

Wave Reflow Selective



Selective Soldering System SEHO GoSELECTIVE



Soldering is our Passion

## Maximum Performance at Minimum Cost

GOSELECTIVE

- High-precision selective miniwave soldering system for stand-alone operation.
- Fiducial recognition for automatic alignment of the printed circuit boards.
- Easy and comfortable teaching process, online or offline.
- Precise axis system for exact positioning of the various working stations.
- Highest flexibility because of quick change solder nozzles.
- The system may be operated with either wettable or non-wettable solder nozzles.
- Automatic wave height control and solder level control provide maximum process reliability.
- Nitrogen inertion of the solder wave ensures highest soldering quality and minimum maintenance.
- For assemblies up to 500 x 500 mm [19.68" x 19.68"].
- Unbeatable price-performance ratio.

### Maximum Performance in Selective Soldering at Minimum Cost: The GoSelective from SEHO

The GoSelective offers the optimal solution when both matters, high soldering quality and flexibility for soldering of remaining THT components.

It is designed and Made in Germany to the highest quality standards to provide a reliable and repeatable selective soldering process. The GoSelective offers an economical and flexible solution requiring minimal floor space.

#### The Concept: Precision and Flexibility

The GoSelective is designed for small and medium size production volumes requiring a stand alone system which is compatible for both tin/lead and lead free soldering processes. The flexibility of the GoSelective allows for the processing of both bare boards and assemblies in carriers up to 500 x 500 mm (19.68" x 19.68").

During the selective soldering process the assemblies remain stationary while the fluxing unit, preheater, and the soldering unit are mounted on a high precision XYZ axis system and are programmed to travel to the points to be soldered.

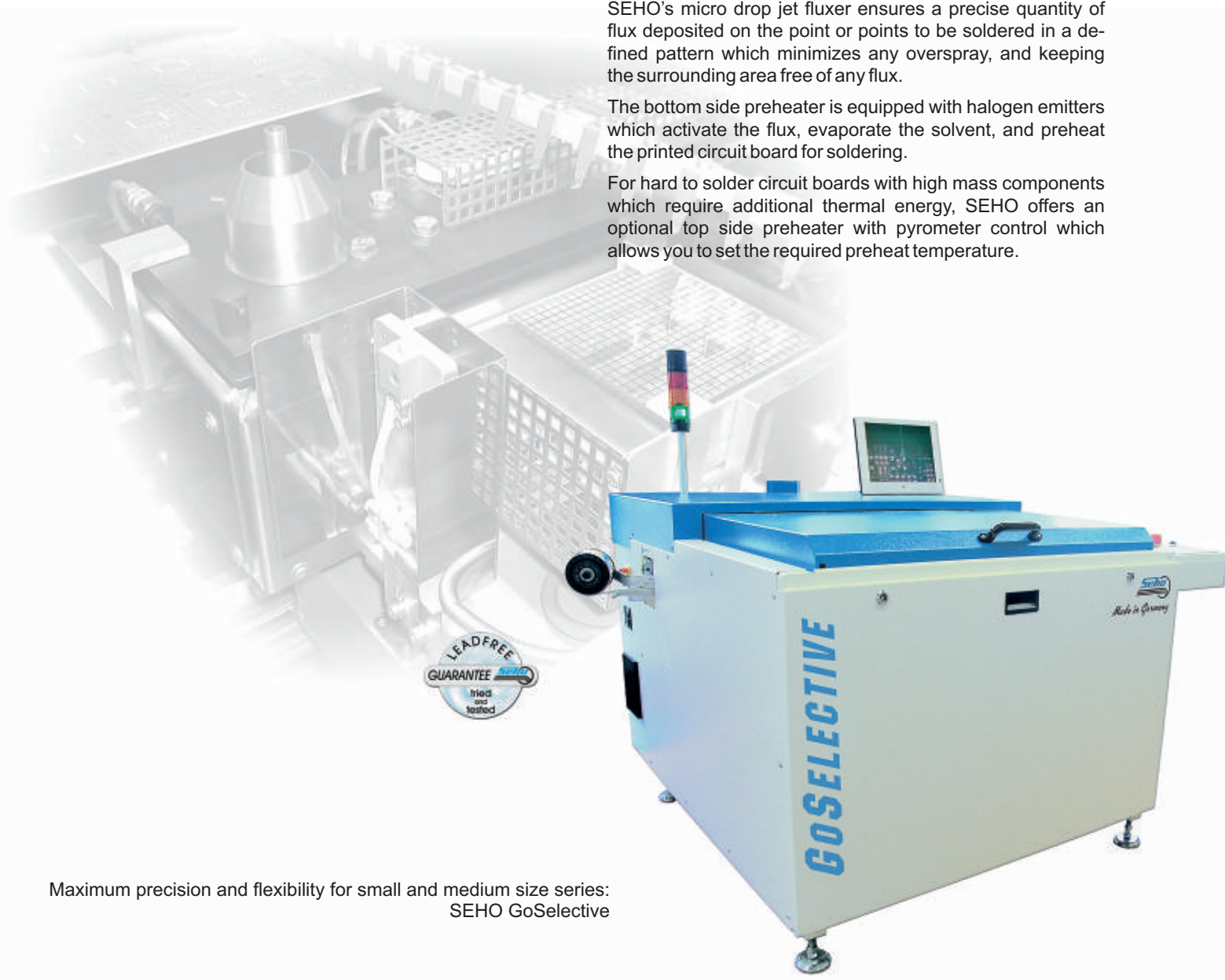
#### Selective Processing Stations: Our Guarantee is the Highest Quality

The GoSelective features a programmable micro drop jet fluxer for spray fluxing all types of low solids fluxes.

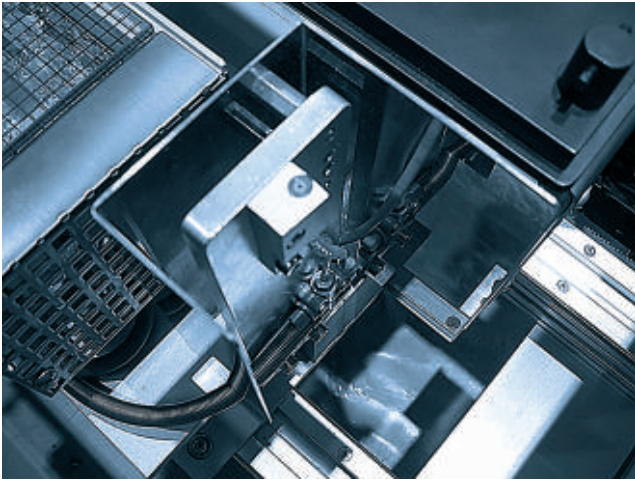
SEHO's micro drop jet fluxer ensures a precise quantity of flux deposited on the point or points to be soldered in a defined pattern which minimizes any overspray, and keeping the surrounding area free of any flux.

The bottom side preheater is equipped with halogen emitters which activate the flux, evaporate the solvent, and preheat the printed circuit board for soldering.

For hard to solder circuit boards with high mass components which require additional thermal energy, SEHO offers an optional top side preheater with pyrometer control which allows you to set the required preheat temperature.



Maximum precision and flexibility for small and medium size series:  
SEHO GoSelective

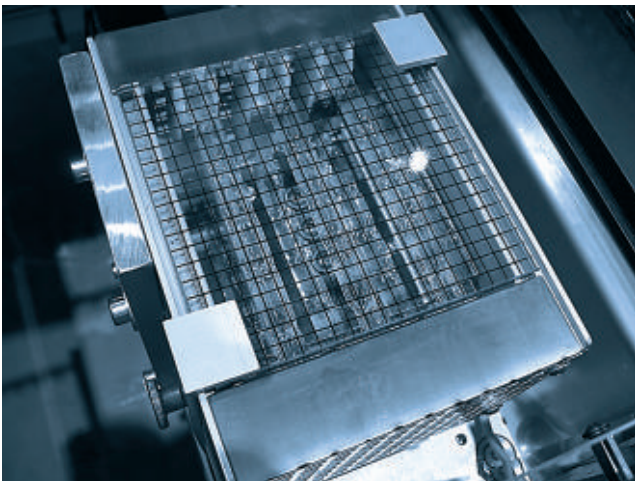


*high-precision micro drop jet fluxer*

The soldering unit is designed for miniwave soldering processes and therefore ensures highest flexibility in your production. Even when it is heated, the soldering unit can be changed very easily which allows economic processing of different solder alloys. A variety of quick change solder nozzles, suitable for dip and drag soldering processes, is available.

The solder nozzle technology of the GoSelective permits very small distances between the solder joints, thus it is possible to also precisely solder points which generally are difficult to get to.

This innovative solder nozzle technology, wettable and non-wettable, suitable for dip and drag soldering, guarantees a reliable process, eliminating bridging and ensures the lowest DPM rates.



*bottom-side preheating*



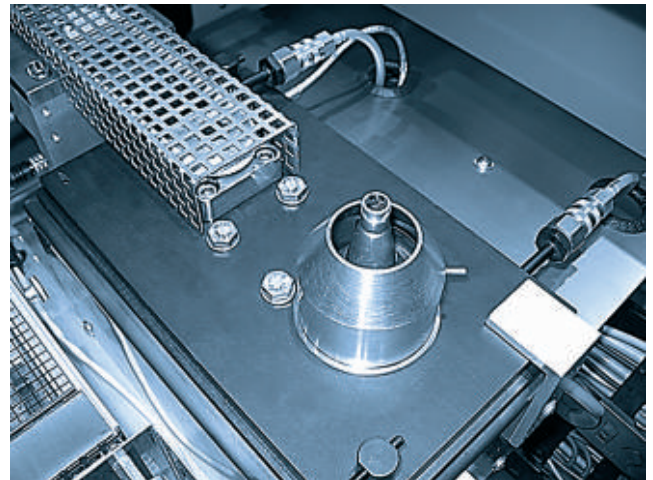
*top-side preheating*

Local area nitrogen inertion ensures an oxide free solder wave, maximizes the flow characteristics of the solder, and keeps maintenance to a minimum.

Highest process reliability is ensured with an automatic solder wave monitoring and wave height control as well as a solder level control.

### **Operational Control: Easy and Comfortable**

The GoSelective system has a high precision color touch pad SPC controller with easy to follow directions. Programming of the GoSelective is quick and easy.



*soldering unit with flexible and precise miniwave solder nozzle*



*non-wettable solder nozzle*



*wettable solder nozzle*

Using the teaching camera, and monitor with cross hair sighting you only need to program the X and Y coordinates and then save the coordinates on the controller.

All programs can be saved and are password protected.

In case of a wide spectrum of assemblies there is an offline teach program available which allows editing of soldering programs on any computer removed from the actual machine. Thus, the machine is used exclusively in the production process without interruption by any programming. The route optimization is particularly innovative. After being taught all the solder points, the program calculates the fastest path independently - to keep pure handling times to a minimum.

Process visualization and the automatic alignment of printed circuit boards with fiducial recognition make the system perfect, maximizing process control as well as reliable soldering results.

## Technical Data and Machine Options

### Fluxer

micro drop jet fluxer	●
wetting width on PCB	2 - 4 mm
flux container	1.8 l pressure tank
automatic level control with capacitive sensor	●
flux types, alcohol or water based	up to 5 % solids content

### Preheating

bottom side halogen emitter	○
total power of the bottom side heating	900 W
top side quartz heating elements with pyrometer control	○
total power of the top side heating	7.5 kW

### Soldering Unit for Miniwave Soldering Processes

solder pot compatible for lead free soldering	●
wettable and non-wettable quick change nozzles	○
nitrogen operation	●
solder pot volume	approx. 14 kg (SnPb)
solder bath temperature	max. 320°C
automatic wave height control	●
automatic solder level control	●
automatic wire solder feeder	○

### Control Unit

touch screen with comfortable user interface	●
display of status messages and password protection	●
real time controller	●
automatic PCB alignment with fiducial recognition	○
process visualization	○
online teach system with camera	○
offline teach program	○

### Handling of Assemblies

max. board dimensions	500 x 500 mm [19.68" x 19.68"]
stand-alone operation with manual infeed and outfeed of assemblies	●
PCB top side clearance	max. 60 mm [2.4"]
PCB bottom side clearance	max. 30 mm [1.2"]

### Axis System

drive unit for X/Y/Z axis	DC servo motor
repeatability	± 0.1 mm

### Nitrogen Technology

nitrogen supply	to be supplied locally
nitrogen connection	R 1/4"
required pressure	min. 2 bar
nitrogen consumption	approx. 1.5 - 2.0 m³/h
required particle cleanliness	5.0 recommended

### Exhaust

exhaust stack	1 piece - 125 mm outer diameter
exhaust volume	500 m³/h

### Electrical Data

available voltages	230/400 V - 50 Hz - 3 phase + N + PE
	3 x 208 V - 60 Hz - 4 wire
power consumption without top side preheating	approx. 4 kW
power consumption with top side preheating	approx. 11 kW

### Machine Dimensions

length incl. control panel	1830 mm [72.1"]
width	1524 mm [60.0"]
height	1062 mm [41.8"]
weight	450 kg



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