Surface **M**ounted **D**evice • Accessories

Measurement • Printing • Handling

Measurement • Temperature profiler

Temperature-Measurement-System 570.70

It is absolutely necessary to document the melting process to guarantee nowadays requirements rergarding the DIN EN ISO 9001 and constant manufacturing quality. Therefore our Mesy® **570.70** offers ideal options.

Our measurement system **570.70** is based on the long experience with our previous models 570.20 and 570.35, but takes care of nowadays technological standards.

The **Mesy**® will be connected directly with a PC via the USB-interface. This interface is used for the data exchange and also for the voltage supply, so no additional battery is needed.

For the measurement 3 channels are available. The NiCr/Ni thermocouples are included in the delivery. They offer enough length for our soldering systems, so that the **Mesy**® can stay outside the soldering system during the measurement.

The measured temperatures are shown in real time on the PC. Of course it is possible to print out the soldering profile for documentation purposes.

For the measurement process you can configure the measurement interval from 500 ms up to 30 min as well as the measurement duration, with a maximum recording of 3000 measuring points.

The **Mesy**® **570.70** offers also the possibility to store a once measured temperature curve as a reference curve and equip it with a tolerance range.

For later control measurements during the series manufacturing this reference curve can be used for comparison. So you can make sure, that you are manufacturing in the middle of the process range with reserves to both sides.

570.70

Technical data 570.70

Dimensions (lxwxh)	120 x 70 x 23 mm
Weight	170 g
Measurement inputs	3 channels
Sensors	NiCr/Ni thermocouples
Temperature measurement range	0 °C – 400 °C
Accuracy of the Mesy (without sensors)	+/- 1 °C
Ambient temperature	0 °C – 50 °C
Required operating system	Microsoft Windows 2000, Professional oder XP
Hardware requirements	PC with USB 1.1 Port
Mounting	Magnetic stripes at the bottom side of the Mesy
Max. current consumption	120 mA

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Temperature-Measurement-System 570.77

The measurement system **570.77** is a continuos further development of our USB-Mesy® 570.70. The recording of the measurement values proceeds in storage mode. The included software runs under the operating system Windows 98 or higher. The analysation of the data can be done in graphic or in table form.

The installed lithium polymer accumulator has a capacity of approx. 15 hours. Parameter setting and analysation can be done with a PC. The storage occurs in the adjusted interval, afterwards the values are transferred to a PC via the USB interface.

The accumulator can be loaded via the USB-interface or via an external mains adapter.

| Scope of delivery	MESY incl. software 3 thermocouples with 50 cm length each USB-cabel Battery charger

570.77

Technical data 570.77

Dimensions (lxwxh)	115 x 85 x 9,5 mm
Weight	165 g
Measurement inputs	3 channels
Sensors	NiCr/Ni thermocouple
Temperature measuring range	10 °C – 400 °C
Measurement accuracy of the Mesy (without sensor)	+/- 1°C
Ambient temperature	0 °C – 50 °C
Accu	Lithium-Polymer Run time min. 15 Std.
Measuring interval	0,5 sec bis 10 min
Measured data storage	max. 4.080 measured values
Required operating system	Microsoft Windows 98. ME, 2000 oder XP
Hardware requirements	PC with USB 1.1 Port
Max. operating temperature*	60 °C, acustic signal if max. operating temperature is exceeded and automatically switched off. Start of a new measurement is only possible after cooling down under 40°C.

*: With the optional thermo insulating box **571.77**, the Mesy® is capable for the use inside reflow- and wave soldering systems.

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Thermo insulating box 571.77 for Measurement-system 570.77
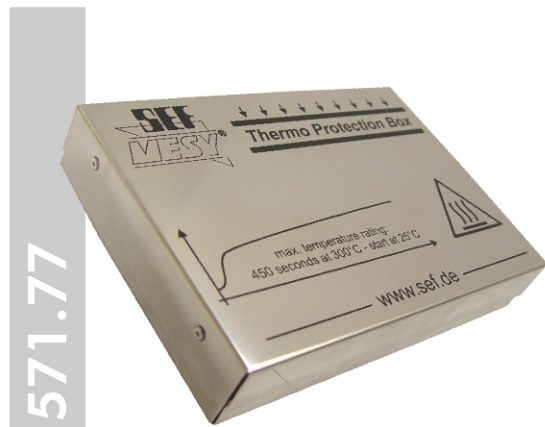
Technical data 570.77

Dimensions (lxwxh)	160 x 110 x 30 mm
Weight	700 g
Insulating characteristics at 190 °C	approx. 13 min. until inner temperature of 60 °C is reached
Insulating characteristics at 300 °C	approx. 7,5 min.

USB-Mesy 2 in thermo insulating box, lead free soldering profile in 548 DF
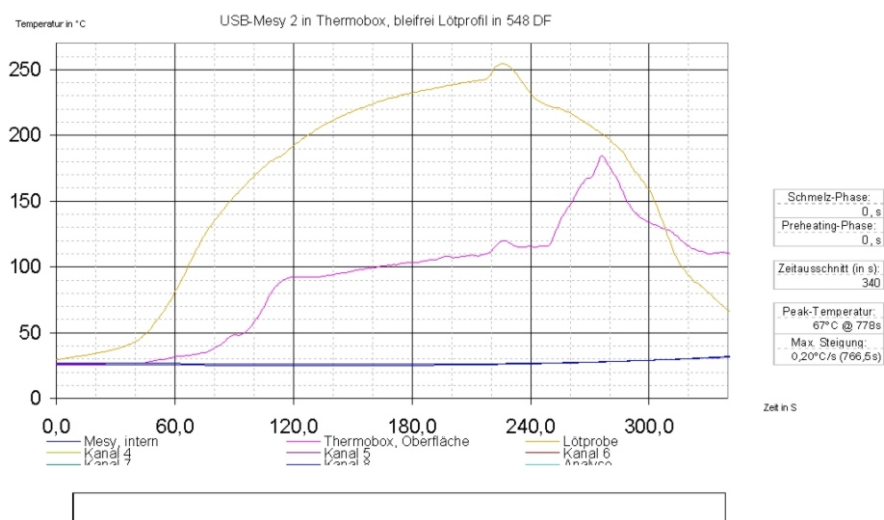
Characteristics of inner temperature, 570.77 in thermo insulating box
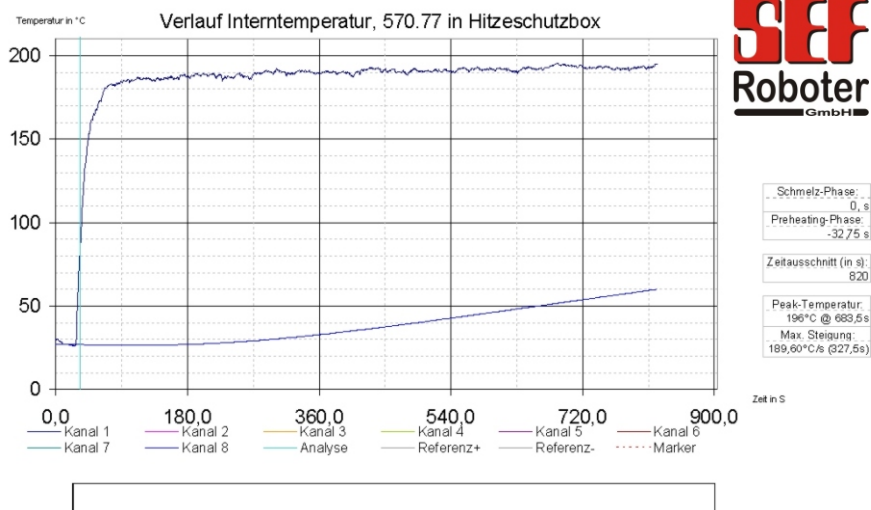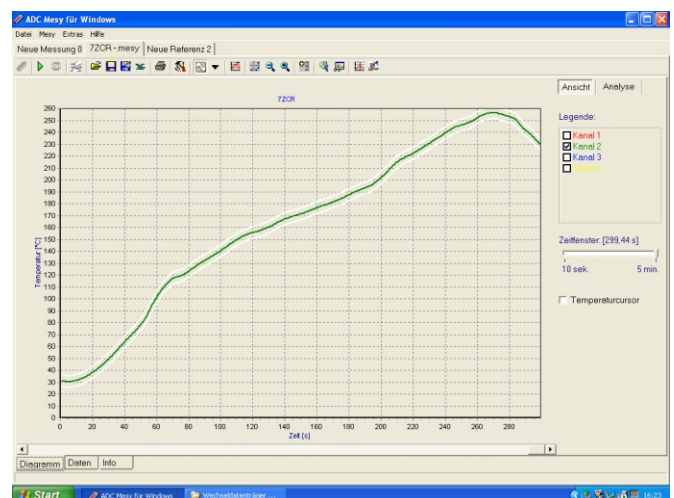
Software Mesy for Windows 1.0

The **Mesy**®-software is included in the scope of delivery of the temperature profilers **570.70** and **570.77** and offers comprehensive functions for the recording, editing and analysation of measuring data.

With **Mesy for Windows 1.0** you can...

… adjust measurement intervals.

… set a start temperature for the begin of the measurement (only 570.77).

… record profiles (in storage mode or real time mode depending on the Mesy®).

… create reference profiles on the basis of measured profiles by adding a tolerance value.

… edit reference profiles by adding, deleting or editing points.

… print with each connected Windows printer.

… export measuring data to Microsoft Excel®.

… use analysation functions like
- display of the peak temperature
- display of the max. positive and negative slope of a profile
- coloured markings of temperature areas (e.g. over or under a temperature and between two temperatures respectively) and the display of their duration.

… create secure documentations with the help of a password protection.

… edit information about your measurement.

… use our previous models 570.20 and 570.35, too (only after optional activation).

Temperature profile
with coloured marked temperature areas

Temperature profile
with added tolerance profile

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Printing • Screen printer
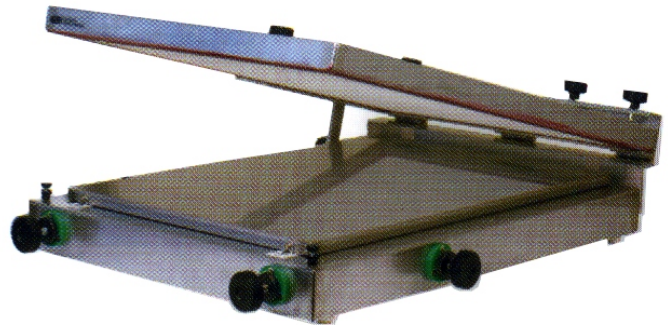
Paste-Printing-Set 530.30

Our set Maxi-Printer **530.03** and Stencil Clamping Frame **530.13** offers an easy and reliable handling as well as an exact repeat accuracy. The set also satisfies with its first class price-performance ratio.

Maxi-Printer 530.03

Whether you want to apply solder paste or chip glue, with this printing device you can do it safely and easily.

The Maxi-Printer is equipped with an adjustable supporting table and a hinged frame fixture. The PCBs can be fixed on the supporting table with a compass plate. The supporting table can be adjusted via knurled-head screws according to the pad layout of the sieve or of the stencil. A millimeter scale shows the adjustable stroke in x- and y-direction. After you have adjusted the supporting table you can lock this adjustment. For an easy handling the frame fixture is equipped with a gas operated compression spring. In the frame fixture you can fix the stencil clamping frame as well as normal sieves.

The height adjustment of the frame fixture is resilient supported and adjustable with a few grips. For the use of sieves the height of the jump-off can be adjusted easily at the rear side of the printing device.

Stencil clamping frame 530.13
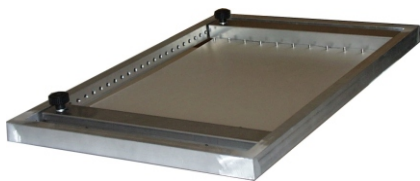
With the Set **530.30** you have a high grade stencil printing system for highest printing precision. In the stencil clamping frame you can clamp stencils with a max. size of 360 x 440 mm. The stencil, whether polyester or metal, will be carried via a fixed and a variable retainer with pins and will be stretched with spring force. The retainers can be arrested in raster steps. Due to the combination of raster steps and spring tension the complete working area can be retained safely and a shifting of the stencil in the clamping frame is impossible.

Technical data

Dimensions (lxwxh)	735 x 551 x 160 mm
Printing area	300 x 350 mm (2x Double-Euro-Format)

Of course you can obtain the Maxi-Printer **530.03** and the stencil clamping frame **530.13** in a set as well as separately.


Manual stencil punching device 530.31.1

For the fixture of your stencils in our stencil clamping frame we offer the Manual Punching Device **530.13.1**. Thus you have the possibility to arrange the necessary punchings in the required raster quickly and precisely.

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Manual pick and place systems THT and SMD 520.13 & 520.13.1

Manual pick and place system 520.13
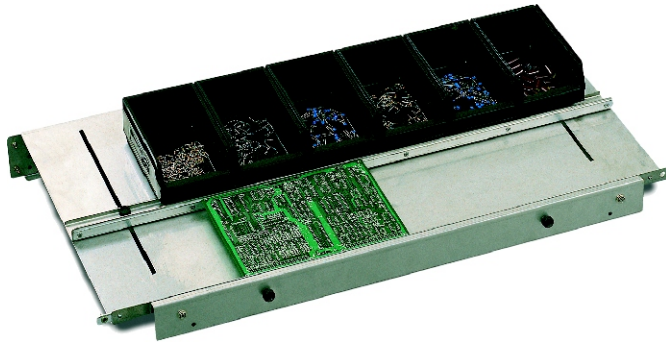
Our manual pick and place system **520.13** offers an elegant solution for the placement of TH and SMD components. With this system it is possible to mount TH components exactly. Several basic systems can be stringed together. In addition a SMD extension can be mounted quickly and easily to the basic system. So a placement of SMD components is possible.

The linear conducted hand support relieves the operation. The PCB is carried by a width adjustable guidance. With chained systems the PCB can be moved easily over all mounting places and can be shared to several working stations efficiently.

For the picking of SMD components we offer the vacuum pump **520.05** including a pipette. Several tips for the different sizes of the SMD components are included in the delivery. The strength of the vacuum can be adjusted at the pump. The storage of the SMD components takes place ideally in 12 ESD capable boxes (4x3 sizes) on the SMD extension. For the storage of the TH components 4 ESD capable hand boxes are included.

Technical data

| Dimensions (lxwxh)	800 x 425 x 100 mm
Placement area	350 x 800 mm

With the SMD extension **530.13.1** a quick and easy placement of SMD components on the manual pick and place system is possible. Therewith a parallel processing of TH and SMD components can take place on the manual pick and place system.
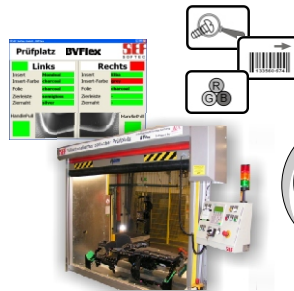

SMD extension 520.13.1

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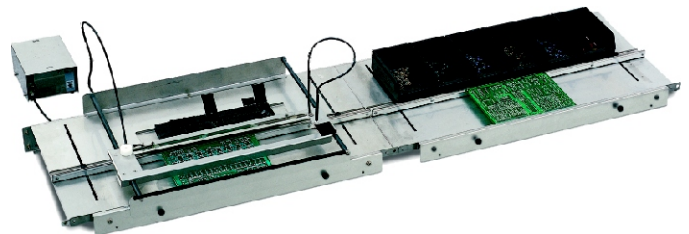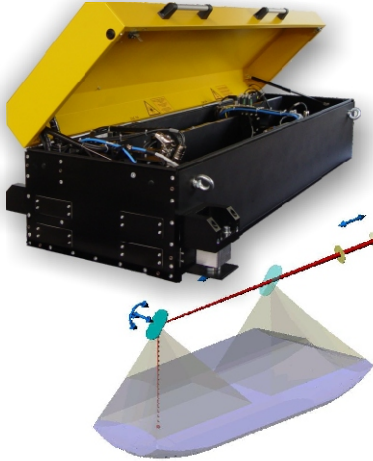
Robotics

Laser Remote
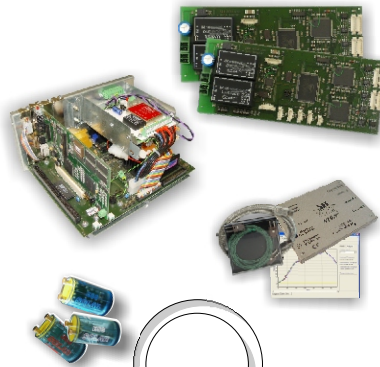
Eltronic

Installations

Industrial image processing

Surface Mount Equipment