

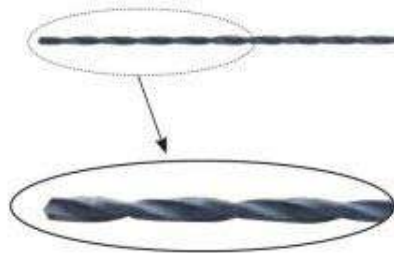


HSS Straight Shank Quick Spiral, Extra Length Vent Drills

QUICK SPIRAL

HSS

Sherwood HSS quick spiral extra length Vent drills are designed for drilling the initial vent hole in aluminium tyre moulds, and are also used in the tyre industry for clean-out work post production where the high helix and extra reach are ideal for the efficient evacuation of waste rubber. Manufactured to works standard. 118° point angle.



Metric

Diameter (mm)	Flute Length (mm)	Overall Length (mm)	Order Code SHR-025
0.60	40	60	-2180D
0.70	40	76	-2180H

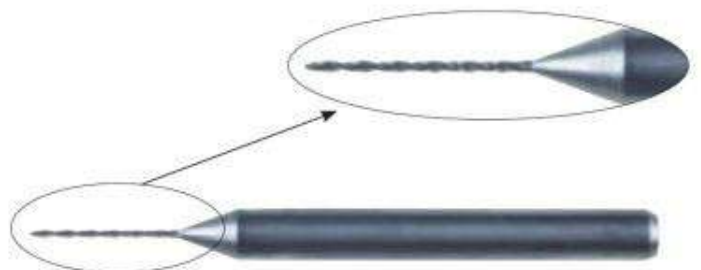
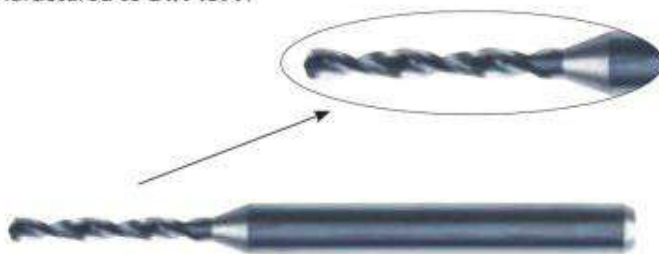
Inch

Diameter (Inch)	Flute Length	Overall Length	Order Code SHR-025
$\frac{3}{64}$ (0.0469)	50.0mm	150mm	-2177R

Carbide Printed Circuit Board Drills

Solid carbide printed circuit board drills. Suitable for drilling through printed circuit boards. Shank diameter 3.175mm, 38mm overall length. Manufactured to DIN 1899.

CARBIDE



Metric

Diameter (mm)	Flute Length (mm)	Order Code SHR-158
0.40	5.5	-3004D
0.45	5.5	-3005E
0.50	5.5	-3006F
0.55	7.0	-3007G
0.60	7.0	-3008H
0.70	9.5	-3010K
0.75	9.5	-3011L
0.80	9.5	-3012M
0.85	9.5	-3013N
0.90	9.5	-3014P
0.95	9.5	-3015Q

Metric Continued

Diameter (mm)	Flute Length (mm)	Order Code SHR-158
1.00	10.5	-3016R
1.05	10.5	-3017S
1.10	10.5	-3018T
1.25	10.5	-3021X
1.30	10.5	-3022Y
1.40	10.5	-3025A
1.50	10.0	-3027C

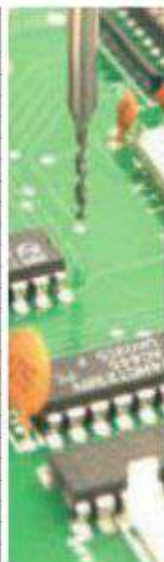
Drilling Stack Height Limits for Drilling PCB Materials

Includes allowance for entry, materials thickness, penetration into backing material, and flute/swarf clearance.

Feed & Speed Guidelines for Drilling PCB Materials

Values listed are for your guidance. Drill parameters should be evaluated for different applications.

Drill Dia. (mm)	Suggested Drilling Stack Height Limits for Carbide PCB Drills		
	1 High	2 High	3 High
0.40	3.3	4.9	-
0.45	3.4	5.0	-
0.50	3.6	5.2	-
0.55	3.7	5.3	-
0.60	3.8	5.4	-
0.65	3.9	5.5	-
0.70	4.1	5.7	7.3
0.75	4.2	5.8	7.4
0.80	4.3	5.9	7.5
0.85	4.4	6.0	7.6
0.90	4.6	6.2	7.8
0.95	4.7	6.3	7.9
1.00	4.8	6.4	8.0
1.05	4.9	6.5	8.1
1.10	5.1	6.7	8.3
1.15	5.2	6.8	8.4
1.20	5.3	6.9	8.5
1.25	5.4	7.0	8.6
1.30	5.6	7.2	8.8
1.35	5.7	7.3	8.9
1.40	5.8	7.4	9.0
1.45	5.9	7.5	9.1
1.50	6.1	7.7	9.3



Drill Dia. (mm)	Cutting Speed 120m/min			Cutting Speed 150m/min			Cutting Speed 180m/min		
	Spindle RPM	Feed		Spindle RPM	Feed		Spindle RPM	Feed	
		mm/rev	m/min		mm/rev	m/min		mm/rev	m/min
0.40	95,000	0.024	2.3	119,000	0.024	2.9	143,000	0.024	3.4
0.45	85,000	0.027	2.3	106,000	0.027	2.9	127,000	0.027	3.4
0.50	76,000	0.030	2.3	95,000	0.030	2.9	115,000	0.030	3.4
0.55	70,000	0.033	2.3	87,500	0.033	2.9	405,000	0.033	3.4
0.60	64,000	0.036	2.3	80,000	0.036	2.9	95,000	0.036	3.4
0.65	59,500	0.039	2.3	74,000	0.039	2.9	88,500	0.039	3.4
0.70	55,000	0.042	2.3	68,000	0.042	2.9	82,000	0.042	3.4
0.75	51,500	0.045	2.3	64,000	0.045	2.9	77,000	0.045	3.4
0.80	48,000	0.048	2.3	60,000	0.048	2.9	72,000	0.048	3.4
0.85	45,000	0.051	2.3	56,500	0.051	2.9	68,000	0.051	3.4
0.90	42,000	0.054	2.3	53,000	0.054	2.9	64,000	0.054	3.4
0.95	40,000	0.057	2.3	50,500	0.057	2.9	60,500	0.057	3.4
1.00	38,000	0.060	2.3	48,000	0.060	2.9	57,000	0.060	3.4
1.05	36,500	0.063	2.3	45,500	0.063	2.9	54,500	0.063	3.4
1.10	35,000	0.066	2.3	43,000	0.066	2.9	52,000	0.066	3.4
1.15	33,500	0.069	2.3	41,500	0.069	2.9	50,000	0.069	3.4
1.20	32,000	0.072	2.3	40,000	0.072	2.9	48,000	0.072	3.4
1.25	30,500	0.075	2.3	38,500	0.075	2.9	46,000	0.075	3.4
1.30	29,000	0.078	2.3	37,000	0.078	2.9	44,000	0.078	3.4
1.35	28,000	0.081	2.3	35,500	0.081	2.9	42,500	0.081	3.4
1.40	27,000	0.084	2.3	34,000	0.084	2.9	41,000	0.084	3.4
1.45	26,000	0.087	2.3	33,000	0.087	2.9	39,500	0.087	3.4
1.50	25,000	0.090	2.3	32,000	0.090	2.9	38,000	0.090	3.4