

LPKF Drilling, Milling and Routing Tools

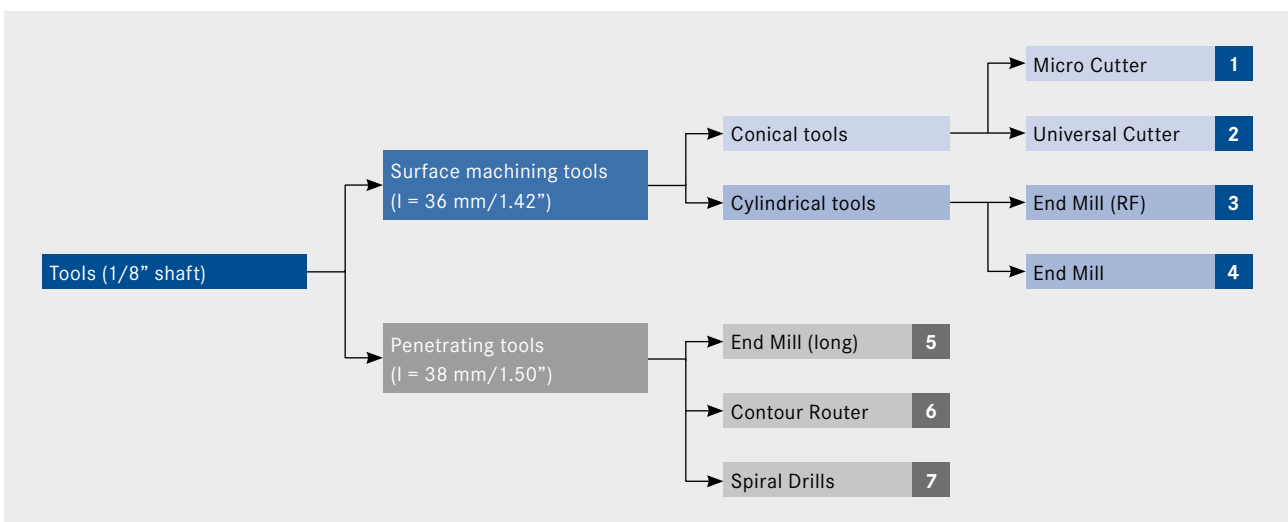
Developed Specifically for LPKF Circuit Board Plotters



LPKF's commitment to the highest-quality components extends to every piece of tooling. The drill and router bits developed specifically for LPKF are premium carbide tools. They ensure long life, precise cuts and clean milling edges.

The tools are divided into two main groups: Surface machining tools with 36 mm (1.42") total length for surface work (cutter and end mills) and penetrating tools with 38 mm (1.5") total length for working through the base material (spiral drills, contour router and end mills).

i Ordering info: See front sleeve.



Micro Cutter/Fine-Line Milling Tool 1/8"

Conical custom-designed tool with orange distance ring.

1	Part no.	Length, milling width	Application
	115836	36 mm, 0.10 – 0.15 mm (4 – 6 mil)	For fine isolation tracks on 18 µm thick Cu.

Universal Cutter 1/8"

Conical custom-designed tool with orange distance ring.

2	Part no.	Length, milling width	Application
	115835	36 mm, 0.2 – 0.5 mm (8 – 20 mil)	For milling different isolation track widths in any copper-plated base material.

End Mill (RF) 1/8"

Cylindrical custom-designed tool with blue distance ring.

3	Part no.	Length, milling width	Application
	115832	36 mm, d = 0.15 mm (6 mil)	Finest isolation tracks in RF applications.
	115833	36 mm, d = 0.25 mm (10 mil)	
	115834	36 mm, d = 0.40 mm (16 mil)	

End Mill 1/8"

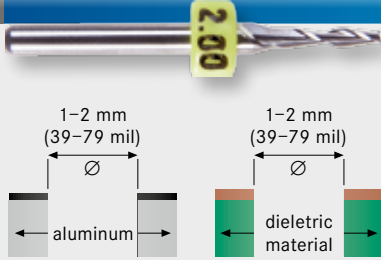
Cylindrical custom-designed tool with violet distance ring.

4	Part no.	Length, milling width	Application
	115839	36 mm, d = 0.80 mm (31 mil)	For wider isolation tracks, rub-out areas and engraving aluminum front panels.
	115840	36 mm, d = 1.00 mm (39 mil)	
	129100*	36 mm, d = 2.00 mm (79 mil)	
	129101*	36 mm, d = 3.00 mm (118 mil)	

* Shaft 25 mm (984 mil)

End Mill long 1/8"

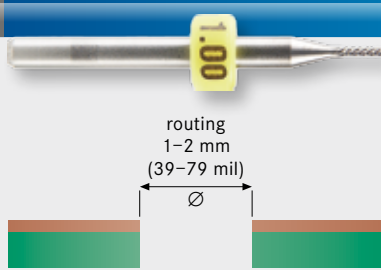
Cylindrical custom-designed tool with light green distance ring.

5	Part no.	Length, milling width	Application
	115837	38 mm, d = 1.00 mm (39 mil)	For cutting aluminum and routing soft base materials for RF and microwave applications.
	129102*	38 mm, d = 2.00 mm (79 mil)	

* Shaft 25 mm (984 mil)

Contour router 1/8"


Cylindrical custom-designed tool with yellow distance ring.

6	Part no.	Length, milling width	Application
	115844	38 mm, d = 1.00 mm (39 mil)	For milling inner and outer contours and holes > 2.4 mm (> 94 mil).
	129099*	38 mm, d = 2.00 mm (79 mil)	

* Shaft 25 mm (984 mil)

Spiral Drill 1/8"

Cylindrical tool with green distance ring.

7	Part no.	Length, milling width	Application
	115846	38 mm, d = 0.20 mm (8 mil)	For drill holes < 2.4 mm (< 94 mil).
	115847	38 mm, d = 0.30 mm (12 mil)	
	115848	38 mm, d = 0.40 mm (16 mil)	
	115849	38 mm, d = 0.50 mm (20 mil)	
	115850	38 mm, d = 0.60 mm (24 mil)	
	115851	38 mm, d = 0.70 mm (28 mil)	
	115852	38 mm, d = 0.80 mm (31 mil)	
	115853	38 mm, d = 0.85 mm (33 mil)	
	115854	38 mm, d = 0.90 mm (35 mil)	
	115855	38 mm, d = 1.00 mm (39 mil)	
	115856	38 mm, d = 1.10 mm (43 mil)	
	115857	38 mm, d = 1.20 mm (47 mil)	
	115858	38 mm, d = 1.30 mm (51 mil)	
	115859	38 mm, d = 1.40 mm (55 mil)	
	115860	38 mm, d = 1.50 mm (59 mil)	
	115861	38 mm, d = 1.60 mm (63 mil)	
	115862	38 mm, d = 1.70 mm (67 mil)	
115863	38 mm, d = 1.80 mm (71 mil)		
115864	38 mm, d = 1.90 mm (75 mil)		
115865	38 mm, d = 2.00 mm (79 mil)		
115866	38 mm, d = 2.10 mm (83 mil)		
115867	38 mm, d = 2.20 mm (87 mil)		
115868	38 mm, d = 2.30 mm (91 mil)		
115869	38 mm, d = 2.40 mm (94 mil)		
115870	38 mm, d = 2.95 mm (116 mil)		
115871	38 mm, d = 3.00 mm (118 mil)		

Tool set with 1/8" shaft and distance rings

For all LPKF ProtoMat models. Includes tools with pressed-on distance rings.

Part no.	Contents
129103	<p>10x Universal cutter 1/8", 36 mm (1.4"), 0.2 – 0.5 mm (8 – 20 mil)</p> <p>2x Micro cutter 1/8", 36 mm (1.4"), 0.10 – 0.15 mm (4 – 6 mil)</p> <p>1x End mill 1/8", 36 mm (1.4"), d = 0.8 mm (31 mil)</p> <p>2x End mill 1/8", 36 mm (1.4"), d = 1.00 mm (39 mil)</p> <p>2x End mill 1/8", 36 mm (1.4"), d = 2.00 (79 mil)</p> <p>1x End mill long 1/8", 38 mm (1.5"), d = 1.00 mm (39 mil)</p> <p>1x End mill long 1/8", 38 mm (1.5"), d = 2.00 (79 mil)</p> <p>2x Contour router 1/8", 38 mm (1.5"), d = 1.00 (39 mil)</p> <p>2x Contour router 1/8", 38 mm (1.5"), d = 2.00 (79 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 0.40 (16 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 0.50 (20 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 0.60 (24 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 0.70 (28 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 0.80 (31 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 0.90 (35 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 1.00 (39 mil)</p> <p>1x Spiral drill 1/8", 38 mm (1.5"), d = 1.20 (47 mil)</p> <p>1x Spiral drill 1/8", 38 mm (1.5"), d = 1.40 (55 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 1.50 (59 mil)</p> <p>1x Spiral drill 1/8", 38 mm (1.5"), d = 1.60 (63 mil)</p> <p>1x Spiral drill 1/8", 38 mm (1.5"), d = 1.80 (71 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 2.00 (79 mil)</p> <p>2x Spiral drill 1/8", 38 mm (1.5"), d = 3.00 (118 mil)</p>



RF and microwave tool set with distance rings

Part no.	Contents
116394	<p>Tools with distance rings:</p> <p>5x End mill (RF) 1/8", 36 mm, d = 0.25 mm (10 mil)</p> <p>3x End mill (RF) 1/8", 36 mm, d = 0.40 mm (16 mil)</p> <p>3x End mill (RF) 1/8", 36 mm, d = 0.15 mm (6 mil)</p> <p>5x End mill 1/8", 36 mm, d = 1.00 mm (39 mil)</p> <p>2x End mill 1/8", 36 mm, d = 2.00 mm (79 mil)</p> <p>2x End mill 1/8", 38 mm, d = 2.00 mm (79 mil)</p>

i Please note:

LPKF recommends using only original LPKF tools and assumes no warranty for machine or secondary failures resulting from the use of non-LPKF tools. All specifications are subject to technical modifications.