

Professional Woodworking Tools

Engineering



perfection

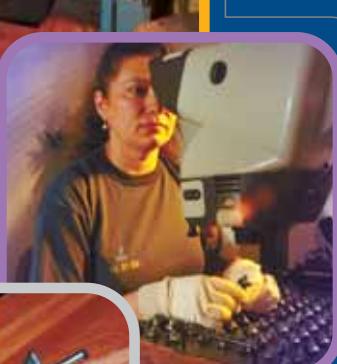
Process



The Vision That Works



Capacity



Quality control



Creativity



 **WPW**
Product Catalogue 2012

A word from the president



I have been involved in metal working since I was a boy working in my father's machine shop before the 2nd World War. In 1959 I started a small factory with 2 partners, which later became W.P.W. Engineering. In the early sixties, carbide tipped tools for woodworking were very new and only a few factories were able to make them. We were the first company in Israel to make Carbide Tipped Router Bits and we have gained tremendous experience over the years.

W.P.W. Engineering has grown to be a leading manufacturer of Carbide Router Bits and other quality tools for woodworking. Thanks to our experienced workers and constant improvements in our production process, we have achieved high quality, reliability and fast delivery of our stock items. This is why our cutting tools are used in the woodworking industry worldwide. There is no compromise in production quality and quality of materials used. Our customers know and appreciate this and therefore are very loyal to WPW.

Our products are sold in North America, Western and Eastern Europe, South Africa, and Australia under WPW and Woodpecker brand names and private labels.

You may find cheap tools on the market, but as the old saying goes: "we are not rich enough to buy cheap..." WPW high quality tools (some of our customers say - the best quality) give excellent value for your money. Thank you for your trust in our products and for giving us the opportunity to serve you.




Chanan Werebeychick
President

Range

This catalogue presents a most comprehensive range of industrial quality carbide Router Bits, Boring Bits and Countersink Bits. Our well known economical Woodpecker line includes the most popular router bits and other tools essential for every craftsman and DIY amateur.

WPW new products are presented at the end of the catalogue in a special section, and include the following lines:

K-Bits - a new generation of carbide router bits with up to 200% longer tool life.

Miniature Bearing Bits – an innovative line of tools with 4.8mm (3/16") ball bearing guide.

Countersink & Stop – Countersinks with unique adjustable depth-stops, developed for quick and easy adjustment of the countersink depth.

Quality

WPW offers tools designed for quality cutting, efficiency and long tool life. Compliance with our own specifications is guaranteed by strict quality control used throughout the manufacturing process. Our sophisticated computer controlled machines contribute to this process.

The quality control system assures us accurate dimensions, concentricity, correct cutting angles, quality of grinding, brazing, etc.

Woodpecker Router Bits are made with Anti Kickback design according to safety requirements of the German Woodworking Trade Association. BG-TEST approval No. 159-000.



How to use this catalogue

The tools in the catalogue are arranged according to their shape or application. You can easily find the proper page using the Table of Contents with the tool profiles - pages 4-5. If you already use our tools or know the code - tool number, you can easily find it by using the alphabetical index on the last page of the catalogue - page 71.

While ordering, please pay attention to the last digit of the tool number, which indicates the shank diameter. Please specify shank diameter by changing the last digit according to the following table.

Shank Diameter	6mm	1/4 "	8mm	3/8 "	10mm	12mm	1/2 "	16mm	20mm
Last Digit	3	4	5	6	7	2	8	1	E

For Example:

F240953 is a tool with 6mm shank

F240954 is a tool with 1/4" shank

F241272 is a tool with 12mm shank

F241278 is a tool with 1/2" shank

All WPW tools are carbide tipped with 2 tips unless stated otherwise.

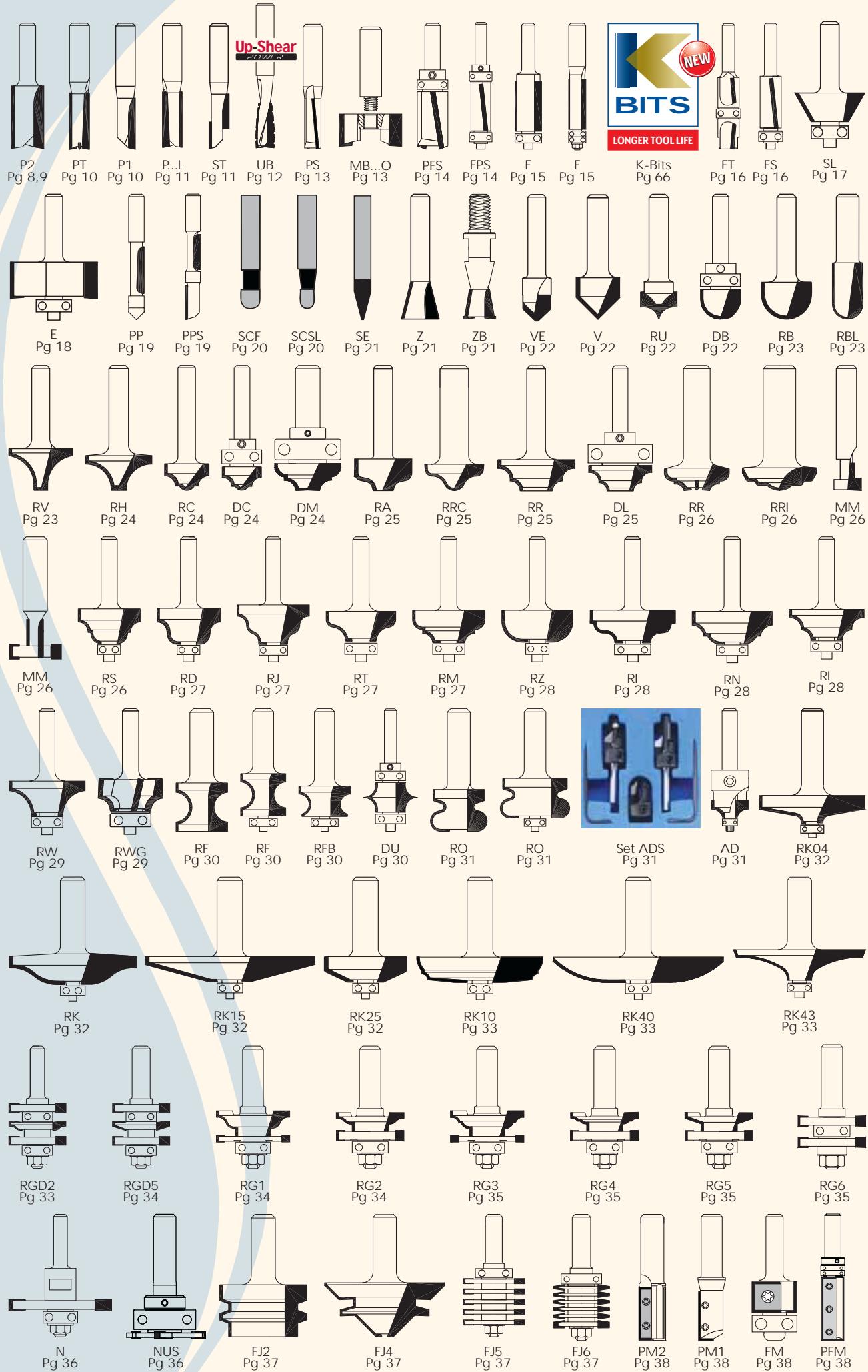
All specifications in this catalogue are subject to change without any notice.

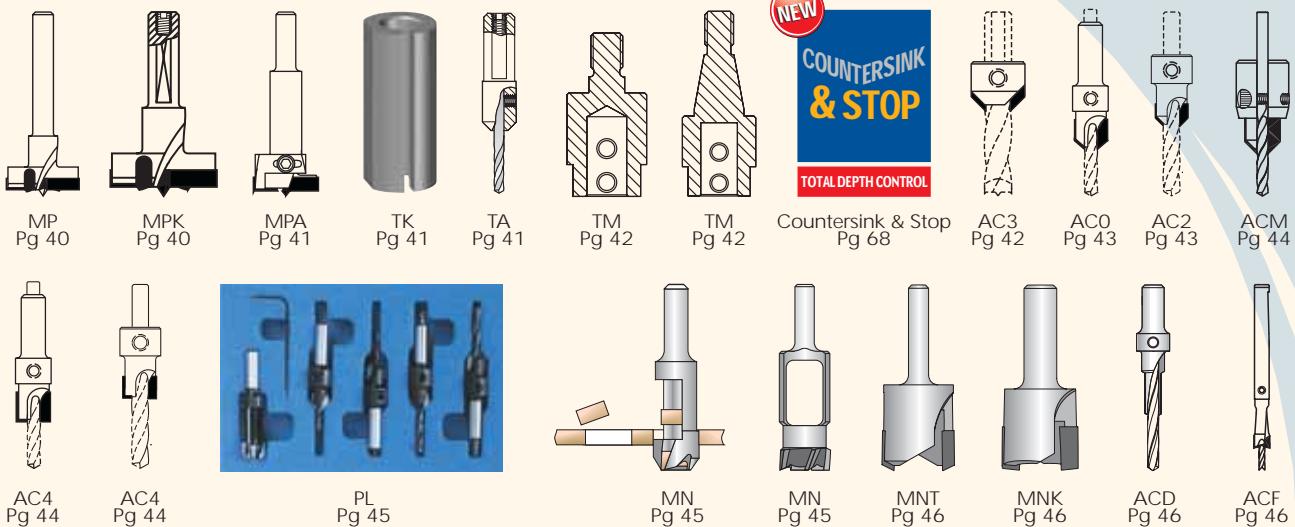
GUARANTEE

All tools are guaranteed against any defects in either workmanship or material. We will not guarantee tools that have been abused or have been damaged due to improper maintenance.

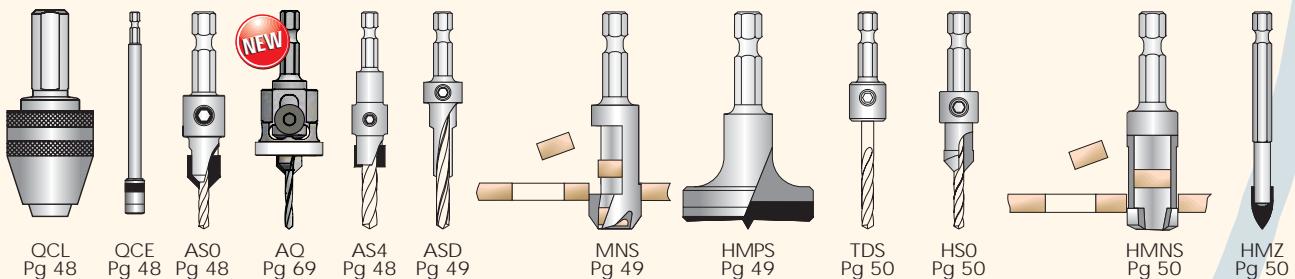


Professional Router Bits

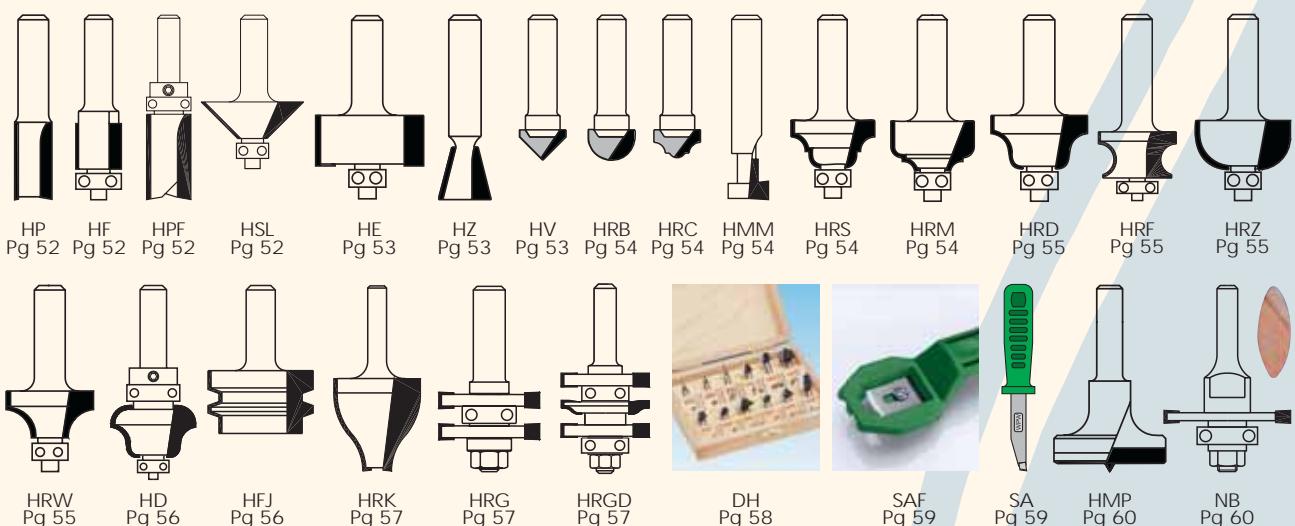




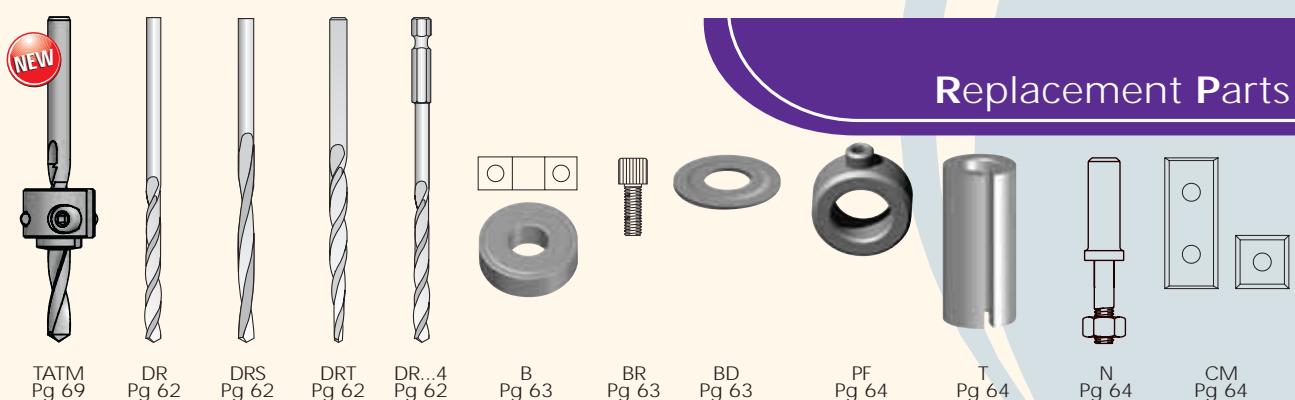
Click & Drill



WoodPecker



Replacement Parts





Technical information

All Router Bits included in this catalogue are Tungsten Carbide tipped or solid carbide, unless stated otherwise, and are designed for use in portable or stationary, including CNC, routing machines.

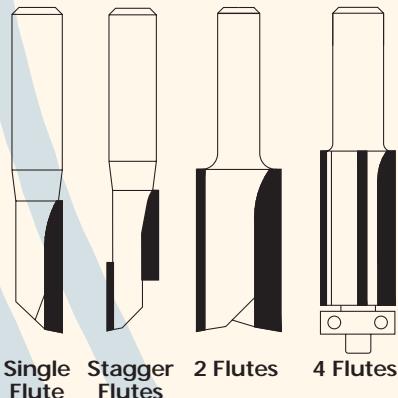
Tungsten Carbide tipped tools have carbide tips brazed onto a steel body. Solid Carbide tools are ground from a solid piece of Tungsten Carbide. Both are designed to cut hard and soft wood, wood by-products such as chipboard, MDF and plywood, plastic, Corian® and other solid surface sheet goods. Aluminium and brass can also be cut, but only on stationary machines, provided that proper clamping devices are employed and the proper speed (RPM) and coolant are used.

Shank and collet

Always use the largest diameter shank available that your router will accommodate. Use the correct size collet. Proper collet condition is of extreme importance. Worn out or distorted collets do not provide adequate holding power and increase run-out and vibration. At least 3/4 of the shank length should be inserted into the collet. The best way is to insert it completely and back off slightly - 1.5mm (1/16") approx.

Flutes

Single flute (1 cutting edge) Router Bits are used for free cutting when fast feed rate takes preference and finish is of secondary importance.



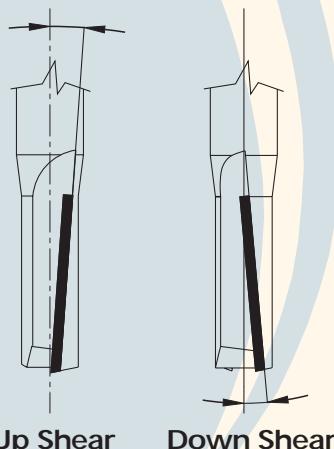
Stagger-Tooth Router bits are actually tools with a single flute divided into two parts - staggered 180°. They combine the fast stock removal of single-flute bits with a better balance and increased strength.

Double flute (2 cutting edges) Router bits are used when the finish is primary and the feed rate is secondary.

3 and 4 flute bits, available on some bits, provide extremely smooth finish on certain laminates that tend to chip easily. They have longer tool life and give much better results while working other hard materials, such as solid surface materials or even aluminium.

Shear angle

Straight Shear Bits are made with negative - "down shear" - or positive - "up shear" - angle of cutting edges. By spreading the cutting action over a larger part of the bit's diameter they produce smoother cuts with less energy and vibration, than standard Straight Bits. This is the reason why profile router bits and cutters are usually made with an up shear angle and this is also the advantage of straight spiral bits. Actually the Straight Shear Bits are a compromise between the standard Straight Bits and the very expensive, industrial Solid Carbide Spiral Bits.



WPW shear bits have very sharp, helical ground cutting edges, which make superior cuts on the wood.

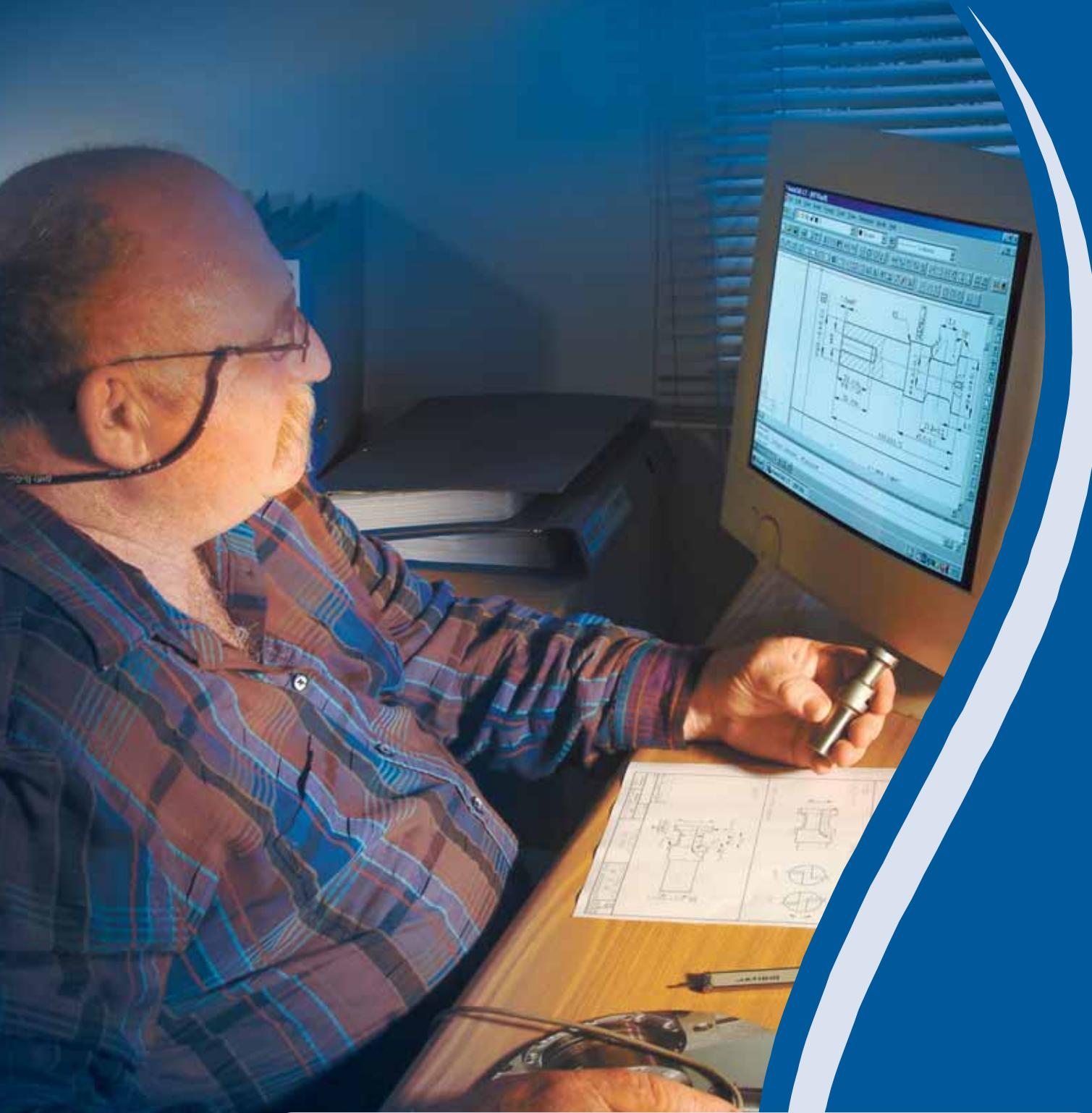
The shear angle allows control of chip removal direction - up or down.

For grooving applications use "up-shear", which pushes chips towards the shank. For laminates, use down shear, to avoid chipping on edges.



Engineering

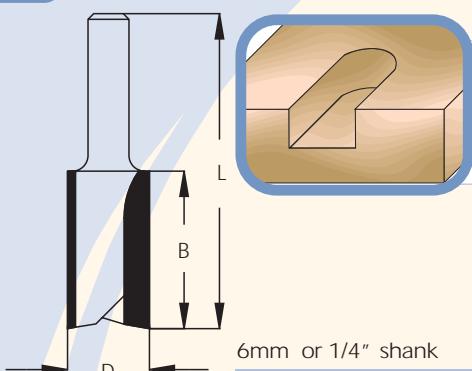
Designing innovative products by an experienced and professional staff



Professional Router Bits

This section presents a most comprehensive range of industrial quality Router Bits - Tungsten carbide tipped, solid carbide and replaceable carbide. This range is the best choice when the quality of the cut and long tool life are the primary factors. It should satisfy most demanding applications in manufacturing and in the woodworking trade.

Shank Diameter	6mm	1/4"	8mm	3/8"	10mm	12mm	1/2"	16mm	20mm
Last Digit	3	4	5	6	7	2	8	1	E



P2

Straight Plunge - Cutting Bits

2 Flutes



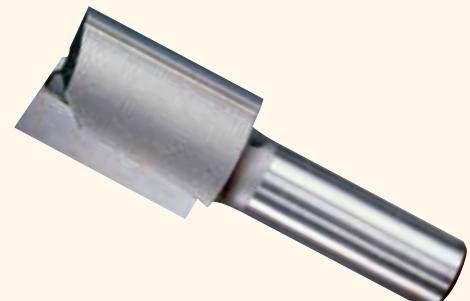
Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
S P210154	1.5	.059	5	3/16	44	1-3/4
S P210164	1.6	1/16	5	3/16	44	1-3/4
S P210184	1.8	.071	5	3/16	44	1-3/4
S P210204	2.0	5/64	5	3/16	44	1-3/4
S P210254	2.5	.098	8	5/16	51	2
S P210304	3.0	.118	11	7/16	51	2
S P200324	3.2	1/8	8	5/16	47	1-7/8
S P210324	3.2	1/8	11	7/16	51	2
S P210354	3.5	.138	11	7/16	51	2
S P210404	4.0	5/32	11	7/16	51	2
S P210484	4.8	3/16	11	7/16	51	2
S P210504	5.0	.197	11	7/16	51	2
S P290504	5.0	.197	11	7/16	60	2-3/8
P220504	5.0	.197	16	5/8	57	2-1/4
P230564	5.6	7/32	19	3/4	51	2
P230604	6.0	.236	19	3/4	51	2
P240604	6.0	.236	25	1	57	2-1/4
P220634	6.3	1/4	13	1/2	51	2
P230634	6.3	1/4	19	3/4	51	2
P240634	6.3	1/4	25	1	57	2-1/4
P290634	6.3	1/4	25	1	73	2-7/8
P230704	7.0	9/32	19	3/4	51	2
P240704	7.0	9/32	25	1	57	2-1/4
P230804	8.0	5/16	19	3/4	51	2
P240804	8.0	5/16	25	1	57	2-1/4
P230904	9.0	.354	19	3/4	51	2
P240904	9.0	.354	25	1	57	2-1/4
P230954	9.5	3/8	19	3/4	51	2
P240954	9.5	3/8	25	1	57	2-1/4

8 mm shank

Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
S P210205	2.0	5/64	5	3/16	44	1-3/4
S P210305	3.0	.118	11	7/16	51	2
S P200325	3.2	1/8	8	5/16	47	1-7/8
S P210405	4.0	5/32	11	7/16	51	2
S P210505	5.0	.197	11	7/16	51	2
S P220505	5.0	.197	16	5/8	57	2-1/4
P230605	6.0	.236	19	3/4	51	2
P240605	6.0	.236	25	1	57	2-1/4
P230705	7.0	9/32	19	3/4	51	2
P230805	8.0	5/16	19	3/4	51	2
P240805	8.0	5/16	25	1	57	2-1/4
P231005	10.0	.394	19	3/4	51	2
P241005	10.0	.394	25	1	57	2-1/4
P251005	10.0	.394	32	1-1/4	63	2-1/2

S - Solid Carbide cutting edge

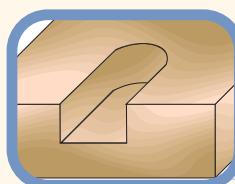
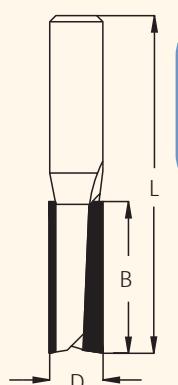
Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
P250954	9.5	3/8	32	1-1/4	63	2-1/2
P231004	10.0	.394	19	3/4	51	2
P241004	10.0	.394	25	1	57	2-1/4
P251004	10.0	.394	32	1-1/4	63	2-1/2
P231104	11.0	7/16	19	3/4	51	2
P241104	11.0	7/16	25	1	57	2-1/4
P231204	12.0	.472	19	3/4	51	2
P241204	12.0	.472	25	1	57	2-1/4
P231274	12.7	1/2	19	3/4	51	2
P241274	12.7	1/2	25	1	57	2-1/4
P251274	12.7	1/2	32	1-1/4	63	2-1/2
P251304	13.0	33/64	32	1-1/4	63	2-1/2
P231404	14.0	.551	19	3/4	51	2
P231434	14.3	9/16	19	3/4	51	2
P231504	15.0	.590	19	3/4	51	2
P231604	16.0	5/8	19	3/4	51	2
P241604	16.0	5/8	25	1	57	2-1/4
P231704	17.0	.670	19	3/4	51	2
P231764	17.5	11/16	19	3/4	51	2
P231804	18.0	.709	19	3/4	51	2
P231904	19.0	3/4	19	3/4	51	2
P232004	20.0	.787	19	3/4	51	2
P232064	20.6	13/16	19	3/4	51	2
P232224	22.0	7/8	19	3/4	51	2
P232504	25.0	.984	19	3/4	51	2
P232544	25.4	1	19	3/4	51	2



Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
PP231205	12.0	.472	19	3/4	51	2
P241205	12.0	.472	25	1	57	2-1/4
P251205	12.0	.472	32	1-1/4	63	2-1/2
P271205	12.0	.472	42	1-5/8	73	2-7/8
P251275	12.7	1/2	32	1-1/4	63	2-1/2
P231405	14.0	.551	19	3/4	51	2
P231505	15.0	.590	19	3/4	51	2
P231605	16.0	5/8	19	3/4	51	2
P241605	16.0	5/8	25	1	57	2-1/4
P231805	18.0	.709	19	3/4	51	2
P232005	20.0	.787	19	3/4	51	2
P232205	22.0	7/8	19	3/4	51	2
P232505	25.0	.984	19	3/4	51	2

Reminder:

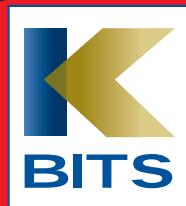
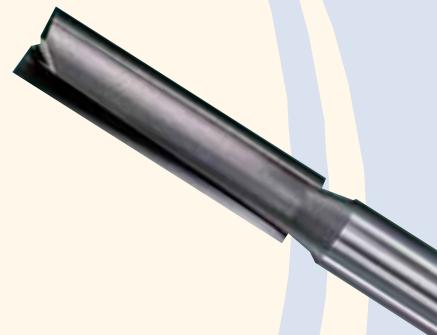
Shank Dia.	6mm	1/4"	8mm	12mm	1/2"
Last Digit	3	4	5	2	8

**P2****Straight Plunge - Cutting Bits**

2 Flutes

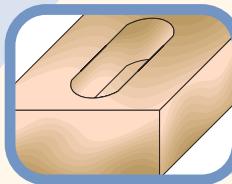
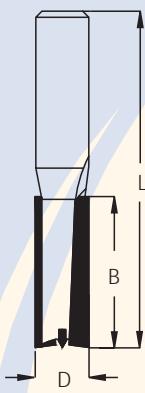
12mm or 1/2" shank

Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
S P210408	4.0	5/32	11	7/16	63	2-1/2
S P23S608	6.0	.236	19	3/4	63	2-1/2
P230608	6.0	.236	19	3/4	63	2-1/2
P230638	6.3	1/4	19	3/4	63	2-1/2
P240638	6.3	1/4	25	1	70	2-3/4
P230808	8.0	5/16	19	3/4	63	2-1/2
P240808	8.0	5/16	25	1	70	2-3/4
P230958	9.5	3/8	19	3/4	63	2-1/2
P240958	9.5	3/8	25	1	70	2-3/4
P250958	9.5	3/8	32	1-1/4	76	3
P241008	10.0	.394	25	1	70	2-3/4
P251008	10.0	.394	32	1-1/4	76	3
P241108	11.0	7/16	25	1	67	2-5/8
P251108	11.0	7/16	32	1-1/4	76	3
P241208	12.0	.472	25	1	67	2-5/8
P251208	12.0	.472	32	1-1/4	73	2-7/8
P261208	12.0	.472	38	1-1/2	80	3-1/8
P281208	12.0	.472	51	2	108	4-1/4
P201208	12.0	.472	75	3	133	5-1/4
P241278	12.7	1/2	25	1	67	2-5/8
P241278X	12.7	1/2	25	1	82	3-1/4
P251278	12.7	1/2	32	1-1/4	73	2-7/8
P261278	12.7	1/2	38	1-1/2	80	3-1/8
P271278	12.7	1/2	38	1-1/2	108	4-1/4
P281278	12.7	1/2	51	2	108	4-1/4
P291278	12.7	1/2	63	2-1/2	114	4-1/2
P201278	12.7	1/2	75	3	133	5-1/4
P261308	13.0	33/64	38	1-1/2	80	3-1/8
P251358	13.5	17/32	32	1-1/4	73	2-7/8
P241408	14.0	.551	25	1	67	2-5/8
P251408	14.0	.551	32	1-1/4	73	2-7/8
P241438	14.3	9/16	25	1	67	2-5/8
P251438	14.3	9/16	32	1-1/4	73	2-7/8
P241608	16.0	5/8	25	1	67	2-5/8
P251608	16.0	5/8	32	1-1/4	73	2-7/8
P261608	16.0	5/8	38	1-1/2	80	3-1/8
P281608	16.0	5/8	51	2	96	3-3/4
P241658	16.5	21/32	25	1	67	2-5/8
P251678	16.5	21/32	32	1-1/4	73	2-7/8
P241708	17.0	43/64	25	1	67	2-5/8
P251768	17.5	11/16	32	1-1/4	73	2-7/8
P241808	18.0	.709	25	1	67	2-5/8
P251808	18.0	.709	32	1-1/4	73	2-7/8
P241908	19.0	3/4	25	1	67	2-5/8
P251908	19.0	3/4	32	1-1/4	73	2-7/8
P261908	19.0	3/4	38	1-1/2	80	3-1/8
P281908	19.0	3/4	51	2	96	3-3/4
P252008	20.0	.787	32	1-1/4	73	2-7/8
P282008	20.0	.787	51	2	96	3-3/4
P252068	20.6	13/16	32	1-1/4	73	2-7/8
P252228	22.0	7/8	32	1-1/4	73	2-7/8
P252508	25.0	.984	32	1-1/4	73	2-7/8
P252548	25.4	1	32	1-1/4	73	2-7/8
P262548	25.4	1	38	1-1/2	80	3-1/8
P282548	25.4	1	51	2	96	3-3/4
P253008	30.0	1.181	32	1-1/4	73	2-7/8
P253208	32.0	1-1/4	32	1-1/4	73	2-7/8
P253508	35.0	1-3/8	32	1-1/4	73	2-7/8
P253808	38.0	1-1/2	32	1-1/4	73	2-7/8
P254508	45.0	1-3/4	32	1-1/4	73	2-7/8

S - Solid Carbide cutting edge

LONGER TOOL LIFE
New Generation
of Router Bits with
Harder Carbide

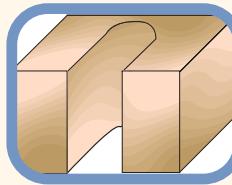
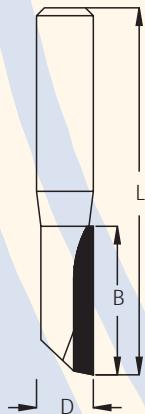
See Pg. 66

**PT****Straight Bits - Carbide Center Tip**

For faster and easier plunging.

Longer tool life when plunging hard materials.

Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
PT30805	8.0	5/16	19	3/4	51	2	8	-
PT31005	10.0	.394	19	3/4	51	2	8	-
PT41205	12.0	.472	25	1	57	2-1/4	8	-
PT41405	14.0	.551	25	1	57	2-1/4	8	-
PT41605	16.0	5/8	25	1	57	2-1/4	8	-
PT41805	18.0	.709	25	1	57	2-1/4	8	-
PT30808	8.0	5/16	19	3/4	63	2-1/2	12	1/2
PT31008	10.0	.394	19	3/4	63	2-1/2	12	1/2
PT41208	12.0	.472	25	1	67	2-5/8	12	1/2
PT41408	14.0	.551	25	1	67	2-5/8	12	1/2
PT41608	16.0	5/8	25	1	67	2-5/8	12	1/2
PT41808	18.0	.709	25	1	67	2-5/8	12	1/2
PT42008	20.0	.787	25	1	67	2-5/8	12	1/2
PT42548	25.4	1	25	1	67	2-5/8	12	1/2

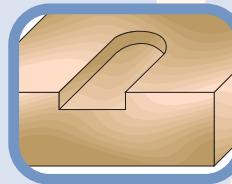
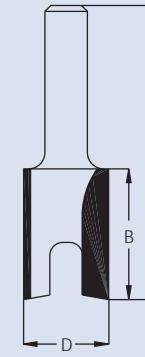
**P1****Straight Plunge Cutting Bits**

Single flute.

For faster feed rates and maximum stock removal.

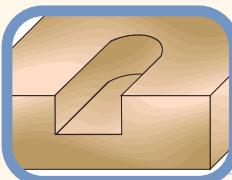
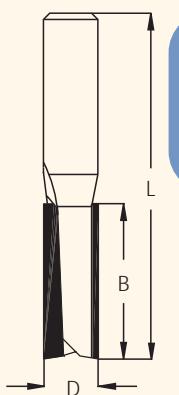
Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
P110104	1.0	.039	3	1/16	43	1-11/16	6	1/4
P110164	1.6	1/16	5	3/16	43	1-11/16	6 or 8	1/4
P110184	1.8	.071	5	3/16	43	1-11/16	6	1/4
P110204	2.0	5/64	5	3/16	43	1-11/16	6 or 8	1/4
P110324	3.2	1/8	11	7/16	47	1-7/8	6	1/4
P110484	4.8	3/16	11	7/16	51	2	6	1/4
P120634	6.3	1/4	13	1/2	51	2	6	1/4
P140634	6.3	1/4	25	1	57	2-1/4	6	1/4
P190634	6.3	1/4	25	1	73	2-7/8	6	1/4
P130704	7.0	9/32	19	3/4	51	2	6	1/4
P140804	8.0	5/16	25	1	57	2-1/4	6	1/4
P131904	19.0	3/4	19	3/4	51	2	6	1/4
P130638	6.3	1/4	19	3/4	63	2-1/2	12	1/2
P130808	8.0	5/16	19	3/4	63	2-1/2	12	1/2
P140958	9.5	3/8	25	1	70	2-3/4	12	1/2
P150958	9.5	3/8	32	1-1/4	76	3	12	1/2
P160958	9.5	3/8	38	1-1/2	80	3-1/8	12	1/2
P141278	12.7	1/2	25	1	67	2-5/8	12	1/2
P151278	12.7	1/2	32	1-1/4	73	2-7/8	12	1/2
P161278	12.7	1/2	38	1-1/2	80	3-1/8	12	1/2
P181278	12.7	1/2	51	2	108	4-1/4	12	1/2
P151608	16.0	5/8	32	1-1/4	73	2-7/8	12	1/2

S - Solid Carbide cutting edge

**MB****Hinge Mortising Bits**

This special design is best for plunging and mortising shallow grooves.

Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
MB31274	12.7	1/2	19	3/4	51	2	6	1/4
MB31604	16.0	5/8	19	3/4	51	2	6	1/4
MB31904	19.0	3/4	19	3/4	51	2	6	1/4

**P...L**

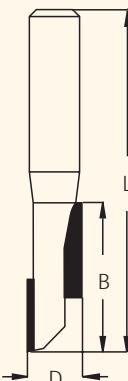
Left Hand Straight Plunge Cutting Bits

2 Flutes, left hand rotation.

Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
P230638L	6.3	1/4	19	3/4	63	2-1/2	12	1/2
P240958L	9.5	3/8	25	1	70	2-3/4	12	1/2
P241278L	12.7	1/2	25	1	67	2-5/8	12	1/2
P261278L	12.7	1/2	38	1-1/2	80	3-1/8	12	1/2
P281278L	12.7	1/2	51	2	108	4-1/4	12	1/2

ST STAGGER TOOTH STRAIGHT BITS

For fast stock removal as single flute, but better balance and increased strength.

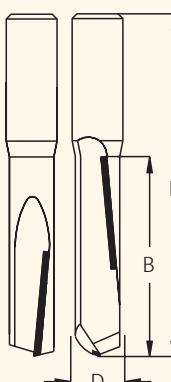
**ST**

Stagger Tooth

Plunge Cutting Bits.



Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
ST61278	12.7	1/2	38	1-1/2	80	3-1/8	12	1/2
ST81278	12.7	1/2	51	2	108	4-1/4	12	1/2
ST91278	12.7	1/2	57	2-1/4	114	4-1/2	12	1/2
ST01278	12.7	1/2	63	2-1/2	114	4-1/2	12	1/2

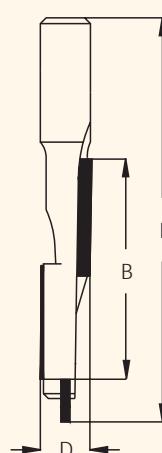
**STS**

Stagger Straight Shear Bits

Up and down shear angle.

For cleaner edges of double faced boards, plywoods and natural woods.

Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
STS6138	12.7	1/2	38	1-1/2	79	3-1/8	12	1/2
STS9138	12.7	1/2	57	2-1/4	108	4-1/4	12	1/2

**STD, STP**

Stagger Straight Bits

With carbide boring point.

For better plunging into hard materials.

Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
Down Shear								
STD9138	12.7	1/2	57	2-1/4	118	4-5/8	12	1/2
Up and Down Shear Angle								
STP9138	12.7	1/2	57	2-1/4	118	4-5/8	12	1/2

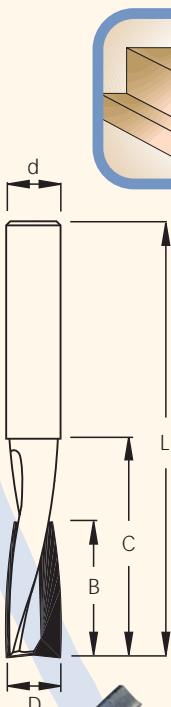
Reminder:

Shank Dia.	6mm	1/4"	8mm	12mm	1/2"
Last Digit	3	4	5	2	8



CNC Straight Production Bits

The shearing action of the US and UB series yields cleaner cuts with less energy and less vibration than the standard straight bits. The helical ground razor-sharp cutting edges provide superior finish. Spiral up-shear geometry pulls the chips from the working area, allowing deeper penetration with higher feed rates. The result is – long tool life during CNC operations at an affordable price. The use of these tools can prove, in many cases, to be more economical than the use of expensive spiral solid carbide tools. Using the Chipbreaker (Semi-finishing) - UB - Up-Shear Bits allows even higher feed rates leaving a relatively smooth surface finish. Designed for CNC machines, the tools are available with large shank diameters.



US/UB

Up-Shear

Longer tool life and cleaner cut.
For working in higher feed rates.

US2 2 Flutes

Tool No.	D		B		L		C		d	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
US25138	13	1/2	32	1-1/4	90	3-1/2	45	1-3/4	12	1/2
US27138	13	1/2	42	1-5/8	105	4-1/8	55	2-3/16	12	1/2
US25161	16	5/8	32	1-1/4	100	3-7/8	50	2	16	5/8
US27161	16	5/8	42	1-5/8	110	4-5/16	60	2-3/8	16	5/8
US2520E	20	.787	32	1-1/4	110	4-5/16	50	2	20	3/4
US2720E	20	.787	42	1-5/8	120	4-3/4	60	2-3/8	20	3/4
US2525E	25	.984	32	1-1/4	100	3-7/8	50	2	20	3/4

2+2 Flutes

US28138	13	1/2	50	2	110	4-5/16	60	2-3/8	12	1/2
US2820E	20	.787	50	2	125	4-7/8	65	2-1/2	20	3/4

US3 3 Flutes

Tool No.	D		B		L		C		d	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
US35161	16	5/8	32	1-1/4	100	3-7/8	50	2	16	5/8
US3520E	20	.787	32	1-1/4	110	4-5/16	50	2	20	3/4
US3820E	20	.787	50	2	125	4-7/8	65	2-1/2	20	3/4
US3525E	25	.984	32	1-1/4	110	4-5/16	50	2	20	3/4

UB2 2 Flutes

Up-Shear Chipbreaker Production Bits

For roughing and semi finishing

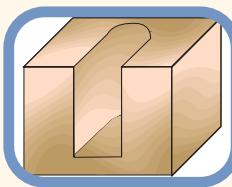
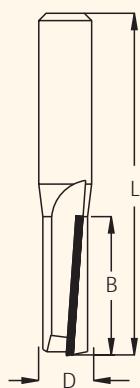
Tool No.	D		B		L		C		d	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
UB27138	13	1/2	42	1-5/8	105	4-1/8	55	2-3/16	12	1/2
UB2520E	20	.787	32	1-1/4	110	4-5/16	50	2	20	3/4

2+2 Flutes

UB28138	13	1/2	50	2	110	4-5/16	60	2-3/8	12	1/2
UB2820E	20	.787	50	2	125	4-7/8	65	2-1/2	20	3/4

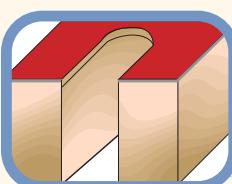
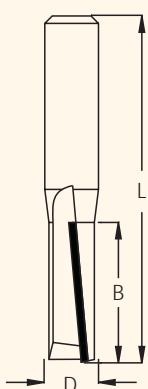
UB3 3 Flutes

Tool No.	D		B		L		C		d	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
UB35161	16	5/8	32	1-1/4	100	3-7/8	50	2	16	5/8
UB3520E	20	.787	32	1-1/4	110	4-5/16	50	2	20	3/4
UB3820E	20	.787	50	2	125	4-7/8	65	2-1/2	20	3/4

**PU****Up Shear - Straight Bits**

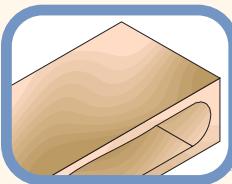
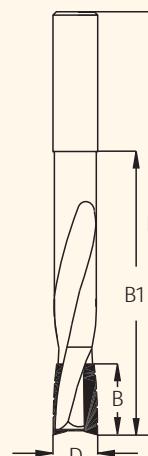
Heavy duty, faster feed rate and increased tool life. For deep grooving in hard wood, MDF and other man made materials.

Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
PU40958	9.5	3/8	25	1	70	2-3/4	12	1/2
PU41278	12.7	1/2	25	1	67	2-5/8	12	1/2
PU51278	12.7	1/2	32	1-1/4	73	2-7/8	12	1/2
PU61278	12.7	1/2	38	1-1/2	80	3-1/8	12	1/2
PU81278	12.7	1/2	51	2	108	4-1/4	12	1/2
PU51908	19.0	3/4	32	1-1/4	73	2-7/8	12	1/2
PU52548	25.4	1	32	1-1/4	73	2-7/8	12	1/2

**PS****Down Shear - Straight Bits**

For smoother cut and cleaner edge of laminated boards. Directs chips towards the work piece.

Tool No.	D		B		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
PS51278	12.7	1/2	32	1-1/4	73	2-7/8	12	1/2
PS61278	12.7	1/2	38	1-1/2	80	3-1/8	12	1/2
PS81278	12.7	1/2	51	2	108	4-1/4	12	1/2

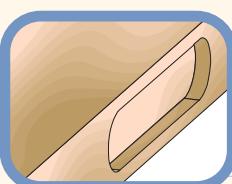
**DT**

12mm or 1/2" shank

Tool No.	D		B		B1		L	
	mm	inch	mm	inch	mm	inch	mm	inch
DT12708	12.7	1/2	25	1	72	2-7/8	151	6
DT16008	16.0	5/8	25	1	81	3-1/8	170	6-5/8
DT19008	19.0	3/4	32	1-1/4	120	4-23/32	170	6-5/8

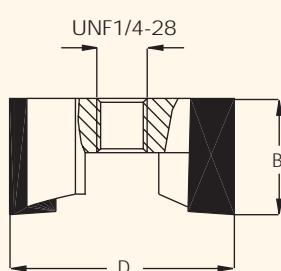
16mm or 5/8" shank

DT14001	14.0	.551	25	1	110	4-5/16	160	6-9/32
DT16001	16.0	5/8	25	1	120	4-23/32	170	6-5/8
DT18001	18.0	.709	25	1	120	4-23/32	170	6-5/8

**MB...0****Lock Mortising Cutters**

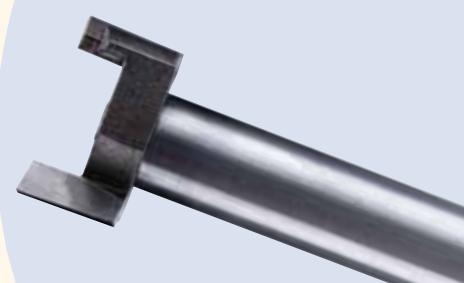
2 Flutes, screw type.

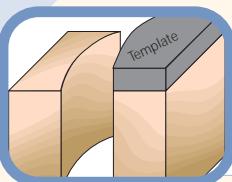
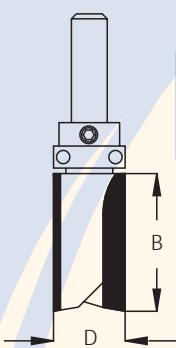
Down-Shear.



Tool No.	D		B	
	mm	inch	mm	inch
MB08000	12.7	1/2	16	5/8
MB10000	16.0	5/8	13	1/2
MB12000	19.0	3/4	13	1/2
MB14000	22.2	7/8	13	1/2
MB16000	25.4	1	13	1/2
MB18000	28.6	1-1/8	14.5	9/16
MB20000	31.8	1-1/4	16	5/8

Arbors: NMB0004. Available with 6mm, 1/4", 12mm and 1/2" shank



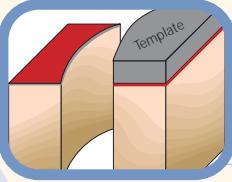
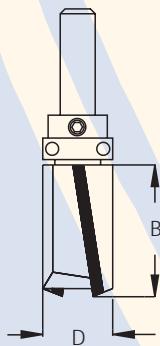
**PF****Straight Plunge Template Bits****NEW**

LONGER TOOL LIFE
New Generation
of Router Bits with
Harder Carbide

See Pg. 66

Tool No.	D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch		mm	inch
PF10954	9.5	3/8	6	1/4	B095063x2	6	1/4
PF20954	9.5	3/8	13	1/2	B095063x2	6	1/4
PF40954	9.5	3/8	25	1	B095063x2	6	1/4
PF11274	12.7	1/2	9	3/8	B127063	6	1/4
PF21274	12.7	1/2	13	1/2	B127063	6	1/4
PF31274	12.7	1/2	19	3/4	B127063	6	1/4
PF41274	12.7	1/2	25	1	B127063	6	1/4
PF51274	12.7	1/2	32	1-1/4	B127063	6	1/4
PF41604	16.0	5/8	25	1	B159063	6 or 8	1/4
PF41904	19.0	3/4	25	1	B190063	6	1/4
PF41605	16.0	5/8	25	1	B160080	8	
PF51605	16.0	5/8	32	1-1/4	B160080	8	
PF42605	26.0	1.024	25	1	B260100	8 or 9.5	3/8
PF31908	19.0	3/4	19	3/4	B190127x2	12	1/2
PF41908	19.0	3/4	25	1	B190127x2	12	1/2
PF81908	19.0	3/4	51	2	B190127x2	12	1/2
PF72548	25.4	1	45	1-3/4	B254127	12	1/2
PF62858	28.6	1-1/8	38	1-1/2	B285127	12	1/2
PF82858	28.6	1-1/8	51	2	B285127	12	1/2
PF73208	31.8	1-1/4	45	1-3/4	B318150	12	1/2

For retaining collars see page 64

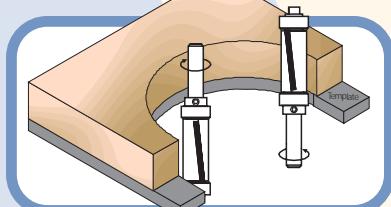
**PFS****Straight Down Shear Template Bits**

For better finish on laminates.



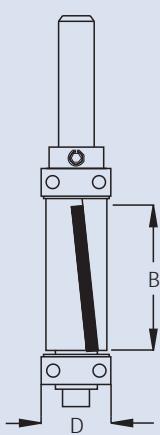
Tool No.	D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch		mm	inch
PFS5198	19.0	3/4	32	1-1/4	B190127x2	12	1/2
PFS6198	19.0	3/4	38	1-1/2	B190127x2	12	1/2
PFS8198	19.0	3/4	51	2	B190127x2	12	1/2

Retaining collar - PF19000

**FPS****Down Shear Multi Trimmer**

This adaptable double bearing guided cutter has down-shear design which ensures a clean cut even in difficult materials.

The two bearing design allows the cutter to be used with the template mounted on either side of the work and, consequently, it is possible to cut from either direction using only one template and without moving the template to the other side of the workpiece. This is especially useful when cutting curves which run both with and against the grain.

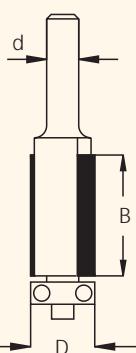


Tool No.	D		B		Bearings	Shank Dia.	
	mm	inch	mm	inch		mm	inch
FPS3134	12.7	1/2	16	5/8	B127048, B127063	6	1/4
FPS5198	19.0	3/4	32	1-1/4	B190063, B190127x2	12	1/2
FPS8198	19.0	3/4	51	2	B190063, B190127x2	12	1/2

For retaining collars see page 64

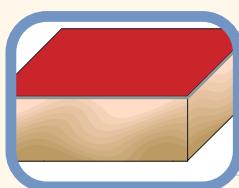
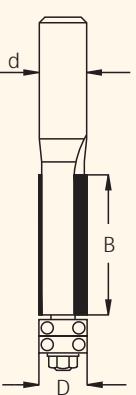
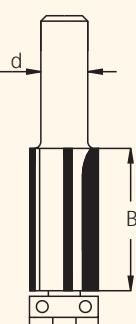
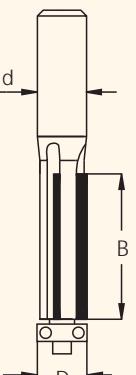
Reminder:

Shank Dia.	6mm	1/4"	8mm	12mm	1/2"
Last Digit	3	4	5	2	8



WHEN SIZE MATTERS
Innovative Line
of Miniature Bearing
Router Bits

See Pg. 67



F

F2 2 Flutes

FLUSH TRIM BITS

With Ball Bearing Guide.

Tool No.	D		B		Bearing	Shank Dia. (d)	
	mm	inch	mm	inch		mm	inch
F210484	4.8	3/16	11	7/16	B048024	6	1/4
F220634	6.3	1/4	13	1/2	B063032	6	1/4
F230634	6.3	1/4	19	3/4	B063032	6	1/4
F240634	6.3	1/4	25	1	B063032	6	1/4
MF22084	8.0	5/16	13	1/2	B080040	6	1/4
F240804	8.0	5/16	25	1	B080040	6	1/4
F220954	9.5	3/8	13	1/2	B095048	6	1/4
F240954	9.5	3/8	25	1	B095048	6	1/4
F250954	9.5	3/8	32	1-1/4	B095048	6	1/4
F221274	12.7	1/2	13	1/4	B127048	6	1/4
F241274	12.7	1/2	25	1	B127048	6	1/4
F251274	12.7	1/2	32	1-1/4	B127048	6	1/4
F220955	9.5	3/8	13	1/2	B095048	8	-
F240955	9.5	3/8	25	1	B095048	8	-
F221275	12.7	1/2	13	1/2	B127048	8	-
F241275	12.7	1/2	25	1	B127048	8	-
F221278	12.7	1/2	13	1/2	B127048	12	1/2
F241278	12.7	1/2	25	1	B127048	12	1/2
F261278	12.7	1/2	38	1-1/2	B127048	12	1/2
F281278	12.7	1/2	51	2	B127048	12	1/2

F3 3 Flutes

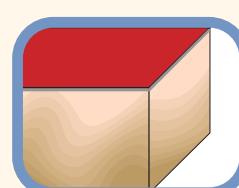
For better surface finish and longer tool life.

Tool No.	D		B		Bearing	Shank Dia. (d)	
	mm	inch	mm	inch		mm	inch
F321274	12.7	1/2	13	1/2	B127048	6	1/4
F341274	12.7	1/2	25	1	B127048	6 or 8	1/4
F322204	22.0	7/8	13	1/2	B220070	6	1/4
F321278	12.7	1/2	13	1/2	B127048	12	1/2
F341278	12.7	1/2	25	1	B127048	12	1/2
F361278	12.7	1/2	38	1-1/2	B127048	12	1/2
F381278	12.7	1/2	51	2	B127048	12	1/2

F4 4 Flutes

For better surface finish and longer tool life.

Tool No.	D		B		Bearing	Shank Dia. (d)	
	mm	inch	mm	inch		mm	inch
F441908	19.0	3/4	25	1	B190063	12	1/2
F461908	19.0	3/4	38	1-1/2	B190063	12	1/2
F481908	19.0	3/4	51	2	B190063	12	1/2



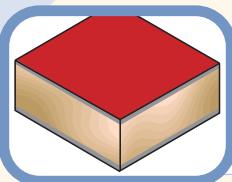
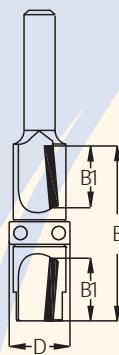
F

Flush Trim Bits

With double ball bearing for added stability.



Tool No.	D		B		Flutes	Bearing	Shank Dia. (d)	
	mm	inch	mm	inch			mm	inch
F240984	9.5	3/8	25	1	2	B095048x2	6	1/4
F361288	12.7	1/2	38	1-1/2	3	B127048x2	12	1/2
F261288	12.7	1/2	38	1-1/2	2	B127048x2	12	1/2
F281288	12.7	1/2	51	2	2	B127048x2	12	1/2

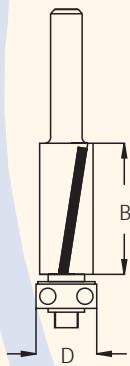


FT

Double Sided Laminate Trimmer

Up/Down shear cutter assembly. Can be used for laminated boards of thickness 11mm (7/16") up to 35mm (1-3/8").

Tool No.	D	B1	B	Bearing	Shank Dia.
	mm inch	mm inch	mm inch		mm inch
FT51274	12.7 1/2	13 1/2	35 1-3/8	B127063	6 or 8 1/4
FT51278	12.7 1/2	13 1/2	35 1-3/8	B127063	12 1/2

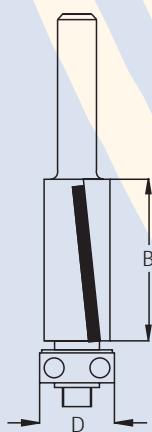


FU

Up Shear Laminate Trimmers

With positive shear angle.

Tool No.	D	B	Bearing	Shank Dia.
	mm inch	mm inch		mm inch
FU41274	12.7 1/2	25 1	B127048	6 1/4
FU61908	19.0 3/4	38 1-1/2	B190063	12 1/2
FU81908	19.0 3/4	51 2	B190063	12 1/2

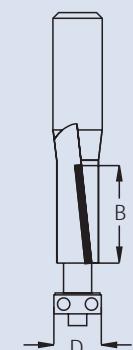


FS

Laminate Trimmers - Down Shear

Eliminates chipping, cleaner edge when trimming veneered plywood and laminated boards.

Tool No.	D	B	Bearing	Shank Dia.
	mm inch	mm inch		mm inch
FS20954	9.5 3/8	13 1/2	B095048	6 1/4
F221604	16.0 5/8	16 5/8	B160050	6 1/4
F221904	19.0 3/4	16 5/8	B190063	6 1/4
FS41274	12.7 1/2	25 1	B127048	6 or 8 1/4
FS41905	19.0 3/4	25 1	B190063	8 -
FS41278	12.7 1/2	25 1	B127048	12 1/2
FS61908	19.0 3/4	38 1-1/2	B190063	12 1/2
FS81908	19.0 3/4	51 2	B190063	12 1/2

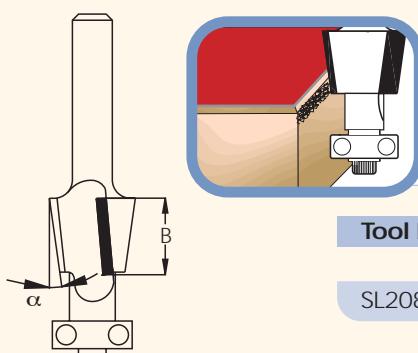


FSG

Flush Trim Bits - Down Shear

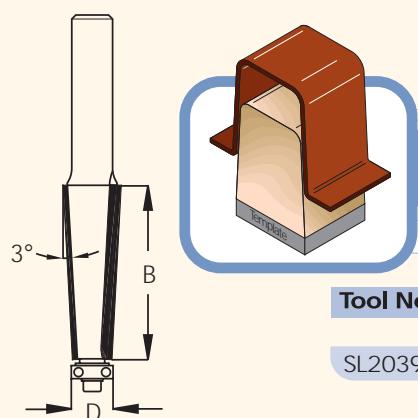
Smooth guiding despite excess of glue.

Tool No.	D	B	Bearing	Shank Dia.
	mm inch	mm inch		mm inch
FSG1274	12.7 1/2	25 1	B127048	6 1/4
FSG1278	12.7 1/2	25 1	B127048	12 1/2

**SL**

Bevel Trim Bit - Down Shear
Smooth guiding despite excess of glue.

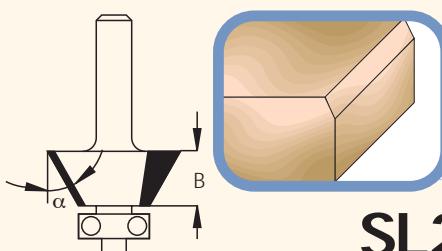
Tool No.	α degrees	B mm	B inch	Bearing	Shank Dia. mm	Shank Dia. inch
SL20804	8	12	1/2	B127048	6	1/4

**SL****3° Patternmaker**

For making wood vacuum-forming molds.
It can be used to bevel the leading edge on a door.



Tool No.	B mm	B inch	D mm	D inch	Bearing	Shank Dia. mm	Shank Dia. inch
SL20398	54	2-1/8	12.7	1/2	B127048	12	1/2

**SL****SL2 2 Flutes****Bevel Trim Bits**

Tool No.	α degrees	B mm	B inch	Bearing	Shank Dia. mm	Shank Dia. inch
SL00074	7	9.5	3/8	B048024	6	1/4
SL00454	45	6.3	1/4	B048024	6	1/4
MSL2454	45	6	1/4	B080040	6	1/4
SL21504	15	6	1/4	B127048	6	1/4
SL21514	15	16	5/8	B127048	6	1/4
SL22504	25	6	1/4	B127048	6	1/4
SL22514	25	16	5/8	B095048	6	1/4
SL24504	45	6	1/4	B127048	6	1/4
SL24514	45	11	7/16	B127048	6	1/4
SL21505	15	6	1/4	B127048	8	
SL22505	25	6	1/4	B127048	8	
SL24505	45	6	1/4	B127048	8	
SL24515	45	11	7/16	B127048	8	
SL21128	11.25	22	7/8	B127048	12	1/2
SL22258	22.5	22	7/8	B127048	12	1/2
SL22518	25	18	23/32	B127048	12	1/2
SL24518	45	11	7/16	B127048	12	1/2
SL24538	45	19	3/4	B127048	12	1/2
SL24548	45	25	1	B127048	12	1/2



WHEN SIZE MATTERS
Innovative Line
of Miniature Bearing
Router Bits

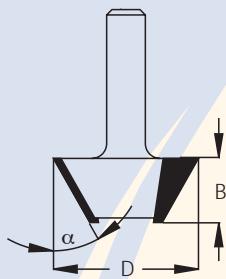
See Pg. 67

SL3**3 Flutes**

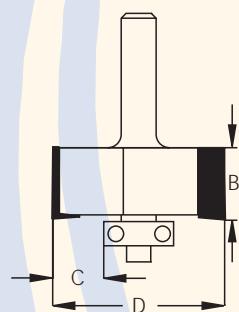
For better surface finish and longer tool life.

SL30704	7	10	3/8	B160050	6	1/4
SL31504	15	10	3/8	B160050	6	1/4
SL32204	22	10	3/8	B160050	6	1/4
SL33004	30	10	3/8	B160050	6	1/4
SL34504	45	11	7/16	B127048	6	1/4
SL34508	45	11	7/16	B127048	12	1/2



**SZ****Bevel Trimming Bits**

Tool No.	α degrees	D		B		Flutes	Shank Dia.	
		mm	inch	mm	inch		mm	inch
SZ21504	15	16.0	5/8	16	5/8	2	6	1/4
SZ32214	22	24.0	31/32	16	5/8	3	6	1/4
SZ34504	45	35.0	1-3/8	10	3/8	3	6	1/4
SZ32218	22	24.0	31/32	16	5/8	3	12	1/2
SZ34508	45	35.0	1-3/8	10	3/8	3	12	1/2

**E****E2 2 Flutes**

Tool No.	C		B		D		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
E220504	4.8	3/16	12.7	1/2	22.2	7/8	B127048	6	1/4
E220954	9.5	3/8	12.7	1/2	31.8	1-1/4	B127048	6 or 8	1/4
E221114	11.1	7/16	12.7	1/2	31.8	1-1/4	B095048	6 or 8	1/4
E220958	9.5	3/8	12.7	1/2	31.8	1-1/4	B127048	12	1/2
E221118	11.1	7/16	12.7	1/2	31.8	1-1/4	B095048	12	1/2

E3 3 Flutes For better surface finish and longer tool life.**NEW**

E320324	3.2	1/8	12.7	1/2	19.0	3/4	B127048	6	1/4
E320504	4.8	3/16	12.7	1/2	22.2	7/8	B127048	6	1/4
E331508	15.0	19/64	19.0	3/4	52.0	2-1/16	B220060	12	1/2
E332008	20.0	25/32	19.0	3/4	52.0	2-1/16	B120060x2	12	1/2

E4 4 Flutes For better surface finish and longer tool life.

E420954	9.5	3/8	12.7	1/2	31.8	1-1/4	B127048	6	1/4
E420958	9.5	3/8	12.7	1/2	31.8	1-1/4	B127048	12	1/2

**ES****Rabbeting Set**

4 Ball Bearing guides for different rabbets.

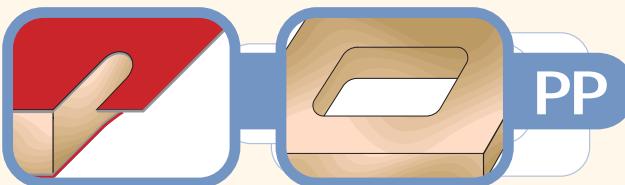
Tool No.	D		C	Bearing
	mm	inch		
ES20004	31.8	1-1/4	6.3	1/4
			8.0	5/16
			9.5	3/8
			11.0	7/16
				B095063

Available with 6 mm, 8 mm, 1/4", 12 mm and 1/2" shank.

Table for choosing the tool and ball bearing guide, according to the required rabbet (C)

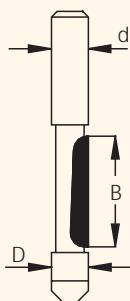
C mm inch	Tool No.	Bearing	C mm inch		Tool No.	Bearing
			mm	inch		
1.6 1/16	E320324	B160048	9.5 3/8	E220954, E420954	B127048	
3.2 1/8	E320324	B127048	11 7/16	E220954, E420954	B095048	
	E220504, E320504	B160048		E221114	B095048	
4.8 3/16	E320324	B095048	15 19/32	E332008	B220060	
	E220504, E320504	B127048	16.5 41/64	E332008	B190060	
6.3 1/4	E220504, E320504	B095048	18.5 47/64	E332008	B150060	
8 5/16	E220954, E420954	B160048	20 25/32	E332008	B120060	

Before ordering another tool, remember to check if you can achieve the new desired rabbet by changing the ball bearing.



PANEL PILOT BITS

Panel Pilot Bits are designed for fast cut out work, using a template. Widely used in the caravan industry.

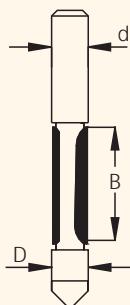


PP Carbide Tipped - Single Flute

Hardened Boring Point.

Tool No.	D		B		Shank Dia. (d)	
	mm	inch	mm	inch	mm	inch
PP30634	6.3	1/4	19	3/4	6 or 8	1/4
PP30804	8.0	5/16	19	3/4	6 or 8	1/4
PP40956	9.5	3/8	25	1	9.5	3/8
PP51278	12.7	1/2	30	1-3/16	12	1/2
PP81278	12.7	1/2	51	2	12	1/2
PP81608	16.0	5/8	51	2	12	1/2

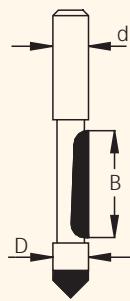
- with staggered flutes



PP2 Carbide Tipped - Double Flute

Hardened Boring Point.

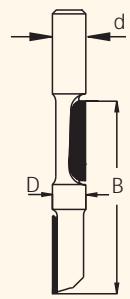
Tool No.	D		B		Shank Dia. (d)	
	mm	inch	mm	inch	mm	inch
PP20634	6.3	1/4	19	3/4	6	1/4
PP20956	9.5	3/8	25	1	9.5	3/8
PP21278	12.7	1/2	30	1-3/16	12	1/2
PP28128	12.7	1/2	51	2	12	1/2



PPJ Carbide Tipped - Down Shear

Single Flute, Carbide boring point. Designed for plunging into hard materials.

Tool No.	D		B		Shank Dia. (d)	
	mm	inch	mm	inch	mm	inch
PPJ2063	6.0	.236	19	3/4	6	-
PPJ0956	9.5	3/8	25	1	9.5	3/8

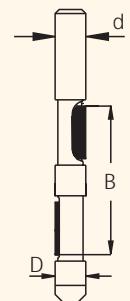


PPS

Carbide Tipped, Staggered, with Center Pilot.

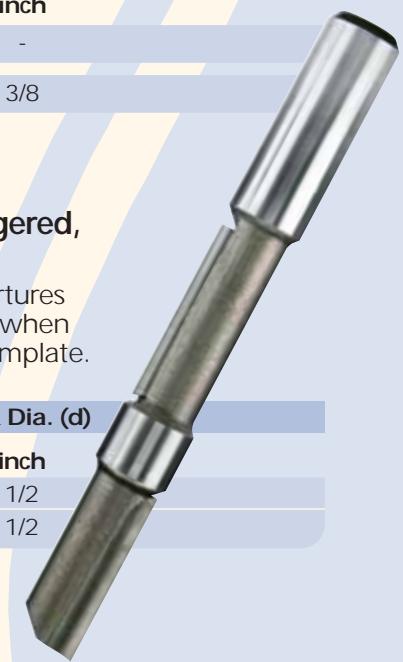
Used for cutting out apertures in ceilings and side walls when the frame can act as a template.

Tool No.	D		B		Shank Dia. (d)	
	mm	inch	mm	inch	mm	inch
PPS9138	12.7	1/2	63	2-1/2	12	1/2
PPS9128	12.7	1/2	71	2-13/16	12	1/2



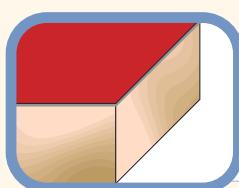
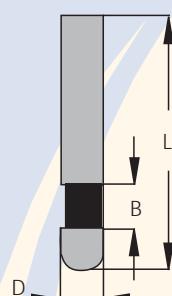
PPT Carbide Tipped with 2 Pilots and Hardened Boring Point

Tool No.	D		B		Flutes	Shank Dia. (d)	
	mm	inch	mm	inch		mm	inch
PPT8956	9.5	3/8	45	1-25/32	1+1	9.5	3/8
PPT9128	12.7	1/2	63	2-1/2	2+2	12	1/2





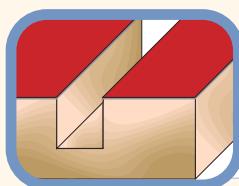
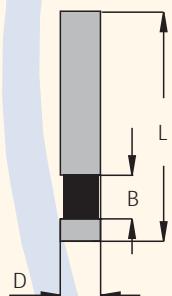
SC SOLID CARBIDE BITS

**SCF**

Flush Trimmer



Tool No.	D	B	L	Shank Dia.
	mm inch	mm inch	mm inch	mm inch
SCF1634	6 1/4	6 1/4	38 1-1/2	6 1/4
SCF2634	6 1/4	9.5 3/8	38 1-1/2	6 1/4

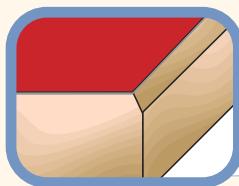
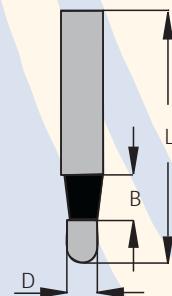
**SCF**

Flush Trimmer

Without ball end for flat dados.

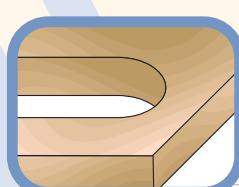
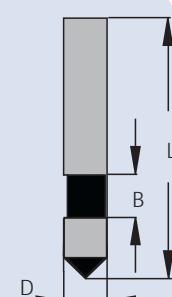


Tool No.	D	B	L	Shank Dia.
	mm inch	mm inch	mm inch	mm inch
SCF1644	6.35 1/4	6 1/4	35 1-3/8	- 1/4

**SCSL**

Bevel Trimmer 7°

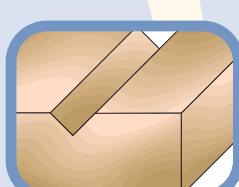
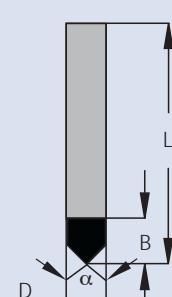
Tool No.	D	B	L	Shank Dia.
	mm inch	mm inch	mm inch	mm inch
SCSL074	4.8 3/16	6 1/4	38 1-1/2	6 1/4
SCSL074X	4.8 3/16	6 1/4	63 2-1/2	- 1/4

**SCPP**

Boring & Flush Trimmer

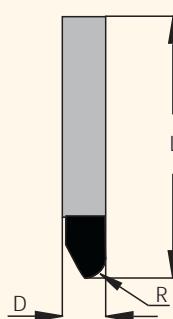


Tool No.	D	B	L	Shank Dia.
	mm inch	mm inch	mm inch	mm inch
SCPP634	6 1/4	6 1/4	38 1-1/2	6 1/4
SCPP644	6 1/4	9.5 3/8	38 1-1/2	6 1/4

**SCV**

"V" Grooving Veining Bit

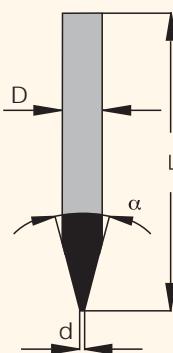
Tool No.	α	D	B	L	Shank Dia.
	Degrees	mm inch	mm inch	mm inch	mm inch
SCV6004	60	6 1/4	12 15/32	38 1-1/2	6 1/4
SCV9004	90	6 1/4	9.5 3/8	38 1-1/2	6 1/4
SCV9034	90	3.2 1/8	6 1/4	38 1-1/2	- 1/4

**SCRB****Veining Bits**

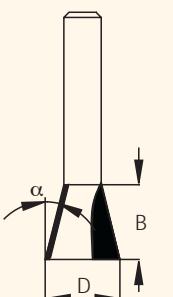
Tool No.	R		D		L		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
SCRB324	1.6	1/16	3.2	1/8	38	1-1/2	6	1/4
SCRB404	2.0	5/64	4.0	5/32	38	1-1/2	6	1/4
SCRB484	2.4	3/32	4.8	3/16	38	1-1/2	6	1/4
SCRB634	3.2	1/8	6.3	1/4	38	1-1/2	-	1/4

NEW**SE****Engraving Bits with Mirror Finish Carbide**

For sign making and PCB milling. Used with CNC and industrial engraving machines for wood, plastic, brass, aluminum, copper and different composites.



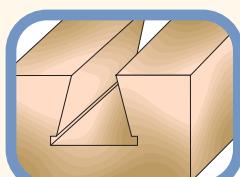
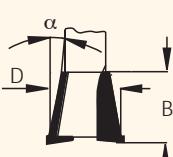
Tool No.	α degrees	D		d		L	
		mm	inch	mm	inch	mm	inch
SE300130m	30	3	-	0.10	.005	40	1-9/16
SE450130m	45	3	-	0.10	.005	40	1-9/16
SE600130m	60	3	-	0.10	.005	40	1-9/16
SE900130m	90	3	-	0.10	.005	40	1-9/16
SE300160m	30	6	-	0.10	.005	40	1-9/16
SE30014	30	6	1/4	0.10	.005	50	2
SE30024	30	6	1/4	0.25	.010	50	2
SE30054	30	6	1/4	0.50	.020	50	2
SE30104	30	6	1/4	1.00	.040	50	2
SE30154	30	6	1/4	1.50	.060	50	2
SE450160m	45	6	-	0.10	.005	40	1-9/16
SE600160m	60	6	-	0.10	.005	40	1-9/16
SE900160m	90	6	-	0.10	.005	40	1-9/16

**Z****Dovetail Bits**

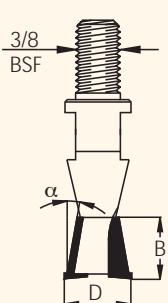
Tool No.	α degrees	D		B		Shank Dia.	
		mm	inch	mm	inch	mm	inch
Z100904	9	9.5	3/8	9.5	3/8	6 or 8	1/4
Z131404	14	12.7	1/2	12.5	1/2	6 or 8	1/4
Z100908	9	9.5	3/8	9.5	3/8	12	1/2
Z071608	7	16.0	5/8	22.0	7/8	12	1/2
Z071908	7	19.0	3/4	22.0	7/8	12	1/2
Z072208	7	22.0	7/8	22.0	7/8	12	1/2
Z131408	14	12.7	1/2	12.5	1/2	12	1/2
Z142548	14	25.4	1	25.0	1	12	1/2

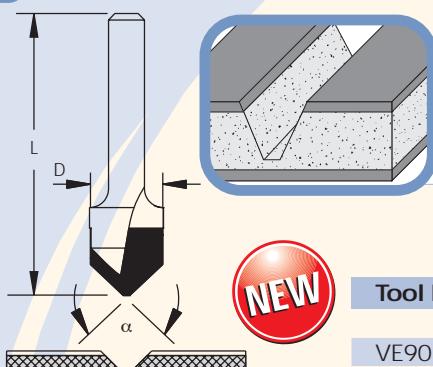
With relieving teeth

Z141404	14	12.7	1/2	13.0	1/2	6 or 8	1/4
---------	----	------	-----	------	-----	--------	-----

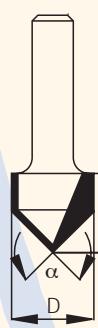
**ZB****Dovetail Bit
For Brookman Machines**

Tool No.	α degrees	D		B	
		mm	inch	mm	inch
ZB13146	10	14.3	9/16	12.7	1/2





After folding

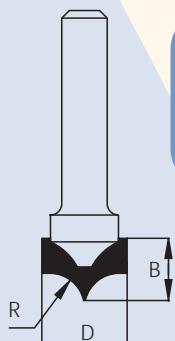
**VE****"V"-Grooving for Shaping Panels**

Designed for folding and shaping Aluminum Composite cladding Materials Such as Alucobond®, Dibond® etc. Routing V-shaped grooves into the aluminum cover and part of the polyethylene core, allows folding the remaining material by hand.

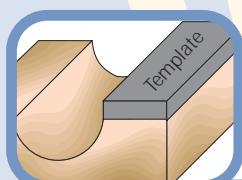
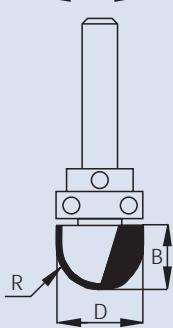
Tool No.	α degrees	B degrees	D mm inch	L mm inch	Shank Dia. mm inch
VE90124	90	90	13 1/2	57 2-1/4	6 or 8 1/4
VE13504	135	45	18 23/32	57 2-1/4	6 or 8 1/4
VE90128	90	90	13 1/2	67 2-5/8	12 1/2

"V" - Grooving Bits

Tool No.	α degrees	D mm inch	B mm inch	Shank Dia. mm inch
MV60954	60	9.5 3/8	9 3/8	6 1/4
V900954	90	9.5 3/8	11 7/16	6 or 8 1/4
V900954	90	9.5 3/8	11 7/16	6 or 8 1/4
V901274	90	12.7 1/2	12 1/2	6 or 8 1/4
V901604	90	16.0 5/8	13 1/2	6 or 8 1/4
V901904	90	19.0 3/4	16 5/8	6 or 8 1/4
V902504	90	25.4 1	19 3/4	6 or 8 1/4
V901278	90	12.7 1/2	12 1/2	12 1/2
V901608	90	16.0 5/8	13 1/2	12 1/2
V901908	90	19.0 3/4	16 5/8	12 1/2
V902508	90	25.4 1	19 3/4	12 1/2
V903208	90	31.8 1-1/4	25 1	12 1/2
V903808	90	38.1 1-1/2	32 1-1/4	12 1/2

RU**Panel and Veining Bits**

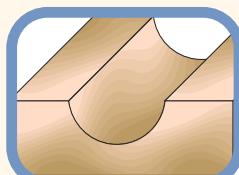
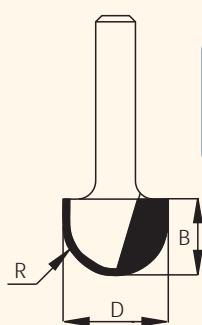
Tool No.	R mm inch	D mm inch	B mm inch	Shank Dia. mm inch
RU05004	4.8 3/16	9.5 3/8	7.5 19/64	6 1/4
RU06004	6.0 1/4	13.0 1/2	12.5 1/2	6 1/4
RU07004	7.5 19/64	14.5 37/64	19.5 3/4	6 1/4

**DB****Core Box Template Bits**

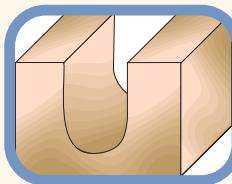
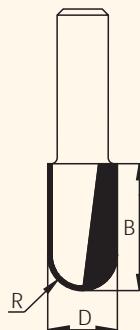
With Ball Bearing Guide.

Tool No.	D = 2R		B		Bearing	Shank Dia.	
	mm	inch	mm	inch		mm	inch
DB12004	12.7	1/2	9	3/8	B127063	6	1/4
DB16004	16.0	5/8	9	3/8	B159063	6	1/4
DB19004	19.0	3/4	11	7/16	B190063	6	1/4
DB19008	19.0	3/4	11	7/16	B190127	12	1/2
DB25008	25.4	1	16	5/8	B254127	12	1/2

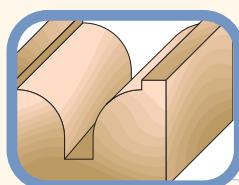
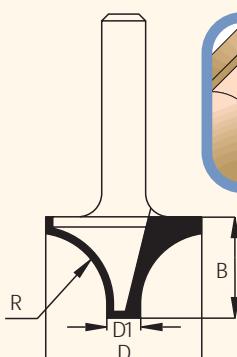
For retaining collar see page 64

**RB****Core Box Bits**

Tool No.	R		D		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
RB06004	3.2	1/8	6.3	1/4	5.5	7/32	6 or 8	1/4
RB08004	4.0	5/32	8.0	5/16	6	1/4	6 or 8	1/4
RB10004	4.8	3/16	9.5	3/8	6	1/4	6 or 8	1/4
RB12004	6.3	1/4	12.7	1/2	9	3/8	6 or 8	1/4
RB16004	8.0	5/16	16.0	5/8	9.5	3/8	6 or 8	1/4
RB19004	9.5	3/8	19.0	3/4	11	7/16	6 or 8	1/4
RB22004	11.1	7/16	22.2	7/8	14	9/16	6 or 8	1/4
RB25004	12.7	1/2	25.4	1	16	5/8	6 or 8	1/4
RB12008	6.3	1/4	12.7	1/2	9	3/8	12	1/2
RB16008	8.0	5/16	16.0	5/8	9.5	3/8	12	1/2
RB19008	9.5	3/8	19.0	3/4	11	7/16	12	1/2
RB22008	11.1	7/16	22.2	7/8	14	9/16	12	1/2
RB25008	12.7	1/2	25.4	1	16	5/8	12	1/2

**RBL****Core Box Bits - Extra Deep**

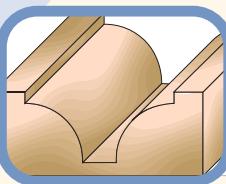
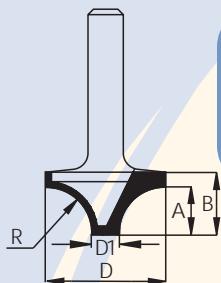
Tool No.	R		D		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
RBL0324	1.6	1/16	3.2	1/8	9.5	3/8	6 or 8	1/4
RBL0484	2.4	3/32	4.8	3/16	13	1/2	6 or 8	1/4
RBL0634	3.2	1/8	6.3	1/4	13	1/2	6 or 8	1/4
RBL0804	4.0	5/32	8.0	5/16	13	1/2	6 or 8	1/4
RBL1008	4.8	3/16	9.5	3/8	25	1	12	1/2
RBL1278	6.3	1/4	12.7	1/2	32	1-1/4	12	1/2
RBL1408	7.1	9/32	14.2	9/16	32	1-1/4	12	1/2
RBL1608	7.9	5/16	15.9	5/8	32	1-1/4	12	1/2
RBL1908	9.5	3/8	19.0	3/4	32	1-1/4	12	1/2
RBL2208	11.1	7/16	22.2	7/8	32	1-1/4	12	1/2
RBL2508	12.7	1/2	25.4	1	32	1-1/4	12	1/2

**RV****Plunging Rounding Over Bits**

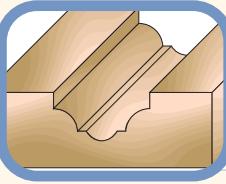
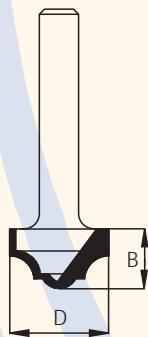
Tool No.	R		D		D1		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
RV05004	4.8	3/16	16.0	5/8	6.3	1/4	14	9/16	6 or 8	1/4
RV06004	6.3	1/4	19.0	3/4	6.3	1/4	13	1/2	6 or 8	1/4
RV08004	8.0	5/16	22.2	7/8	6.3	1/4	14	9/16	6 or 8	1/4
RV10004	9.5	3/8	25.4	1	6.3	1/4	16	5/8	6 or 8	1/4
RV12005	12.7	1/2	35.0	1-3/8	9.5	3/8	25	1	8	-
RV16005	16.0	5/8	44.5	1-3/4	12.7	1/2	32	1-1/4	8	-
RV05008	4.8	3/16	16.0	5/8	6.3	1/4	14	9/16	12	1/2
RV06008	6.3	1/4	19.0	3/4	6.3	1/4	13	1/2	12	1/2
RV08008	8.0	5/16	22.2	7/8	6.3	1/4	14	9/16	12	1/2
RV10008	9.5	3/8	25.4	1	6.3	1/4	16	5/8	12	1/2
RV12008	12.7	1/2	35.0	1-3/8	9.5	3/8	25	1	12	1/2
RV16008	16.0	5/8	44.5	1-3/4	12.7	1/2	32	1-1/4	12	1/2
RV19008	19.0	3/4	50.8	2	12.7	1/2	38	1-1/2	12	1/2

Reminder:

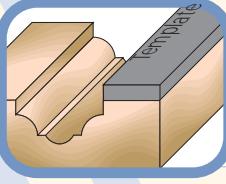
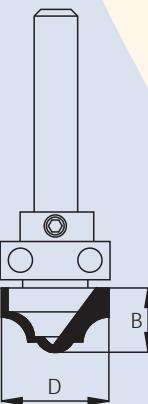
Shank Dia.	6mm	1/4"	8mm	12mm	1/2"
Last Digit	3	4	5	2	8

**RH****Plunging Beading & Rounding Over Bits**

Tool No.	R=A		D		D1		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
RH03004	3.2	1/8	9.5	3/8	3.3	1/8	7	9/32	6	1/4
RH05004	4.8	3/16	13.5	17/32	4.0	5/32	9.5	3/8	6	1/4
RH06004	6.3	1/4	17.5	11/16	4.8	3/16	13	1/2	6	1/4
RH08004	8.0	5/16	22.2	7/8	6.3	1/4	14	9/16	6	1/4
RH10004	9.5	3/8	25.4	1	6.3	1/4	16	5/8	6	1/4
RH12004	12.7	1/2	31.8	1-1/4	6.3	1/4	17	11/16	6	1/4
RH05008	4.8	3/16	13.5	17/32	4.0	5/32	9.5	3/8	12	1/2
RH06008	6.3	1/4	17.5	11/16	4.8	3/16	13	1/2	12	1/2
RH08008	8.0	5/16	22.2	7/8	6.3	1/4	14	9/16	12	1/2
RH10008	9.5	3/8	25.4	1	6.3	1/4	16	5/8	12	1/2
RH12008	12.7	1/2	31.8	1-1/4	6.3	1/4	17	11/16	12	1/2

**RC****Plunging Classical Bits**

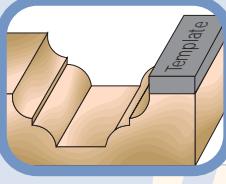
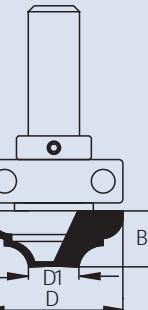
Tool No.	D		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch
MRC0304	12.7	1/2	8	5/16	6 or 8	1/4
RC03004	12.7	1/2	9	3/8	6 or 8	1/4
RC05004	19.0	3/4	13	1/2	6 or 8	1/4
RC06004	25.4	1	16	5/8	6 or 8	1/4
RC05008	19.0	3/4	13	3/4	12	1/2
RC06008	25.4	1	16	5/8	12	1/2
RC10008	35.0	1-3/8	15	19/32	12	1/2

**DC****Classical Template Bits**

With Ball Bearing Guide.

Tool No.	D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch		mm	inch
DC03004	12.7	1/2	9	3/8	B127063	6	1/4
DC05004	19.0	3/4	13	1/2	B190063	6	1/4
DC06004	25.4	1	16	5/8	B254127	6	1/4
DC06008	25.4	1	16	5/8	B254127	12	1/2
DC10008	35.0	1-3/8	15	19/32	B350150	12	1/2

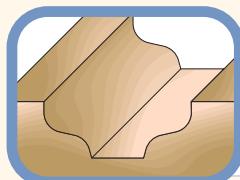
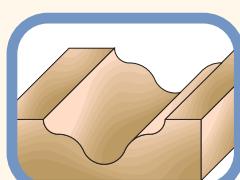
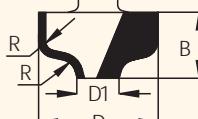
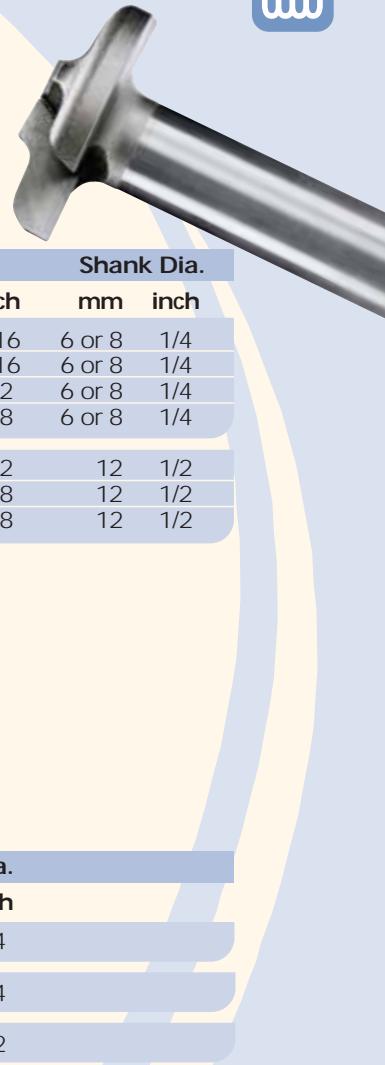
For retaining collar see page 64

**DM****Panelling Flat Bottom Groover**

With Ball Bearing Guide.

Tool No.	R		D		D1		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch		mm	inch
DM35008	5.5	7/32	35	1-3/8	12.7	1/2	14	9/16	B350150	12	1/2

Retaining collar - PF12700

**RA, RRA****Ogee Bits****RRC****Plunge Ogee Bits****Tool No.****D****B****Shank Dia.****mm****inch****mm****inch****mm****inch**

MRR1204

12.7

1/2

8

5/16

6 or 8

1/4

RRC2704

27.0

1-1/16

12

15/32

6 or 8

1/4

RRC2708

27.0

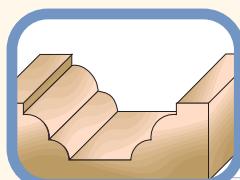
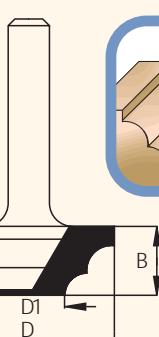
1-1/16

12

15/32

12

1/2

**RR****Plunging Classical Bits****Tool No.****R****D****D1****B****mm****inch****mm****inch****mm****inch****mm****inch**

RR42544

4.0

5/32

25.4

1

10

3/8

16

5/8

6

1/4

RR42548

4.0

5/32

25.4

1

10

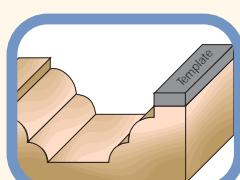
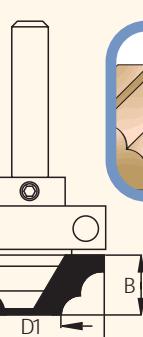
3/8

16

5/8

12

1/2

**DL****Plunging Classical Template Bits**

With Ball Bearing Guide.

**Tool No.****D****B****D1****Bearing****Shank Dia.****mm****inch****mm****inch****mm****inch**

DL42544

25.4

1

16

5/8

10

3/8

B260100

6

1/4

DL42548

25.4

1

16

5/8

10

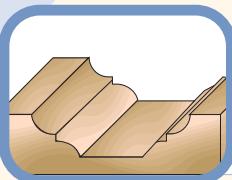
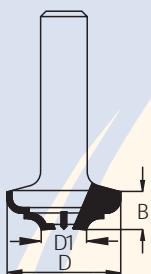
3/8

B254127

12

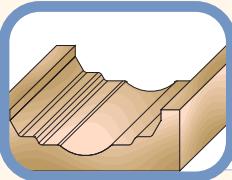
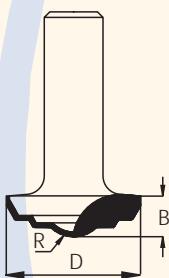
1/2

For retaining collar see page 64

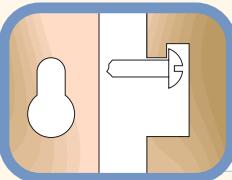
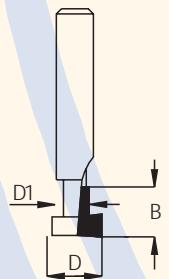
**RR****Classical Bits**

With Carbide Plunging Tip.

Tool No.	D		D1		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
RR32008	31.8	1-1/4	12.5	1/2	11	7/16	12	1/2

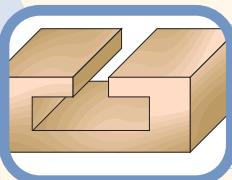
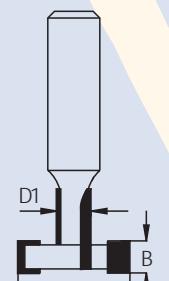
**RRI****Classical Bits**

Tool No.	D		R		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
RRI0508	36.5	1-7/16	9	.354	9.5	3/8	12	1/2

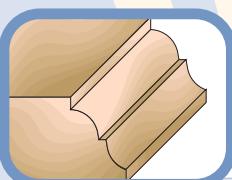
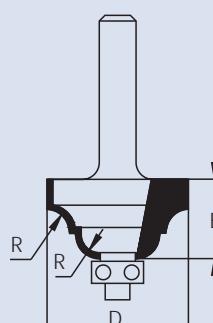
**MM****Key Hole Bits - Single Flute**

For "Key Hole" slots in picture frames.

Tool No.	D		D1		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
MM10954	9.5	3/8	4.8	3/16	9.5	3/8	6 or 8	1/4
MM12954	12.7	1/2	8.0	5/16	9.5	3/8	6 or 8	1/4

**MM****T-Slot Bits**

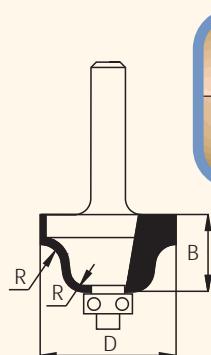
Tool No.	D		D1		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
MM28208	28.0	1-3/32	9.5	3/8	8.0	5/16	12	1/2
MM29198	29.0	1.142	12.7	1/2	10.0	.394	12	1/2
MM29208	29.0	1.142	9.5	3/8	9.5	3/8	12	1/2
MM35228	35.0	1-3/8	12.7	1/2	9.5	3/8	12	1/2

**RS****Classical Bits**

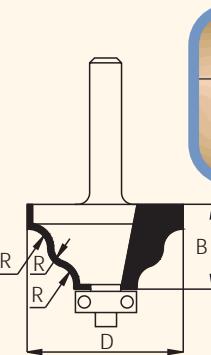
With Ball Bearing Guide.



Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
MRS0304	3.0	1/8	20.0	25/32	10	25/64	B080040	6	1/4
RS04004	4.0	5/32	25.4	1	14	9/16	B095048	6 or 8	1/4
RS06004	6.3	1/4	35.0	1-3/8	19	3/4	B095048	6 or 8	1/4
RS04008	4.0	5/32	25.4	1	14	9/16	B095048	12	1/2
RS06008	6.3	1/4	35.0	1-3/8	19	3/4	B095048	12	1/2

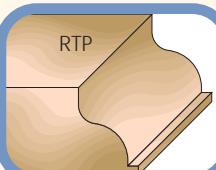
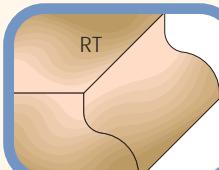
**RD**
Roman Ogee Bits
 With Ball Bearing Guide.

Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
MRD0304	3.0	1/8	20.0	25/32	10	25/64	B080040	6	1/4
RD04004	4.0	5/32	25.4	1	14.5	9/16	B095048	6 or 8	1/4
RD06004	6.3	1/4	35.0	1-3/8	19	3/4	B095048	6 or 8	1/4
RD04008	4.0	5/32	25.4	1	14.5	9/16	B095048	12	1/2
RD06008	6.3	1/4	35.0	1-3/8	19	3/4	B095048	12	1/2

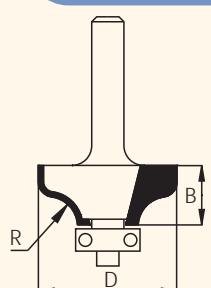
**RJ****Wavy Edge Bits**

With Ball Bearing Guide.

Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
MRJ0304	2.5	3/32	20.0	25/32	10	25/64	B080040	6	1/4
RJ04004	4.0	5/32	31.8	1-1/4	17.5	11/16	B127048	6 or 8	1/4
RJ04008	4.0	5/32	31.8	1-1/4	17.5	11/16	B127048	12	1/2

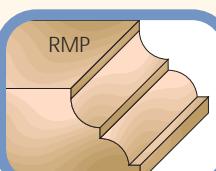
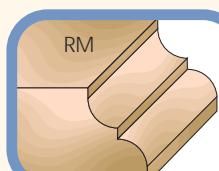
**RT/RTP****Ogee Bits**

With Ball Bearing Guide.

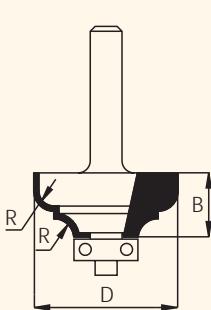


Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
RT04004	4.0	5/32	28.6	1-1/8	13	1/2	B127048	6 or 8	1/4
RT06004	6.3	1/4	35.0	1-3/8	17	11/16	B127048	6 or 8	1/4
RT04008	4.0	5/32	28.6	1-1/8	13	1/2	B127048	12	1/2
RT06008	6.3	1/4	35.0	1-3/8	17	11/16	B127048	12	1/2

For type RTP use Ball Bearing Guide - B095048
 Ordering RTP type - change the tool No. prefix from RT to RTP

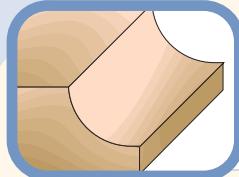
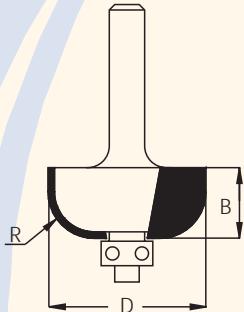
**RM/RMP****Classical Bits**

With Ball Bearing Guide.



Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
MRM0304	3.0	1/8	20.0	25/32	10	25/64	B080040	6	1/4
RM04004	4.0	5/32	28.6	1-1/8	13	1/2	B127048	6 or 8	1/4
RM06004	6.3	1/4	35.0	1-3/8	17	11/16	B127048	6 or 8	1/4
RM04008	4.0	5/32	28.6	1-1/8	13	1/2	B127048	12	1/2
RM06008	6.3	1/4	35.0	1-3/8	17	11/16	B127048	12	1/2

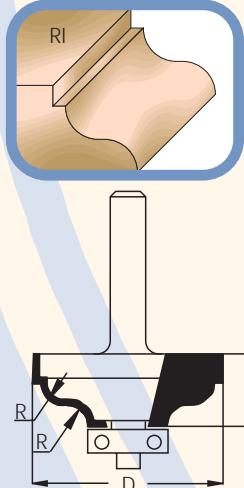
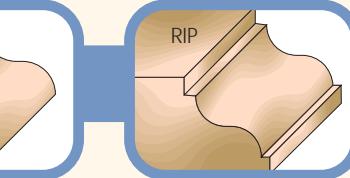
For type RMP use Ball Bearing Guide - B095048
 Ordering RMP type - change the tool No. prefix from RM to RMP

**RZ****Cove Bits**

With Ball Bearing Guide.



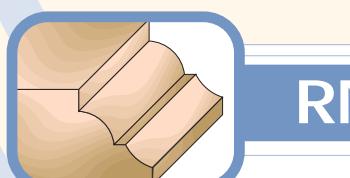
Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
MRZ0304	3.0	1/8	14.0	35/64	10	25/64	B080040	6	1/4
M07RZ64	6.0	1/4	20.0	25/32	10	25/64	B080040	6	1/4
RZ05004	4.8	3/16	19.0	3/4	11	7/16	B095048	6 or 8	1/4
RZ06004	6.3	1/4	22.2	7/8	12	1/2	B095048	6 or 8	1/4
RZ08004	8.0	5/16	25.4	1	12	1/2	B095048	6 or 8	1/4
RZ10004	9.5	3/8	28.6	1-1/8	14	9/16	B095048	6 or 8	1/4
RZ12004	12.7	1/2	35.0	1-3/8	16	5/8	B095048	6 or 8	1/4
RZ06008	6.3	1/4	22.2	7/8	12	1/2	B095048	12	1/2
RZ08008	8.0	5/16	25.4	1	12	1/2	B095048	12	1/2
RZ10008	9.5	3/8	28.6	1-1/8	14	9/16	B095048	12	1/2
RZ12008	12.7	1/2	35.0	1-3/8	16	5/8	B095048	12	1/2

**RI/RIP****Ogee Fillet Bits**

With Ball Bearing Guide.

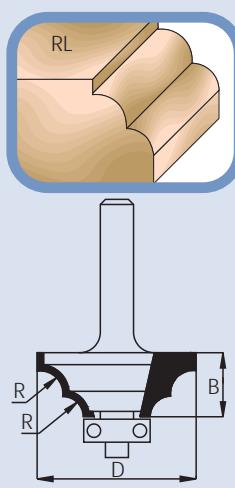
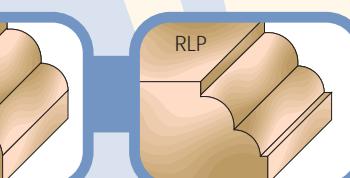
Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
MRI0304	2.8	7/64	22.0	.866	8	5/16	B080040	6	1/4
RI04004	4.0	5/32	35.0	1-3/8	13.5	17/32	B127048	6 or 8	1/4
RI04008	4.0	5/32	35.0	1-3/8	13.5	17/32	B127048	12	1/2
RI06008	6.3	1/4	41.3	1-5/8	19	3/4	B127048	12	1/2
RI10008	9.5	3/8	57.2	2-1/4	25	1	B127048	12	1/2

For type RIP use Ball Bearing Guide - B095048
 Ordering RIP type - change the tool No. prefix from RI to RIP

RN**Classical Bits**

With Ball Bearing Guide.

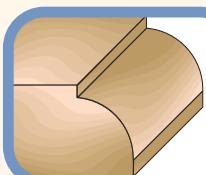
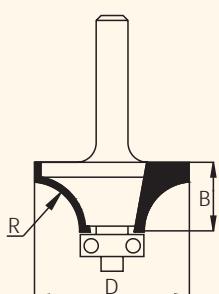
Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
RN03004	5.0	13/64	31.8	1-1/4	13	1/2	B127048	6 or 8	1/4
RN04004	6.5	1/4	38.1	1-1/2	16	5/8	B127048	6 or 8	1/4
RN03008	5.0	13/64	31.8	1-1/4	13	1/2	B127048	12	1/2
RN04008	6.5	1/4	38.1	1-1/2	16	5/8	B127048	12	1/2

**RL/RLP****Classical Moulding Bits**

With Ball Bearing Guide.

Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
RL04004	4.0	5/32	28.6	1-1/8	13	1/2	B127048	6 or 8	1/4
RL06004	5.5	7/32	35.0	1-3/8	17	11/16	B127048	6 or 8	1/4
RL04008	4.0	5/32	28.6	1-1/8	13	1/2	B127048	12	1/2
RL06008	5.5	7/32	35.0	1-3/8	17	11/16	B127048	12	1/2

For type RLP use Ball Bearing Guide - B095048
 Ordering RLP type - change the tool No. prefix from RL to RLP

**RW**

Rounding Over Bits
With Ball Bearing Guide.

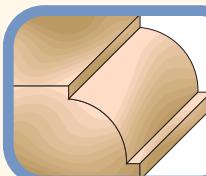
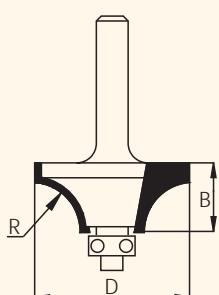
NEW

See Pg. 67

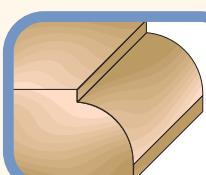
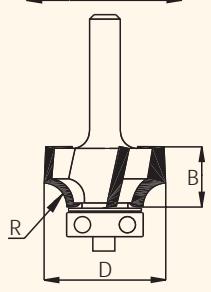


Max speed 16000 RPM
Max speed 18000 RPM

"RW" Rounding Over bits can be converted to Beading Bits by substituting the ball bearing B127048 to bearing No. B095048.
Ordering Beading Bits - change the tool No. prefix from "RW" to "RP".

**RP**

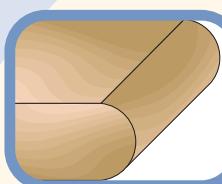
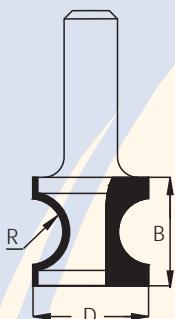
Beading Bits
With Ball Bearing Guide.

**RWG**

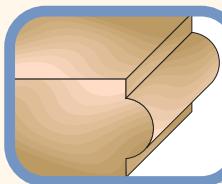
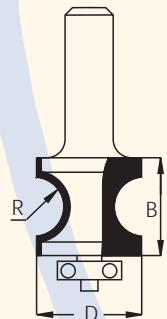
4 Flutes Rounding Over Bits
With Ball Bearing Guide.
For better surface finish and longer tool life.



Tool No.	R		D		B		Bearing	Shank Dia.	
	mm	inch	mm	inch	mm	inch		mm	inch
RWG0504	4.8	3/16	25.4	1	11	7/16	B160048	6	1/4
RWG0604	6.3	1/4	28.6	1-1/8	11	7/16	B160048	6	1/4
RWG1004	9.5	3/8	35.0	1-3/8	16	5/8	B160048	6	1/4
RWG1204	12.7	1/2	41.3	1-5/8	18	11/16	B160048	6	1/4
RWG0508	4.8	3/16	25.4	1	11	7/16	B160048	12	1/2
RWG0608	6.3	1/4	28.6	1-1/8	11	7/16	B160048	12	1/2
RWG1008	9.5	3/8	35.0	1-3/8	16	5/8	B160048	12	1/2
RWG1208	12.7	1/2	41.3	1-5/8	18	11/16	B160048	12	1/2

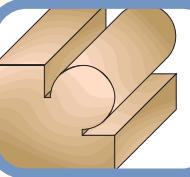
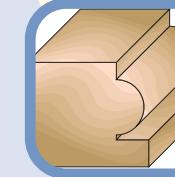
**RF****Bull Nose Bits**

Tool No.	R		D		B		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
RF02004	2.0	5/64	13.5	17/32	13	1/2	6 or 8	1/4
RF02804	2.8	7/64	15.1	19/32	13	1/2	6 or 8	1/4
RF03604	3.6	9/64	16.7	21/32	19	3/4	6 or 8	1/4
RF05204	5.2	13/64	22.2	7/8	19	3/4	6 or 8	1/4
RF08S04	8.0	5/16	27.0	1-1/16	25	1	6	1/4
RF03608	3.6	9/64	16.7	21/32	19	3/4	12	1/2
RF05208	5.2	13/64	22.2	7/8	19	3/4	12	1/2
RF06808	6.8	17/64	26.0	1-1/32	25	1	12	1/2
RF09508	9.5	3/8	33.3	1-5/16	35	1-3/8	12	1/2
RF12708	12.7	1/2	43.0	1-11/16	40	1-9/16	12	1/2
RF15908	15.9	5/8	50.8	2	51	2	12	1/2

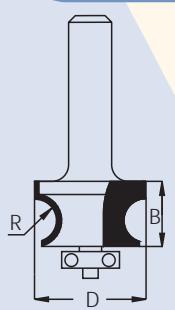
**RF****Bull Nose Bits**

With Ball Bearing Guide.

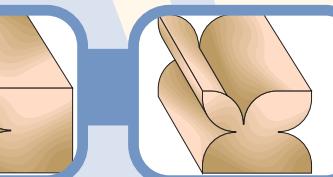
Tool No.	R		D		B		Bearing	Shank Dia.
	mm	inch	mm	inch	mm	inch		
RF06818	6.8	17/64	26.2	1-1/32	26	1-1/32	B127048	12 1/2
RF09518	9.5	3/8	35.0	1-5/8	34	1-11/32	B160050	12 1/2
RF12718	12.7	1/2	44.5	1-3/4	40	1-37/64	B190063	12 1/2
RF15918	15.9	5/8	50.8	2	50	2	B190063	12 1/2

**RFB****Edge Beading Bits**

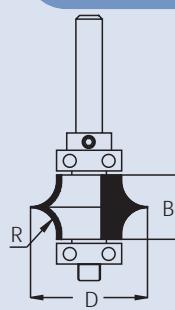
With Ball Bearing Guide.



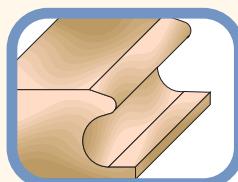
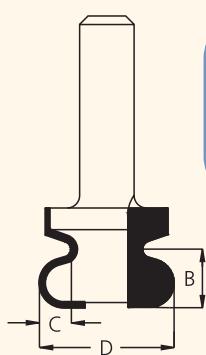
Tool No.	R		D		B		Bearing	Shank Dia.
	mm	inch	mm	inch	mm	inch		
RFB0324	3.2	1/8	22.2	7/8	14	9/16	B127048	6 or 8 1/4
RFB0484	4.8	3/16	28.2	1-7/64	16	5/8	B160050	6 or 8 1/4
RFB0634	6.3	1/4	31.8	1-1/4	19	3/4	B160050	6 or 8 1/4
RFB0328	3.2	1/8	22.2	7/8	14	9/16	B127048	12 1/2
RFB0488	4.8	3/16	28.2	1-7/64	16	5/8	B160050	12 1/2
RFB0638	6.3	1/4	31.8	1-1/4	19	3/4	B160050	12 1/2
RFB0958	9.5	3/8	38.1	1-1/2	25	1	B160050	12 1/2

**DU****Sunk Bead Bits**

With Ball Bearing Guide.

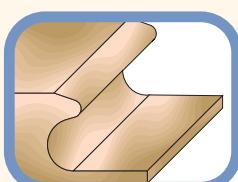
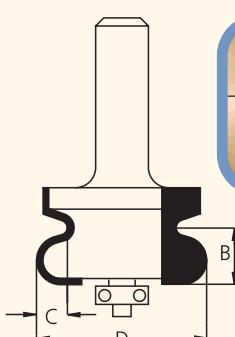


Tool No.	R		D		B		Bearing	Shank Dia.
	mm	inch	mm	inch	mm	inch		
DU05004	4.8	3/16	25.4	1	12.7	1/2	B159063x2	6 1/4
DU06004	6.3	1/4	28.6	1-1/8	15.9	5/8	B159063x2	6 1/4
DU10004	9.5	3/8	34.5	1-23/64	22.2	7/8	B159063x2	6 1/4

**RO****Finger Grip Bits**

Tool No.	C	D	B	Shank Dia.
	mm inch	mm inch	mm inch	mm inch
• RO20008	3.5 9/64	20.0 25/32	12 15/32	12 1/2
• RO24008	5.0 3/16	24.0 15/16	12 15/32	12 1/2
RO70008	8.0 5/16	31.8 1-1/4	12 15/32	12 1/2
RO38008	10.5 13/32	38.0 1-1/2	14.5 9/16	12 1/2

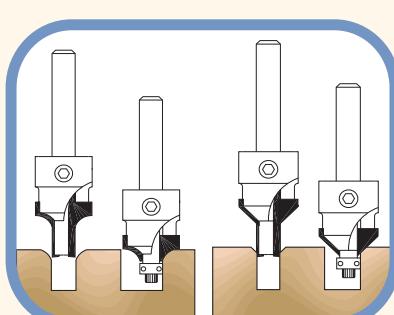
- With carbide plunging point

NEW**RO****Finger Grip Bits**

With Ball Bearing Guide.



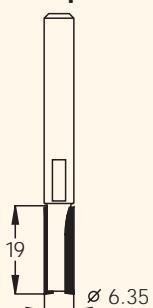
Tool No.	C	D	B	Bearing	Shank Dia.
	mm inch	mm inch	mm inch		mm inch
RO70018	8.0 5/16	44.0 1-3/4	12 15/32	B127063	12 1/2

**AD****Dado Edge Forming Set**
Complete 5-piece set

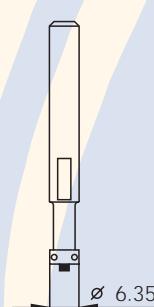
Easy chamfering and corner rounding of narrow dados. Straight grooving and edge forming in one operation.

Set No. ADS0100

6mm or 1/4" shank

Components:

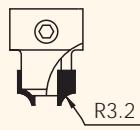
ADP2364
Straight bit



ADN0634
Arbor



ADSL450
Bevel cutter



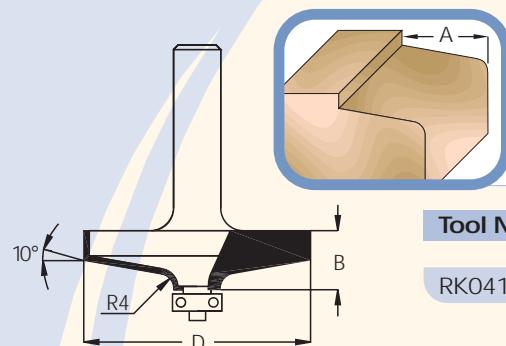
ADRW030
Rounding over



ADRW050
Rounding over



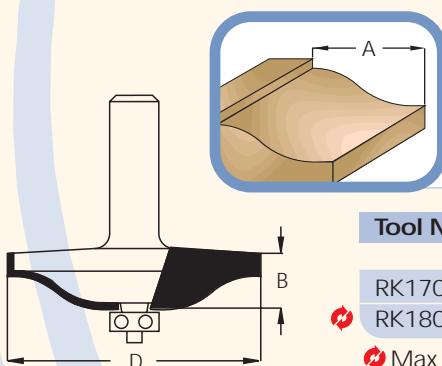
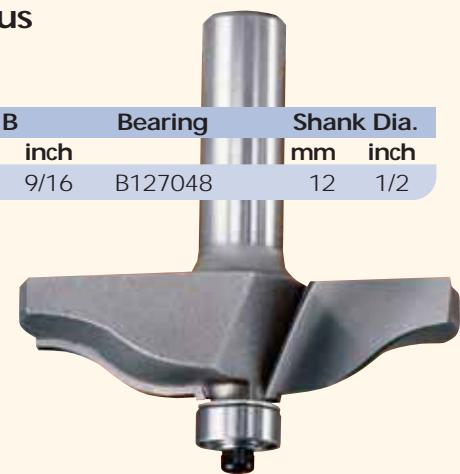
RK RAISED PANEL BITS



RK04

Chamfering Bit
With Radius

Tool No.	A	D	B	Bearing	Shank Dia.
	mm inch	mm inch	mm inch		mm inch
RK04108	24 15/16	61 2-13/32	14 9/16	B127048	12 1/2

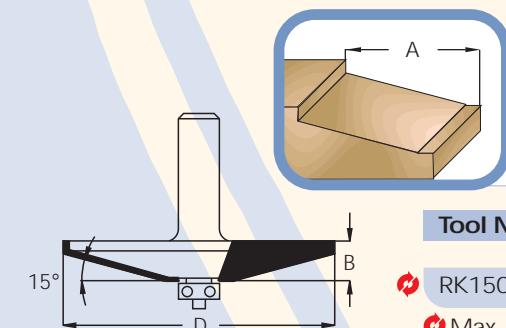
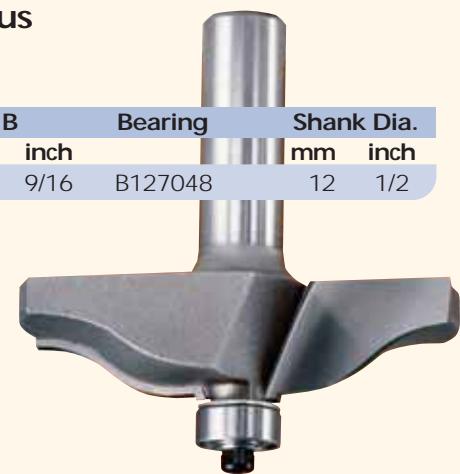


RK

Ogee

Tool No.	A	D	B	Bearing	Shank Dia.
	mm inch	mm inch	mm inch		mm inch
RK17008	27.0 1-1/16	66.7 2-5/8	16 5/8	B127048	12 1/2
RK18008	36.5 1-7/16	85.7 3-3/8	16 5/8	B127048	12 1/2

Max speed 16000 RPM

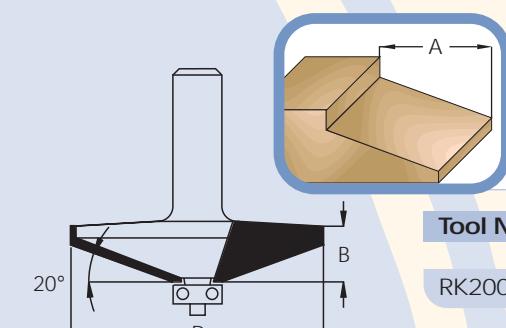


RK15

Traditional

Tool No.	A	D	B	Bearing	Shank Dia.
	mm inch	mm inch	mm inch		mm inch
RK15008	36.5 1-7/16	85.7 3-3/8	12.7 1/2	B127048	12 1/2

Max. Speed 16000 RPM

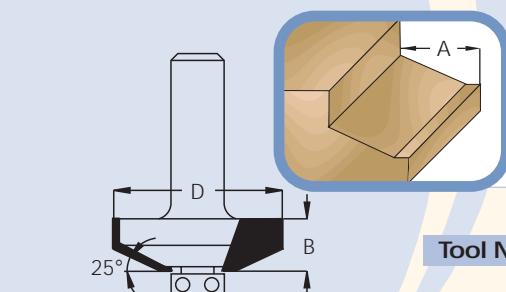


RK20

Traditional

Tool No.	A	D	B	Bearing	Shank Dia.
	mm inch	mm inch	mm inch		mm inch
RK20008	27 1-1/16	66.7 2-5/8	16 5/8	B127048	12 1/2

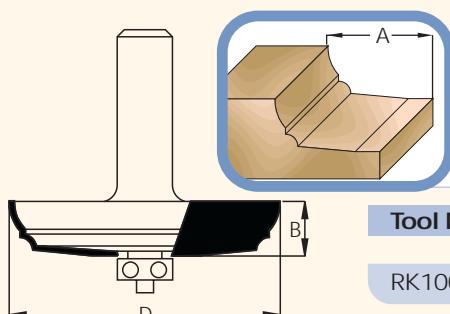
Max. Speed 16000 RPM



RK25

Traditional

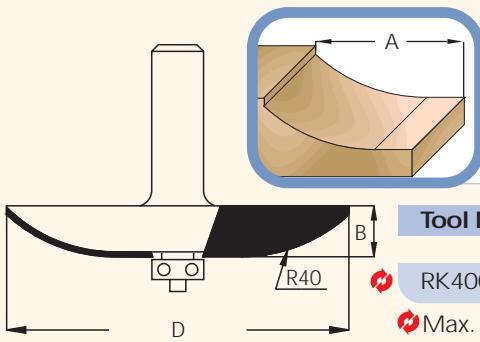
Tool No.	A	D	B	Bearing	Shank Dia.
	mm inch	mm inch	mm inch		mm inch
RK25008	14.3 9/16	41.3 1-5/8	12.7 1/2	B127048	12 1/2



RK10

Classical

Tool No.	A mm	A inch	D mm	D inch	B mm	B inch	Bearing	Shank Dia. mm	Shank Dia. inch
RK10008	25.4	1	63.5	2-1/2	12.7	1/2	B127048	12	1/2

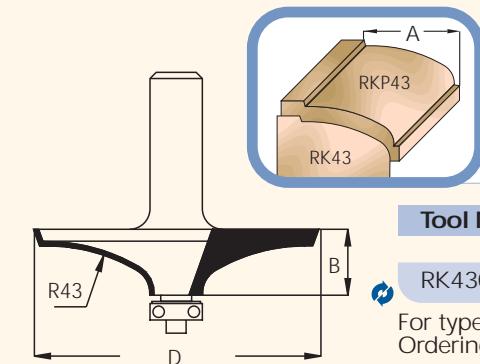


RK40

Cove

Tool No.	A mm	A inch	D mm	D inch	B mm	B inch	Bearing	Shank Dia. mm	Shank Dia. inch
RK40008	36.5	1-7/16	85.8	3-3/8	12.7	1/2	B127048	12	1/2

Max. Speed 16000 RPM



RK43

Thumbnail bits

Tool No.	A mm	A inch	D mm	D inch	B mm	B inch	Bearing	Shank Dia. mm	Shank Dia. inch
RK43008	28.2	1-7/64	69.2	2-23/32	16	5/8	B127048	12	1/2

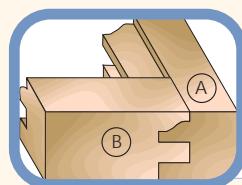
For type RKP use ball bearing guide - B095048
Ordering RKP type - change the tool No. prefix from RK to RKP

Max. Speed 18000 RPM

RGD Tongue & Groove Easy Set For Profile Scribed Doors

Assembly with 2 ball bearing guides and 3 grooving cutters.
No reassembly required.

Both parts of the joint are cut by only changing the cutter height.



RGD2

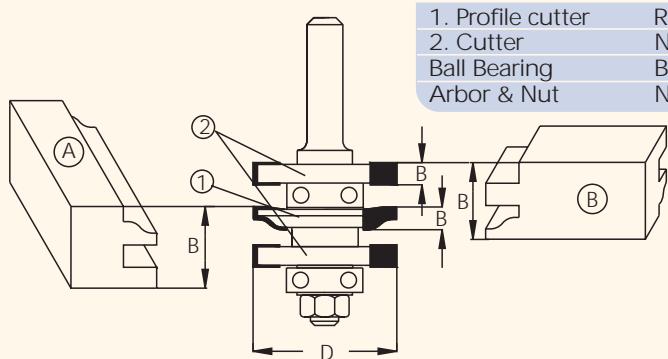
Ogee



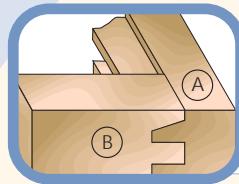
Description	Tool No.	D mm	D inch	B mm	B inch	Shank Dia. mm	Shank Dia. inch
Assembly	RGD2008	41.0	1-5/8	22.0	7/8	8 or 12	1/2

Components:

1. Profile cutter	RGD2000	41.0	1-5/8	6.3	1/4	
2. Cutter	NG41060	41.0	1-5/8	6.3	1/4	
Ball Bearing Arbor & Nut	B220080					
	NHRG828					8 or 12 1/2



Reminder:	Shank Dia.	6mm	1/4"	8mm	12mm	1/2"
	Last Digit	3	4	5	2	8



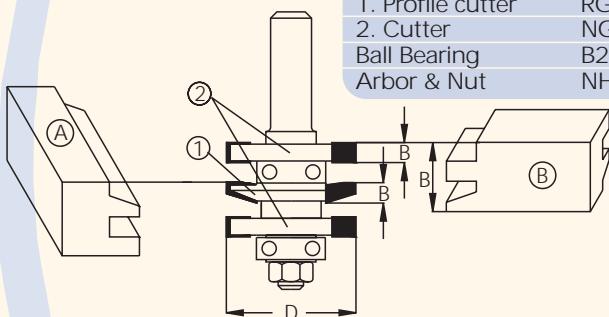
RGD5

Traditional

Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	RGD5008	41.0 1-5/8	22.0 7/8	8 or 12 1/2

Components:

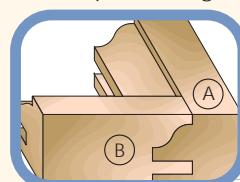
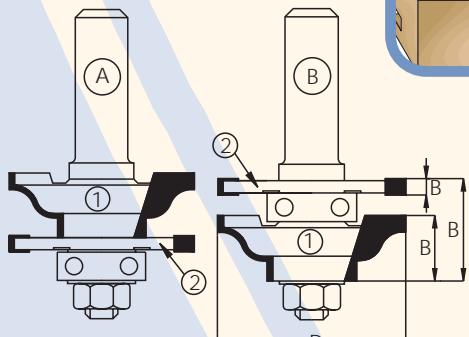
1. Profile cutter	RGD5000	41.0	1-5/8	6.3	1/4
2. Cutter	NG41060	41.0	1-5/8	6.3	1/4
Ball Bearing	B220080				
Arbor & Nut	NHRG828			8 or 12	1/2



RG

TONGUE & GROOVE CLASSIC SETS

Assembly with Ball Bearing Guide.

By reversing the assembly, you can use a single tool for both cuts A & B.
Shims should be used for perfect alignment before and after sharpening.

RG1

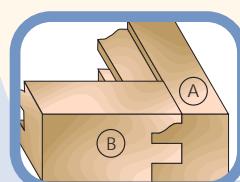
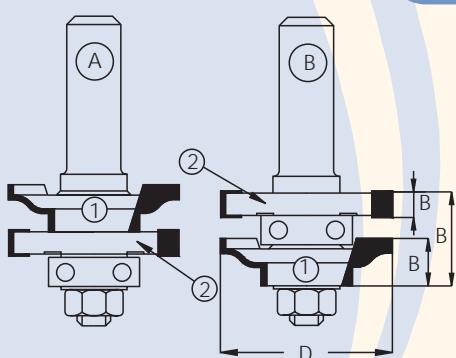
Ogee



Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	RG10008	46.0 1-13/16	22.0 7/8	8 or 12 1/2

Components:

1. Profile cutter	RG10000	46.0 1-13/16	15.0	19/32
2. Cutter	NG46040	46.0 1-13/16	4.0	5/32
Ball Bearing	B220080			
Arbor & Nut	NG00008			8 or 12 1/2



RG2

Ogee

Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	RG21004	31.8 1-1/4	16.0 5/8	6 or 8 1/4

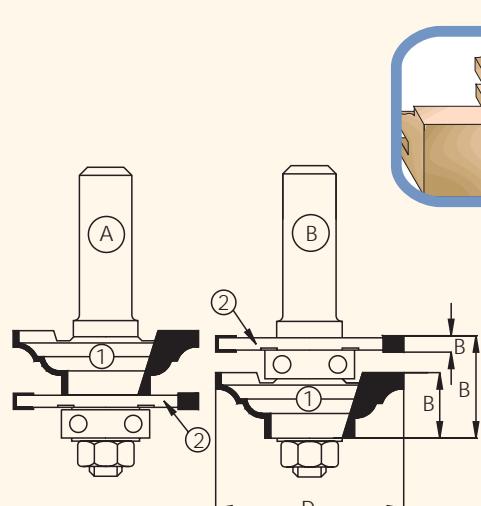
Components:

1. Profile cutter	RG21000	31.8	1-1/4	6.4	1/4
2. Cutter	NG32060	31.8	1-1/4	6.4	1/4
Ball Bearing	B127063				
Arbor & Nut	NHRG634			6 or 8	1/4

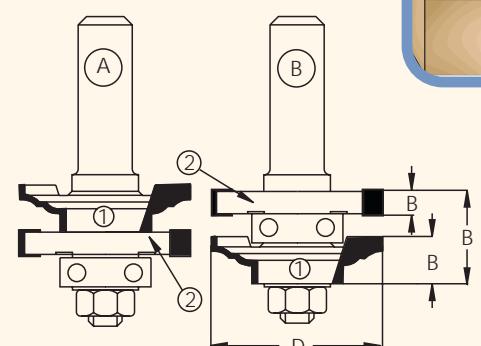
Assembly	RG20008	41.0	1-5/8	22.0	7/8	8 or 12	1/2
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Components:

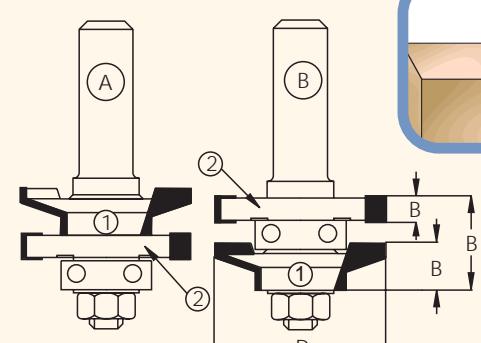
1. Profile cutter	RG20000	41.0	1-5/8	11.0	7/16
2. Cutter	NG41060	41.0	1-5/8	6.3	1/4
Ball Bearing	B220080				
Arbor & Nut	NG00008			8 or 12	1/2

**RG3****Ogee**

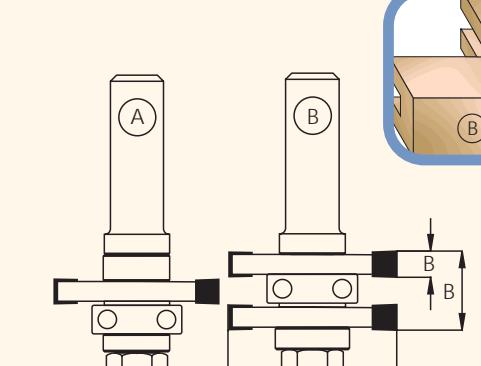
Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	RG30008	46.0 1-13/16	22.0 7/8	8 or 12 1/2
Components:				
1. Profile cutter	RG30000	46.0 1-13/16	15.0 19/32	
2. Cutter	NG46040	46.0 1-13/16	4.0 5/32	
Ball Bearing	B220080			
Arbor & Nut	NG00008			8 or 12 1/2

**RG4****Classical**

Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	RG40008	41.0 1-5/8	22.0 7/8	8 or 12 1/2
Components:				
1. Profile cutter	RG40000	41.0 1-5/8	11.0 7/16	
2. Cutter	NG41060	41.0 1-5/8	6.3 1/4	
Ball Bearing	B220080			
Arbor & Nut	NG00008			8 or 12 1/2

**RG5****Traditional**

Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	RG50008	41.0 1-5/8	22.0 7/8	8 or 12 1/2
Components:				
1. Profile Cutter	RG50000	41.0 1-5/8	11.0 7/16	
2. Cutter	NG41060	41.0 1-5/8	6.3 1/4	
Ball Bearing	B220080			
Arbor & Nut	NG00008			8 or 12 1/2

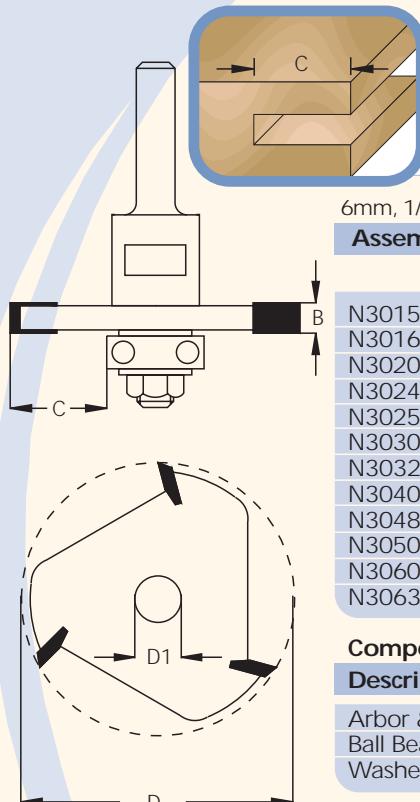
**RG6****Tongue & Groove Cutter Set**

By changing the components of the assembly, you can use a single tool for both cuts A&B.

Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	RG60008	41.0 1-5/8	19.0 3/4	8 or 12 1/2
Components				
Cutter (x2)	NG41060	41.0 1-5/8	6.3 1/4	
Ball Bearing	B220080			
Arbor & Nut	NHRG818			8 or 12 1/2

Reminder:

Shank Dia.	6mm	1/4"	8mm	12mm	1/2"
Last Digit	3	4	5	2	8

**N3**

6mm, 1/4", 8mm, 12mm or 1/2" shank

Slotting Cutters 3 Wings

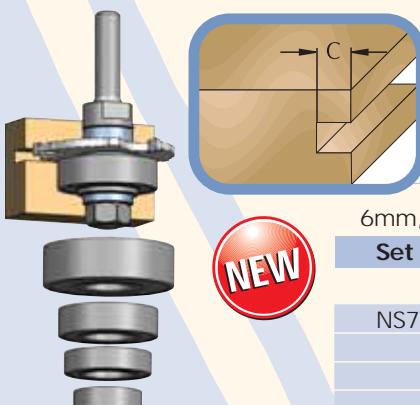
D = 47.6mm (1-7/8")
 D1 = 7.94mm (5/16")
 C = 15.9mm (5/8")



Assembly Tool No.	Cutter Tool No.	B	mm	inch
N301584	N301500	1.5	.059	
N301684	N301600	1.6	1/16	
N302084	N302000	2.0	5/64	
N302484	N302400	2.4	3/32	
N302584	N302500	2.5	.098	
N303084	N303000	3.0	.118	
N303284	N303200	3.2	1/8	
N304084	N304000	4.0	5/32	
N304884	N304800	4.8	3/16	
N305084	N305000	5.0	.197	
N306084	N306000	6.0	15/64	
N306384	N306300	6.3	1/4	

Components

Description	Tool No.
Arbor & Nut	N000004
Ball Bearing	B159063
Washer (x2)	BW06300

N2**NS**

6mm, 1/4", 8mm, 12mm, or 1/2" shank

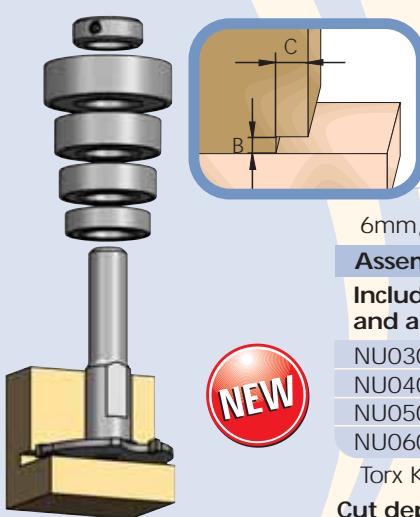
Slotting Cutters 2 Wings

All of the sizes listed for 3 wing slotting cutters, can also be ordered with 2 wings.
 For ordering, just change the prefix of the tool No. from N3 to N2.

Variable Depth Set for Slotting Cutters

Includes arbor and 5 ball bearings for changing cut depths.
 All Slotting cutters N3 and N2 type can be used.
 Cutter not included.

Set No.	C	Bearing
	mm inch	
NS79054	2.8 7/64	B420150
	6.3 1/4	B350150
	7.8 5/16	B320150
	9.8 3/8	B280150
	12.8 1/2	B220080

**NUS**

6mm, 1/4", 8mm, 12mm, or 1/2" shank

Slot & Undercut Bit with Variable Depth

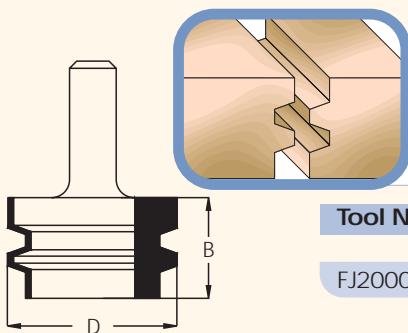
For general Slotting and undercutting. Suitable for flooring.
 Exchangeable bearings enable achieving different depths of cut.

Assembly A	Assembly Set B	Cutter Tool No.	B
Includes Cutter and arbor	Includes Cutter, arbor and 4 bearings		mm inch
NU03008	NUS03048	N3U0300	3.0 .118
NU04008	NUS04048	N3U0400	4.0 5/32
NU05008	NUS05048	N3U0500	5.0 .197
NU06008	NUS06048	N3U0600	6.0 15/64

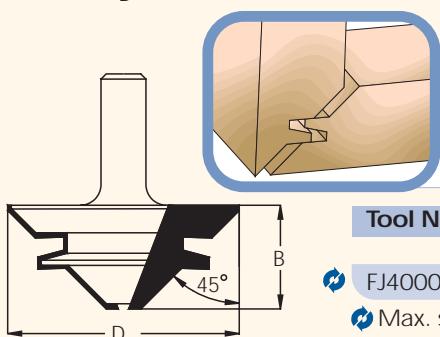
Torx Key T25 is included in all assemblies. Replacement screw: BT50080.

Cut depth in assembly set B

Ball Bearing	B420150	B350150	B320150	B280150
Cut Depth (C)	2.8mm (7/64")	6.3mm (1/4")	7.8mm (5/16")	9.8mm (3/8")

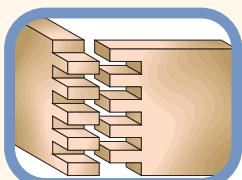
**FJ2****Glue Joint Bit**

Tool No.	D	B	Shank Dia.
	mm inch	mm inch	mm inch
FJ20008	47.0 1-27/32	28 1-3/32	12 1/2

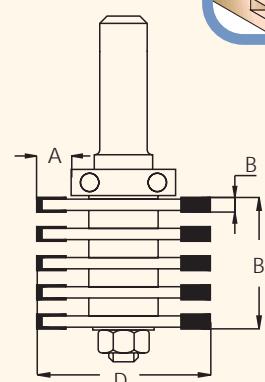
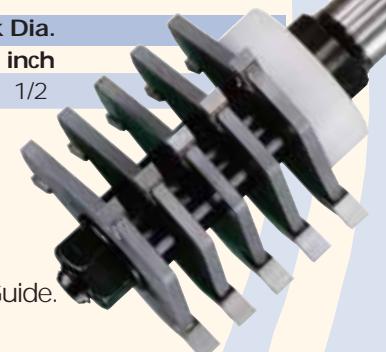
**FJ4****45° Lock Mitre Joint Bit**

Tool No.	D	B	Shank Dia.
	mm inch	mm inch	mm inch
FJ40008	67.0 2-5/8	30 1-3/16	12 1/2

Max. speed 18000 RPM

**FJ5****Combi Joint Set**

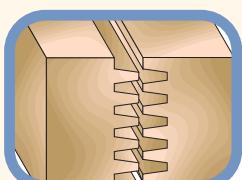
Assembly with Ball Bearing Guide.



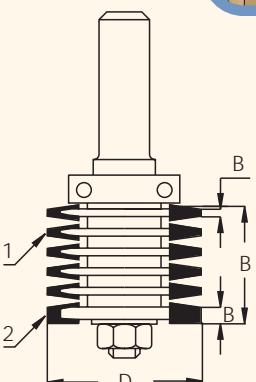
Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	FJ50008	47.6 1-7/8	36.0 1-13/32	12 1/2

Components:

Cutter (x5)	N304000	47.6	1-7/8	4.0	5/32
Arbor & Nut	NFJ5008				12 1/2
Delrin Set	BDEL500	For A = 9.8mm (.386")			
Delrin Set	BDEL510	For A = 9.3mm (.366")			
Delrin Set	BDEL520	For A = 6.8mm (.268")			
Washer (x2)	BW16080				
Spacer 5.3mm (x4)	BS53000				
Shims 0.5mm (x1)	BS05000				
Shims 0.1mm (x4)	BS01000				
Shims 0.05mm (x8)	BS00500				

**FJ6****Finger Joint Set**

Assembly with Ball Bearing Guide.



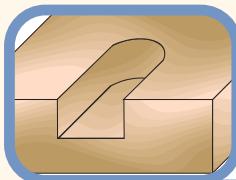
Description	Tool No.	D	B	Shank Dia.
		mm inch	mm inch	mm inch
Assembly	FJ60008	39.5 1-9/16	33.0 1-5/16	12 1/2

Components:

1. Cutter (x5)	NJ39020	39.5	1-9/16	1.9	5/64
2. Cutter (x1)	NJ39050	39.1	1-35/64	5.5	7/32
Arbor & Nut	NFJ6008				12 1/2
Washer (x2)	BW16080				
Spacer 3.4mm (x6)	BS34000				
Shims 0.5mm (x1)	BS05000				
Shims 0.1mm (x10)	BS01000				
Shims 0.05mm (x5)	BS00500				



REPLACEABLE TUNGSTEN CARBIDE BITS

**PM2****Straight Bits**

No plunge.



Tool No.

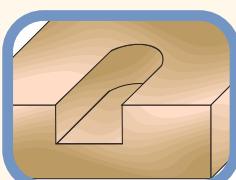
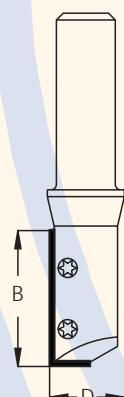
D**B**

Blade No.

Shank Dia.

	mm	inch	mm	inch		mm	inch
PM25148	14.0	.551	30	1.181	CM03090	12	1/2
PM25168	16.0	5/8	30	1.181	CM03090	12	1/2
PM28168	16.0	5/8	50	1.969	CM03090	12	1/2
PM25188	18.0	.709	30	1.181	CM03012	12	1/2
PM25208	20.0	.787	30	1.181	CM03012	12	1/2
PM28208	20.0	.787	50	1.969	CM03012	12	1/2
PM28228	22.0	7/8	50	1.969	CM03012	12	1/2
PM25258	25.0	1	30	1.181	CM03012	12	1/2

50mm cutting length bits are performed with 2 staggered 30mm length blades

**PM1****Straight Plunge Bits - Single blade**

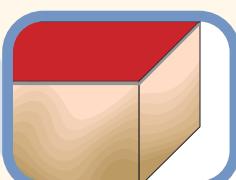
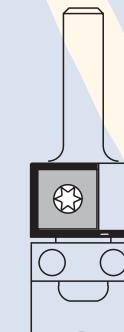
Tool No.

D**B**

Blade No.

Shank Dia.

	mm	inch	mm	inch		mm	inch
PM15128	12.0	.472	30	1.181	CM03090	12	1/2
PM15148	14.0	.551	30	1.181	CM03090	12	1/2
PM15168	16.0	5/8	30	1.181	CM03012	12	1/2
PM18168	16.0	5/8	50	1.969	CM05012	12	1/2
PM18188	18.0	.709	50	1.969	CM05012	12	1/2
PM18208	20.0	.787	50	1.969	CM05012	12	1/2

**FM****Flush Trim Bits**

With Ball Bearing Guide.

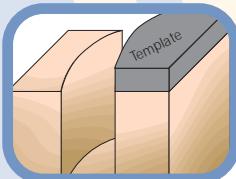
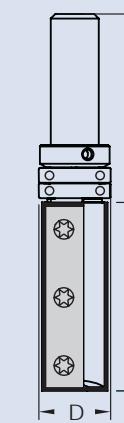
Tool No.

D**B**

Blade No.

Shank Dia.

	mm	inch	mm	inch		mm	inch
FM19004	19.0	3/4	12	15/32	CM01212	B190060	6 or 8 1/4
FM19014	19.0	3/4	30	1.181	CM03012	B190060	6 or 8 1/4
FM19018	19.0	3/4	30	1.181	CM03012	B190060	12 1/2
FM19028	19.0	3/4	50	1.969	CM501217	B190060	12 1/2

NEW**PFM****Straight Plunge Template Bits**

12mm or 1/2" shank

Tool No.

D**B**

Blade No.

Bearing

	mm	inch	mm	inch	mm	inch	
PFM7198	19.0	3/4	50	1.969	100	3-15/16	CMO5012 2 HOLES
PFM8198	19.0	3/4	50	1.969	100	3-15/16	CMO501217 3 HOLES

NEW**Replaceable K-Bits****Harder carbide
Longer tool life**

All WPW replaceable carbide bits can be supplied with harder carbide grade.

For ordering – add the letter "K" to the last digit of the Tool No.
For example: Change from PFM8198 to PFM8198K

perfection

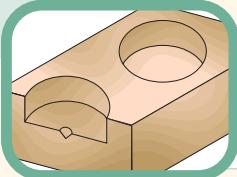
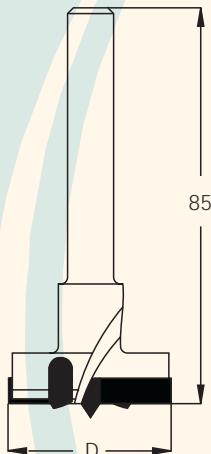
Finest materials, highest quality carbide developed for longer lasting tool life



Boring & Countersink Bits

This section includes special designs of professional hinge boring bits, other accessories for drilling machines and "combi" chucks, adjustable countersinks, counterbores etc. Innovative tools such as special stepped drills and "plug sets" are offered. Most of the tools are carbide tipped. In other cases, the tools are heat treated and surface treated with a unique advanced DHN treatment for extended tool life.

Shank Diameter	6mm	1/4"	8mm	3/8"	10mm	12mm	1/2"
Last Digit	3	4	5	6	7	2	8

**MP**

10mm shank

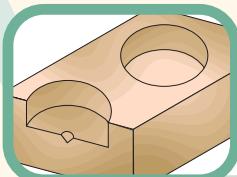
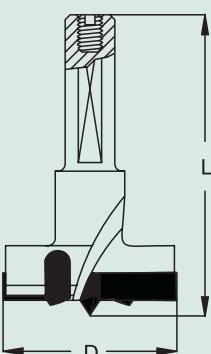
Tool No.	D
mm	
MP10007	10
MP15007	15
MP19007	19
MP20007	20
MP22007	22
MP23007	23
MP25007	25
MP26007	26
MP30007	30
MP32007	32
MP34007	34
MP35007	35
MP38007	38
MP40007	40
MP45007	45
MP50007	50

Boring Bits

For blind holes.

Carbide tipped with a centering point,
2 straight cutting edges and 2 nicking teeth.

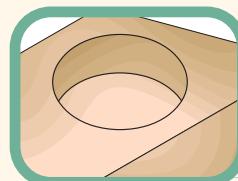
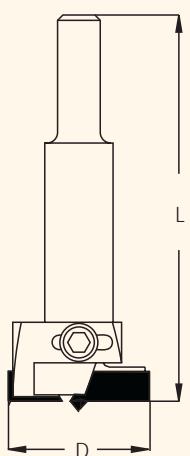
Other sizes available upon request

**MPK**

10mm shank

Tool No.	D	L
Right rotation	Left rotation	
MPK1507	MPK1507L	15 56.5
MPK1607	MPK1607L	16 56.5
MPK1807	MPK1807L	18 56.5
MPK2007	MPK2007L	20 56.5
MPK2207	MPK2207L	22 56.5
MPK2507	MPK2507L	25 56.5
MPK2607	MPK2607L	26 56.5
MPK3007	MPK3007L	30 56.5
MPK3507	MPK3507L	35 56.5
MPK3807	MPK3807L	38 56.5
MPK4007	MPK4007L	40 56.5
MPK4507		45 56.5
MPK1517	MPK1517L	15 69
MPK2017	MPK2017L	20 69
MPK2517	MPK2517L	25 69
MPK3017	MPK3017L	30 69
MPK3517	MPK3517L	35 69
MPK2527	MPK2527L	25 76
MPK3027	MPK3027L	30 76
MPK3527	MPK3527L	35 76

Boring Bits - Combi SystemCarbide tipped with a centering point,
2 straight cutting edges and 2 nicking teeth.With adjustable set-screw in shank.
Fits 10 mm combi chucks right hand and left hand rotation.

**MPA****Adjustable Boring Bits**

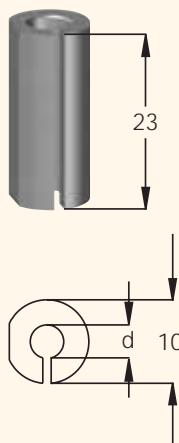
Carbide tipped with centering point, 2 scorers, one fixed and one adjustable.

Use only on a Drill Press.

Assembly	D mm	L mm	Shank Dia. mm	Blade No.
			inch	
MPA3007	30-60	90	10	-
MPA6008	60-80	100	12 1/2	MPA6000

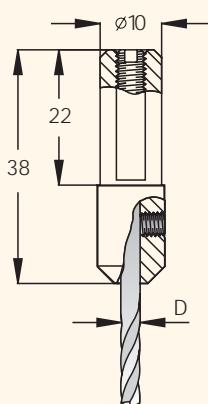
For safety: Max. speed should be 1500 RPM and the work piece should be clamped firmly.

Combi Chuck Accessories

**TK****Shank Drill Bushings**

For combi chucks.

Tool No.	d mm	d inch
TK10020	2.0	5/64
TK10025	2.5	-
TK10030	3.0	-
TK10032	3.2	1/8
TK10035	3.5	-
TK10040	4.0	5/32
TK10045	4.5	-
TK10050	5.0	-
TK10055	5.5	-
TK10060	6.0	-
TK10070	7.0	-
TK10080	8.0	-

**TA****Combi Chuck Adapter For Drills**

Drills not included.

Tool No.	D mm	D inch
TA10020	2.0	5/64
TA10025	2.5	-
TA10030	3.0	-
TA10032	3.2	1/8
TA10035	3.5	-
TA10040	4.0	5/32
TA10050	5.0	-
TA10063	6.3	1/4



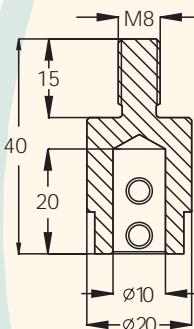
Adjustable screw No. BR50100 (M5x10)



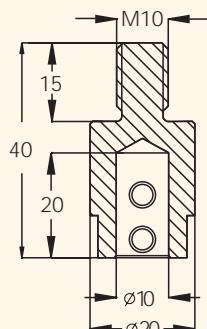
TM

Boring Machine Chucks
- Combi System
For 10mm Shank Boring Bits

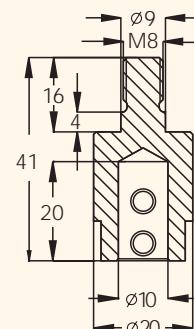
For NOTTMEYER machines
 TM08101R - Right rotation
 TM08101L - Left rotation



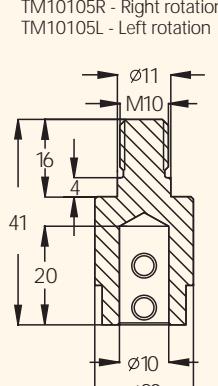
For AYEN, TORWEGGE, HOLZMA and other machines
 TM10103R - Right rotation
 TM10103L - Left rotation



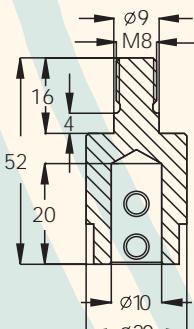
For NOTTMEYER machines
 TM08104R - Right rotation
 TM08104L - Left rotation



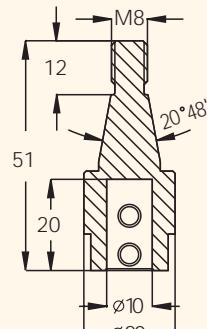
For HOLZMA, S.C.M.I., MORBIDELLI, BIESSE, TORWEGGE and other machines
 TM10105R - Right rotation
 TM10105L - Left rotation



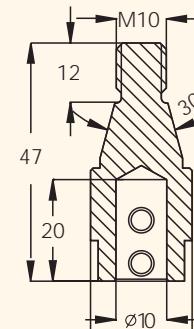
For NOTTMEYER machines
 TM08114R - Right rotation
 TM08114L - Left rotation



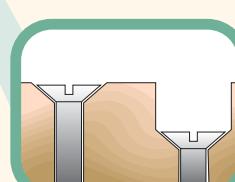
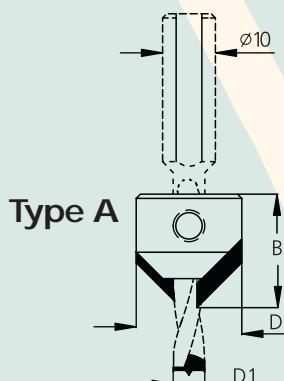
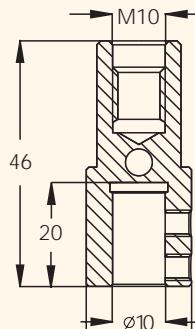
For BILEK machines
 TM08106R - Right rotation
 TM08106L - Left rotation



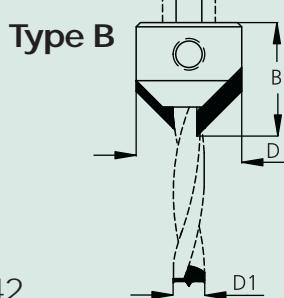
For BILEK, VITAP, BUSSELATO, OMPEX and other machines
 TM10102R Right rotation
 TM10102L Left rotation



For SCHEER machines
 TM10107R - Right rotation
 TM10107L - Left rotation



AC3



Tool No.
Right rotation Left rotation

D1 D B
 mm mm mm

Type A - Designed to be assembled on the drill flute
 For individual drill Diameters

AC3040R	AC3040L	4.0	15.5	18
AC3050R	AC3050L	5.0	16.0	18
AC3060R	AC3060L	6.0	16.0	18
AC3070R	AC3070L	7.0	16.0	18
AC3080R	AC3080L	8.0	18.0	18
AC3090R	AC3090L	9.0	18.0	18
AC3100R	AC3100L	10.0	20.0	18
AC3120R	AC3120L	12.0	20.0	18

Type B - Designed to be assembled on the drill 10mm shank
 Fits a range of drill Diameters

AC31112R	AC31112L	11.0-12.0	22.0	17
AC35101R	AC35101L	5.0-10.0	15.5	19
AC3510R	AC3510L	5.0-10.0	20.0	19



Ensure flutes of drill are aligned with flutes of countersink

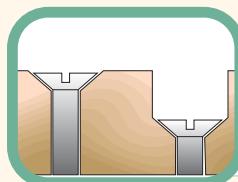
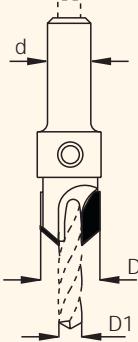
Ordering Countersinks and Counterbores

All Countersinks and Counterbores, listed in this catalogue, can be ordered with HSS drills. By adding the proper letter to the last digit of the tool number, you can choose among a few types of drills.

The available standard drills are listed in Pg. 62.

Drill type	Regular flute	Slow Spiral	Taper Point
Last Letter	S	D	T

For example: AC03205S, AC03605D, AC26320D



AC0

Countersinks - Carbide Tipped

For wood screws sizes #2-#14 (2mm-6mm).



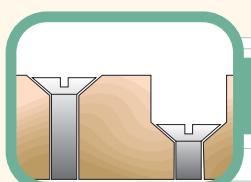
COUNTERSINK
& STOP

TOTAL DEPTH
CONTROL

Unique adjustable
depth-stops!
No scratches!
No burn marks!

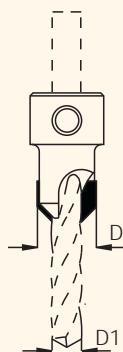
See Pg. 68-69

Tool No.	D1		D		Shank Dia.(d)	
	mm	inch	mm	inch	mm	inch
AC02405	2.4	3/32	8.5	11/32	8	5/16
AC02805	2.8	7/64	9.5	3/8	8	5/16
AC03215	3.2	1/8	8.0	5/16	8	5/16
AC03205	3.2	1/8	9.5	3/8	8	5/16
AC03285	3.2	1/8	12.7	1/2	8	5/16
AC03605	3.6	9/64	10.0	.394	8	5/16
AC04005	4.0	5/32	10.0	.394	8	5/16
AC04405	4.4	11/64	11.1	7/16	8	5/16
AC04807	4.8	3/16	11.1	7/16	9.5	3/8
AC04817	4.8	3/16	12.7	1/2	9.5	3/8
AC05007	5.0	.197	12.0	.472	9.5	3/8
AC05607	5.6	7/32	12.0	.472	9.5	3/8
AC05617	5.6	7/32	12.7	1/2	9.5	3/8
AC06007	6.0	15/64	12.7	1/2	9.5	3/8
AC06317	6.3	1/4	12.7	1/2	10	.394
AC06307	6.3	1/4	13.5	17/32	10	.394



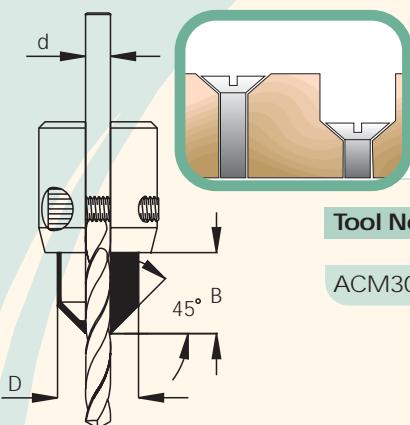
AC2/AS2

Countersinks - Carbide Tipped
Shankless, for assembling on drills.



Tool No.	D1		D	
	mm	inch	mm	inch
AS23200	3.2	1/8	9.5	3/8
AS24000	4.0	5/32	9.5	3/8
AC21240	4.0	5/32	12.7	1/2
AS24400	4.4	11/64	9.5	3/8
AS24810	4.8	3/16	12.7	1/2
AS25610	5.6	7/32	12.7	1/2
AS26310	6.3	1/4	12.7	1/2
AC26320	6.3	1/4	16.0	5/8
AC27020	7.1	9/32	16.0	5/8
AC28020	8.0	5/16	16.0	5/8
AC28030	8.0	5/16	19.0	3/4
AC29530	9.5	3/8	19.0	3/4
AC22595	9.5	3/8	25.4	1
AC22811	11.1	7/16	28.6	1-1/8





ACM

Multi-Diameter Countersink

Carbide tipped.
Shankless, for assembling on drills.

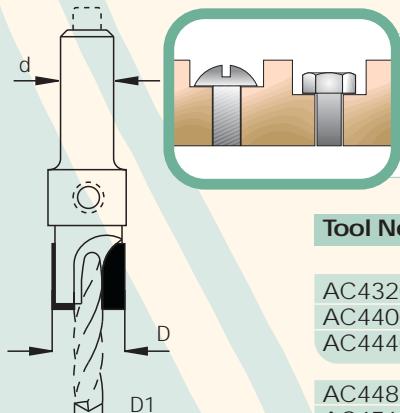
Tool No.	d mm	d inch	D mm	D inch	B mm	B inch
ACM3070	3.0-7.2	1/8-9/32	11.3-15.3	.445-.602	12	15/32



ACS

Set No. ACS0000

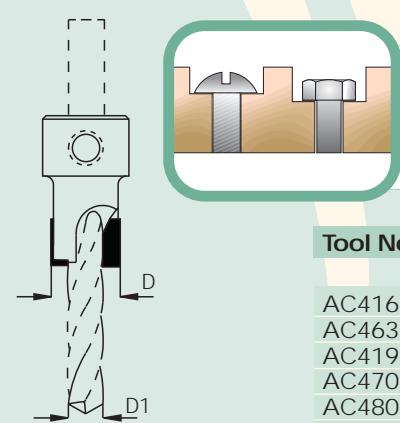
Consists of:
Multi-Diameter Countersink - ACM3070 and drills
from 3mm to 6mm.



AC4

Counterbores- Flat Bottom Carbide Tipped

Tool No.	D1 mm	D1 inch	D mm	D inch	d mm	d inch
AC43205	3.2	1/8	9.5	3/8	8.0	5/16
AC44005	4.0	5/32	10.0	.394	8.0	5/16
AC44405	4.4	11/64	10.0	.394	8.0	5/16
AC44817	4.8	3/16	12.7	1/2	9.5	3/8
AC45617	5.6	7/32	12.7	1/2	9.5	3/8
AC46017	6.0	15/64	12.7	1/2	9.5	3/8
AC46317	6.3	1/4	12.7	1/2	9.5	3/8

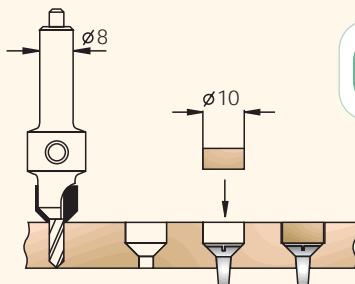


AC4

Counterbores - Flat bottom Carbide Tipped

Shankless, for assembling on drills.

Tool No.	D1 mm	D1 inch	D mm	D inch
AC41648	4.8	3/16	16.0	5/8
AC46320	6.3	1/4	16.0	5/8
AC41963	6.3	1/4	19.0	3/4
AC47020	7.1	9/32	16.0	5/8
AC48020	8.0	5/16	16.0	5/8
AC48030	8.0	5/16	19.0	3/4
AC49530	9.5	3/8	19.0	3/4
AC42595	9.5	3/8	25.4	1
AC42512	12.7	1/2	25.4	1
AC42812	12.7	1/2	28.6	1-1/8



PL

Countersink & Plug Cutter Set

For decorative concealing of screw heads.
Drilling & Countersinking with a single tool.
Concealing of screwheads with wooden plugs
which perfectly fit with countersink.

The sets include countersink bits with different drill diameters and 10mm plug cutter MN10005, which fits with all countersinks.

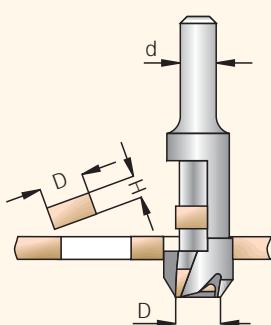
Set No.	Description	Drill Dia.
		mm inch
PL10305	2 pcs.	3.0 .118
PL10325	2 pcs.	3.2 1/8
PL10355	2 pcs.	3.5 .138
PL10365	2 pcs.	3.6 9/64
PL10405	2 pcs.	4.0 5/32
PL10445	2 pcs.	4.4 11/64
PL10505	2 pcs.	5.0 .197
PL40005	5 pcs.	3, 3.5, 4, 5
PL41005	5 pcs.	3.2, 3.6, 4, 4.4 1/8, 9/64, 5/32, 11/64



Replacement Countersinks :



Tool No.	Drill Dia.
	mm inch
AC10305S	3.0 .118
AC10325S	3.2 1/8
AC10355S	3.5 .138
AC10365S	3.6 9/64
AC10405S	4.0 5/32
AC10445S	4.4 11/64
AC10505S	5.0 .197



MN

Plug Cutters - Self Ejecting

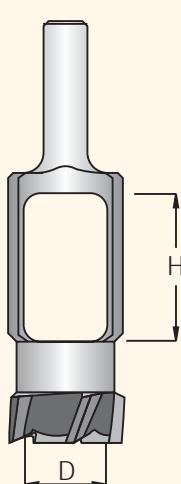
Heat treated and DHN* treated.
One Flute.
For best results use drill press.

Tool No.	D	H max	Shank dia. (d)
	mm inch	mm inch	mm inch
MN09505	9.5 3/8	19 3/4	8 5/16
MN10005	10.0 .394	19 3/4	8 5/16
MN12005	12.0 .472	19 3/4	8 5/16
MN12705	12.7 1/2	19 3/4	8 5/16
MN16007	16.0 5/8	19 3/4	10 .394
MN19007	19.0 3/4	19 3/4	10 .394

Extra long design - up to 50mm length of plugs.

MNL0955	9.5 3/8	50 1-31/32	8 5/16
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*DHN - advanced surface treatment for extended life



MN

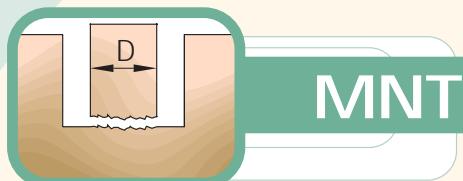
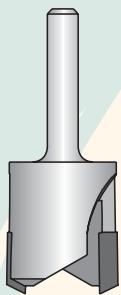
Plug Cutters - Self Ejecting

HS Heat treated steel.

Tool No.	D	H	Shank Dia.
	mm	mm	mm
MN20008	20	32	13
MN25008	25	32	13
MN30008	30	32	13
MN35001	35	32	16



Boring & Countersink Bits

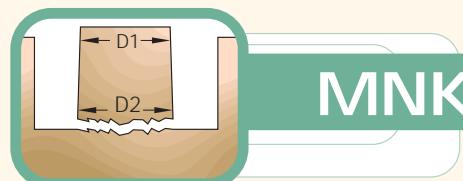
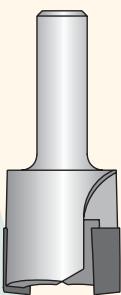
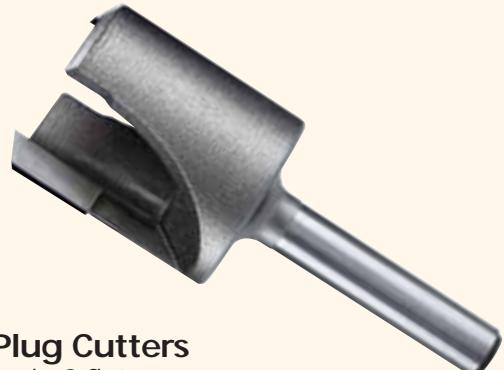


MNT

Plug Cutters

Carbide tipped - 2 flutes.

For making plugs up to 16mm (5/8") long.



MNK

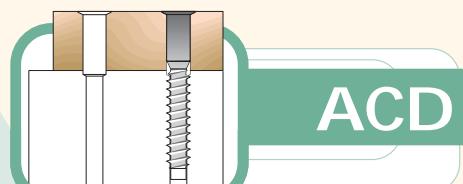
Tapered Plug Cutters

Carbide tipped - 2 flutes.

For making tapered plugs up to 16mm (5/8") long.

Ensures a tight fit - no gap around the plug. Solves the problem of irregular holes or plugs as a result of runout in the drill press etc. You just tap a plug into a hole until you meet resistance, then cut off the excess.

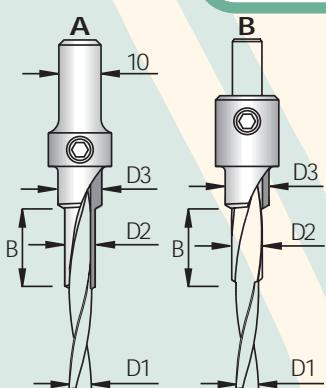
Tool No.	D1		D2		Hole Dia		Shank Dia.	
	mm	inch	mm	inch	mm	inch	mm	inch
MNK1308	12.0	15/32	13.0	33/64	12.7	1/2	12	1/2
MNK1608	15.2	19/32	16.2	41/64	16	5/8	12	1/2
MNK2008	18.3	23/32	19.5	49/64	19	3/4	12	1/2



ACD

3 Steps Drill Bit

For Connecting Screws
(Confirmat, Directa etc.).
HSS Slow Spiral drill.



Tool No.	D1	D2	D3	B	Drill No.	Drill description
	mm	mm	mm	mm		
Type A - for laminated chipboard. Countersink DHN* treated.						
ACD0507D	3.5	5	8	15	DRS0350	3.5mm Dia
ACD0657D	4.4	6.5	9.6	11	DRS0440	4.4mm Dia
ACD0707D	5.0	7	10	19	DRS0500	5.0mm Dia

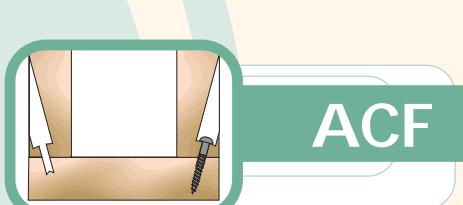
Type B - for MDF and other materials.

ACD0700D	5.0	7	10	•	DR50070	5x7mm stepped
----------	-----	---	----	---	---------	---------------

*DHN - advanced surface treatment for extended life.

• Adjustable Length

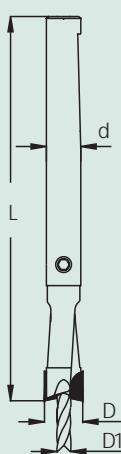
NEW



ACF

Face Frame Counterbore

Carbide tipped.
Drill included.



Tool No.	D1		D		L		d	
	mm	inch	mm	inch	mm	inch	mm	inch
ACF0950S	3.45	.136	9.5	3/8	101	4	9	.354
ACF2950S	3.45	.136	9.5	3/8	152	6	9	.354
ACFS950S	3.45	.136	9.5	3/8	104	4-1/8	9	.354

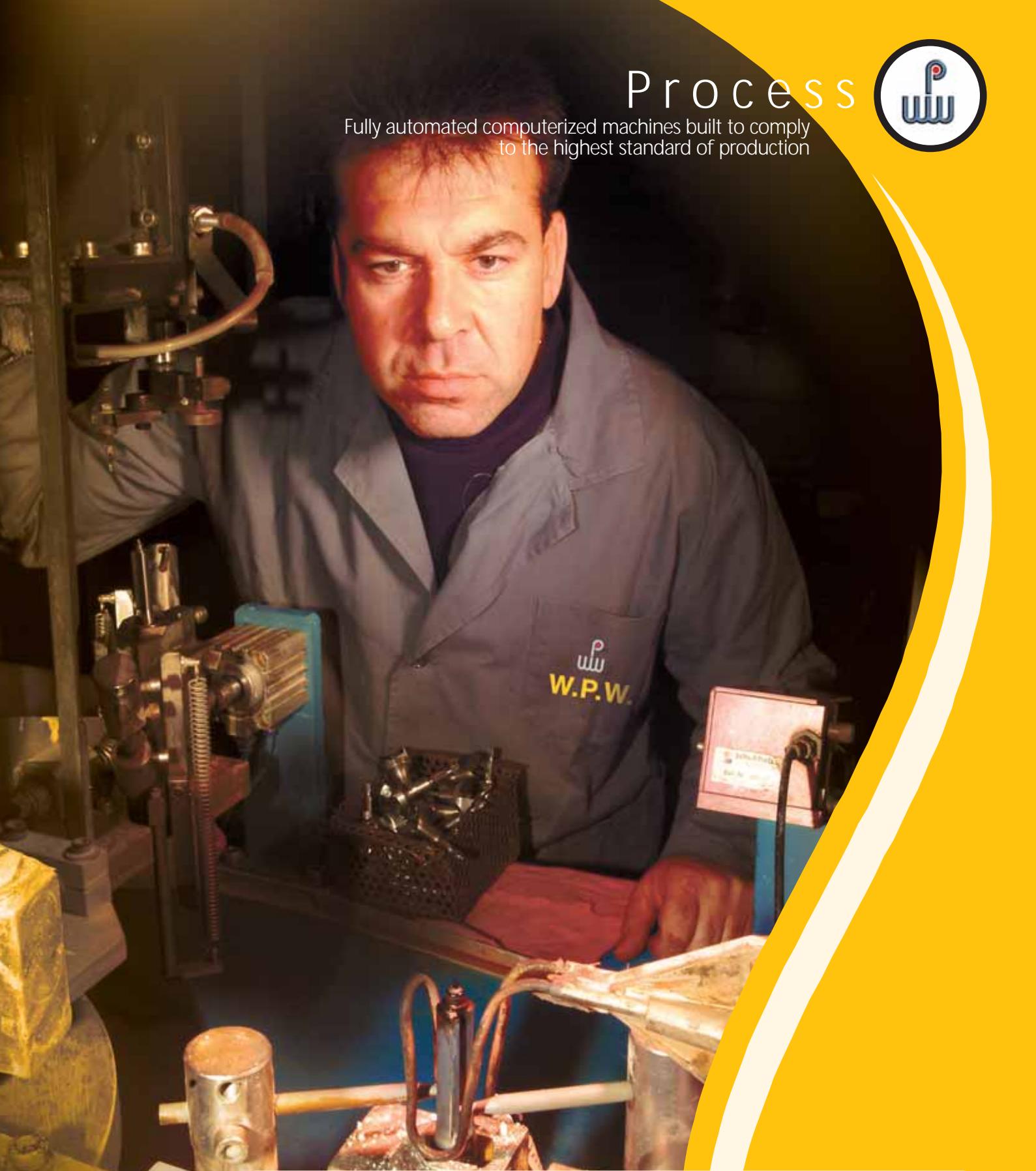
• Spiral

Replaceable "Fish tail" drill - DR03450



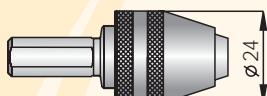
Process

Fully automated computerized machines built to comply
to the highest standard of production

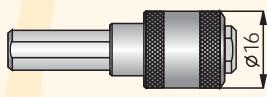


Click & Drill

Professional quick-change system for drilling, countersinking and screw-driving. The most effective way to increase productivity for drilling and fixing. The tools are designed for use with power drills and screwdrivers. Compatible with direct-drive 1/4" (6.3mm) hexagonal shank power bits.

**QC****Quick - Change Chuck**

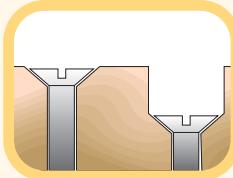
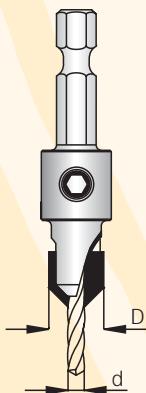
QCL6306
Professional chuck
One hand operation



QCH6306
DIY chuck



QCE
Quick - Change Extension
150 mm (6") long
Tool No: QCE6304

**AS0****Countersinks - Carbide Tipped**
Drill bits adjustable for drilling different lengths.

Tool No.	d		D	
	mm	inch	mm	inch
AS02004	2.0	5/64	9.5	3/8
AS02404	2.4	3/32	9.5	3/8
AS02504	2.5		9.5	3/8
AS02804	2.8	7/64	9.5	3/8
AS03004	3.0		9.5	3/8
AS03204	3.2	1/8	9.5	3/8
AS03504	3.5		9.5	3/8
AS03604	3.6	9/64	12.7	1/2
AS04004	4.0	5/32	9.5	3/8
AS04804	4.8	3/16	12.7	1/2
AS05004	5.0		12.7	1/2
AS06004	6.0	15/64	12.7	1/2

Available with regular, taper point or slow spiral drills.
Depth - stop available (TAS). See list on page 64.

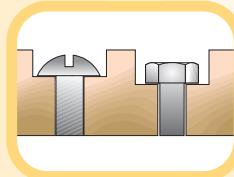
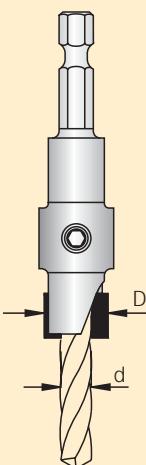
**COUNTERSINK & STOP**

TOTAL DEPTH CONTROL
Unique adjustable depth-stops
No scratches!
No burn marks!

See Pg. 68-69

QCS**Set No. QCS0204**

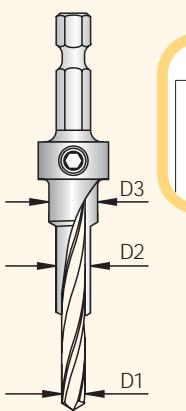
Consists of:
AS02504S, AS03004S, AS04004S and
QCH6306

**AS4****Counterbores - Carbide tipped.**
Flat bottom.

Tool No.	d		D	
	mm	inch	mm	inch
AS44004	4.00	5/32	9.5	3/8
AS44804	4.76	3/16	9.5	3/8
AS44814	4.76	3/16	12.7	1/2
AS45014	5.00	-	14.0	.551
AS46014	6.00	15/64	15.0	.591
AS46304	6.35	1/4	12.7	1/2
AS46314	6.35	1/4	16.0	5/8

Short drills - 75mm (3") length - are used.





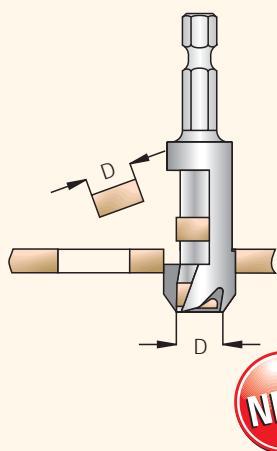
ASD

RTA Furniture Step Drills - 3 Steps

For connecting screws - Confirmat, Directa etc.
HSS slow spiral drills.
Countersinks with 2 steps,
DHN* treated - extremely resistant to wear.

Tool No.	D1	D2	D3	Drill No.
	mm	mm	mm	
ASD0504D	3.5	5.0	7.0	DRS0350
ASD0704D	5.0	7.0	10.0	DRSL500

*DHN - advanced surface treatment for extended life

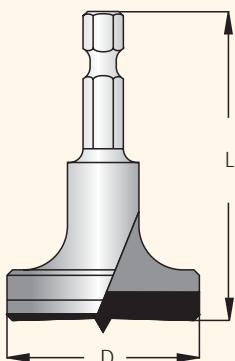


MNS

Plug Cutters - Heavy Duty

Heat treated and DHN* treated.
For best results - use a Drill Press.

Tool No.	D
	mm inch
MNS0804	8.0 5/16
MNS0954	9.5 3/8
MNS1004	10.0 .394
MNS1204	12.0 .472
MNS1274	12.7 1/2
MNS1504	15.0 .591
MNS1604	16.0 5/8

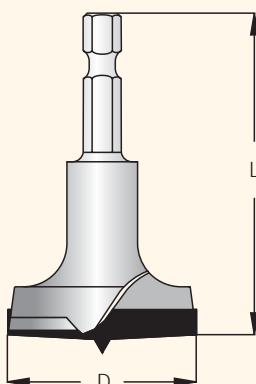


HMPS

Carbide Tipped Boring Bits

For blind holes.
For best results - use a Drill Press.

Tool No.	D	L
	mm	mm
HMPS154	15	55
HMPS204	20	55
HMPS254	25	55
HMPS264	26	55
HMPS304	30	55
HMPS354	35	55

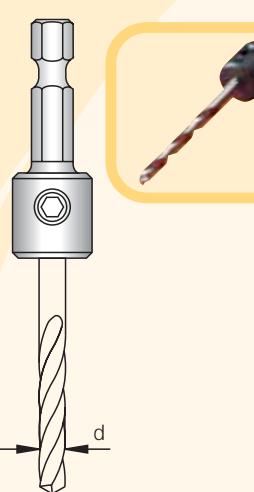


HMPT

Carbide Tipped Boring Bits

For blind holes. Designed for drilling with a hand held drill, but for better results use a Drill Press.

Tool No.	D	L
	mm	mm
HMPT154	15	58
HMPT264	26	58
HMPT354	35	58
HMPT404	40	58



TDS

Drill Adapters

Converts all standard drill bits into Quick-Change tools.

Tool No.

d

mm **inch**

TDS0200	2.0	5/64
TDS0240	2.4	3/32
TDS0250	2.5	.098
TDS0280	2.8	7/64
TDS0300	3.0	.118
TDS0320	3.2	1/8
TDS0350	3.5	.138
TDS0360	3.6	9/64

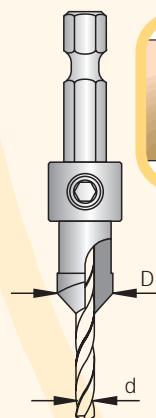
Tool No.

d

mm **inch**

TDS0400	4.0	5/32
TDS0440	4.4	11/64
TDS0480	4.76	3/16
TDS0500	5.0	.197
TDS0560	5.6	7/32
TDS0600	6.0	.236
TDS0630	6.3	1/4

DIY "Click & Drill" Tools



HS0

Countersink - HS

Heat treated steel.

Tool No.

D

mm **inch**

HS02404	2.4	3/32	9.5	3/8
HS02504	2.5		9.5	3/8
HS02804	2.8	7/64	9.5	3/8
HS03004	3.0		9.5	3/8

Tool No.

d

D

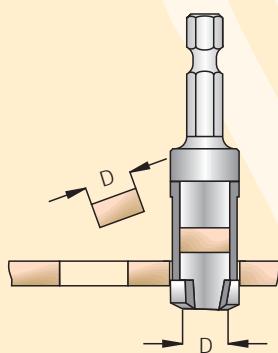
mm **inch**

HS03204	3.2	1/8	9.5	3/8
HS03504	3.5		9.5	3/8
HS03604	3.6	9/64	12.7	1/2
HS04004	4.0	5/32	12.7	1/2

Set No. QHS4004

Consists of:

4 Pcs. countersinks and QCH6306.



HMNS

Plug Cutters

Heat treated steel.

For best results - use a Drill Press.

Tool No.

D

mm **inch**

HMNS954	9.5	3/8
HMNS104	10.0	.394

Tool No.

D

mm **inch**

HMNS134	12.7	1/2
HMNS164	16.0	5/8

HMZ

Glass & Tile Drills

Carbide Tipped. For use on glass, porcelain, tile and mirrors.

Tool No.

D

mm **inch**

HMZ0304	3	1/8
HMZ0404	4	5/32
HMZ0504	5	3/16
HMZ0604	6	1/4
HMZ0704	7	9/32

Tool No.

D

mm **inch**

HMZ0804	8	5/16
HMZ1004	10	3/8
HMZ1204	12	15/32
HMZ1304	13	1/2

How to drill glass:

1. Drill at a slow speed 500-800 RPM, applying slight pressure.
2. Never drill dry! Apply lubricant, it might be water, or preferably light oil.
3. Drill carefully until the point just breaks through the surface of the glass. Then, turn the glass over, and finish drilling the hole from the other side.

Capacity

Automated lines for large quantities, quick delivery and uniformity



Woodpecker

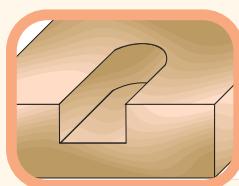
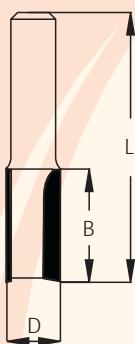


Economical line of quality carbide tipped router bits and other tools essential for every craftsman and DIY amateur. A basic assortment of more than 100 router bits and sets. The tools facilitate renovations, repairs and restoration of furniture. Excellent for building furniture and artistry on wood. Available with 6mm shank, 8mm shank and 1/4" shank.

Shank Diameter 6mm 1/4" 8mm
Last Digit 3 4 5



All Woodpecker router bits are available with 6mm shank (suffix 3), 8mm shank (suffix 5) and 1/4" shank (suffix 4).

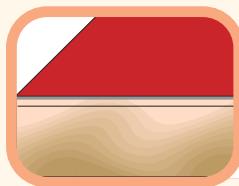
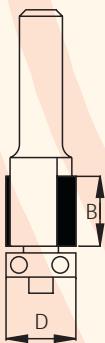


HP

Straight Bits

Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
HP21055	5.0	3/16	12	1/2	48	1-7/8
HP23065	6.0	1/4	20	3/4	48	1-7/8
HP23085	8.0	5/16	20	3/4	48	1-7/8
HP24085	8.0	5/16	25	1	56	1-3/16
HP23105	10.0	3/8	20	3/4	48	1-7/8
HP23125	12.0	15/32	20	3/4	48	1-7/8
HP24125	12.0	15/32	25	1	56	1-3/16
HP23135	12.7	1/2	20	3/4	48	1-7/8
HP24134*	12.7	1/2	25	1	56	1-3/16
HP23145	14.0	9/16	20	3/4	48	1-7/8
HP23165	16.0	5/8	20	3/4	48	1-7/8
HP23185	18.0	45/64	20	3/4	48	1-7/8
HP23195	19.0	3/4	20	3/4	48	1-7/8
HP23205	20.0	25/32	20	3/4	48	1-7/8

* Available only with 6mm or 1/4" shank

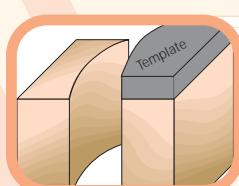
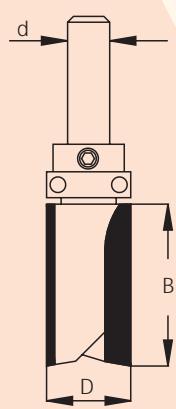


HF

Flush Trimming Bit



Tool No.	D		B		Bearing
	mm	inch	mm	inch	
HF22095	9.5	3/8	13	1/2	B095032
HF24095	9.5	3/8	25	1	B095032
HF22125	12.7	1/2	13	1/2	B127048
HF24125	12.7	1/2	25	1	B127048

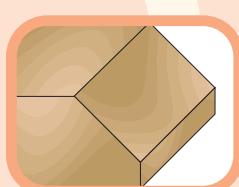
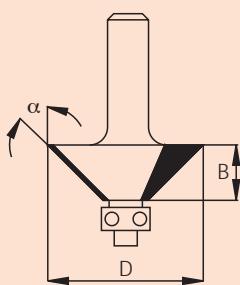


HPF

Straight Plunge Template Bit

Tool No.	D		B		Bearing	
	mm	inch	mm	inch	d=1/4" (6 mm)	d=8mm
HPF4124*	12.7	1/2	25	1	B127063	-
HPF4165	16.0	5/8	25	1	B159063	B160080

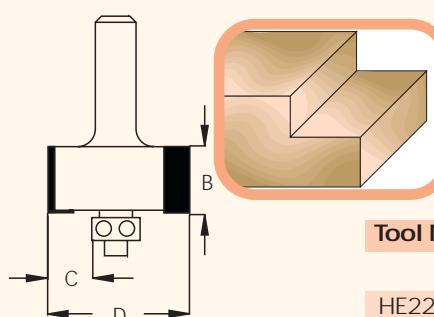
* Available only with 6mm or 1/4" shank



HSL

Bevel Trimming Bit

Tool No.	α degrees	D		B		Bearing
		mm	inch	mm	inch	
HSL1505	15	16	5/8	6.5	1/4	B127048
HSL2255	25	15	19/32	6.5	1/4	B095032
HSL4505	45	24	31/32	6.5	1/4	B127048
HSL2455	45	32	1-1/4	13	1/2	B095032

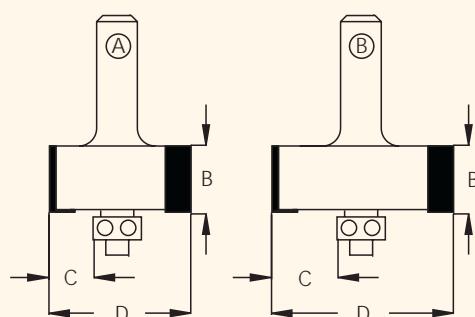
**HE****Rabbeting Bit**

Tool No.	C		D		B		Bearing
	mm	inch	mm	inch	mm	inch	
HE22035	4.8	3/16	18.8	3/4	11	7/16	B095048
HE22105	9.5	3/8	28.6	1-1/8	12	15/32	B095032
HE22095	11.1	7/16	31.8	1-1/4	12	15/32	B095048

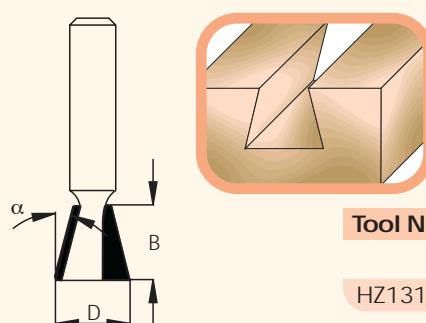
**HES****Rabbeting & Flush Trim Set**

2 bits - 4 ball bearing guides

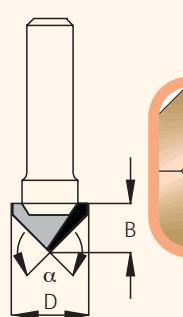
Allows 8 different cuts



Description	Tool No.	C		Bearing
		mm	inch	
Set	HES8005			
Tool A	HE22035	0-flush	B190048	
		1.6	1/16	B160048
		3.2	1/8	B127048
		4.8	3/16	B095048
Tool B	HE22095	6.3	1/4	B190048
		8.0	5/16	B160048
		9.5	3/8	B127048
		11.1	7/16	B095048

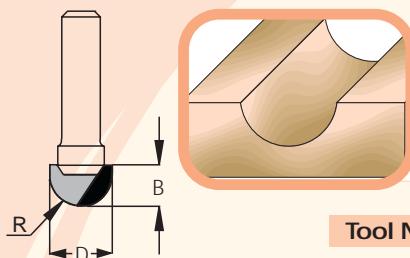
**HZ****Dovetail Bit**

Tool No.	α degrees	D		B	
		mm	inch	mm	inch
HZ13145	14	12.7	1/2	12	1/2

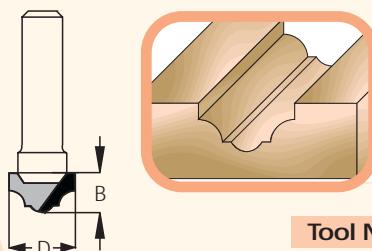
**HV****"V"- Grooving Bits**

Tool No.	α degrees	D		B	
		mm	inch	mm	inch
HV60955	60	9.5	3/8	10	25/64
HV90125	90	12.7	1/2	8	5/16

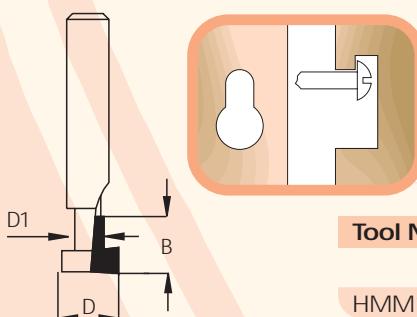
Reminder:
 Shank Dia. | 6mm | 1/4" | 8mm |
 Last Digit | 3 | 4 | 5 |

**HRB****Core Box Bits**

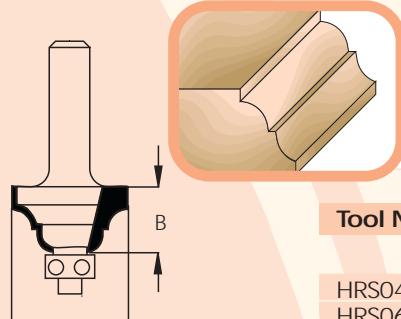
Tool No.	R	D	B	
	mm	inch	mm	inch
HRB0605	3.2	1/8	6.3	1/4
HRB1005	4.8	3/16	9.5	3/8
HRB1205	6.3	1/4	12.7	1/2
HRB1905	9.5	3/8	19.0	3/4
			5	3/16
			6	1/4
			8	5/16
			11	7/16

**HRC****Classical Bit**

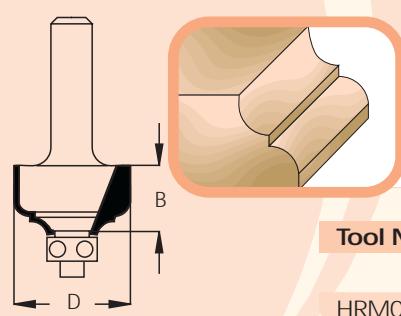
Tool No.	D	B		
	mm	inch	mm	inch
HRC0305	12.7	1/2	8	5/16

**HMM****Key Hole Bit**

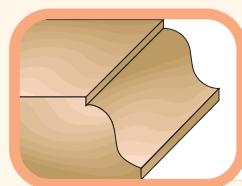
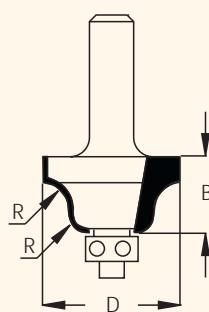
Tool No.	D	D1	B	
	mm	inch	mm	inch
HMM1095	9.5	3/8	4.8	3/16
			9.5	3/8

**HRS****Classical Bit**

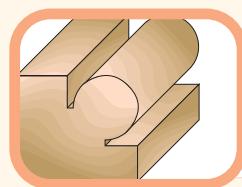
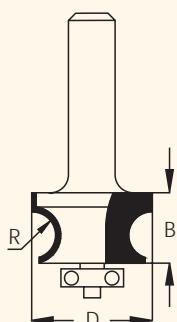
Tool No.	D	B	Bearing
	mm	inch	
HRS0405	25.0	1	16 5/8
HRS0605	35.0	1-3/8	19 3/4
			B095032
			B095032

**HRM****Classical Bit**

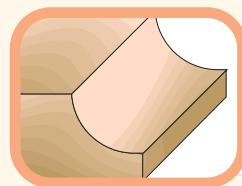
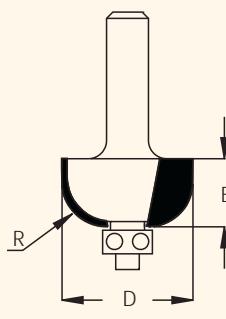
Tool No.	D	B	Bearing
	mm	inch	
HRM0305	22.0	7/8	13 1/2
			B095032

**HRD****Ogee Bit**

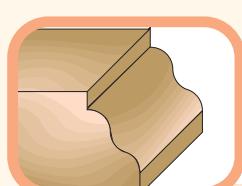
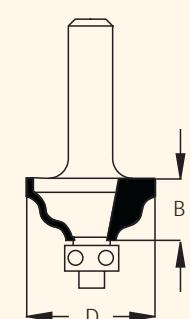
Tool No.	R	D	B	Bearing
	mm inch	mm inch	mm inch	
HRD0405	4.0 5/32	25.0 1	16 5/8	B095032
HRD0605	6.3 1/4	35.0 1-3/8	19 3/4	B095032

**HRF****Corner Beading Bit**

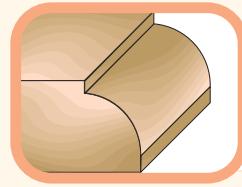
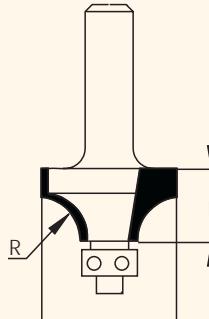
Tool No.	R	D	B	Bearing
	mm inch	mm inch	mm inch	
HRFB035	3.2 1/8	22.2 7/8	14 9/16	B127048
HRFB065	6.3 1/4	31.8 1-1/4	19 3/4	B127048

**HRZ****Cove Bits**

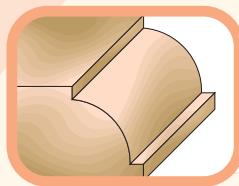
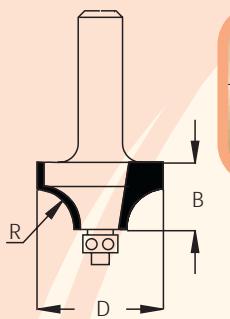
Tool No.	R	D	B	Bearing
	mm inch	mm inch	mm inch	
HRZ0605	6.3 1/4	22.0 7/8	13 1/2	B095032
HRZ1005	9.5 3/8	28.6 1-1/8	14 9/16	B095032

**HRJ****Wavy Edge Bit**

Tool No.	D	B	Bearing
	mm inch	mm inch	
HRJ0305	25.0 1	13 1/2	B095032

**HRW****Rounding Over Bits**

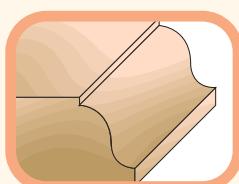
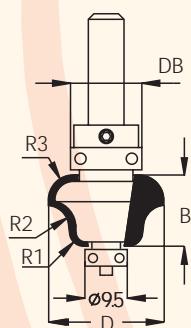
Tool No.	R	D	B	Bearing
	mm inch	mm inch	mm inch	
HRW0305	3.2 1/8	15.8 5/8	10 25/64	B095032
HRW0605	6.3 1/4	22.0 7/8	13 1/2	B095032
HRW0805	8.0 5/16	25.0 1	15 19/32	B095032
HRW1005	9.5 3/8	28.6 1-1/8	17 43/64	B095032
HRW1215	12.7 1/2	38.0 1-1/2	17.5 11/16	B127048

**HRP****Beading Bits**

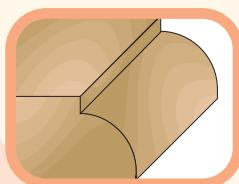
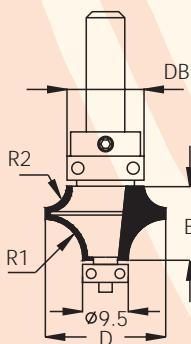
Tool No.	R	D	B	Bearing
	mm inch	mm inch	mm inch	
HRP0305	3.2 1/8	15.8 5/8	10	25/64 B063032
HRP0605	6.3 1/4	22.0 7/8	13	1/2 B063032
HRP0805	8.0 5/16	25.0 1	15	19/32 B063032
HRP1005	9.5 3/8	28.6 1-1/8	17	43/64 B063032
HRP1215	12.7 1/2	38.0 1-1/2	17.5	11/16 B095048

HD DOUBLE SHAPED TOOLS

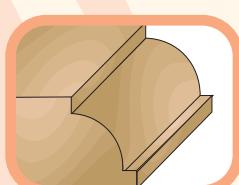
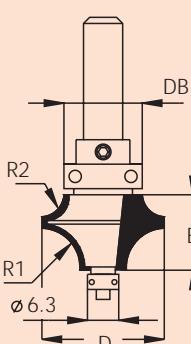
With 2 Bearings (top and bottom).

**HDD****Decorative Bits**

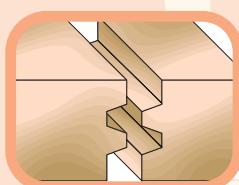
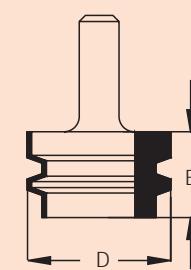
Tool No.	D	B	R1=R2	R3	DB
	mm inch	mm inch	mm inch	mm inch	mm inch
HDD0405	25.4 1	16 5/8	4.0 5/32	4.8 3/16	16 5/8

**HDW****Rounding Over Bits**

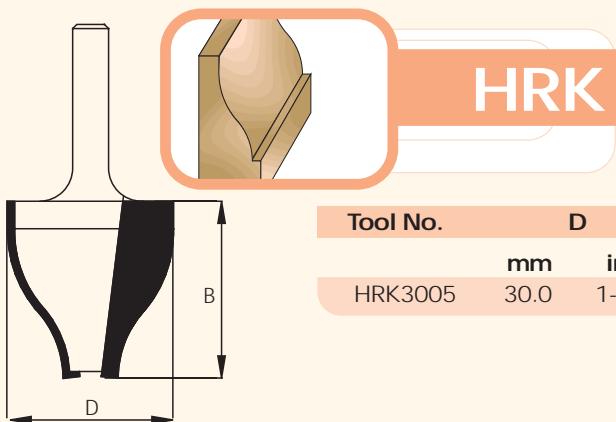
Tool No.	D	B	R1	R2	DB
	mm inch	mm inch	mm inch	mm inch	mm inch
HDW0605	22.0 7/8	13.5 17/32	6.3 1/4	3.2 1/8	16 5/8
HDW0805	25.0 63/64	15.5 39/64	8.0 5/16	4.8 3/16	16 5/8

**HDP****Beading Bits**

Tool No.	D	B	R1	R2	DB
	mm inch	mm inch	mm inch	mm inch	mm inch
HDP0605	22.0 7/8	13.5 17/32	6.3 1/4	3.2 1/8	16 5/8
HDP0805	25.0 63/64	15.5 39/64	8.0 5/16	4.8 3/16	16 5/8

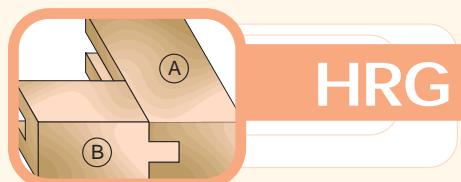
**HFJ****Glue Joint Bit**

Tool No.	D	B
	mm inch	mm inch
HFJ2005	25.4 1	28.5 1-1/8



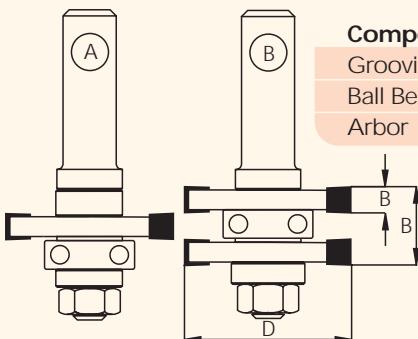
Vertical Raised Panel Bit

Tool No.	D	B		
	mm	inch	mm	inch
HRK3005	30.0	1-3/16	32	1-1/4



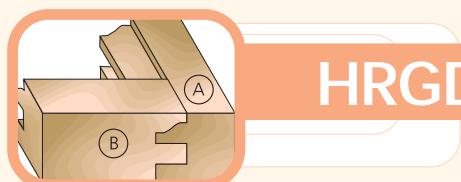
Tongue & Groove Cutter Set

Description	Tool No.	D		B	
		mm	inch	mm	inch
Assembly	HRG6005	32.0	1-1/4	19	3/4



Components

Grooving cutter	HN26332	32.0	1-1/4	6.3	1/4
Ball Bearing	B127063				
Arbor	NHRG655				



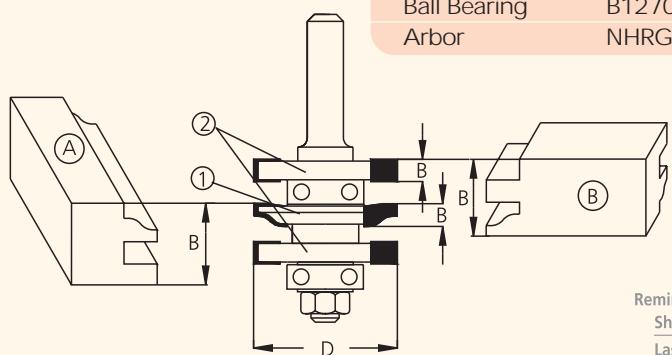
Tongue & Groove Easy Set - Ogee For Profile Scribed Doors No reassembly required!

Both parts of the joint are cut by just changing the cutter height.

Description	Tool No.	D		B	
		mm	inch	mm	inch
Assembly	HRGD205	32.0	1-1/4	19	3/4

Components

1. Profile cutter	HNRG232	32.0	1-1/4	6.3	1/4
2. Grooving cutter	HN26332	32.0	1-1/4	6.3	1/4
Ball Bearing	B127063				
Arbor	NHRG645				



Reminder:

Shank Dia.	6mm	1/4"	8mm
Last Digit	3	4	5



DH "Dolls Houses" Router Bits

A line of tools designed to meet the needs of model makers, architects, dolls houses enthusiasts and professional craftsman for small sized, shaped tools.

6 mm, 1/4" or 8 mm shank

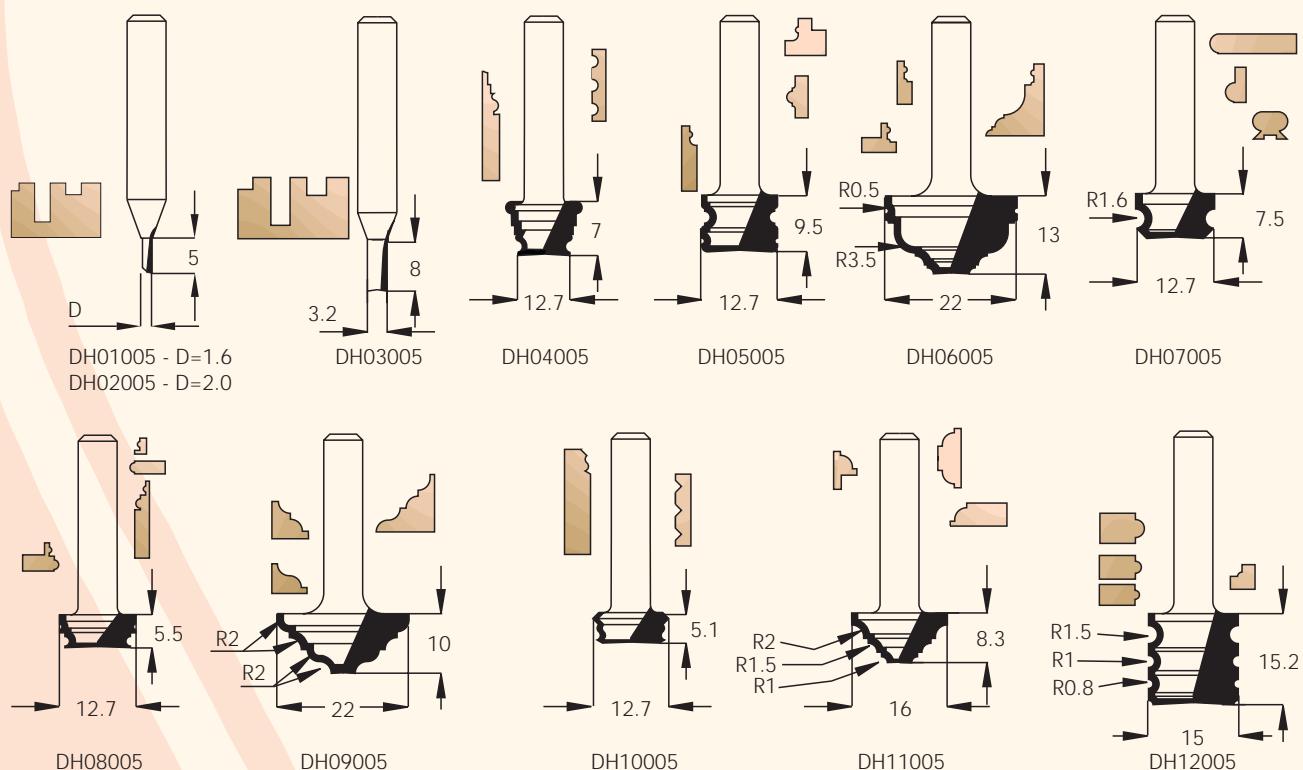


DHS

"Dolls Houses" 12 Pcs. Set

Set No. DHS1205

Consists of 12 router bits in a handsome wooden storage box.



HS12

12 Pcs. Starter Set

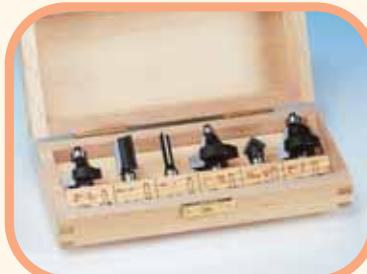
Set No. HS12175

Consists of:

HRB1205, HRZ0605, HZ13145, HSL2455, HF22125, HRW0605, HRW1005, HP23065, HP23125, HP23165, HV90125, HRD0405.

In a handsome wooden storage box.



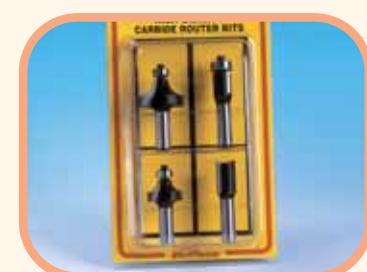
**HS06****6 Pcs. Set****Set No. HS06225**

Consists of:

HRP0605, HP23125, HP23065, HRW1005, HV90125, HRD0405
In a handsome wooden storage box.**HS30****30 Pcs. Set****Set No. HS30175**

Consists of:

30 tools of Woodpecker bits in a handsome wooden storage box.

**HS04****4 Pcs. Set****Set No. HS04015**

Consists of:

HRW0605, HRW1005, HP23125, HF22125
in a transparent blister.

Other selections available.

**SAF****Laminated Trimmer**

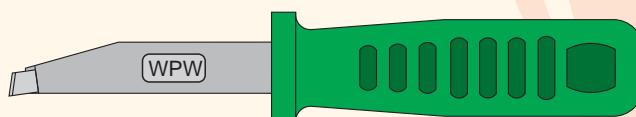
For wood, melamine, PVC or Polyester veneers.

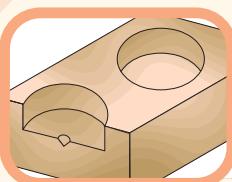
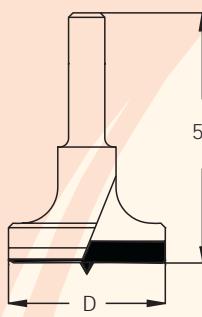
Trims clean & flush up to 3 mm thick.

Blades are double edged.

Tool No. SAF0000

Replaceable blade No. SAFM020

**SA****Carbide Laminate Cutter**“Score and Break” for cutting
laminates and other hard materials.
Can be used for glass.**Tool No. SA00000**

**HMP****Boring Bits**

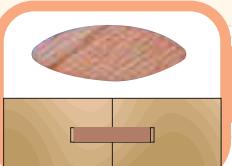
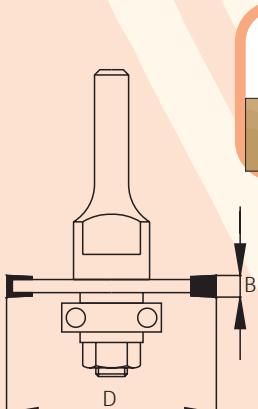
For blind holes

8mm shank

Tool No.	D mm
HMP2005	20
HMP2505	25
HMP2605	26
HMP3005	30
HMP3505	35

**HMPS****Boring Bits - 5 Pcs. Set****Set No. HMPS055**

Bits in a wooden box.

**NB****"Biscuit" Jointer Assembly**Includes slotting cutter
arbor and ball bearing guideD = 40.0mm (1-37/64")
B = 4.0mm (5/32")

Assembly	For Biscuit No.	Bearing
NB15005	0	B220060
NB19005	10	B190060
NB23005	20	B150060

Components

Description	Tool No.
Cutter (2 wings)	N204030
Arbor & Nut	NB06005

**NBS****Set No. NBS0305**

Set for all 3 sizes of biscuits.



Quality control

Each product is checked for sharpness and concentricity



Replacement Parts

Drills, Ball Bearing guides, screws and other accessories for router machines and for router bits.

Shank Diameter Last Digit	6mm	1/4"	8mm	3/8"	10mm	12mm	1/2"
	3	4	5	6	7	2	8

DR

Drill Bits - Regular Flute

HSS M2 Fully ground.

Tool No.	D	
	mm	inch
Drills DIN 338		
DR02000	2.0	5/64
DR02400	2.4	3/32
DR02500	2.5	
DR02800	2.8	7/64
DR03000	3.0	
DR03200	3.2	1/8
DR03500	3.5	
DR03600	3.6	9/64
Short Drills DIN 1897		
DRK0280	2.8	7/64
DRK0300	3.0	
DRK0320	3.2	1/8
DRK0360	3.6	9/64

Tool No.	D	
	mm	inch
DR04000		
DR04400	4.4	11/64
DR04500	4.5	
DR04800	4.8	3/16
DR05000	5.0	
DR05600	5.6	7/32
DR06000	6.0	15/64
DR06300	6.3	1/4
DRK0400		
DRK0500	5.0	
DRK0600	6.0	15/64

DRS

Slow Spiral Drills

HSS Din 338 Fully ground.

Better chip removal - easier drilling.

Tool No.	D	
	mm	inch
DRS0200		
DRS0240	2.4	3/32
DRS0280	2.8	7/64
DRS0300	3.0	
DRS0320	3.2	1/8
DRS0350	3.5	
DRS0360	3.6	9/64
DRS0400	4.0	5/32
DRS0440	4.4	11/64
DRS0480	4.8	3/16

Tool No.	D	
	mm	inch
DRS0500		
DRS0560	5.6	7/32
DRS0600	6.0	15/64
DRS0630	6.3	1/4
DRS0710	7.1	9/32
DRS0800	8.0	5/16
DRS0900	9.0	.354
DRS0950	9.5	3/8
DRS1110	11.1	7/16
DRS1270	12.7	1/2

DRT

Taper Point Drills

HSS M2 Din 338 Fully ground.

Save time when drilling pilot holes for wood screws. Drill in one pass both for the shank of the screw and for the thread. Pilot holes for wood screws are recommended especially for hard woods. The hole in the first piece of wood should be bored large enough to accommodate freely the screw shank. In the second piece of wood the hole should be smaller according to the root diameter of the thread.

Tool No.	D	
	mm	inch
DRT0200		
DRT0240	2.4	3/32
DRT0280	2.8	7/64
DRT0320	3.2	1/8
DRT0360	3.6	9/64
DRT0400	4.0	5/32

Tool No.	D	
	mm	inch
DRT0440		
DRT0480	4.8	3/16
DRT0500		
DRT0560	5.6	7/32
DRT0600	6.0	15/64
DRT0630	6.3	1/4



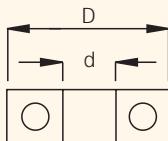
DR...4

Drills with 1/4" (6.3mm) Hex Shank

HSS M2 Din 338 Fully ground.

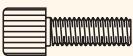
Tool No.	D	
	mm	inch
DR02404		
DR03004	3.0	
DR03204	3.2	1/8
DR03504	3.5	
DR03604	3.6	9/64

Tool No.	D	
	mm	inch
DR04004		
DR04804	4.8	3/16
DR05004		
DR06004	6.0	
DR06304	6.3	1/4

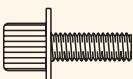
**B****Ball Bearings**

Stock No.	D		d	
	mm	inch	mm	inch
B048024	4.76	3/16	2.38	3/32
B063032	6.35	1/4	3.17	1/8
B080040	8.00	.315	4.00	.157
B095032	9.53	3/8	3.17	1/8
B095048	9.53	3/8	4.76	3/16
B095063	9.53	3/8	6.35	1/4
B120060	12.00	.472	6.0	.236
B124048	12.40	.488	4.76	3/16
B127048	12.70	1/2	4.76	3/16
B127063	12.70	1/2	6.35	1/4
B150060	15.00	.591	6.0	.236
B159063	15.87	5/8	6.35	1/4
B160048	15.87	5/8	4.76	3/16
B160050	16.00	.630	5.00	.197
B160080	16.00	.630	8.00	.315

Stock No.	D		d	
	mm	inch	mm	inch
B190048	19.05	3/4	4.76	3/16
B190060	19.00	.748	6.00	.236
B190063	19.05	3/4	6.35	1/4
B190127	19.05	3/4	12.70	1/2
B220060	22.00	.866	6.0	.236
B220070	22.00	.866	7.00	.276
B220080	22.00	.866	8.00	.315
B254127	25.40	1	12.70	1/2
B260100	26.00	1.024	10.00	.394
B280150	28.00	1.102	15.00	.591
B285127	28.57	1-1/8	12.70	1/2
B320150	32.00	1-1/4	15.00	.591
B350150	35.00	1.378	15.00	.591
B420150	42.00	1.654	15.00	.591

BR/BT**Screws**

Stock No.	Description	Application	Key No.
BR25095	NC 3/48 x 9.5mm	Ball bearing fixing	KEY5/64
BR30100	M 3 x 10mm	Ball bearing fixing	KEY02.5
BR32095	NC 5/40 x 9.5mm	Ball bearing fixing	KEY3/32
BR40120	M 4 x 12mm	ACM countersink and TATM	KEY03.0
BR48127	NF10-32 x 12.7mm	Ball bearing fixing	KEY04.0



BRW2595	NC 3/48 x 9.5mm	Ball bearing fixing	KEY5/64
BRW3295	NC 5/40 x 9.5mm	Ball bearing fixing	KEY3/32



BR32026	NC 5/40 x 2.6mm	Retaining collars	KEY01.6
BR32032	NC 5/40 x 3.2mm	Retaining collars	KEY01.6
BR48048	NC 10/24 x 4.8mm	Countersinks & Counterbores	KEY3/32
BR50050	M5 x 5mm	Combi chucks	KEY02.5
BR50100	M5 x 10mm	Combi drills & adapters	KEY02.5
BR60060	M6 x 6mm	Countersinks & Counterbores	KEY03.0
BR63048	NF1/4-28 x 4.8mm	Countersinks & Counterbores	KEY1/8
BR63063	NF1/4-28 x 6.3mm	Countersinks & Counterbores	KEY1/8



BT35048	Torx M 3.5 x 4.8mm	Replaceable bits	KEY-TORX
BT40056	Torx M 4 x 5.6mm	Replaceable bits	KEY-TORX



BR40100	M 4 x 10mm	Ball bearing fixing	KEY02.5
BRK6363	NF1/4-28 x 6.3mm	Fixing Stopper on Countersink	KEY-4032



BT50080	M 5 x 8mm	Fixing Slot & Undercut bit	KEY-TORX25
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BD**Dust Shields**

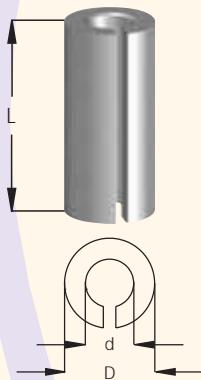
Stock No.	Description	Application
BD08040	8mm Dia x 4mm Dia	B080040 Ball Bearing Guides
BD09532	3/8" Dia x 1/8" Dia	B095032 Ball Bearing Guides
BD09548	3/8" Dia x 3/16" Dia	B095048 Ball Bearing Guides
BD12748	1/2" Dia x 3/16" Dia	B127048 Ball Bearing Guides
BD16050	16mm Dia x 5mm Dia	B160050 Ball Bearing Guides
BD35150	35mm Dia x 15mm Dia	B350150 Ball Bearing Guides



PF...0

Retaining Collars

Stock No.	d	Application	Screw No.
PF06300	6.35mm (1/4")	For Shank Mounted Ball Bearing Guides	BR32026, BR32032
PF08000	8mm	For Shank Mounted Ball Bearing Guides	BR32032
PF09500	6.35mm (1/4")	For B095063 Bearing	BR32026
PF10000	10mm	For Shank Mounted Ball Bearing Guides	BR32026, BR32032
PF12700	12.7mm (1/2")	For Shank Mounted Ball Bearing Guides	BR48048
PF19000	12.7mm (1/2")	For B190127 & B254127 Bearings	BR32026, BR32032



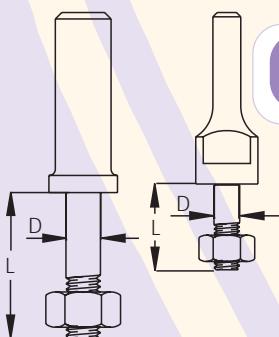
T/TL

Reduction Sleeves

For reducing collet size to take smaller shank.

Stock No.	D	d	L
T060032	6mm	1/8"	25mm
T063030	1/4"	3mm	25mm
T063032	1/4"	1/8"	25mm
T080060	8mm	6mm	25mm
T080063	8mm	1/4"	25mm
T095063	3/8"	1/4"	25mm
T095080	3/8"	8mm	25mm
T100060	10mm	6mm	25mm
T100080	10mm	8mm	25mm

Stock No.	D	d	L
T120060	12mm	6mm	25mm
TL12063	12mm	1/4"	30mm
T120080	12mm	8mm	25mm
T120100	12mm	10mm	25mm
TL12760	1/2"	6mm	30mm
T127063	1/2"	1/4"	25mm
T127080	1/2"	8mm	25mm
TL12795	1/2"	3/8"	30mm
T127100	1/2"	10mm	25mm



N

Arbors for Slotting Cutters

6mm, 1/4", 8mm, 12mm and 1/2" shank

Stock No.		L		Description
	mm	inch	mm	inch
N000004	7.94	5/16	15	.590
N000804	7.94	5/16	15	.590
N000014	7.94	5/16	34	1-11/32
N000814	7.94	5/16	34	1-11/32
				Includes ball bearing B159063
				Includes ball bearing B220080

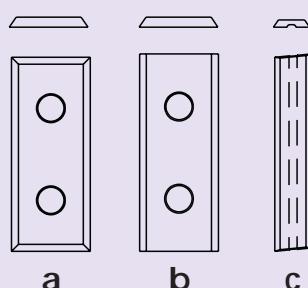
6mm, 1/4" and 8mm shank

NB06004	6.00	.236	20.5	13/16	For Biscuit jointer cutters
---------	------	------	------	-------	-----------------------------

CM

Tungsten Carbide Replaceable Blades

For tools with replaceable Carbide blades.



Stock No.	Dimensions mm	Type	Cut. Edges	Holes
CM01212	12 x 12 x 1.5	a	4	1
CM03090	29.5 x 9 x 1.5	a	4	2
CM03012	29.5 x 12 x 1.5	a	4	2
CM05090	50 x 9 x 1.5	a	4	2
CM05012	49.5 x 12 x 1.5	a	4	2
CMO1217	50 x 12 x 1.7	a	4	3
CMO3012b	30 x 12 x 1.5	b	2	2
CMO5012b	30 x 12 x 1.5	b	2	2
CM03055	30 x 5.5 x 1.1	c	2	-
CM05055	50 x 5.5 x 1.1	c	2	-

*Available also with HARD GRADE - K

For ordering K-GRADE - add K to the last digit of the stock No.

For details about K-GRADE – see page 66



Creativity

Always committed to developing new ideas into practical tools,
making your job more cost effective



New Product Lines

This section includes our latest new product lines:

K-Bits - a new generation of carbide router bits with up to 200% longer tool life.

Miniature Bearing Bits - an innovative line of tools with 4.8mm (3/16") ball bearing guide.

Countersink & Stop - Countersinks with unique adjustable depth-stops, developed for quick and easy adjustment of the countersink depth.



K-Bits

New generation of carbide router bits for cutting abrasive materials

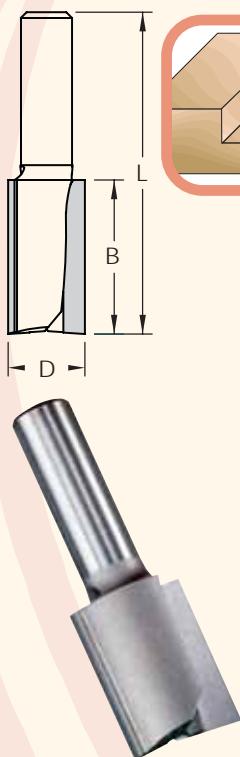
Cost effective - With up to 200% longer life time. Excellent for cutting MDF and HDF.

K-Carbide grade - Developed especially for working on man-made materials that consist of synthetic polymer resins for bonding purposes.

K-Carbide is Resistant against the corrosion produced by the resins on standard carbide grades.



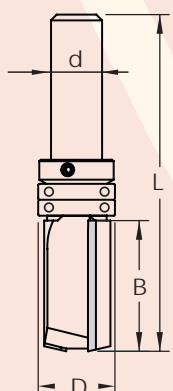
LONGER TOOL LIFE



P2..K

1/2" or 12mm shank

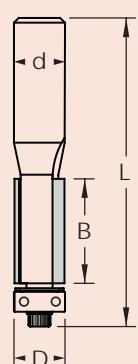
Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
P230608K	6.0	.236	19	3/4	63	2-1/2
P230638K	6.3	1/4	19	3/4	63	2-1/2
P240808K	8.0	5/16	25	1	70	2-3/4
P240958K	9.5	3/8	25	1	70	2-3/4
P241008K	10.0	.394	25	1	70	2-3/4
P251008K	10.0	.394	32	1-1/4	76	3
P241208K	12.0	.472	25	1	67	2-5/8
P251208K	12.0	.472	32	1-1/4	73	2-7/8
P261208K	12.0	.472	38	1-1/2	80	3-1/8
P281208K	12.0	.472	51	2	108	4-1/4
P241278K	12.7	1/2	25	1	67	2-5/8
P251278K	12.7	1/2	32	1-1/4	73	2-7/8
P261278K	12.7	1/2	38	1-1/2	80	3-1/8
P281278K	12.7	1/2	51	2	108	4-1/4
P251608K	16.0	5/8	32	1-1/4	73	2-7/8
P261608K	16.0	5/8	38	1-1/2	80	3-1/8
P281608K	16.0	5/8	51	2	96	3-3/4
P252008K	20.0	.787	32	1-1/4	73	2-7/8



PF..K

Straight Template Bits

Tool No.	D		B		L		Shank Dia (d)
	mm	inch	mm	inch	mm	inch	
PF41605K	16.0	5/8	25	1	67	2-5/8	8
PF51605K	16.0	5/8	32	1-1/4	73	2-7/8	8
PF41908K	19.0	3/4	25	1	77	3-1/16	12
PF81908K	19.0	3/4	51	2	102	4	12



F..K

Flush Trim Bits

Tool No.	D		B		L		Shank Dia (d)
	mm	inch	mm	inch	mm	inch	
F240954K	9.5	3/8	25	1	66	2-5/8	6
F241274K	12.7	1/2	25	1	66	2-5/8	6
* F221604K	16.0	5/8	16	5/8	56	2-7/32	6
F271275K	12.7	1/2	42	1-21/32	83	3-1/4	8
F241278K	12.7	1/2	25	1	76	3	12
F261278K	12.7	1/2	38	1-1/2	102	4	12
F281278K	12.7	1/2	51	2	115	4-1/2	12

* Down Shear

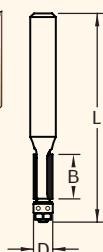
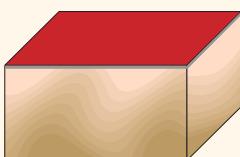


Miniature Bearing Bits

An Innovative line of tools with 4.8mm (3/16") Ball Bearing guide - Smallest in the market.

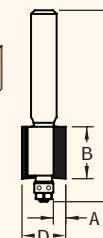
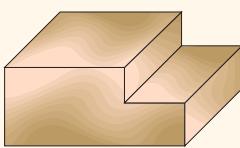
With a selection of profiles, you have now access to those tight spaces and sharp corners where regular tools won't go. Ideal for sign-making, musical instrument building and other small intricate projects. Can be used on wood and plastic.

All tools are available with 6mm or 1/4" shank
Replaceable bearing No. B048024



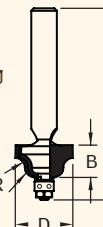
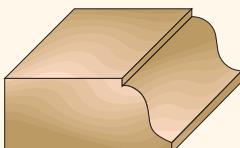
Flush Trim with Miniature Bearing

Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
F210484	4.8	3/16	11	7/16	51	2



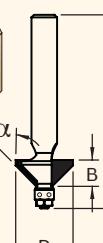
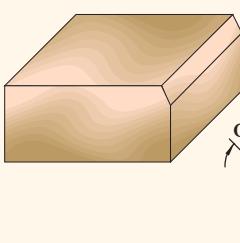
Rabbeting with Miniature Bearing

Tool No.	D		B		A		L	
	mm	inch	mm	inch	mm	inch	mm	inch
E200324	11.1	7/16	13	1/2	3.2	1/8	47	1-7/8



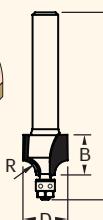
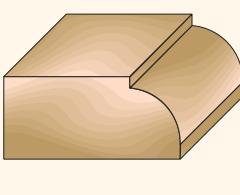
Roman Ogee with Miniature Bearing

Tool No.	R		D		B		L	
	mm	inch	mm	inch	mm	inch	mm	inch
RD00254	2.4	3/32	14.3	9/16	8	5/16	47	1-7/8



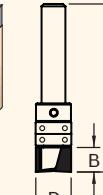
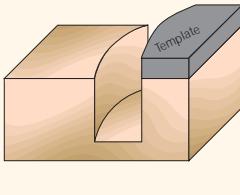
Bevel Trim with Miniature Bearing

Tool No.	D		α		B		L	
	mm	inch	degrees	mm	inch	mm	inch	
SL00074	6.3	1/4	7°	9.5	3/8	47	1-7/8	
SL00454	14.3	9/16	45°	6.3	1/4	47	1-7/8	



Rounding Over with Miniature Bearing

Tool No.	R		D		B		L	
	mm	inch	mm	inch	mm	inch	mm	inch
RW00244	2.4	3/32	9.5	3/8	9.5	3/8	46	1-13/16
RW00324	3.2	1/8	11.1	7/16	9.5	3/8	46	1-13/16
RW00404	4.0	5/32	12.7	1/2	9.5	3/8	46	1-13/16



Straight Plunge Template Bit*

Tool No.	D		B		L	
	mm	inch	mm	inch	mm	inch
PF10954	9.5	3/8	6	1/4	45	1-3/4

* 2 Ball Bearing guides 9.5mm (3/8") diameter - for added stability
Ball Bearing No. B095063



Countersink & Stop

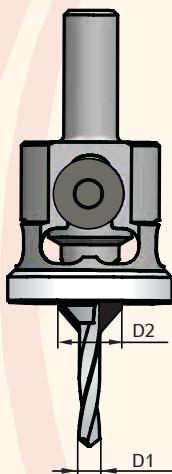
Carbide Tipped Countersinks with Depth-Stop

A new addition to the well known range of professional WPW countersinks. Unique adjustable depth-stops, developed for quick and easy adjustment of the countersink depth. The user friendly design enables control of the drill length and its replacement, without the need to disassemble the Depth-Stop.



COUNTERSINK
& STOP

TOTAL DEPTH CONTROL

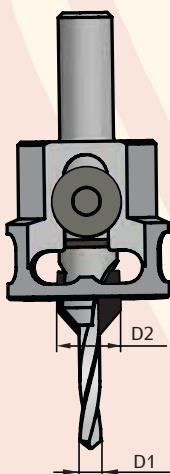


ATP

Antifriction polymer collar. No scratches! No burn marks!

Tool No.	D1		D2		Shank Dia.		Replacement components	
	mm	inch	mm	inch	mm	inch	Countersink	Depth Stop
ATP2405D	2.4	3/32	8.5	11/32	8.0	5/16	AT02405D	TATP130
ATP2505D	2.5	.098	8.5	11/32	8.0	5/16	AT02505D	TATP130
ATP3005D	3.0	.118	10.0	.394	8.0	5/16	AT03005D	TATP130
ATP3205D	3.2	1/8	9.5	3/8	8.0	5/16	AT03205D	TATP130
ATP3285D	3.2	1/8	12.7	1/2	8.0	5/16	AT03285D	TATP130
ATP3505D	3.5	.138	10.0	.394	8.0	5/16	AT03505D	TATP130
ATP3605D	3.6	9/64	10.0	.394	8.0	5/16	AT03605D	TATP130
ATP4005D	4.0	5/32	10.0	.394	8.0	5/16	AT04005D	TATP130
ATP4405D	4.4	11/64	11.1	7/16	8.0	5/16	AT04405D	TATP150
ATP4807D	4.8	3/16	11.1	7/16	9.5	3/8	AT04807D	TATP150
ATP4817D	4.8	3/16	12.7	1/2	9.5	3/8	AT04817D	TATP150
ATP5005D	5.0	.197	10.0	.394	8.0	5/16	AT05005D	TATP150
ATP5007D	5.0	.197	12.0	.472	9.5	3/8	AT05007D	TATP150
ATP6007D	6.0	15/64	12.7	1/2	9.5	3/8	AT06007D	TATP150

Replacement screws: BRK6363 and BR63048. Special hex key KEY4032 included

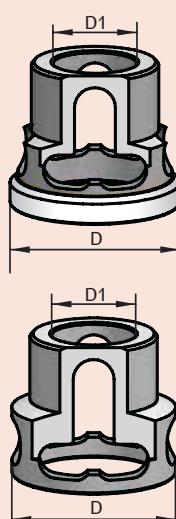


ATS

Countersink with Standard Depth-Stop

Slow spiral drill included.

Large opening - for better chip clearance.
Efficient solution for most demanding jobs.
All the countersinks listed above,
can be supplied with the standard metal Depth-Stop.
For ordering - change the letter "P" in the tool No. to "S".
For example: change from ATP3205D to AT~~S~~3205D.



TAT

Replacement Depth Stoppers

Tool No.	D1		D	
	mm	inch	mm	inch
Low friction				
TATP130	13	1/2	25	63/64
TATP150	15	19/32	28	1-7/64
TATP152	15	19/32	38	1-1/2

Metal

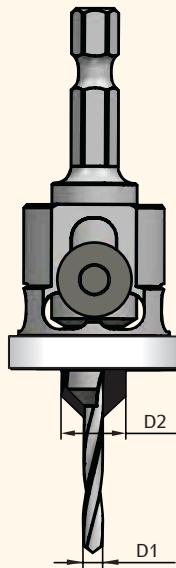
TAT1300	13	1/2	24	15/16
TAT1500	15	19/32	27	1-1/16

Replacement screws: BRK6363 and BR63048. Special hex key KEY4032 included

Click & Drill Countersink & Stop

Carbide tipped. With 1/4" (6.3mm) hexagonal shank

This new design combines the advantages of the Countersink & stop system, that features an easier adjustment of the countersink depth, along with the Click & Drill quick-change system - for changing tools instantly in drill machines with 1/4" hexagonal chucks.



AQP

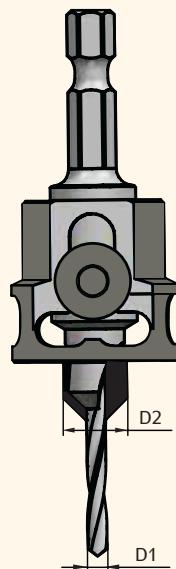
Countersink with Low Friction Depth-Stop.

Drill included.

Antifriction polymer collar. No scratches! No burn marks!

Tool No.	D1		D2		Replacement components		
	mm	inch	mm	inch	Countersink	Depth Stop	Drill
AQP2004S	2.0	5/64	9.5	3/8	AQ02004S	TATP130	DR02000
AQP2404S	2.4	3/32	9.5	3/8	AQ02404S	TATP130	DR02400
AQP2504S	2.5		9.5	3/8	AQ02504S	TATP130	DR02500
AQP2804SC	2.8	7/64	9.5	3/8	AQ02804SC	TATP130	DRK0280
AQP3004SC	3.0		9.5	3/8	AQ03004SC	TATP130	DRK0300
AQP3204SC	3.2	1/8	9.5	3/8	AQ03204SC	TATP130	DRK0320
AQP3604SC	3.6	9/64	12.7	1/2	AQ03604SC	TATP130	DRK0360
AQP4004SC	4.0	5/32	9.5	3/8	AQ04004SC	TATP130	DRK0400
AQP5004SC	5.0		12.7	1/2	AQ05004SC	TATP150	DRK0500
AQP6004SC	6.0	15/64	12.7	1/2	AQ06004SC	TATP150	DRK0600

Replacement screws: BRK6363 and BR63048. Special hex key KEY4032 included



AQS

Countersink with Standard Depth-Stop

Drill included.

All the countersinks listed above, can be supplied with the standard metal Depth stop.

For ordering - change the letter "P" in the tool No. to "S".

For example: change from AQP3204SC to AQS3204SC

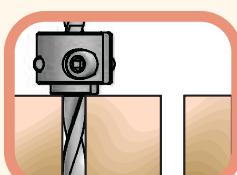


Adjustable Universal Drill Depth-Stops

Can be clamped onto any drill either on the flute or the shank.

An innovative and universal solution to the problem of drilling holes to an accurate depth. Special design to minimize any marks on the surface being drilled.

User friendly - quick assembly and easy drill-depth adjustment.



TATM

For drills 3-10mm (1/8"-3/8")

Tool No.	Range of drill diameters	
	mm	inch
TATM3070	3 - 7	1/8 - 1/4
TATM6100	6 - 10	1/4 - 3/8

About Cutting and Router speeds

We are often asked about recommended cutting speed for routing. The answer is complicated. The maximum allowed cutting speed for Carbide Router Bits depends on many factors such as:

1. Material type and hardness.
2. Stability of the system: machine, chuck, work piece.
3. Tool length and depth of cut.

The general formula for calculating Router speed - n - is: $n = \frac{V \times 60 \times 1000}{\pi \times \text{OD}}$

n = router speed in RPM

V = cutting speed in meter/sec.

OD = router bit's diameter in mm

π = 3.14...

RECOMMENDED CUTTING SPEED

Material	V
Softwood	60 - 90
Hardwood	50 - 80
Chipboard	60 - 80
Plywood	60 - 80
MDF	40 - 60
Laminates	40 - 60

This speed is not always practical.

Taking into consideration the speed and the power of Router machines that are available in the market, we suggest the following router speeds in terms of RPM (Revolutions Per Minute).

SUGGESTED ROUTER SPEED - RPM

OD	n (RPM)
Up to 25mm (1")	30,000
Up to 35mm (1-5/8")	28,000
Up to 50mm (2")	20,000
Up to 65mm (2-1/2")	18,000
Up to 80mm (3-1/4")	16,000
Up to 95mm (3-3/4")	12,000



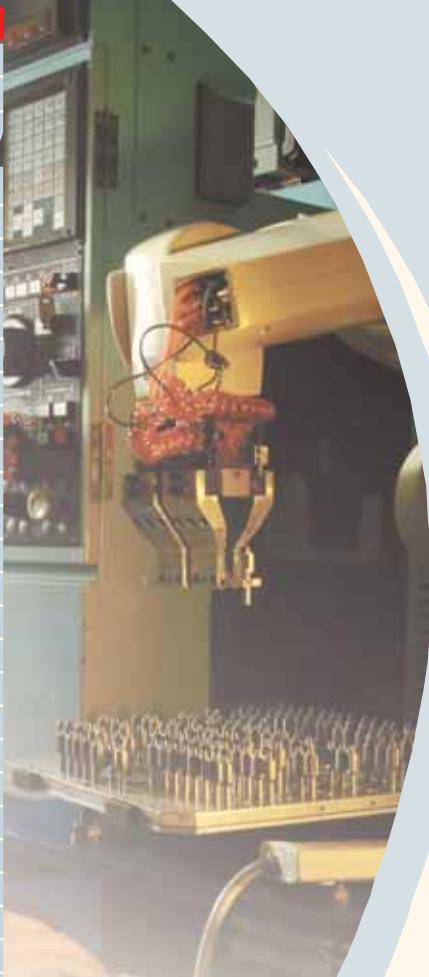
General Safety Information

Router machines running at high speeds can be dangerous, as the cutting tools may chip or fragment.

- Follow safety instructions supplied with your power tool. Clean & dust machines regularly.
- Always wear eye, ear and respiratory protection while operating routers.
- Keep your fingers away from the tool while the machine is working.
- Unplug your router whenever changing the bit.
- Insert at least 3/4 of the shank into the collet.
- Do not cut too deep in one go. Feed router with suitable force in order to avoid overload.
- Feed router in correct direction - against the rotation of the bit.
- Remove the tool from the collet when not in use.
- Don't use worn out collets, and always use the correct size.
- Always have your cutting tool sharpened by a skilled worker using the proper grinding equipment.
- While resharpening tools, use adequate ventilation. The grinding process will produce dust that has potentially hazardous ingredients.



Code	Page No.	Code	Page No.	Code	Page No.
AC0	43	HRD	55	QCL	48
AC1	45	HRG	57	QCS	48
AC2	43	HRJ	55	QHS	50
AC3	42	HRK	57	RA	25
AC4	44	HRM	54	RB	23
ACD	46	HRP	56	RBL	23
ACF	46	HRS	54	RC	24
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FSG	16	NMB	13	ST	11
FT	16	NS, NU	36	STD	11
FU	16	P..L	11	STP	11
HD	56	P1	10	STS	11
HE	53	P2	8, 9, 66	SZ	18
HES	53	PF	14, 66, 67	T	64
HF	52	PFM	38	TA	41
HFJ	56	PFS	14	TAT	68
HMM	54	PL	45	TATM	69
HMNS	50	PM	38	TDS	50
HMP	60	PP	19	TK	41
HMPS	49, 60	PPJ	19	TL	64
HMPT	49	PPS	19	TM	42
HMZ	50	PPT	19	UB	12
HP	52	PS	13	US	12
HPF	52	PT	10	V	22
HRF	55	PU	13	VE	22
HRB	54	QCE	48	Z	21
HRC	54	QCH	48	ZB	21





Why should I become a WPW business partner?

- Professional quality – tested and approved
- Comprehensive range of tools
- Best carbide grades available
- Creative and experienced engineering team
- Production with unique progressive automation
- Reliability and fast delivery
- Service above all
- Worldwide export for more than 30 years
- Excellent value for your money



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