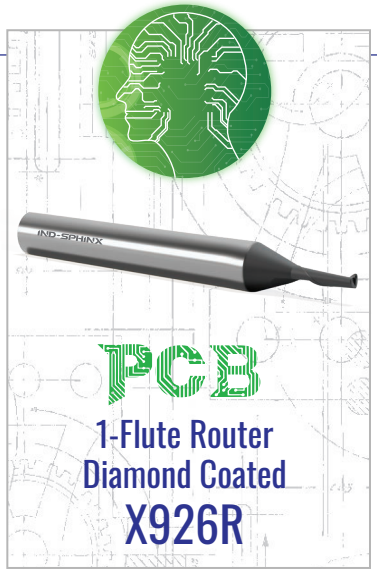
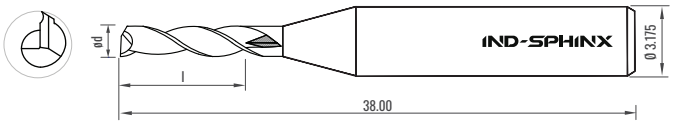


IMS PCB Ceramic Layer | FR4 Normal Tg | FR4 High Tg ≥170 | FR4 Ceramic Fillers | Halogen Free Laminates



Diamond Coated

APPLICATION

Routing of inner and outer contours of IMS PCB's e.g Aluminium, Copper.

FEATURES & BENEFITS

High hardness ~ 10000 HV

Extreme wear resistance

High heat conductance

Reduce friction - smooth chip flow

High dimensional accuarcy- improved process capability

PACKING

Single tool per pack
10 tools per pack
50 tools per pack

ød DIAMETER	l FLUTE LENGTH	mm
0.80	2.00	-
1.00	3.00	5.00
1.20	3.00	-
1.40	3.00	-
1.60	4.00	5.00
1.80	4.00	-
2.00	4.00 *	6.00
2.40	6.00	-
3.00	6.00	-

On request Inch / Special dimensions / Shank 3.00mm

* : Non stock items / Articles

RECOMMENDED PARAMETERS FOR ROUTING ALUMINIUM IMS PCB

ød mm	N RPM	f µm/rev	F x-y m/min	Fz (Pre Drilled) m/min	Routing Depth m/min	Depth in to Backup
0.80	83000	3.0	0.25	0.8	0.80	0.3
1.00	66000	5.0	0.30	0.8	1.00	0.4
1.20	55000	9.0	0.50	0.8	1.20	0.4
1.40	44000	14.0	0.60	1.0	1.50	0.4
1.60	42000	7.0	0.30	1.0	1.60	0.4
1.80	37000	11.0	0.40	1.0	1.80	0.4
2.00	33000	15.0	0.50	1.0	2.00	0.5
2.40	28000	18.0	0.50	1.0	2.40	0.5
3.00	22000	22.0	0.50	1.0	3.00	0.5

ød Tool Diameter | N Spindle Speed | f Chip Load | F x-y Table Feed | F z Z-Feed Rate

Tabulated parameters provide guidelines which acts as starting points for optimising speeds and feeds at the user's end.

REMARKS

- For Copper IMS PCB reduce RPM by ~ 15% and reduce feed rate by ~ 25%.
- Reduce feed rate 25% in case of depth routing.
- Use entry material ≥ 0.80mm thickness.
- Recommended to use MQL with coolants like Ethanol or oil emulsion for improved performance and dimensional control.
- Control collet runout and vibration.