

# PCB Separator MAESTRO 4S

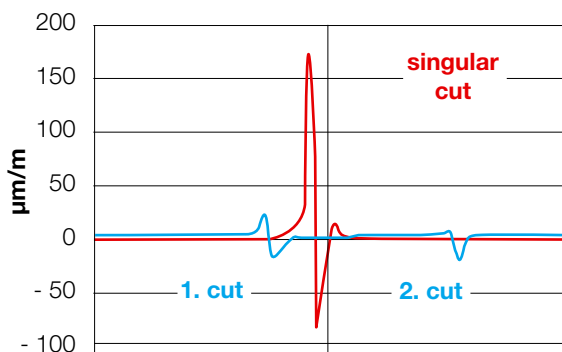


## Stress-free separation of pre-scored PCBs

The MAESTRO 4S separates both large and small PCBs quickly, economically and without stress. Cutting with only a single traverse of the pre-scored groove causes tensile and compressive stresses that can damage sensitive components near the groove. Even a second traverse of the groove accompanied by an adjustment of the blade distance substantially reduces the tensile and compressive stresses. This significantly improves the quality of the populated PCBs.

## The most important features

- The blade distance is entered on the operating panel and its adjustment is motor-powered.
- Up to eight programs can be stored.
- The materials used for PCBs are FR4 and aluminum
- The continuously adjustable separation length is set with limit switches.
- The accumulated cutting performance is displayed for the purpose of scheduling preventive maintenance of the blade.



**Material: FR4 1,5 mm, rest thickness ca. 0,6 mm**

Technical Data	4S/450	4S/600
Separation type	Component side Solder side	circular blade linear blade
Operation	optimized motor driven	
Separation speed	300/500 mm/s switchable	
Material	FR4, Aluminum	
Height of components	Solder and component sides up to 34 mm	
Continuously adjustable separation length	up to 450 mm	up to 600 mm
Width of supporting table	200 mm	
Programming		
Start	Traverse to starting position	
Program	9	
Separation steps	1 - 5	
Blade distance	0.9 mm up to 0.05 mm	
Key switch button	Release program selection	
Cutting performance display	up to 99 km	
DEL	Reset step count	
Power switch	ON / OFF	
Foot switch	START Operation	
Safety switch	Emergency stop	
Voltage	100 - 240 VAC 50/60 Hz	
Emission sound pressure level	LpA < 70 dB (A)	
Temperature/	Operation	+10 - 35°C / 10 - 85%
Humidity	Storage	-20 - +50°C / 10 - 85%
not condensing	Transport	-20 - +50°C / 10 - 85%
Weight	38 kg	46 kg
Height x Depth	434 x 425 mm	
Width	702 mm	852 mm
Approvals	CE, FCC class A	

Maximum height of components next to the groove.	
Increase in external dimensions after separation.	typical 0.2 mm
The pre-scored groove can be interrupted by cutouts.	
If components project above the groove, the linear blade needs to be cut out. In such a case contact us.	

# Conveyor belt

## Conveyor Belt

The separated PCBs are placed individually on the conveyor belt, and transported out to the side of the machine. The speed is adjusted according to the size of the PCB. A light barrier at the end of the conveyor belt detects the arrival of PCBs and stops the belt.



Technical Data	450	600
Material conveyor belt	antistatic	
Direction of belt travel	to the right	
Belt speed	5/6/7/8/9 m/min.	
Light barrier	can be activated for belt stoppage	
Vertical clearance to linear blade	5 - 17 mm	
Maximum PCB width	200	
Weight	14 kg	
Width of belt	170 mm	
Length	1200 mm	1350 mm
Approvals	CE, FCC class A	

The correspondingly designated circular blade must be used for each different type of material that is to be cut.

Various aluminum alloys are used in the manufacture of PCBs. We recommend submitting sample PCBs with the order in order to optimize the cutting geometry and for the correct adjustment of the circular blades.

The circular and linear blades must be precisely guided across the entire separation length in order to achieve stress-free separation and a long service life. The measuring system is mounted on a carriage for setting and regularly checking the parallelism.



Part No.	Description
<b>8936800</b> <b>8936745</b>	PCB Separator MAESTRO 4S/450 PCB Separator MAESTRO 4S/600  The desired circular blade has to be ordered separately. It is mounted and adjusted in the device in the factory.
<b>8930509.001</b> <b>8936895.001</b>	Circular blade FR4 Circular blade Alu
<b>8970208.001</b>	Dial gauge
<b>8931240</b> <b>8932150</b>	Conveyor belt 450 Conveyor belt 600
Content of delivery PCB Separator	Power cable Type E+F, length 1,8 m Foot switch Hexagon key 2 mm Supporting table incl. mounting set Operation manual de/en
Content of delivery Conveyor belt	Power cable Type E+F, length 1,8 m Montage set Operation manual de/en



Pos.	Part No.	Spare parts
1	<b>8930509.001</b>	Circular blade FR4
1	<b>8936895.001</b>	Circular blade Alu
2	<b>8936615.001</b>	Guide 2
3	<b>8936614.001</b>	Guide 1
4	<b>8933394.001</b>	Linear blade 450
4	<b>8933682.001</b>	Linear blade 600

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