

LPKF

Laser & Electronics

North American Tools & Materials Price List

Effective: October 1st 2012



To Order Tools & Materials:

Call: **1-800-345-LPKF Ext.242**

Or (503) 454-4242

Fax: (503) 682-7151

E-Mail: tools@lpkfusa.com

Shop online at www.lpkfusa.com/store

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Milling Tools

100% Carbide universal milling tool for milling printed circuit board isolation tracks. V-shaped profile for variable milling width. Tools with distance rings for use with machines that have the automatic tool change option and all "S" series machines.

Part Number	Milling Usage		Description	Quantity	Diameter Shank (Inches)	Length (inches)	Price
	(mil)	(mm)					
101010	8 – 12 mil	0.2 – 0.3 mm	Universal Cutter for isolation tracks on 35 µm copper	10 pack	1/8"	1.42"	\$180.00
101010-4	8 – 12 mil	0.2 - 0.3 mm	with Orange distance ring	10 pack	1/8"	1.42"	\$185.00
100890	4 – 8 mil	0.1 – 0.15 mm	Fine Line Milling tool/Micro Cutter for isolation tracks on 35 µm copper	10 pack	1/8"	1.42"	\$210.00
100890-4	4 – 8 mil	0.1 – 0.15 mm	with Orange distance ring	10 pack	1/8"	1.42"	\$215.00



End Mill Cutters

Used for copper removal by providing straight sided & flat-bottomed isolation paths. Also used for wide rub out paths. Tools with distance rings for use with machines that have the automatic tool change option and all "S" series machines.

Part Number	Milling		Description	Quantity	Diameter Shank (Inches)	Length (inches)	Price
	(mil)	(mm)					
100806	4 mil	0.10 mm	End Mill (RF) for isolation & film engraving	10 pack	1/8"	1.42"	\$295.00
100806-6	4 mil	0.10 mm	with Blue distance ring	10 pack	1/8"	1.42"	\$300.00
107244	6 mil	0.15 mm	End Mill (RF) for isolation & film engraving	10 pack	1/8"	1.42"	\$270.00
107244-6	6 mil	0.15 mm	with Blue distance ring	10 pack	1/8"	1.42"	\$275.00
100888	10 mil	0.25 mm	End Mill (RF) for isolation & film engraving	10 pack	1/8"	1.42"	\$200.00
100888-6	10 mil	0.25 mm	with Blue distance ring	10 pack	1/8"	1.42"	\$205.00
100862	15.7 mil	0.4 mm	End Mill (RF) for isolation & film engraving	10 pack	1/8"	1.42"	\$180.00
100862-6	15.7 mil	0.4 mm	with Blue distance ring	10 pack	1/8"	1.42"	\$185.00
100886	20 mil	0.5 mm	End Mill for engraving aluminum & wider isolation tracks.	10 pack	1/8"	1.42"	\$170.00
101012	31 mil	0.8 mm	End Mill for engraving aluminum & wider isolation tracks	10 pack	1/8"	1.42"	\$125.00
101012-2	31 mil	0.8 mm	with Violet distance ring	10 pack	1/8"	1.42"	\$130.00
101014	39 mil	1.0 mm	End Mill for engraving aluminum & wider isolation tracks	10 pack	1/8"	1.42"	\$125.00
101014-2	39 mil	1.0 mm	with Violet distance ring	10 pack	1/8"	1.42"	\$130.00
101016	79 mil	2.0 mm	End Mill for engraving aluminum & wider isolation tracks	10 pack	1/8"	1.42"	\$125.00
101016-2	79 mil	2.0 mm	with Violet distance ring	10 pack	1/8"	1.42"	\$130.00
101018	118 mil	3.0 mm	End Mill for engraving aluminum & wider isolation tracks	10 pack	1/8"	1.42"	\$135.00
101018-2	118 mil	3.0 mm	with Violet distance ring	10 pack	1/8"	1.42"	\$140.00

Please Call 1-503-454-4242 If the Size You Desire Is Not Listed



Long End Mill Cutters

Used for routing aluminum panels & milling of pockets in brass or aluminum backed substrates. Tools with distance rings for use with machines that have the automatic tool change option and all "S" series machines.

Part Number	Milling		Description	Quantity	Diameter Shank (Inches)	Length (inches)	Price
	(mil)	(mm)					
101015	39 mil	1.0 mm	End Mill for milling of aluminum & for contour routing of RF- & microwave materials	10 pack	1/8"	1.50"	\$120.00
101015-3	39 mil	1.0 mm	with Light Green distance ring	10 pack	1/8"	1.50"	\$125.00
101015-9	39 mil	1.0 mm	Flute length = .125"	10 pack	1/8"	1.50"	\$176.00
101017	79 mil	2.0 mm	End Mill for milling of aluminum & for contour routing of RF- & microwave materials	10 pack	1/8"	1.50"	\$120.00
101017-3	79 mil	2.0 mm	with Light Green distance ring	10 pack	1/8"	1.50"	\$125.00
101017-9	79 mil	2.0 mm	Flute length = .375"	10 pack	1/8"	1.50"	\$176.00



Contour Routers (Downdraft)

Used for cutting the completed board from a larger panel & for routing cutouts. Tools with distance rings for use with machines that have the automatic tool change option and all "S" series machines.

Part Number	Milling		Description	Quantity	Diameter Shank (Inches)	Length (inches)	Price
	(mil)	(mm)					
100878	20 mil	0.5 mm	Contour router for wider tracks	10 pack	1/8"	1.50"	\$145.00
100878-5	20 mil	0.5 mm	with Yellow distance ring	10 pack	1/8"	1.50"	\$150.00
100879	39 mil	1.0 mm	Contour router for wider tracks	10 pack	1/8"	1.50"	\$95.00
100879-5	39 mil	1.0 mm	with Yellow distance ring	10 pack	1/8"	1.50"	\$100.00
100880	59 mil	1.5 mm	Contour router for wider tracks	10 pack	1/8"	1.50"	\$95.00
100881	79 mil	2.0 mm	Contour router for wider tracks	10 pack	1/8"	1.50"	\$95.00
100881-5	79 mil	2.0 mm	with Yellow distance ring	10 pack	1/8"	1.50"	\$100.00
100882	98 mil	2.5 mm	Contour router for wider tracks	10 pack	1/8"	1.50"	\$95.00
100883	98 mil	3.0 mm	Contour router for wider tracks	10 pack	1/8"	1.50"	\$95.00
100883-5	118 mil	3.0 mm	with Yellow distance ring	10 pack	1/8"	1.50"	\$100.00



Drill Bits

For use on all LPKF milling plotters. Tools with distance rings for use with machines that have the automatic tool change option and all "S" series machines.

Part Number	Milling		Description	Quantity	Diameter Shank (Inches)	Length (inches)	Price
	(mil)	(mm)					
108911	7.9 mil	0.2 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$98.00
108911-1	7.9 mil	0.2 mm	with Green distance ring	10 pack	1/8"	1.50"	\$103.00
100976	9.8 mil	0.25 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$75.00
100977	11.8 mil	0.3 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$60.00
100977-1	11.8 mil	0.3 mm	with Green distance ring	10 pack	1/8"	1.50"	\$65.00
100894	13.8 mil	0.35 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00



Drill Bits (Continued)

For use on all LPKF milling plotters. Tools with distance rings for use with machines that have the automatic tool change option and all "S" series machines.

Part Number	Milling		Description	Quantity	Diameter Shank	Length	Price
	(mil)	(mm)					
100978	15.8 mil	0.4 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100978-1	15.8 mil	0.4 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100979	19.7 mil	0.5 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100979-1	19.7 mil	0.5 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100980	23.6 mil	0.6 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100980-1	23.6 mil	0.6 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100897	25.6 mil	0.65 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100981	27.6 mil	0.7 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100981-1	27.6 mil	0.7 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100944	29.5 mil	0.75 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100982	31.5 mil	0.8 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100982-1	31.5 mil	0.8 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100983	33.5 mil	0.85 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100984	35.4 mil	0.9 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100984-1	35.4 mil	0.9 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100985	39.4 mil	1.0 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100985-1	39.4 mil	1.0 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100949	41.3 mil	1.05 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100986	43.3 mil	1.1 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100986-1	43.3 mil	1.1 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100951	45.3 mil	1.15 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100987	47.2 mil	1.2 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100987-1	47.2 mil	1.2 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100988	49.2 mil	1.25 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100989	51.2 mil	1.3 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100989-1	51.2 mil	1.3 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100990	55.1 mil	1.4 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100990-1	55.1 mil	1.4 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100991	59.1 mil	1.5 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100991-1	59.1 mil	1.5 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100992	63.0 mil	1.6 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100992-1	63.0 mil	1.6 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100915	65.0 mil	1.65 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100993	66.9 mil	1.7 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100993-1	66.9 mil	1.7 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100917	68.9 mil	1.75 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100994	70.9 mil	1.8 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100994-1	70.9 mil	1.8 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100919	72.8 mil	1.85 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00

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Drill Bits (Continued)

For use on all LPKF milling plotters. Tools with distance rings for use with machines that have the automatic tool change option and all "S" series machines.

Part Number	Milling		Description	Quantity	Diameter Shank (Inches)	Length (inches)	Price
	(mil)	(mm)					
100995	74.8 mil	1.9 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100995-1	74.8 mil	1.9 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100996	78.7 mil	2.0 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100996-1	78.7 mil	2.0 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100997	82.7 mil	2.1 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100997-1	82.7 mil	2.1 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100998	86.6 mil	2.2 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100998-1	86.6 mil	2.2 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
100999	90.6 mil	2.3 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
100999-1	90.6 mil	2.3 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
101000	94.5 mil	2.4 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
101000-1	94.5 mil	2.4 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
101001	98.4 mil	2.5 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
101001-1	98.4 mil	2.5 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
101002	102.4 mil	2.6 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
101002-1	102.4 mil	2.6 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
101003	106.3 mil	2.7 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
101003-1	106.3 mil	2.7 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
101004	110.2 mil	2.8 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
101004-1	110.2 mil	2.8 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
101005	114.2 mil	2.9 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
101005-1	114.2 mil	2.9 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
101006	116.1 mil	2.95 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
101006-1	116.1 mil	2.95 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
101007	118.1 mil	3.0 mm	Spiral Drill bit for printed circuit boards	10 pack	1/8"	1.50"	\$48.00
101007-1	118.1 mil	3.0 mm	with Green distance ring	10 pack	1/8"	1.50"	\$53.00
117352	116.1 mil	2.95 mm	Spiral Drill Bits with Pink distance rings. Used to create reference holes on the LPKF ProtoMat® S42 without a Vacuum Table & S43 with a Vacuum table.	1 piece	1/8"	1.69"	\$20.00



Distance Rings

Part Number	Description	Quantity	Price
108016	1/8 " Rings used for setting tool depth with the ProtoMat® 95s & LPKF 101 Hi-P Automill systems.	100 pack	\$19.00
101382	Pneumatic Distance Ring Press Applies distance rings to tools for use with automatic tool change systems.	1	\$1200.00
116698	Tool Ring Setter. Accurately calibrates tool ring to predetermined adjustable depth. Includes small hand microscope.	1	\$1450.00

Tool Accessories

Part Number	Description	Quantity	Price
101640	Tweezers	1	\$15.00

Starter Tool & Accessories Packages

Part Number	Description					Unit Price	
129103	Starter Package - Tools & materials required to begin using your LPKF circuit board plotter					\$450.00	
	Qty.	Milling		Description	Diameter Shank		Length
		(mil)	(mm)		(inches)		(inches)
	10	8-12 mil	0.2-0.3 mm	Universal Milling Tools	1/8"		1.42"
	2	4-8 mil	0.1-0.15 mm	Micro Cutter Tools	1/8"		1.42"
	1	31 mil	0.8 mm	End Mill for isolation & film engraving	1/8"		1.42"
	2	39 mil	1.0 mm	End Mill for isolation & film engraving	1/8"		1.42"
	2	79 mil	2.0 mm	End Mill for isolation & film engraving	1/8"		1.42"
	1	39 mil	1.0 mm	Long End Mill for isolation & film engraving	1/8"		1.50"
	1	79 mil	2.0 mm	Long End Mill for isolation & film engraving	1/8"		1.50"
	2	39 mil	1.0 mm	Contour router for wider tracks	1/8"		1.50"
	2	79 mil	2.0 mm	Contour router for wider tracks	1/8"		1.50"
	2	15.8 mil	0.4 mm	Spiral Drill bit for printed circuit boards	1/8"		1.50"
	2	19.7 mil	0.5 mm	Spiral Drill bit for printed circuit boards	1/8"		1.50"
	2	23.6 mil	0.6 mm	Spiral Drill bit for printed circuit boards	1/8"		1.50"
	2	27.6 mil	0.7 mm	Spiral Drill bit for printed circuit boards	1/8"		1.50"
	2	31.5 mil	0.8 mm	Spiral Drill bit for printed circuit boards	1/8"		1.50"
	2	35.4 mil	0.9 mm	Spiral Drill bit for printed circuit boards	1/8"		1.50"
	2	39.4 mil	1.0 mm	Spiral Drill bit for printed circuit boards	1/8"		1.50"
	1	47.2 mil	1.2 mm	Spiral Drill bit for printed circuit boards	1/8"		1.50"
1	55.1 mil	1.4 mm	Spiral Drill bit for printed circuit boards	1/8"	1.50"		
2	59.1 mil	1.5 mm	Spiral Drill bit for printed circuit boards	1/8"	1.50"		
1	63 mil	1.6 mm	Spiral Drill bit for printed circuit boards	1/8"	1.50"		
2	70.9 mil	1.8 mm	Spiral Drill bit for printed circuit boards	1/8"	1.50"		
2	78.7 mil	2.0 mm	Spiral Drill bit for printed circuit boards	1/8"	1.50"		
2	118.1 mil	3.0 mm	Spiral Drill bit for printed circuit boards	1/8"	1.50"		
129103-1	Starter Package (above) with Green distance rings for Drill Bits & Yellow distance rings for Contour routers					\$450.00	
116394	RF Starter Package - End mills & materials used for the fabrication of RF & Microwave boards.					\$450.00	
	Qty.	Milling		Description	Diameter Shank		Length
		(mil)	(mm)		(inches)		(inches)
	3	6 mil	0.15 mm	End Mill (RF) for isolation & film engraving	1/8"		1.42"
	5	10 mil	0.25 mm	End Mill (RF) for isolation & film engraving	1/8"		1.42"
	3	15.7 mil	0.4 mm	End Mill (RF) for isolation & film engraving	1/8"		1.42"
	5	39 mil	1.0 mm	End Mill (RF) for isolation & film engraving	1/8"		1.42"
	2	79 mil	2.0 mm	End Mill (RF) for isolation & film engraving	1/8"		1.42"
2	79 mil	2.0 mm	Long End Mill (RF) for isolation & film engraving	1/8"	1.5"		
116394-1	RF Starter Package (above) with Blue & Violet distance rings RF End Mills & End Mills					\$450.00	

Materials

Copper Board Material (Single Sided)

Part Number	Dimensions				Description	Quantity	Price
	Width (inches)	Length (inches)	Thickness (inches)	CU Thickness (Ounces.)			
106396	9"	12"	0.059"	1 oz	FR4 single sided 1 oz. Copper clad board	10 pack	\$150.00
106400	15.5"	18"	0.059"	1 oz	FR4 single sided 1 oz. Copper clad board	10 pack	\$300.00

Copper Board Material (Double Sided)

Part Number	Dimensions				Description	Quantity	Price
	Width (inches)	Length (inches)	Thickness (inches)	CU Thickness (ounces)			
106395	9"	12"	0.059"	¼ oz	FR4 double-sided copper clad board material. Includes peel off protective foil.	10 pack	\$300.00
106399	15.5"	18"	0.059"	¼ oz	FR4 double-sided copper clad board material. Includes peel off protective foil.	10 pack	\$600.00
106394	9"	12"	0.059"	½ oz	FR4 double-sided copper clad board material.	10 pack	\$80.00
106398	15.5"	18"	0.059"	½ oz	FR4 double-sided copper clad board material.	10 pack	\$150.00
106397	9"	12"	0.059"	1 oz	FR4 double-sided copper clad board material.	10 pack	\$80.00
106401	15.5"	18"	0.059"	1 oz	FR4 double-sided copper clad board material.	10 pack	\$200.00
106193	9"	12"	0.059"	2 oz	FR4 double-sided copper clad board material.	10 pack	\$155.00
106403	9"	12"	0.020"	1 oz	FR4 double-sided copper clad board material.	10 pack	\$90.00
101047	9"	12"	0.028"	½ oz	FR4 double-sided copper clad board material. Recommended for longer tool life.	10 pack	\$90.00
101043	15.5"	18"	0.093"	½ oz	FR4 double-sided copper clad board material.	10 pack	\$450.00

Underlay Material

Underlay material is used to raise the copper board off the machined table so that when holes are drilled the table is not damaged. LPKF underlay boards are free of phenolic resin or formaldehyde additives. The LPKF underlay material is very flat & has a smooth surface with a white, very thin, hard coating on both sides to meet the highest demands for drilling quality. Only conifers are used to manufacture these boards, which are free of carcinogenic oak or beech fibers & free of bark & ashes. The underlay material doesn't absorb moisture & doesn't bend.

Part Number	Dimensions				Description	Quantity	Price
	Width (inches)	Length (inches)	Thickness (mil)	Thickness (mm) +/- 0.1 mm			
106388	9"	12"	79 mil	2 mm*	Underlay Material	10 pack	\$39.00
106389	15.5"	18"	79 mil	2 mm*	Underlay Material	10 pack	\$89.00
107705	9"	12"	98.42 mil	2.5 mm	Underlay Material. Recommended for use with base materials off 40 mils (1 mm) & less.	10 pack	\$49.00
107706	15.5"	18"	98.42 mil	2.5 mm	Underlay Material. Recommended for use with base materials off 40 mils (1 mm) & less.	10 pack	\$99.00

Vacuum Table Backing Materials

Part Number	Dimensions				Description	Quantity	Price
	Width (inches)	Length (inches)	Thickness (mil)	Thickness (mm)			
114297	7"	17"	197 mil	5 mm*	Honeycomb material for the LPKF ProtoMat [®] H100 vacuum table	4 pack	\$110.00
116148	13.5"	10"	197 mil	5 mm	Honeycomb material for the LPKF ProConduct [®] vacuum table	4 pack	\$110.00
116002	14.5"	16.8"	197 mil	5 mm	White Air Permeable backing material for the LPKF ProtoMat [®] H100 Vacuum Table	2 pack	\$205.00
116099	12.5"	9.5"	197 mil	5 mm	White Air Permeable backing material for the LPKF ProtoMat [®] S-Series Vacuum Table	4 pack	\$150.00

Multi-Layer material & Accessories

Part Number	Description		Unit Price
119612	Multi Layer Kit for MiniContac & MultiPress (4 Layer Boards). Multi-layer materials & accessories for 10 multi-layer boards (4 layers each)		\$1,100.00
	Qty.	Description	
	10	FR4 double-sided ½ oz. copper clad base material 12" x 9" x 39 mil (Part # 119574)	
	20	Single Sided laminate material for outer layers, ½ oz. Cu with protection foil. 12" x 9" x 8 mil (Part # 119571)	
	40	Prepreg bonding material. 12" x 9" x 6 mil (Part # 119572)	
119613	Multi Layer Kit for MiniContac & MultiPress (6 Layer Boards). Multi-layer materials & accessories for 10 multi-layer boards (6 layers each)		\$1,555.00
	Qty.	Description	
	20	FR4 double-sided ½ oz. copper clad base material 12" x 9" x 14 mil (Part # 119575)	
	20	Single Sided laminate material for outer layers, ½ oz. Cu with protection foil. 12" x 9" x 8 mil (Part # 119571)	
	60	Prepreg bonding material. 12" x 9" x 6 mil (Part # 119572)	
	4	Pressing cardboard cushion 12" x 9" x 26 mil (Part # 119573)	

Part Number	Dimensions			Description	Quantity	Price
	Width (inches)	Length (inches)	Thickness (mil)			
119571	12"	9"	8 mil	Single Sided thin laminate material for outer layers, ½ oz. Cu with protection foil	1	\$55.00
119572	12"	9"	6 mil	Prepreg bonding material	1	\$4.00
106858	15"	12.6"	6 mil	Prepreg bonding material for MultiPress II	1	\$5.00
119573	12"	9"	26 mil	Pressing cardboard cushion for MultiPress S	1	\$4.00
106860	16.5"	14.2"	67 mil	Pressing cardboard cushion for MultiPressII	1	\$5.00
119574	12"	9"	39 mil	FR4 double sided ½ oz. CU clad, board material	1	\$16.00
106856	16.5"	14.2"	39 mil	FR4 double sided 1 oz. CU clad, board material	1	\$25.00
108761	16.5"	14.2"	19 mil	FR4 double-sided ½ oz. CU clad board material	1	\$20.00
119575	12"	9"	14 mil	FR4 double-sided ½ oz. CU clad board material	1	\$14.00
120999	12"	9"	67 mil	Pressing Cushion for MultiPress S	1	\$120.00
120345	12"	9"	63 mil	Pressing Metal Sheet for MultiPress S (2 pieces needed)	1	\$160.00



EasySolder Materials

Part Number	Description		Unit Price
107644	EasySolder Consumable Set for use with the LPKF MiniPress.		\$715.00
	Qty.	Description	
	10	Polyimide solder mask foils 9" x 12" x 3 mil (2 mil foil, 1 mil adhesive) thickness (Part # 107818)	
	10	Pressing cardboard cushions 8" x 12" (Part # 108187)	
	4	Underlay material 9" x 12" x 79 mil (Part # 106388)	
	2	Pressure compensation rubber mats 8" x 12" (Part # 106084)	
	2	Stainless steel press sheets 8" x 6" x 18 mil (Part # 107704)	
	3	Fine Line Milling tool/Micro Cutter 1/8 shaft (4 – 8 mil) (Part # 100890)	
	1	Metallic Scalpel with blade	
106244	EasySolder Consumable Set for use with the LPKF MultiPress		\$715.00
	Qty.	Description	
	10	Polyimide solder mask foils 9" x 12" x 3 mil (2 mil foil, 1 mil adhesive) thickness (Part # 107818)	
	10	Pressing cardboard cushions 8" x 12" (Part # 108187)	
	4	Underlay material 9" x 12" x 79 mil (Part # 106388)	
	2	Pressure compensation rubber mats 8" x 12" (Part # 106084)	
	2	Stainless steel press sheets 8" x 6" x 18 mil (Part # 107704)	
	3	Fine Line Milling tool/Micro Cutter 1/8 shaft (4 – 8 mil) (Part # 100890)	
	1	Metallic Scalpel with blade	
1	Glue Stick & 3 rolls of tape		

Part Number	Dimensions		Description	Quantity	Price
	Width (inches)	Length (inches)			
107818	9"	12"	Polyimide solder mask foil 3 mil (2 mil foil, 1 mil adhesive) thickness	10	\$210.00
107819	15.5"	18"	Polyimide solder mask foil 3 mil (2 mil foil, 1 mil adhesive) thickness	10	\$310.00
108187	8"	12"	Pressing cardboard cushion	10	\$50.00
106084	8"	12"	Pressure compensation rubber mat	1	\$55.00
107704	8"	6"	Stainless steel 18 mil thick press sheet for MiniPress	1	\$60.00
107025	14"	16.5"	Stainless steel 18 mil thick press sheet for MultiPress II	1	\$75.00

Stencil Cutting Polyamide Foil

Part Number	Dimensions		Description	Quantity	Price
	Width (inches)	Length (inches)			
108321	8"	12"	Polyimide stencil foil: compatible w/ C-class ProtoMat [®] machines	10	\$400.00
108322	12"	16"	Polyimide stencil foil: compatible w/ M-class ProtoMat [®] machines	10	\$675.00

LPKF ProMask for Solder Mask & ProLegend for Silk Screen



The LPKF ProMask® System is a quick, simple, and cost effective solution for creating clean electrical insulation between tracks and components. ProMask® completely protects PCBs from environmental corrosion or oxidation, and provides optimal preparation for short-free soldering. The LPKF ProLegend allows users to include a silk screen layer of white text for proper component labeling and placement. The LPKF ProMask/ProLegend® combination gives prototype PCBs the professional finish they deserve and enables the soldering of SMD or conventional components to a clearly labeled PCB with no fear of short circuits. The necessary components for this process are as follows, the LPKF ProMask or LPKF ProLegend System accessory kit for application (p/n 117072 or 117584), the LPKF UV table (p/n 117192), a Laser Printer (minimum 600 dpi), & a hot-air oven (p/n 115877).

Part Number	Description	Price
117072	LPKF ProMask System Includes all necessary tools & materials for the initial set-up for ten 9" x 12" double sided PCB panels	\$700.00
	Qty. Description	
	10 Foam rollers	
	1 Roller tray & roller handle	
	20 Wooden spatulas	
	1 Cleaning brush	
	1 Developer flask	
	1 Developer dish	
	20 Black/White laser printer films	
	2 PCB handles	
	20 Curing packets (Comp. A.)	
	20 Varnish packets (Comp. B)	
	1 Cleaner (500 ml) deoxidizer	
	10 Developer 10 gram packets	
	10 Conditioner 7 gram packets (used to neutralize the developer)	
1 1 pair of Heavy duty gloves		
10 Disposable gloves		
117192	LPKF UV Lamp Table used for the exposure process (110/120 V, 60 Hz)	1 \$1400.00
115877	Hot Air Oven used for curing.	1 \$750.00
117108	LPKF ProMask Consumable Set includes 20 Solder resist packets (Comp A & B), 10 Developer 10.0 Gram packets , 20 Black/White laser printer films, 10 Conditioner 7.0 gram packets, 10 foam rollers, 20 wooden spatulas, & 1 roller tray and handle.	1 \$195.00
117564	LPKF ProLegend Consumable Set includes 20 white identification resist (Comp A & B), 10 Developer 10.0 Gram packets , 20 Black/White laser printer films, 10 Conditioner 7.0 gram packets, 10 foam rollers, 20 wooden spatulas, & 1 roller tray and handle.	1 \$195.00
116061	Replacement Foam Roller for ProMask	1 \$3.50
116062	Replacement Roller Tray and Roller Handle including one foam roller for ProMask	1 \$8.50
120376	LPKF ProMask Green Solder Resist includes 20 packets of both Comp. A and Comp. B.	20 \$170.00
120377	LPKF ProLegend White Identification Resist includes 20 packets of both Comp. A and Comp. B.	20 \$170.00
124855	LPKF ProMask/ProLegend Conditioner 7 gram packets (used to neutralize the developer)	10 \$30.00
124856	LPKF ProMask/ProLegend Developer 10 gram packets	10 \$30.00
115891	ProConduct® & ProMask Cleaner including bottle.	1 \$20.00



PCB Board Finish Accessories

Part Number	Description	Quantity	Price
07448	Metal Free PCB Cleaning Pads to remove oxidation from the copper surface.	10 pack	\$15.00
12014	Plastik Spray .to give prototype boards a great finish after milling. This is a transparent solder able protective coating based on an acrylic resin. 6.66 fl oz	1 can	\$30.00

PCB Board Adhesive

Part Number	Description	Quantity	Price
106373	Masking Tape to mount board & underlay material to the tabletop of LPKF milling plotters to avoid movement & bending. This tape is safe release. 1" x 60 yards	1 roll	\$6.00
6065	Spray Adhesive to place soft or flexible materials onto the backing material without warping. Boards can be repositioned. Ideal for MW & RF circuits. 15 fl. oz	1 can	\$25.00



Set Pin System

Part Number	Description	Quantity	Price
108221	Pilot Pins used for alignment to provide registration on all LPKF milling plotters (excluding Hi-P & Hi-P Automill) 3 mm diameter.	10 pack	\$10.00
127151	Long Pilot Pins used for alignment to provide registration on LPKF milling plotters with a vacuum table. 3 mm diameter x 12 mm length <i>(was p/n 100197)</i>	10 pack	\$15.00
100039	Set Pin Strips: red plastic strips used to place alignment (Pilot) pins into the table of all LPKF milling plotters.	10 pack	\$50.00
107188	Insertion Tool for Pilot Pins for the precise insertion of registration (Pilot) pins into the Set Pin Strips.	1	\$50.00



Measuring Microscopes

Part Number	Description	Quantity	Price
103678	Precision measuring microscope with 60x magnification: featuring a helicoid focusing, inch scale (0.001" division) with 0.08" viewing range, a lens surface with color corrected coating insuring a bright full-contrast image, an anodized aluminum construction with integrated lighting & a clear acrylic base that admits light from all directions. Includes convenient custom storage case.	1	\$475.00



Lead-Free Solder Paste

No-clean, lead-free solder paste is a modified rosin based paste, which allows repeatability and consistency. The Patented Nihon Superior nickel stabilized tin/copper eutectic alloy has a melting point of 227°C.

Part Number	Description	Quantity	Unit Price
220191	Lead-free solder paste, 250 gram jar	1	\$80.00
129360	Lead-free solder paste, 5cc syringe, for use with ProtoPlace S/S63 & S103 dispensing unit	1	\$30.00



LPKF EasyContac Manual Through-Hole Plating

Part Number	Description	Unit Price
110914	LPKF Easy Contac for prototype circuit boards with less than 50 through-plated holes & PCB repairs. All necessary parts are conveniently packed in a handy box including, rivets of a unique copper alloy that are placed in the hole by hand & riveted with the help of a punch tool. The hole can be populated with a component or lead if required.	\$600.00
	Qty. Description	
	1000 EasyContac Rivet 0.8 mm/31 mil outer diameter: 0.6 mm/23 mil inner diameter (Part # 110907)	
	1000 EasyContac Rivet 1.0 mm/39 mil outer diameter: 0.8 mm/31 mil inner diameter (Part # 110758)	
	1000 EasyContac Rivet 1.4 mm/55 mil outer diameter: 1.0 mm/39 mil inner diameter (Part # 110906)	
	1000 EasyContac Rivet 1.6 mm/63 mil outer diameter: 1.2 mm/47 mil inner diameter (Part # 110759)	
	1 EasyContac Rivet Punch Tool including tool tip A (used for 0.8 mm & 1.0 mm size (Part # 110760)	
	1 Tool Tip B used for 1.4 mm & 1.6 mm rivet sizes (Part # 110911)	
	1 Easy Contac Anvil (Part # 110821)	
1 Easy Contac Tweezers (Part # 110757)		



Expendables for EasyContac

Part Number	Rivet Diameter		Description	Quantity	Price
	Outer (mm/mil)	Inner (mm/mil)			
110907	0.8 mm / 31 mil	0.6 mm / 23 mil	EasyContac Rivets	1000 pack	\$100.00
110758	1.0 mm / 39 mil	0.8 mm / 31 mil	EasyContac Rivets	1000 pack	\$100.00
110906	1.4 mm / 55 mil	1.0 mm / 39 mil	EasyContac Rivets	1000 pack	\$100.00
110759	1.6 mm / 63 mil	1.2 mm / 47 mil	EasyContac Rivets	1000 pack	\$100.00
110760	EasyContac Center Punch for semiautomatic forming of the rivets including tool tip A			1	\$70.00
110971	EasyContac Tool Tip A for punching rivets with 0.8 mm & 1.0 mm diameter			1	\$25.00
110911	EasyContac Tool Tip B for punching rivets with 1.4 mm & 1.6 mm diameter			1	\$25.00
110821	EasyContac Anvil for stable support when punching			1	\$30.00
110757	EasyContac Tweezers			1	\$18.00



LPKF ProConduct® Through-Hole Plating Process

An easy to use parallel through-hole plating process which applies an even layer of conductive paste to the through-holes of printed circuit boards, providing & electrical connection to double sided & multilayer PCB's. The necessary components for this process are as follows, a honeycomb surface vacuum table, dust extraction unit, adhesive foils, conductive paste, hot-air oven as well as an accessory kit for the foil application & mounting.

Part Number	Description	Price
215790	LPKF ProConduct® Starter Kit for use with included stand alone vacuum table. Includes necessary tools & materials for the initial set-up as well (hot air oven and vacuum sold separately) as both consumable packages for ten 9" x 12" double sided PCB panels	\$2000.00
	Qty. Description	
	1 LPKF ProConduct® Stand Alone Vacuum Table	
	20 Adhesive protection foils	
	10 Absorbent fleece backing sheets	
	20 LPKF proprietary conductive paste 2.5 gram packets	
	5 FR4 double-sided ½ oz. copper clad board material 9" x 12"	
	5 FR4 double-sided 1 oz. copper clad board material 9" x 12"	
	1 Squeegee	
	1 Brush	
	1 Roller	
	1 PCB Cleaning Pad	
	1 ProConduct® Cleaner & Spray Container	
1 1 pair of Heavy Duty Gloves & 100 disposable Gloves		
115790	LPKF ProConduct® System for LPKF ProtoMat® machines with a vacuum table (S42, S62, S100, & H100). Includes necessary tools and materials (hot air oven, vacuum, and vacuum table sold separately) minus the stand alone vacuum table.	1 \$1000.00
115878	LPKF ProConduct® Desktop Vacuum table	1 \$1000.00
114647	Dust Extraction Unit/Vacuum for stand alone vacuum table.	1 \$795.00
115877	Hot Air Oven used for curing.	1 \$750.00
116159	LPKF ProConduct® Consumable Foil Set includes 20 Adhesive Protection Foils, 10 Absorbent fleece backing sheets, & 10 vacuum table covers for concentration of suction.	1 \$145.00
116110	LPKF ProConduct® Consumable Paste includes 20, 2.5 gram packets of LPKF's proprietary conductive epoxy.	1 \$250.00
118209	LPKF ProConduct® Protection Film adhesive surface foils 9" x 12"	20 \$90.00
115891	LPKF ProConduct® & ProMask Cleaner including bottle.	1 \$20.00

Electroplating System Consumable

Part Number	Description	Quantity	Price
108764	One year supply of plating chemicals for MiniContac I, II, III & RS systems, including Cleaner 110, Cleaner 210, Activator 310, Copper Plater 400 & Shine 400.	1 set	\$980.00
106920	One year supply of plating chemicals for Contac I, II, III & RS systems, including Cleaner 110, Cleaner 210, Activator 310, Copper Plater 400 & Shine 400.	1 set	\$1990.00
107914	Cleaner 110	1 quart	\$25.00
107915	Cleaner 210	1 quart	\$25.00
107916	Activator 310	1 quart	\$95.00
102439	Copper Plater 400	1 quart	\$30.00
107917	Shine 400	1 quart	\$55.00
998001	Disposal of MiniContac Chemical Set includes paperwork, approval, containers, UPS sent empty containers. Outbound freight not included. (Disposal services may not be available in all locations)	1 x	\$1100.00
998002	Disposal of Contac Chemical Set includes paperwork, approval, containers, UPS sent empty containers. Outbound freight not included. (Disposal services may not be available in all locations)	1 x	\$1500.00

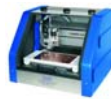
Dust Extraction System & Supplies

Part Number	Description	Unit Price
114647	Dust Extraction System (Jetstream) for the ProConduct[®] Vacuum Table & all LPKF ProtoMat[®] models except H100 Whisper quiet (62 dba), variable speed, dust extraction system includes.... 0-140 CFM airflow & a highly effective 2 stage filter system; 1 st stage: Multi-layered disposable bag 2 nd stage: HEPA filter allowing > 99.97% dust capture efficiency. This system is switched on/off directly by the LPKF ProtoMat [®] , synchronized with the milling motor to optimize equipment life & can also be used independent of the LPKF ProtoMat [®] .	\$795.00
220126	Dust Extraction Systems w/ Integrated Electronic AutoSwitch for the LPKF ProtoMat[®] H100 Whisper quite (62 dba), variable speed, dust extraction systems includes...0-282 CFM airflow & a highly effective HEPA filter system. The extensive HEPA filtration system allows > 99.97% dust capture efficiency. This system is switched on/off directly by the LPKF ProtoMat [®] , synchronized with the milling motor to optimize equipment life & can also be used independent of the LPKF ProtoMat [®] .	\$1200.00
AG143	Dust Extraction Bags for both the LPKF ProtoMat [®] . H100 dust extraction (no latch on the top) (model LV200). & Jetstream dust extraction units. (p/n 114647) (5 pack)	\$50.00
F141	Disposable cartridge including filter for the LPKF ProtoMat [®] . H100 dust extraction unit with 3 air intake ports on the top (model LV200).	\$100.00
AB112	Dust Extraction Motor Brush Kit for both the LPKF ProtoMat [®] . H100 dust extraction unit (no latch on the top) (model LV200) - requires 2 kits & Jetstream dust extraction units. (p/n 114647) - requires 1 kit. 2 brushes included in each kit.	\$25.00
F160	HEPA filter for Jetstream dust extraction unit. Fits p/n 114647.	\$50.00
F164	Filter # 2 – Deep Pleated Pre Filter for the LPKF ProtoMat [®] .H100 dust extraction unit with a latch on the top (for p/n 220126) – 2 pack.	\$125.00
F074	Filter # 3 – HEPA Filter for the LPKF ProtoMat [®] . H100 dust extraction unit with a latch on the top (p/n 220126). Also for ProtoLaser [®] (p/n 124391)	\$142.00
AB011	Dust Extraction Motor Brush Kit for the LPKF ProtoMat [®] .H100 dust extraction unit with a latch on the top (for p/n 220126) – set of 4 brushes and 2 pads. 1 kit required	\$35.00
F073	Filter # 2 -6" Disposable pleated filter for the LPKF ProtoLaser [®] (p/n 124391) and MicroLine UV (p/n 210626) dust extraction units. 2 pack	\$120.00
AG128	Filter #1 high capacity prefilter dust extraction bags for the LPKF ProtoLaser [®] (p/n 124391) and MicroLine UV (p/n 210626) dust extraction units. 5 pack	\$140.00
AG110	Filter #4 chemical filter replacement pads for the LPKF ProtoLaser [®] (p/n 124391) and MicroLine UV (p/n 210626) dust extraction units.	\$155.00
AB024	Dust Extraction Motor Brush Kit for the LPKF ProtoLaser [®] (p/n 124391) set of 4 brushes and filter pad. Requires 1 kit	\$95.00
109028	Variable Speed Vacuum Dust Extraction Bags (pkg. of 5) (fits p/n 050114)	\$35.00
109106	Filter Queen Vacuum Dust Extraction Bags (pkg. of 10)	\$10.00



Options & Upgrades

Part Number	Description	Unit Price
109688	Micrometer Milling Depth Adjustment provides precise milling depth adjustment. Available for all LPKF circuit board plotters. Includes fitting.	\$295.00
106007	Pneumatic Z Stroke & Height Extension allows greater Z-axis movement of up to 14 mm. This option is available for all models except the LPKF ProtoMat [®] . H100, 95s & 95s/II. Option performed at the LPKF factory. Requires compressed air (min 87 psi)	\$2500.00
107149	Pneumatic Working Depth Limiter rides on an air cushion, ideal for sensitive materials. Option performed at the LPKF factory. Requires compressed air (min 87 psi)	\$980.00
109283	Working Depth Limiter with Integrated Light Source for all LPKF ProtoMat [®] models except the LPKF ProtoMat [®] H100, 95s, 95s/II, C100/HF & models built prior to 1997.	\$450.00
109284	Pneumatic Working Depth Limiter with Integrated Light Source only for the LPKF ProtoMat [®] 95s, 95s/II, C100/HF & H100.	\$510.00
113421	Brush Head for "S" and "X" Series used during rework procedures, helps protect placed components, while maintaining a sufficient low pressure region for the vacuum system to remove debris from the area.	\$55.00
114487	LPKF AutoCAM Fiducial Recognition Camera Option , fits all models except 95s and 95sII. Includes return shipment of system.	\$7550.00
106345	Inspection Camera for all LPKF ProtoMat [®] models except H100, S62, 95s, & 95s/II Provides a camera option for the visual positioning of the milling head. Ideal for reworking.	\$2500.00
130483	Flat Screen Monitor for use with Inspection Camera, 15" Flat Screen Monitor, NTSC/PAL	\$735.00
115789	Automatic Fiducial Camera System for S42/S62/S100 LPKF ProtoMat[®] systems only. Allows automatic fiducial recognition, eliminating user interaction, while simplifying the board alignment process. Option includes camera, mounting parts & cables.	\$3500.00
127689	Automatic Fiducial Camera for ProtoMat S43 only. Allows automatic fiducial recognition, eliminating user interaction, while simplifying the board alignment process. Option includes camera, mounting parts & cables.	\$3,995.00
120128	LPKF StatusLight for S42/S62/S100 LPKF ProtoMat[®] systems only. Connects to the LPKF ProtoMat [®] to indicate status of the machine visible across a busy factory floor or in other environments where constant close monitoring is impractical.	\$1095.00
127781	LPKF StatusLight for S43/S63/S103 LPKF ProtoMat[®] systems only. Connects to the LPKF ProtoMat [®] to indicate status of the machine visible across a busy factory floor or in other environments where constant close monitoring is impractical	\$1095.00
120744	Upgrade MultiPress S manual to auto. hydraulic unit: automatic hydraulic unit for LPKF MultiPress S	\$4595.00
115693	LPKF S62/S100 Vacuum Table - For securing board material to the machine without the need for registration pins. Ideal for flex circuits, thin films, and reworking existing boards.	\$1980.00
117048	LPKF S42 Vacuum Table - For securing board material to the machine without the need for registration pins. Ideal for flex circuits, thin films, and reworking existing boards.	\$1980.00
127688	LPKF S43/S63 Vacuum Table - For securing board material to the machine without the need for registration pins. Ideal for flex circuits, thin films, and reworking existing boards.	\$1700.00
127700	Upgrade Kit S43 - S63	\$10300.00
127701	Upgrade Kit S43 - S103	\$17500.00
127702	Upgrade Kit S63 - S103	\$10300.00



Acoustic Cabinets

The acoustic cabinet reduces noise and dust emissions to ensure comfortable operation in your lab or office.

117750	Table Top Acoustic Cabinet for S42 reduces noise and dust emissions.	\$1610.00
114140	Large Acoustic Cabinet (For LPKF ProtoMat [®] M30/s, M60, 95s, 95s/II, and H100 models). Acoustic Cabinet- 32x42x55 248 lb with packaging included	\$6100.00

Product Training

LPKF Laser & Electronics recommends no more than 2-3 students.

Part Number	Description	Unit Price
10	1 day Customer On-Site Training for two people at your facility) (airfare included)	\$2750.00
10-1	Each Additional day Customer On-Site Training (for two people at your facility)	\$1600.00
SA-10-1157	ProtoLaser S/U/U3 Installation (includes airfare and travel expenses) *required with purchase*	\$2750.00
20-1	ProtoLaser S/U/U3 On-Site Training Day (up to two people) *2 days required*	\$1600.00
223002	Remote phone training and support - per hour (charges are acquired in 15 minute increments)	\$120.00
11	Individual Factory Training (per day) Cost is per day for two people at LPKF facility in OR. Does not include expenses. Usually requires 2 days to complete training.	\$990.00

Maintenance & Service

You may either ship your machine to the LPKF factory in Tualatin, OR, or an LPKF technician will travel to your site to service your LPKF circuit board plotter. We recommend maintenance once per year (date TBD by LPKF). This service includes cleaning, lubrication, & calibration of all rods & lead screws. Our technician will also check & adjust the alignment of the registration system, (includes new INI files) & check alignment.

Part Number	Description	Unit Price
221001	In-House (LPKF factory) LPKF circuit board plotter system	\$700.00
101450	On-Site Service (Your facility) LPKF circuit board plotter system (any type built after 1993) first day.	\$2750.00
201450	Each Additional day Customer On-Site Service	\$1600.00

In the special case that our service technicians finds necessary repairs on your system that would exceed a maintenance job, we will make a recommendation on any hardware upgrade or repair separately. Such repairs would be subject to separate authorization & billing.

Maintenance Supplies

Part Number	Description	Unit Price
102244	Lubricant for lead screws used with the LPKF ProtoMat [®] 91s, 92s, 91s/HS, 91s/Vs, 93s, C30, C30/s, C60, C100/HF, & S62.	\$25.00
106976	Lubricant for ball bearing lead screws used with the LPKF ProtoMat [®] 95, 95s-II, Automill & Hi-P, & H100	\$30.00
115513	ProtoMat [®] S42 & S62 foot for working depth limiter	\$20.00
118274	ProtoMat [®] S62 & S100 automatic tool change O-Rings (package of 20)	\$10.00
117228	ProtoMat [®] S100 foot for working depth limiter	\$190.00
122430	ProtoMat [®] S62 collet key	\$17.00
126869	ProtoMat [®] S62 & S100 collet brush	\$2.50
127757	ProtoMat [®] E33 T6 torx screw driver for collet set screw	\$25.00
10000104	ProtoMat [®] E33 set screw for tool change	\$0.50
127116	ProtoMat [®] S43/S63 for working depth limiter	\$20.00
127295	ProtoMat [®] S103 for working depth limiter	\$135.00
SET-10-1042	Maintenance Set for ProtoMat S43	\$85.00
SET-10-1043	Maintenance Set for ProtoMat S63	\$110.00
SET-10-1044	Maintenance Set for ProtoMat S103	\$240.00

Online Store

Please visit our online store at www.lpkfusa.com/store. Current pricing & part numbers are available at this site as well as the ability to place your order online to be received in minutes. The order may be placed with a Credit Card (Visa, MasterCard, AMEX, Discover accepted) or with purchase order #.

LPKF TERMS AND CONDITIONS

A copy of LPKF standard terms and conditions is available upon request, or may be downloaded from the website at: http://www.lpkfusa.com/downloads/terms_and_conditions.pdf