

# PCB Separator MAESTRO 4S

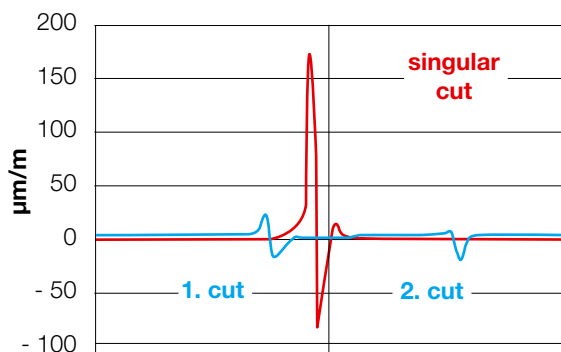


## Stress-free separation of pre-scored PCBs

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

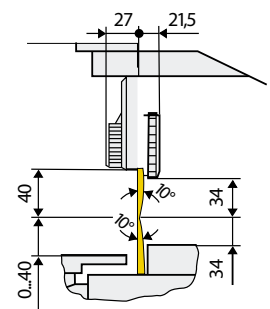
- The blade distance is entered on the operating panel and its adjustment is motor-powered.
- Up to nine programs can be stored.
- The materials used for PCBs are FR4 and aluminum
- The continuously adjustable separation length is set with limit switches.
- The accumulated cutting performance is displayed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



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

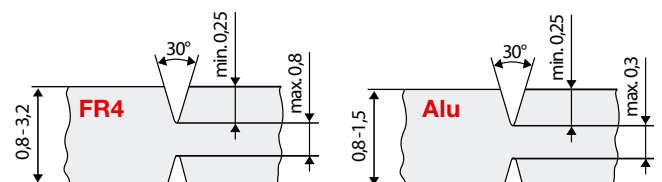
Technical Data		4S/450	4S/600
Separation type		Component side Solder side	circular blade linear blade
Operation		optimized motor driven	
Separation speed		300/500 mm/s switchable	
Material		FR4, Aluminum	
Height of components		Solder and component sides up to 34 mm	
Continuously adjustable separation 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	+ 5 - 40°C / 10 - 85%	
Humidity	Storage	+ 0 - 60°C / 20 - 80%	
not condensing	Transport	– 25 - 60°C / 20 - 80%	
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.



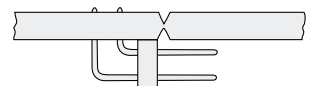
Increase in external dimensions after separation.

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 mm	
Weight	14 kg	
Width of belt	170 mm	
Length	1200 mm	1350 mm
Approvals	CE, FCC class A	

For separating aluminum with the MAESTRO 4S the standard circular blade with special blade settings can be used. More information in the operation manual and at [www.cab.de/en](http://www.cab.de/en)

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
<b>8936800.520</b> <b>8936745.520</b>	PCB Separator MAESTRO 4S/450/alu PCB Separator MAESTRO 4S/600/alu
<b>8930509.001</b>	Circular blade
<b>8970208.001</b>	Dial gauge pre-installed
<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 Dial gauge Operation manual de/en
Content of delivery Conveyor belt	Power cable Type E+F, length 1,8 m Assembling set Operation manual de/en



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

① Headquarter and fabrication  
in Germany

② to ⑩ International  
subsidiaries

There are furthermore 820  
distribution partners in more  
than 80 countries.



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