



Spiral Bits - Routing & Milling Tools

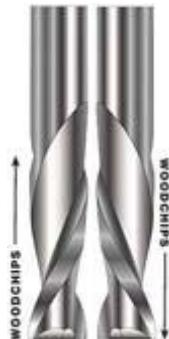
Spiral router bits combine a shearing action in cutting with an auguring action in chip clearance. The shearing action yields an especially clean, accurate cut, while the augering action clears chips from the cut. An excellent choice for mortising.

Special unique carbide grade, increased clearance geometry and razor-sharp cutting edges with polish flutes provides a superior finish and longer tool life. Special unique carbide grade for longer lifetime in abrasive materials.

- Deeper penetration with less stress on the tool
- Great for production settings
- Excellent for creating grooves and dado cuts in softwood, hardwoods, plywood and composites
- Primarily used on CNC machines and other automatic routers
- Can be used with hand-held and table-mounted portable routers



Upcut vs Downcut



Depending on which way the spiral goes on a cutter, an upcut will move the chips up and out of the cut, and it will tend to pull up on the workpiece. 95% of downcut bits are right hand rotation.

Compression Cutters



The combination of an upcut and a downcut and you've got a Compression Cutter. The flutes literally go one way for the bottom half of the flute length and the other way at the top.

“Diamond Cut” Bits



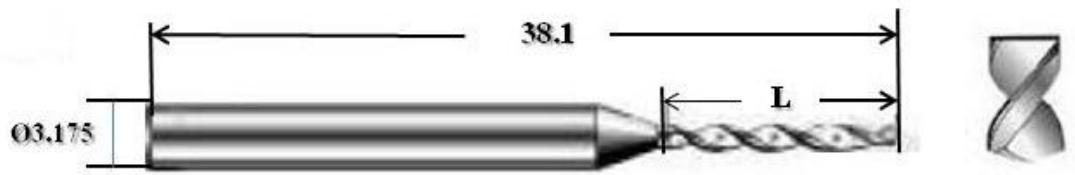
They're great for finishing cuts, but their material removing capacity is limited relative to other kinds of bits. Since they're gentle on the material, they are often used with composites, PC board material, and other layered materials.

PSP TECH - Spiral router bits Type

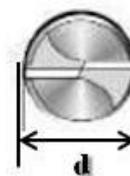
Straight Type Drill Bit : Diameter 1.05mm-3.175mm

Model G129

- The cutting edge is straight type, providing high performance productivity and improved chip transport.
- Most commonly used straight type drills. Suitable for drilling standard FR-4, OEM-3 and Halogen-Free Boards.



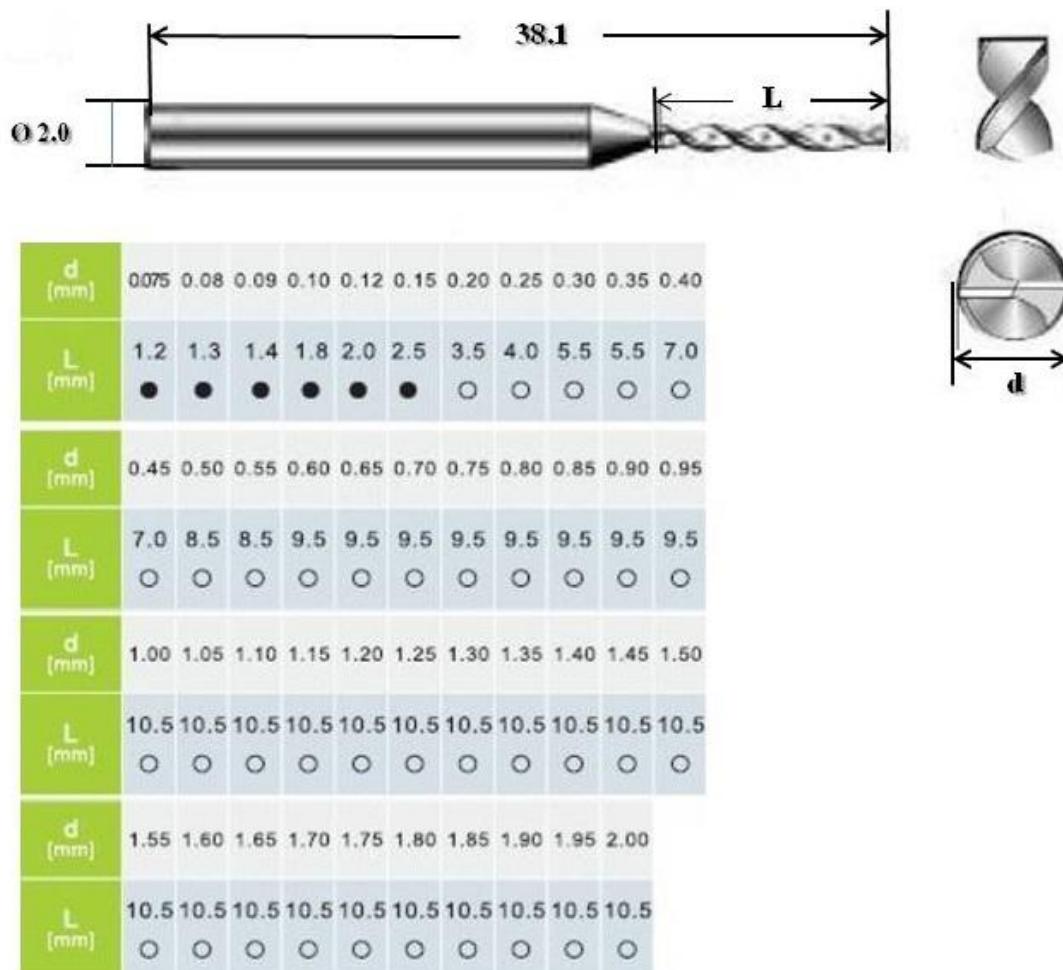
d [mm]	1.05 1.10 1.15 1.20 1.25 1.30 1.35 1.40 1.45 1.50 1.55
L [mm]	10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5
•	• • • • • • • • • • •
d [mm]	1.60 1.65 1.70 1.75 1.80 1.85 1.90 1.95 2.00 2.05 2.10
L [mm]	10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5
•	• • • • • • • • • •
d [mm]	2.15 2.20 2.25 2.30 2.35 2.40 2.45 2.50 2.55 2.60 2.65
L [mm]	10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5
•	• • • • • • • • • •
d [mm]	2.70 2.75 2.80 2.85 2.90 2.95 3.00 3.05 3.10 3.15 3.175
L [mm]	10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5 10.5
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Straight Type Drill Bit – New Generation: Diameter 0.075mm-0.15mm

Model G229UC

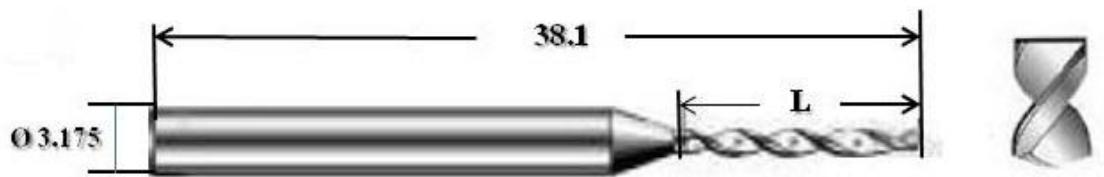
- A completely new generation of micro drill which permits the economical and process-reliable mechanical production of micro-holes.
 - High-Speed spindles to achieve high precision and efficiency



Undercut Type Drill Bit : Diameter 1.05 mm~2.00mm

Model G129UC

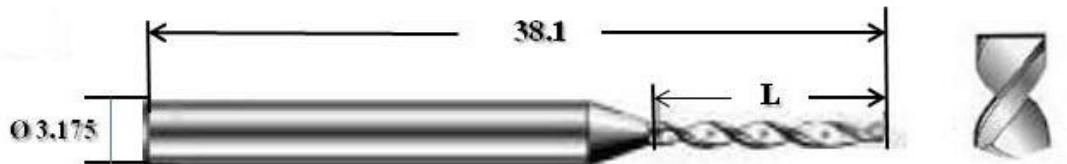
- The cutting edge is under cut type, the advantage are:
 - Less heat generation
 - Less deface edge
 - Less roughness on hole walls ensure longer lifetime and cost reduction
 - Reducing friction between drill and to provide



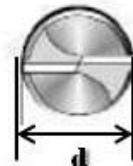
Undercut Slot Type Drill Bit : Diameter 0.40mm~2.00mm

Model G125UC

- The cutting edge is under cut type, developed as a new trend of PCB
- Good for high density PCB ensure good quality and longer lifetime
- Special design to maximize rigidity to ensure excellent performance and quality.



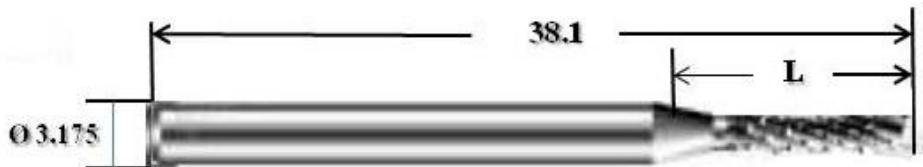
d [mm]	0.40	0.45	0.50	0.55	0.60	0.65	0.70	0.75	0.80
L [mm]	5.0	5.0	5.0	5.0	6.7	6.7	6.7	6.7	6.7
○	○	○	○	○	○	○	○	○	○
d [mm]	0.85	0.90	0.95	1.00	1.05	1.10	1.15	1.20	1.25
L [mm]	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
○	○	○	○	○	○	○	○	○	○
d [mm]	1.30	1.35	1.40	1.45	1.50	1.55	1.60	1.65	1.70
L [mm]	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
○	○	○	○	○	○	○	○	○	○
d [mm]	1.75	1.80	1.85	1.90	1.95	2.00			
L [mm]	6.7	6.7	6.7	6.7	6.7	6.7			
○	○	○	○	○	○	○			



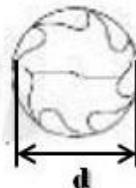
Diamond Cut Type Router Bit : Diameter 0.5mm~2.4mm

Model 141R

- The diamond types are potential increase in productivity due to
- Increase in stack height
- Good debris evacuation capability and excellent dimension accuracy.
- Longer tool life
- Suitable for routing various printed boards, especially for high TG and Halogen-free boards.



d [mm]	0.50	0.60	0.70	0.80	0.90	1.00	1.10
L [mm]	3.5 ○	4.0 ○	5.0 ○	5.0 ○	5.0 ○	7.0 ○	7.0 ○
d [mm]	1.20	1.30	1.40	1.50	1.60	1.70	1.80
L [mm]	7.0 ○	7.0 ○	7.0 ○	8.5 ○	8.5 ○	8.5 ○	8.5 ○
d [mm]	1.90	2.00	2.10	2.20	2.30	2.40	
L [mm]	8.5 ○	10.5 ○	10.5 ○	10.5 ○	10.5 ○	10.5 ○	



Chipbreaker Type Router Bit : Diameter 0.5mm~3.175mm

Model SCB 129

- Design with small chip breaker to prevent edge burrs.
- Suitable for peripheral routing with high precision requirement.



d [mm]	0.50	0.60	0.70	0.80	0.90	1.00	1.10
L [mm]	3.5 ○	4.0 ○	5.0 ○	5.0 ○	5.0 ○	6.0 ○	6.0 ○
d [mm]	1.20	1.30	1.40	1.50	1.60	1.70	1.80
L [mm]	6.0 ○	6.0 ○	6.0 ○	8.5 ○	8.5 ○	8.5 ○	8.5 ○
d [mm]	1.90	2.00	2.10	2.20	2.30	2.40	2.50
L [mm]	8.5 ○	10.5 ○	10.5 ○	10.5 ○	10.5 ○	10.5 ○	10.5 ○
d [mm]	2.60	2.70	2.80	2.90	3.00	3.175	
L [mm]	10.5 ○	10.5 ○	10.5 ○	10.5 ○	10.5 ○	10.5 ○	

