

# Options & Accessories

## for ProtoMat circuit board plotters

Order info

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Expand the capabilities of the ProtoMat and other LPKF systems with a variety of precision accessories and options. These additions, made from the highest quality materials and durably designed for the most challenging prototyping situation, are the perfect complement to any system. Accessories are easy to install at the customer level, and options (such as the non-contact working depth limiter) are options installed at the factory.

- **Increased functionality**
- **Highest quality construction**
- **Perfect integration**

Options & Accessories

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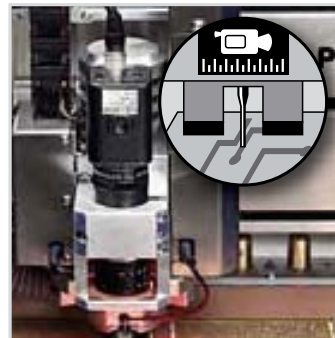
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## Options

### Fiducial recognition camera

**Well-suited for multilayer up to 6 layers!**

Use the LPKF fiducial recognition camera to help align a board for multilayer production more quickly and accurately than a pin-only system. The camera also provides for **automatic inspection of the tool bit status** and a **direct measuring function**. The camera includes driver software that integrates seamlessly with BoardMaster and provides automatic recognition and alignment to existing fiducials in the circuit board. The S-series camera requires USB 2.0 in the host computer, and no additional hardware. The ProtoMat M60/X60 camera includes a special frame-grabber video card and requires an empty peripheral slot in a Windows® computer.



Fiducial recognition camera	ProtoMat S-series camera	ProtoMat M60/X60
Part #	115789	114487

### Vacuum tabletop

This option holds the workpiece tightly against the work surface, eliminating any substrate irregularities such as twisting or warpage. The tabletop also prevents the board from slipping after it has been flipped for multi-sided milling or drilling.



Vacuum tabletop	ProtoMat S42	ProtoMat S62 and S100
Part #	117048	115693

### Acoustic cabinet

LPKF acoustic cabinet reduce noise and dust emissions, making ProtoMat models even more ideal for CAD offices and electronics prototyping laboratories. The shelving unit is ideal for extra tools and consumables, as well as accessories such as switches and dust extraction mechanisms.



Acoustic cabinet for ProtoMat S42	
Part #	117750
Machine	S42
Dimensions (W/H/D)	650 x 510 x 800 mm (25.6" x 21" x 31.5")
Noise reduction	10 dB

Option	LPKF ProtoMat					
	S100	S62	S42	H100	M60	X60
Fiducial recognition camera	+	+	+	●	+	+
Vacuum tabletop	+	+	+	●	-	-
Acoustic cabinet	●	●	+	●	-	-

● standard    + optional    - not available

## Accessories

### Dust extraction

The LPKF dust extraction system, complete with a HEPA absolute filter, keeps the work area clean and free of debris of all sizes, from drill shavings to microscopic dust. The milling depth limiter, a precise tool, requires a dust-free surface against which to operate. The integrated AutoSwitch ensures that the dust extraction system is switched on and off automatically. This guarantees safety, increases the lifetime of the dust extraction system and reduces noise when the machine is not running.

Dust extraction	
Part #	114647
Vacuum pressure	Max. 22,500 Pascal
Air flow rate	241 m <sup>3</sup> /hr (0.140 cfm)
Power consumption	800 W (230 V) or 960 W (120 V)
Dimensions (W/H/D)	250 x 300 x 350 mm (10" x 12" x 14")
Acoustic pressure	50 dB(A)
Absolute filter	HEPA filter
Remote control	Controlled by software LPKF BoardMaster



### Measuring microscope

The LPKF measuring microscope is the ideal tool for calibrating ProtoMat isolation depths, with a built-in light, 60x magnification, and a precision metric scale.

Measuring microscope	
Part #	113495



### Precision ring setter

Use the LPKF ringsetter for autochange ProtoMat models to allow different tool use without readjusting the milling depth. Contains adjustment unit and measuring microscope.

Precision ring setter	
Part #	116698



### Brush head (only for ProtoMat S62, ProtoMat S100 and ProtoMat X60)

The brush head, used primarily during rework procedures, helps protect placed components, while maintaining a sufficient low-pressure region for the vacuum system to remove debris from the work area.

Brush head	ProtoMat S62 und S100	ProtoMat X60
Part #	113421	113815



## Compressors

LPKF air compressors supply a steady, reliable source of compressed air for systems requiring compressed air.

Compressors	Small compressor	Large compressor
<b>Part #</b>	<b>101092</b>	<b>104863</b>
Tank size (liters)	6	50
Max. pressure	6 bar (116 psi)	10 bar (145 psi)
Output	33 l/min (1.1 cfm)	165 l/min (5.8 cfm)
External Dimensions (W/H/D)	360 x 430 x 360 mm (14.2" x 16.9" x 14.2")	1000 x 770 x 390 mm (39.4" x 30.3" x 15.4")
Weight	21 kg (46 lbs)	56 kg (123 lbs)
Acoustic noise level dB(A) at a distance of 4 m (157.5")	52	68
Recommended for	LPKF ProtoPlace	LPKF ProtoMat S100 LPKF ProtoMat H100 LPKF ProtoMat X60



## StatusLight

The LPKF StatusLight connects to an LPKF ProtoMat and indicates the status of the machine in such a way that it's visible even across a busy factory floor or in other environments where constant close monitoring is impractical.

Status light	ProtoMat S-series	ProtoMat H100
<b>Part #</b>	<b>120128</b>	<b>119036</b>



Accessories	LPKF ProtoMat					
	S100	S62	S42	H100	M60	X60
Dust extraction	+	+	+	●	+	+
Measuring microscope	+	+	+	+	+	+
Precision ring setter	+	+	+	+	+	+
Brush head	+	+	-	-	-	+
Compressors	+	-	-	+	-	+
StatusLight	+	+	-	+	-	-

● standard    + optional    - not available