

# Total Solutions

for Soldering Processes and  
Automated Production Lines

SEHO GoSelective-LS

Selective Soldering System SEHO GoSELECTIVE-LS



Reflow | Selective | Wave | Handling Solutions | AOI | Know How & Training

## Maximum Performance at Minimum Cost

GoSELECTIVE-LS

- High precision selective miniwave soldering system for stand-alone operation.
- Fiducial recognition for automatic position correction.
- 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.
- Automatic wave height control and solder level control provide maximum process reliability.
- Nitrogen inertion of the solder waves 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 Systems from SEHO.

The GoSelective offers the optimal solution when both matters, high soldering quality and flexibility for selective 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.

In their basic configuration, the GoSelective and GoSelective-LS are equipped to meet a wide range of production requirements.

To ensure a particular ergonomical work flow, the GoSelective-LS is provided with a loading and unloading station for carriers. This also allows to assemble boards in one carrier while a second carrier is being processed in the machine to ensure shortest cycle times.

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.



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

Flux deposition is made with SEHO's proven micro drop jet fluxing system featuring outstanding precision.

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

The soldering unit is designed for miniwave soldering processes and therefore ensure 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 is available. SEHO's innovative solder nozzle technology permits very small distances between the solder joints, thus it is possible to also precisely solder points which generally are difficult to get to.

In addition, the GoSelective-LS also may be equipped with an electro-magnetic soldering unit.

The advantages are obvious: An outstanding compact design, minimum maintenance requirements as well as virtually no wear.

Moreover, the electro-magnetic soldering unit also allows product-specific dip soldering processes to reduce cycle times significantly in high volume productions.

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



multi nozzle tool for dip soldering processes





### Automatic Nozzle Cleaning: Innovative and Smart

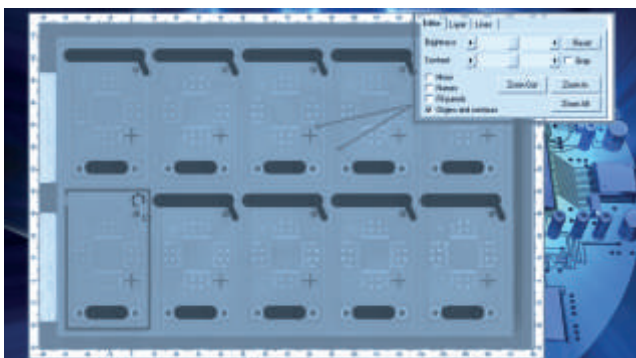
Soiled solder nozzles remarkably affect the reproducibility of processes.

A particular highlight of selective soldering systems from SEHO is the patented ultrasonic cleaning function for nozzles that ensures maximum machine availability. Besides significantly longer lifetime of the solder nozzles, this unique feature provides an absolutely stable soldering process.

### Operation: Easy and Comfortable

The GoSelective systems are equipped with an up-to-date control unit.

Programming is quick and easy and, of course, it is also possible offline in case of a wide spectrum of assemblies.



*easy programming: online or offline*



*automatic ultrasonic solder nozzle cleaning*

*highest flexibility and precision in selective miniwave soldering*



### 100 % Process Control: Reliable Soldering Results

All selective soldering systems from SEHO provide a 100 % process control which is world-wide unique.

Software tools and sensors monitor and control all process steps: From automatic position correction with fiducial recognition, fluxer function control and absolutely reproducible temperature profiles in the preheat area, to wave height control, solder level control and process visualization.

With the machine communication software mcServer all processes can be traced completely. mcServer systematically collects, analyzes and prepares statistically all machine and process parameters.

## Technical Data and Machine Options

### Fluxer

micro drop jet fluxer	●
wetting width on PCB	2 - 4 mm
flux container	1.0 l pressure tank
automatic level control and spray jet control	●
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

solder pot compatible for lead free soldering	●
miniwave soldering process	●
dip soldering process	○
nitrogen operation	●
solder bath temperature	max. 320°C
automatic wave height control	●
automatic solder level control	●
automatic wire solder feeder	●

### Control Unit

comfortable user interface	●
display of status messages and password protection	●
real time controller	●
automatic position correction with fiducial recognition	●
process visualization	●
online teach system with camera	●
offline teach program	●

### Handling of Assemblies

max. carrier dimensions	500 x 500 mm [19.68" x 19.68"]
stand-alone operation	●
PCB top side clearance	max. 100 mm [3.9"]
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 - 2.5 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)	1675 mm [65.9"]
width	2645 mm [104.1"]
height	1472 mm [57.9"]
weight	650 kg



### Headquarters Germany

**SEHO Systems GmbH**  
 Frankenstrasse 7 - 11  
 97892 Kreuzwertheim  
 Germany  
 Phone +49 (0) 93 42-889-0  
 Fax +49 (0) 93 42-889-200  
 E-Mail info@seho.de  
 Website www.seho.de

### Americas

**SEHO North America, Inc.**  
 1445 Jamike Avenue Suite # 1  
 Erlanger, KY 41018  
 USA  
 Phone +1-859-371-7346  
 Fax +1-859-282-6718  
 E-Mail sehona@sehona.com  
 Website www.sehona.com

