

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 soldering system for stand-alone operation with flexible miniwave process or multiwave process ensuring shortest cycle times.
- 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 electro-dynamic soldering unit and quick change solder nozzles.
- Automatic wave height control and solder level control provide maximum process reliability.
- Controlled nitrogen inertion of the solder waves ensures highest quality and minimum maintenance.
- For carriers up to 500 x 500 mm [19.68" x 19.68"].



Maximum Performance in Selective Soldering at Minimum Cost: The GoSelective-LS from SEHO.

The GoSelective-LS 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-LS offers an economical and flexible solution requiring minimal floor space.

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 preheating is equipped with halogen emitters or full-sized quartz heaters 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 GoSelective-LS is equipped with an electro-magnetic soldering unit. The advantages are obvious: An outstanding compact design, minimum maintenance requirements as well as virtually no wear.

Depending on the application you may work with quickly exchangeable miniwave solder nozzles that ensure highest flexibility in your production, or with product-specific multi-nozzle tools to reduce cycle times significantly in high volume productions. 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.

Even when it is heated, the soldering unit can be changed very easily which allows economic processing of different solder alloys.

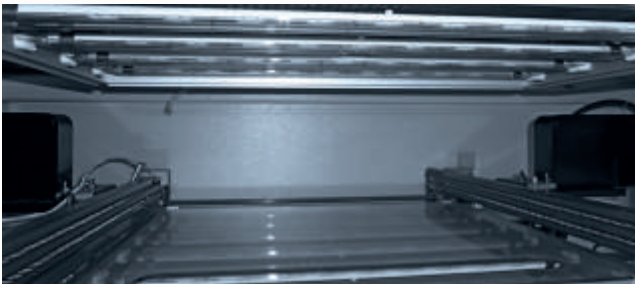
Controlled local nitrogen inertion ensures an oxide free solder wave, maximizes the flow characteristics of the solder and keeps maintenance to a minimum.



multi-nozzle tools ensure shortest cycle times



top and bottom quartz preheating



Automatic Nozzle Cleaning: Innovative and Smart

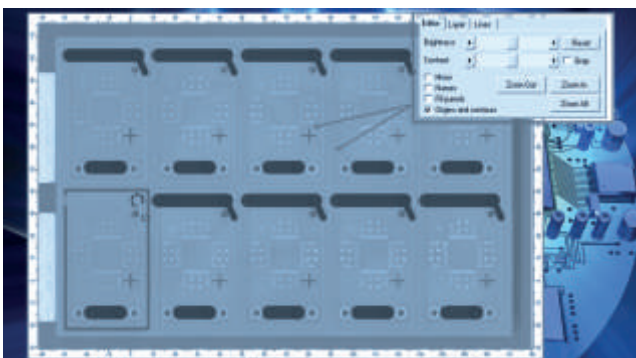
Soiled solder nozzles remarkably affect the reproducibility of processes.

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-LS is equipped with a powerful and 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 solder level control and process visualization. The SEHO cross sensor allows touchless wave height measurement and, as a special feature, includes an automatic tool measurement: diameter, height and mounting position of miniwave solder nozzles are automatically measured.

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 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	○
bottom side quartz heating cassette	○
top side quartz heating cassette with pyrometer control	○
total power of one quartz heating cassette	7.5 kW

Soldering Unit

soldering unit with electro-magnetic pump system	●
miniwave soldering process or multiwave soldering process	○
nitrogen operation	●
automatic ultrasonic cleaning for wetted solder nozzles	○
automatic wave height control	○
automatic solder level control	○
automatic wire solder feeder	○

Control Unit

automation PC with 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	AC servo motor
repeatability	± 0.1 mm

Nitrogen Technology

nitrogen supply	to be supplied locally
nitrogen connection	R 1/4"
required pressure	min. 4 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)	1675 mm [65.9"]
width	2645 mm [104.1"]
height	1472 mm [57.9"]
weight	650 kg

Further options upon request.

● Standard ○ Option

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