.43-0.48	0.35-0.40	0.43-0.48	0.15-0.20
3/8"	0.005-0.007"	0.013-0.015"	0.014-0.016"		0.010-0.012"	0.006-0.008"	0.007-0.009"	0.017-0.019"	0.014-0.016"	0.017-0.019"	0.006-0.008"
12mm		0.35-0.40	0.40-0.45	0.40-0.46	0.27-0.33	0.20-0.25	0.20-0.25	0.45-0.50	0.40-0.45	0.45-0.50	0.17-0.22
1/2"		0.014-0.016"	0.016-0.018"	0.016-0.018"	0.011-0.013"	0.008-0.010"	0.008-0.010"	0.018-0.020"	0.016-0.018"	0.018-0.020"	0.007-0.009"
16mm						0.25-0.30		0.50-0.56	0.45-0.50	0.50-0.55	
5/8"						0.010-0.012"		0.020-0.022"	0.018-0.020"	0.020-0.022"	
20mm						0.27-0.33		0.58-0.63	0.48-0.53	0.58-0.63	0.22-0.27
3/4"						0.011-0.013"		0.023-0.025"	0.019-0.021"	0.023-0.025"	0.009-0.011"

MDF - Chip Load Per Tooth

CW										
Series	7035	6140 6141 7140 7141	6150 6151 7150 7151	6152 6153 7152 7153	7154 7155	6156 7156	6161 6162 7161 7162	7180 7182	7200 7201 7202	7210 7211
Page	60	66	67	68	69	70	71	72	77	78
Diameter	1/2xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm										
1/16"										
3mm										
1/8"										
6mm	0.02-0.07	0.10-0.15								
1/4"	0.001-0.003"	0.004-0.006"								
10mm	0.05-0.10	0.12-0.17	0.30-0.35	0.43-0.48	0.43-0.48		0.35-0.40	0.48-0.53		
3/8"	0.002-0.004"	0.005-0.007"	0.012-0.014"	0.017-0.019"	0.017-0.019"		0.014-0.016"	0.019-0.021"		
12mm	0.07-0.12	0.12-0.17	0.33-0.38	0.45-0.50	0.48-0.53		0.40-0.45	0.53-0.58	0.50-0.55	0.35-0.40
1/2"	0.003-0.005"	0.005-0.007"	0.013-0.015"	0.018-0.020"	0.019-0.021"		0.016-0.018"	0.021-0.023"	0.020-0.022"	0.014-0.016"
16mm			0.35-0.40	0.50-0.55		0.10-0.15	0.43-0.48		0.55-0.60	0.40-0.45
5/8"			0.014-0.016"	0.020-0.022"		0.004-0.006"	0.017-0.019"		0.022-0.024"	0.016-0.018"
20mm	0.12-0.17	0.15-0.20	0.40-0.45	0.58-0.63			0.48-0.53		0.60-0.66	0.45-0.50
3/4"	0.005-0.007"	0.006-0.008"	0.016-0.018"	0.023-0.025"			0.019-0.021"		0.024-0.026"	0.018-0.020"

Depth of Cut

- 1 x D Use suggested chip load.
- 2 x D Decrease chip load by 25%.
- 3 x D Decrease chip load by 50%.

Formulae:

- RPM = Feed Rate / (Number of Flutes x Chip Load)
- Feed Rate = RPM x Number of Flutes x Chip Load
- Chip Load = Feed rate / (RPM x Number of Flutes)

Soft Plywood - Chip Load Per Tooth

CW									
Series	6230 6231 7230 7231	6026 6028 7026 7028	7000	6090 6091 7090 7091	7092 7093	6100 6102 7100 7102	6103 7103	6031 7031	7035
Page	18	29	30	41	42	43	45	59	60
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1/2xD
1.5mm	0.02-0.07								
1/16"	0.001-0.003"								
3mm	0.05-0.10	0.33-0.38	0.15-0.20					0.07-0.12	
1/8"	0.002-0.004"	0.013-0.015"	0.006-0.008"					0.003-0.005"	
6mm	0.10-0.15	0.38-0.43	0.20-0.25			0.43-0.48		0.12-0.17	0.05-0.10
1/4"	0.004-0.006"	0.015-0.017"	0.008-0.010"			0.017-0.019"		0.005-0.007"	0.002-0.004"
10mm	0.12-0.17	0.40-0.45	0.22-0.27	0.55-0.60	0.55-0.60	0.48-0.53	0.55-0.60	0.15-0.20	0.05-0.10
3/8"	0.005-0.007"	0.016-0.018"	0.009-0.011"	0.022-0.024"	0.022-0.024"	0.019-0.021"	0.022-0.024"	0.006-0.008"	0.002-0.004"
12mm		0.45-0.50	0.25-0.30	0.60-0.66	0.60-0.66	0.53-0.58	0.60-0.66	0.17-0.22	0.07-0.12
1/2"		0.018-0.020"	0.010-0.012"	0.024-0.026"	0.024-0.026"	0.021-0.023"	0.024-0.026"	0.007-0.009"	0.003-0.005"
16mm		0.50-0.55		0.66-0.71		0.58-0.63	0.66-0.71		
5/8"		0.020-0.022"		0.026-0.028"		0.023-0.025"	0.026-0.028"		
20mm		0.55-0.60		0.71-0.76		0.63-0.68	0.71-0.76	0.22-0.27	0.10-0.15
3/4"		0.022-0.024"		0.028-0.030"		0.025-0.027"	0.028-0.030"	0.009-0.011"	0.004-0.006"

Soft Plywood - Chip Load Per Tooth

CW								
Series	6150 6151 7150 7151	6152 6153 7152 7153	7154 7155	6156 7156	6161 6162 7161 7162	7180 7182 7181	7200 7201 7202	7210 7211
Page	67	68	69	70	71	72 73	77	78
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm								
1/16"								
3mm								
1/8"								
6mm								
1/4"								
10mm	0.35-0.40	0.43-0.48	0.43-0.48		0.50-0.55	0.48-0.53		
3/8"	0.014-0.16"	0.017-0.019"	0.017-0.019"		0.020-0.022"	0.019-0.021"		
12mm	0.40-0.45	0.48-0.53	0.48-0.53		0.55-0.60	0.53-0.58	0.71-0.76	0.53-0.58
1/2"	0.016-0.018"	0.019-0.021"	0.019-0.021"		0.022-0.024"	0.021-0.023"	0.028-0.030"	0.021-0.023"
16mm	0.45-0.50	0.53-0.58		0.07-0.12	0.60-0.66		0.76-0.81	0.58-0.63
5/8"	0.018-0.020"	0.021-0.023"		0.003-0.005"	0.024-0.026"		0.030-0.032"	0.023-0.025"
20mm	0.50-0.55	0.58-0.63			0.66-0.71		0.81-0.86	0.63-0.68
3/4"	0.020-0.022"	0.023-0.025"			0.026-0.028"		0.032-0.034"	0.025-0.027"

Depth of Cut

- 1 x D Use suggested chip load.
- 2 x D Decrease chip load by 25%.
- 3 x D Decrease chip load by 50%.

Formulae:

- $RPM = \text{Feed Rate} / (\text{Number of Flutes} \times \text{Chip Load})$
- $\text{Feed Rate} = RPM \times \text{Number of Flutes} \times \text{Chip Load}$
- $\text{Chip Load} = \text{Feed rate} / (RPM \times \text{Number of Flutes})$

Hard Plywood - Chip Load Per Tooth

CW								
Series	6230 6231 7230 7231	6026 6028 7026 7028	7000	6090 6091 7090 7091	7092 7093	6100 6102 7100 7102	6103 7103	6031 7031
Page	18	29	30	41	42	43	45	59
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.02-0.07							
1/16"	0.001-0.003"							
3mm	0.05-0.10	0.30-0.45	0.12-0.17					0.07-0.12
1/8"	0.002-0.004"	0.012-0.018"	0.005-0.007"					0.003-0.005"
6mm	0.10-0.15	0.35-0.40	0.17-0.22			0.35-0.40		0.12-0.17
1/4"	0.004-0.006"	0.014-0.016"	0.007-0.009"			0.014-0.016"		0.005-0.007"
10mm	0.12-0.17	0.40-0.45	0.20-0.25	0.48-0.53	0.48-0.53	0.40-0.45	0.48-0.53	0.15-0.20
3/8"	0.005-0.007"	0.016-0.018"	0.008-0.010"	0.019-0.021"	0.019-0.021"	0.016-0.018"	0.019-0.021"	0.006-0.008"
12mm		0.45-0.50	0.22-0.27	0.53-0.58	0.53-0.58	0.45-0.50	0.53-0.58	0.17-0.22
1/2"		0.018-0.020"	0.009-0.011"	0.021-0.023"	0.021-0.023"	0.018-0.020"	0.021-0.023"	0.007-0.009"
16mm		0.50-0.55		0.58-0.63		0.50-0.55	0.58-0.63	
5/8"		0.020-0.022"		0.023-0.025"		0.020-0.022"	0.023-0.025"	
20mm		0.55-0.60		0.63-0.68		0.55-0.60	0.63-0.68	0.22-0.27
3/4"		0.022-0.024"		0.025-0.027"		0.022-0.024"	0.025-0.027"	0.009-0.011"

Hard Plywood - Chip Load Per Tooth

CW								
Series	7035	6150 6151 7150 7151	6152 6153 7152 7153 7154 7155	6156 7156	6161 6162 7161 7162	7180 7181 7182	7200 7201 7202	7210 7211
Page	60	67	68 69	70	71	72 73	77	78
Diameter	1/2xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm								
1/16"								
3mm								
1/8"								
6mm	0.02-0.07							
1/4"	0.001-0.003"							
10mm	0.05-0.10	0.35-0.40	0.43-0.48		0.45-0.50	0.48-0.53		
3/8"	0.002-0.004"	0.014-0.016"	0.017-0.019"		0.018-0.020"	0.019-0.021"		
12mm	0.07-0.12	0.40-0.45	0.48-0.53		0.50-0.55	0.53-0.58	0.68-0.73	1.00-1.04
1/2"	0.003-0.005"	0.016-0.018"	0.019-0.021"		0.020-0.022"	0.021-0.023"	0.027-0.029"	0.039-0.041"
16mm		0.45-0.50	0.53-0.58	0.07-0.12	0.55-0.63		0.73-0.78	1.09-1.14
5/8"		0.018-0.020"	0.021-0.023"	0.003-0.005"	0.022-0.025"		0.029-0.031"	0.043-0.045"
20mm	0.12-0.17	0.50-0.55	0.58-0.63		0.60-0.66		0.81-0.86	1.19-1.24
3/4"	0.005-0.007"	0.020-0.022"	0.023-0.025"		0.024-0.026"		0.032-0.034"	0.047-0.049"

Depth of Cut

1 x D Use suggested chip load.
 2 x D Decrease chip load by 25%.
 3 x D Decrease chip load by 50%.

Formulae:

RPM = Feed Rate / (Number of Flutes x Chip Load)
 Feed Rate = RPM x Number of Flutes x Chip Load
 Chip Load = Feed rate / (RPM x Number of Flutes)

Laminated Chipboard - Chip Load Per Tooth

LW						
Series	6026 6028 7026 7028	6100 6102 7100 7102	6103 7103	7180 7181 7182	7202	7210 7211
Page	29	43	45	72 73	77	78
Diameter	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm						
1/16"						
3mm	0.33-0.38					
1/8"	0.013-0.015"					
6mm	0.38-0.43	0.43-0.48				
1/4"	0.015-0.017"	0.017-0.019"				
10mm	0.40-0.45	0.48-0.53	0.55-0.60	0.48-0.53		
3/8"	0.016-0.018"	0.019-0.021"	0.022-0.024"	0.019-0.021"		
12mm	0.45-0.50	0.53-0.58	0.60-0.66	0.53-0.58	0.71-0.76	0.53-0.58
1/2"	0.018-0.020"	0.021-0.023"	0.024-0.026"	0.021-0.023"	0.028-0.030"	0.021-0.023"
16mm	0.48-0.53	0.63-0.68	0.66-0.71		0.76-0.81	0.58-0.63
5/8"	0.019-0.021"	0.025-0.027"	0.026-0.028"		0.030-0.032"	0.023-0.025"
20mm	0.53-0.58	0.68-0.73	0.71-0.76		0.81-0.86	0.63-0.68
3/4"	0.021-0.023"	0.027-0.029"	0.028-0.030"		0.032-0.034"	0.025-0.027"

Laminated Plywood - Chip Load Per Tooth

LW						
Series	6026 6028 7026 7028	6100 6102 7100 7102	6103 7103	7180 7181 7182	7202	7210 7211
Page	29	43	45	72 73	77	78
Diameter	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm						
1/16"						
3mm	0.33-0.38					
1/8"	0.013-0.015"					
6mm	0.38-0.43	0.38-0.43				
1/4"	0.015-0.017"	0.015-0.017"				
10mm	0.40-0.45	0.40-0.45	0.48-0.53	0.48-0.53		
3/8"	0.016-0.018"	0.016-0.018"	0.019-0.021"	0.019-0.021"		
12mm	0.45-0.50	0.45-0.50	0.53-0.58	0.53-0.58	0.68-0.73	0.48-0.53
1/2"	0.018-0.020"	0.018-0.020"	0.021-0.023"	0.021-0.023"	0.027-0.029"	0.019-0.021"
16mm	0.48-0.53	0.48-0.53	0.58-0.63		0.76-0.81	0.53-0.58
5/8"	0.019-0.021"	0.019-0.021"	0.023-0.025"		0.030-0.032"	0.021-0.023"
20mm	0.53-0.58	0.53-0.58	0.63-0.68		0.81-0.86	0.58-0.63
3/4"	0.021-0.023"	0.021-0.023"	0.025-0.027"		0.032-0.034"	0.023-0.025"

Depth of Cut

- 1 x D Use suggested chip load.
- 2 x D Decrease chip load by 25%.
- 3 x D Decrease chip load by 50%.

Formulae:

- $RPM = \text{Feed Rate} / (\text{Number of Flutes} \times \text{Chip Load})$
- $\text{Feed Rate} = RPM \times \text{Number of Flutes} \times \text{Chip Load}$
- $\text{Chip Load} = \text{Feed rate} / (RPM \times \text{Number of Flutes})$

Soft Plastics - Chip Load Per Tooth

SP												
Series	6230 6231 7230 7231	6001 7001	6010 6012 7010 7011	153 154 155 151 152	6037 7037	6060 6061 7060 7061	6040 6042 7040 7042	7110	7080 7081	254	214 211 216 200 204	6150, 6151 7150, 7151 6152, 6153 7152, 7153 7154, 7155
Page	18	19	21	26 27 28	32	33	34 35	40	40	46	46 47 48 52	67 68 69
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.05-0.10		0.05-0.10	0.05-0.10							0.05-0.10	
1/16"	0.002-0.004"		0.02-0.004"	0.02-0.004"							0.002-0.004"	
3mm	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.13-0.17		0.05-0.10	0.02-0.07	0.05-0.10	0.05-0.10	0.05-0.10	
1/8"	0.004-0.006"	0.004-0.006"	0.004-0.006"	0.004-0.006"	0.005-0.007"		0.002-0.004"	0.001-0.003"	0.002-0.004"	0.002-0.004"	0.002-0.004"	
6mm	0.20-0.30	0.20-0.30	0.20-0.30	0.20-0.30	0.17-0.23	0.20-0.25	0.10-0.20	0.07-0.12	0.10-0.15	0.10-0.20	0.10-0.20	
1/4"	0.008-0.012"	0.008-0.012"	0.008-0.012"	0.008-0.012"	0.007-0.009"	0.008-0.010"	0.004-0.008"	0.003-0.005"	0.004-0.006"	0.004-0.008"	0.004-0.008"	
10mm	0.20-0.30	0.35-0.46	0.20-0.30	0.20-0.30	0.23-0.28	0.25-0.30	0.12-0.17	0.10-0.15	0.10-0.15	0.12-0.17	0.12-0.17	0.10-0.15
3/8"	0.008-0.012"	0.014-0.018"	0.008-0.012"	0.008-0.012"	0.009-0.011"	0.010-0.012"	0.005-0.007"	0.004-0.006"	0.004-0.006"	0.005-0.007"	0.005-0.007"	0.004-0.006"
12mm		0.46-0.56	0.25-0.35	0.25-0.35	0.28-0.33	0.30-0.35	0.15-0.20	0.12-0.17	0.15-0.20	0.15-0.20	0.15-0.20	0.15-0.20
1/2"		0.018-0.022"	0.010-0.014"	0.010-0.014"	0.011-0.013"	0.012-0.014"	0.006-0.008"	0.005-0.007"	0.006-0.008"	0.006-0.008"	0.006-0.008"	0.006-0.008"
16mm							0.17-0.22			0.17-0.22	0.17-0.22	
5/8"							0.007-0.009"			0.007-0.009"	0.007-0.009"	
20mm										0.20-0.25	0.20-0.25	
3/4"										0.008-0.10"	0.008-0.10"	

Hard Plastics and Acrylics - Chip Load Per Tooth

HP AC													
Series	6230 6231 7230 7231	6001 7001	6013 6014 7013 7014	153 154 155 151 152	6037 7037	6060 6061 7060 7061	7080 7081	254	214 211 216 200 204	7038	6030 7030	6140 6141 7140 7141	6150, 6151 7150, 7151 6152, 6153 7152, 7153 7154, 7155
Page	18	19	22	26 27 28	32	33	40	46	46 47 48 52	54	57	66	67 68 69
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.05-0.10		0.05-0.10	0.05-0.10					0.05-0.10				
1/16"	0.002-0.004"		0.02-0.004"	0.02-0.004"					0.002-0.004"				
3mm	0.15-0.20	0.08-0.13	0.15-0.20	0.15-0.20	0.13-0.18		0.05-0.10	0.10-0.15	0.10-0.15	0.05-0.10			
1/8"	0.006-0.008"	0.003-0.005"	0.006-0.008"	0.006-0.008"	0.005-0.007"		0.002-0.004"	0.004-0.006"	0.004-0.006"	0.002-0.004"			
6mm	0.25-0.30	0.18-0.28	0.25-0.30	0.25-0.30	0.18-0.23	0.15-0.20	0.10-0.15	0.15-0.20	0.15-0.20	0.10-0.15	0.15-0.20	0.10-0.15	
1/4"	0.010-0.012"	0.007-0.011"	0.010-0.012"	0.010-0.012"	0.007-0.009"	0.006-0.008"	0.004-0.006"	0.006-0.008"	0.006-0.008"	0.004-0.006"	0.006-0.008"	0.004-0.006"	
10mm	0.25-0.30	0.33-0.43	0.25-0.30	0.25-0.30	0.23-0.28	0.20-0.25	0.10-0.15	0.20-0.25	0.20-0.25	0.15-0.20	0.18-0.23	0.10-0.15	0.10-0.15
3/8"	0.010-0.012"	0.013-0.017"	0.010-0.012"	0.010-0.012"	0.009-0.011"	0.008-0.010"	0.004-0.006"	0.008-0.010"	0.008-0.010"	0.006-0.008"	0.007-0.009"	0.004-0.006"	0.004-0.006"
12mm		0.43-0.53	0.30-0.40	0.30-0.40	0.28-0.33	0.25-0.30	0.15-0.20	0.25-0.30	0.25-0.30	0.20-0.25	0.20-0.25	0.15-0.25	0.15-0.20
1/2"		0.017-0.021"	0.012-0.016"	0.012-0.016"	0.011-0.013"	0.010-0.012"	0.006-0.008"	0.010-0.012"	0.010-0.012"	0.008-0.10"	0.008-0.010"	0.006-0.010"	0.006-0.008"
16mm								0.28-0.33	0.28-0.33				
5/8"								0.011-0.013"	0.011-0.013"				
20mm								0.30-0.36	0.30-0.36			0.30-0.40	
3/4"								0.012-0.014"	0.012-0.014"			0.012-0.016"	

Depth of Cut

1 x D Use suggested chip load.
2 x D Decrease chip load by 25%.
3 x D Decrease chip load by 50%.

Formulae:

RPM = Feed Rate / (Number of Flutes x Chip Load)
Feed Rate = RPM x Number of Flutes x Chip Load
Chip Load = Feed rate / (RPM x Number of Flutes)

Composites - Chip Load Per Tooth

CP							
Series	6020 6021 7020 7021	6050 6051 7050 7051	6030 7030	7170 7171	7190 7191	7192 7193	FG
Page	25	36	57	72	76	76	82
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm							
1/16"							
3mm	0.07-0.12	0.07-0.12	0.05-0.10		0.05-0.10		
1/8"	0.003-0.005"	0.003-0.005"	0.002-0.004"		0.002-0.004"		
6mm	0.07-0.12	0.10-0.15	0.07-0.12		0.05-0.10		0.10-0.15
1/4"	0.003-0.005"	0.004-0.006"	0.003-0.005"		0.002-0.004"		0.004-0.006"
10mm	0.10-0.15	0.15-0.20	0.10-0.15	0.05-0.25	0.07-0.15	0.17-0.22	0.10-0.15
3/8"	0.004-0.006"	0.006-0.008"	0.004-0.006"	0.002-0.010"	0.003-0.006"	0.007-0.009"	0.004-0.006"
12mm	0.12-0.17	0.25-0.30	0.12-0.17	0.05-0.25	0.18-0.23	0.20-0.25	0.10-0.15
1/2"	0.005-0.007"	0.010-0.012"	0.005-0.007"	0.002-0.010"	0.007-0.009"	0.008-0.010"	0.004-0.006"
16mm							
5/8"							
20mm							
3/4"							

Solid Surface - Chip Load Per Tooth

SS											
Series	6230 6231 7230 7231	6010 6012 7010 7011	6013 6014 7013 7014	7003 7004	6060 6061 7060 7061	6040 6042 7040 7042	6050 6051 7050 7051	7080 7081	6030 7030	7035	6140 6141 7140 7141
Page	18	21	22	24	33	34	36	40	57	60	66
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.05-0.10	0.05-0.07	0.05-0.07								
1/16"	0.002-0.004"	0.002-0.003"	0.002-0.003"								
3mm	0.15-0.20	0.05-0.10	0.05-0.10			0.05-0.10	0.08-0.15	0.05-0.10	0.05-0.10		
1/8"	0.006-0.008"	0.002-0.004"	0.002-0.004"			0.002-0.004"	0.003-0.006"	0.002-0.004"	0.002-0.004"		
6mm	0.25-0.30	0.15-0.25	0.15-0.25	0.05-0.10	0.10-0.15	0.07-0.12	0.10-0.15	0.10-0.15	0.07-0.12	0.07-0.15	0.05-0.10
1/4"	0.010-0.012"	0.006-0.010"	0.006-0.010"	0.002-0.004"	0.004-0.006"	0.003-0.005"	0.004-0.006"	0.004-0.006"	0.003-0.005"	0.003-0.006"	0.002-0.004"
10mm	0.25-0.30	0.15-0.25	0.15-0.25		0.15-0.20	0.10-0.15	0.20-0.25	0.10-0.15	0.10-0.15	0.07-0.15	0.05-0.15
3/8"	0.010-0.012"	0.006-0.010"	0.006-0.010"		0.006-0.008"	0.004-0.006"	0.008-0.010"	0.004-0.006"	0.004-0.006"	0.003-0.006"	0.002-0.006"
12mm					0.20-0.25	0.12-0.17	0.30-0.35	0.15-0.20	0.12-0.17		0.05-0.15
1/2"					0.008-0.010"	0.005-0.007"	0.012-0.014"	0.006-0.008"	0.005-0.007"		0.002-0.006"
16mm						0.15-0.20					0.10-0.20
5/8"						0.006-0.008"					0.004-0.008"
20mm						0.17-0.22					
3/4"						0.007-0.009"					

Depth of Cut

- 1 x D Use suggested chip load.
- 2 x D Decrease chip load by 25%.
- 3 x D Decrease chip load by 50%.

Formulae:

- $RPM = \text{Feed Rate} / (\text{Number of Flutes} \times \text{Chip Load})$
- $\text{Feed Rate} = RPM \times \text{Number of Flutes} \times \text{Chip Load}$
- $\text{Chip Load} = \text{Feed rate} / (RPM \times \text{Number of Flutes})$

Aluminium - Chip Load Per Tooth

A									
Series	6230 6231 7230 7231	7002	6015 6016 7015 7016	6020 6021 7020 7021	153 154 155 151 152	6050 6051 7050 7051	7080 7081	254	214 211 216 200 204
Page	18	20	23	25	26 27 28	36	40	46	46 47 48 52
Diameter	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD	1xD
1.5mm	0.05-0.10				0.05-0.10				0.05-0.10
1/16"	0.002-0.004"				0.002-0.004"				0.002-0.004"
3mm	0.05-0.10	0.02-0.07	0.05-0.10	0.15-0.20	0.05-0.10	0.07-0.12	0.07-0.12	0.07-0.12	0.07-0.12
1/8"	0.002-0.004"	0.001-0.003"	0.002-0.004"	0.006-0.008"	0.002-0.004"	0.003-0.005"	0.003-0.005"	0.003-0.005"	0.003-0.005"
6mm	0.07-0.15	0.05-0.12	0.07-0.15	0.17-0.22	0.07-0.15	0.10-0.15	0.10-0.15	0.10-0.15	0.10-0.15
1/4"	0.003-0.006"	0.002-0.005"	0.003-0.006"	0.007-0.009"	0.003-0.006"	0.004-0.006"	0.004-0.006"	0.004-0.006"	0.004-0.006"
10mm	0.10-0.20	0.07-0.17	0.10-0.20	0.20-0.25	0.10-0.20	0.15-0.20	0.15-0.20	0.15-0.20	0.15-0.20
3/8"	0.004-0.008"	0.003-0.007"	0.004-0.008"	0.008-0.010"	0.004-0.008"	0.006-0.008"	0.006-0.008"	0.006-0.008"	0.006-0.008"
12mm	0.12-0.22	0.17-0.22	0.20-0.25	0.22-0.27	0.12-0.22	0.25-0.30	0.25-0.30	0.25-0.30	0.25-0.30
1/2"	0.005-0.009"	0.007-0.009"	0.008-0.010"	0.009-0.011"	0.005-0.009"	0.010-0.012"	0.010-0.012"	0.010-0.012"	0.010-0.012"
16mm								0.28-0.33	0.28-0.33
5/8"								0.011-0.013"	0.011-0.013"
20mm								0.30-0.36	0.30-0.36
3/4"								0.012-0.014"	0.012-0.014"

Depth of Cut

1 x D Use suggested chip load.
2 x D Decrease chip load by 25%.
3 x D Decrease chip load by 50%.

Formulae:

RPM = Feed Rate / (Number of Flutes x Chip Load)
Feed Rate = RPM x Number of Flutes x Chip Load
Chip Load = Feed rate / (RPM x Number of Flutes)

Conversion Chart

Size	MM	Decimal Equivalent	Size	MM	Decimal Equivalent	Size	MM	Decimal Equivalent	Size	MM	Decimal Equivalent	Size	MM	Decimal Equivalent
-	0.10	0.0039	53	1.51	0.0595	-	4.00	0.1575	J	7.04	.2770	-	14.00	0.5512
-	0.20	0.0079	1/16	1.59	0.0625	21	4.04	.1590	K	7.14	.2810	9/16	14.29	0.5625
-	0.25	0.0098	52	1.61	0.0635	20	4.09	.1610	9/32	7.14	0.2812	37/64	14.68	0.5781
-	0.30	0.0118	51	1.70	.0670	19	4.22	.1660	L	7.37	.2900	-	15.00	0.5906
80	0.34	0.0135	50	1.78	.0700	18	4.31	0.1695	M	7.49	.2950	19/32	15.08	0.5938
79	0.37	0.0145	49	1.85	.0730	11/64	4.37	0.1719	19/64	7.54	0.2969	39/64	15.48	0.6094
1/64	0.40	0.0156	48	1.93	.0760	17	4.39	.1730	N	7.67	.3020	5/8	15.88	.6250
78	0.41	.0160	5/64	1.98	0.0781	16	4.50	.1770	5/16	7.94	0.3125	-	16.00	0.6299
77	0.46	.0180	47	1.99	0.0785	15	4.57	.1800	-	8.00	.3150	41/64	16.27	0.6406
	0.50	0.0197	-	2.00	0.0787	14	4.62	.1820	O	8.03	.3160	21/32	16.67	0.6562
76	0.51	.0200	46	2.06	.0810	13	4.70	.1850	P	8.20	.3230	-	17.00	0.6693
75	0.53	.0210	45	2.08	.0820	3/16	4.76	0.1875	21/64	8.33	0.3281	43/64	17.07	0.6719
74	0.57	0.0225	44	2.18	.0860	12	4.80	.1890	Q	8.43	.3320	11/16	17.46	0.6875
-	0.60	0.0236	43	2.26	.0890	11	4.85	.1910	R	8.61	.3390	45/64	17.86	0.7031
73	0.61	.0240	42	2.37	0.0935	10	4.91	0.1935	11/32	8.73	0.3438	-	18.00	0.7087
72	0.64	.0250	3/32	2.38	0.0938	9	4.98	.1960	S	8.84	.3480	23/32	18.26	0.7188
71	0.66	.0260	41	2.44	.0960	-	5.00	0.1968	-	9.00	0.3543	47/64	18.65	0.7344
-	0.70	0.0276	40	2.50	.0980	8	5.05	.1990	T	9.09	.3580	-	19.00	.7480
70	0.71	.0280	39	2.53	0.0995	7	5.11	.2010	23/64	9.13	0.3594	3/4	19.05	.7500
69	0.74	0.0292	38	2.58	0.1015	13/64	5.16	0.2031	U	9.35	.3680	49/64	19.45	0.7656
	0.75	0.0295	37	2.64	.1040	6	5.18	.2040	3/8	9.53	.3750	25/32	19.84	0.7812
68	0.79	.0310	36	2.71	0.1065	5	5.22	0.2055	V	9.56	.3770	-	20.00	0.7874
1/32	0.79	0.0313	7/64	2.78	0.1094	4	5.31	.2090	W	9.80	.3860	51/64	20.24	0.7969
-	0.80	0.0315	35	2.79	.1100	3	5.41	.2130	25/64	9.92	0.3906	13/16	20.64	0.8125
67	0.81	.0320	34	2.82	.1110	7/32	5.56	0.2188	-	10.00	0.3937	-	21.00	0.8268
66	0.84	.0330	33	2.87	.1130	2	5.61	.2210	X	10.08	.3970	53/64	21.03	0.8281
65	0.89	.0350	32	2.95	.1160	1	5.79	.2280	Y	10.26	.4040	27/32	21.43	0.8438
-	0.90	0.0354	-	3.00	0.1181	A	5.94	.2340	13/32	10.32	0.4062	55/64	21.84	0.8594
64	0.91	.0360	31	3.05	.1200	15/64	5.95	0.2344	Z	10.49	.4130	-	22.00	0.8661
63	0.94	.0370	1/8	3.18	.1250	-	6.00	0.2362	27/64	10.72	0.4219	7/8	22.23	.8750
62	0.97	.0380	30	3.26	0.1285	B	6.05	.2380	-	11.00	0.4331	57/64	22.62	0.8906
61	0.99	.0390	29	3.45	.1360	C	6.15	.2420	7/16	11.11	0.4375	-	23.00	0.9055
-	1.00	0.0394	28	3.57	0.1405	O	6.25	.2460	29/64	11.51	0.4531	29/32	23.02	0.9062
60	1.02	.0400	9/64	3.57	0.1406	1/4	6.35	.2500	15/32	11.91	0.4688	59/64	23.42	0.9219
59	1.04	.0410	27	3.66	.1440	E	6.35	.2500	-	12.00	0.4724	15/16	23.81	0.9375
58	1.07	.0420	26	3.73	.1470	F	6.53	.2570	31/64	12.30	0.4844	-	24.00	0.9449
57	1.09	.0430	25	3.80	0.1495	G	6.63	.2610	1/2	12.70	.5000	61/64	24.21	0.9531
56	1.18	0.0465	24	3.86	.1520	17/64	6.75	0.2656	-	13.00	0.5118	31/32	24.61	0.9688
3/64	1.19	0.0469	23	3.91	.1540	H	6.76	.2660	33/64	13.10	0.5156	-	25.00	0.9842
55	1.32	.0520	5/32	3.97	0.1562	I	6.91	.2720	17/32	13.49	0.5312	63/64	25.00	0.9844
54	1.40	.0550	22	3.99	.1570	-	7.00	0.2756	35/64	13.89	0.5469	I	25.40	1.0000



Merlin Tools Ltd



Quality • Precision • Performance



MERLIN TOOLS LIMITED

(Hereinafter referred to as "The Company")

1. All orders are subject to our Conditions of Sale as detailed below:

All quotations given and all sales made are upon the express condition that, although the goods supplied are of sound commercial quality and every care has been taken in manufacture, there is no guarantee as to their suitability for any specific purpose, even if that purpose is known to The Company. The buyer must therefore satisfy himself that the goods conform to his requirements before use.

2. The Company's liability in respect of goods furnished shall be limited to the purchase price of the goods in respect of which damages are claimed.

3. The buyer shall inspect the goods furnished immediately after delivery. The buyer shall give to the seller immediate written notice of any claim that any of the goods are not of stated quality and the buyer's failure to give notice of any claim within fourteen days from date of advice of despatch or delivery shall constitute an unqualified acceptance of such goods by the buyer. Slight imperfections in colour, appearance and measurements are not to be the subject of complaint. If the purchaser wishes to make a complaint on a later date because of defects hidden at the time of receipt despite a careful examination, the purchaser has a right to demand alteration, substitution, further delivery from the Company's Works if any defect is found by the Company.

4. Owing to fluctuations in the cost of raw materials and labour it may be necessary to alter prices. Every effort will be made to keep customers informed. No responsibility will be accepted for such alterations and prices charged will be those current at time of despatch.

5. Payment terms are strictly nett at the end of the month following month of invoice.

6. The title and ownership of the goods supplied would only be transferred to the purchaser when the amount has been paid in full. Nothing shall prevent the buyer reselling or transferring the goods to a third party in the ordinary course of business, but in such event the buyer will be deemed to sell or transfer the goods as agents for us, and will be deemed to receive and hold any price received thereof for the account of ourselves. The buyer undertakes to pay to us all monies received by the buyer in respect of any sale or transfer of the goods to a third party, until the price of goods sold by us to the buyer has been paid in full.

7. The Company reserves the right to select the means of transportation. Any extra cost incurred by reason of using such other means of transport as the buyer shall select shall be paid by the buyer.

8. In the event of the buyer not receiving the goods within fourteen days of receipt of an advice note he shall notify the Company in writing. Shortages or damages must be reported to the Carrier and to The Company within three days.

9. Any date given for delivery is to be considered as approximate only and cannot be guaranteed. The Company cannot be made responsible for any delays due to strikes, lockouts, accidents on land or on sea, government interference or for any other unforeseen circumstances and no claims for damage or compensation will be accepted.

10. In the event that The Company is compelled to withdraw from any contract due to circumstances mentioned in paragraph 9 this does not affect the right to demand payment in respect of all deliveries made before the date on which the contract is cancelled.

11. Orders accepted by us cannot be cancelled without our consent in writing and on terms that will indemnify against loss. Only in exceptional circumstances and subject to our specific written agreement in each instance, will we accept back for credit goods already delivered. If returned goods are accepted in these circumstances they will be subject to a handling charge.

12. Special non-standard products cannot be cancelled, exchanged or credited. We reserve the right to over or under produce each item by up to 10%.

13. Any dispute arising hereunder shall be referred to arbitration by an arbitrator to be mutually agreed between the parties or failing agreement to any arbitrator to be appointed by the President of the Law Society.

Terms of Trading

All UK orders are subject to our Terms of trading as detailed below:

Orders valued at over £100 nett are Carriage Paid.

No minimum order value.

Orders up to £99.99 nett will incur carriage charge of £6.50

Orders requiring Royal Mail Special Delivery guaranteed next working day before 1.00pm is carriage at cost starting from £8.70 depending upon weight. This must be specified when ordering.

A redirection charge of £4.00 plus VAT will be made where items are sent direct to a Distributor's End User.



Solid Carbide Performance Routers

Merlin Tools Ltd

Quality • Precision • Performance

Distributed by

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