Premium Vapor Phase Soldering Machine

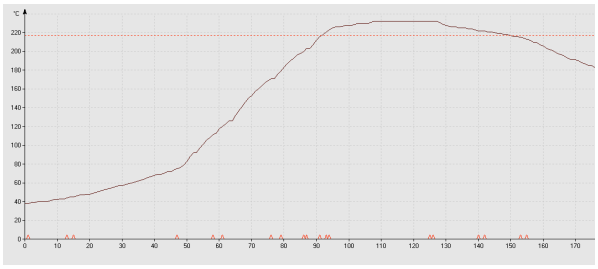
for Highest Demands

Process Cycle

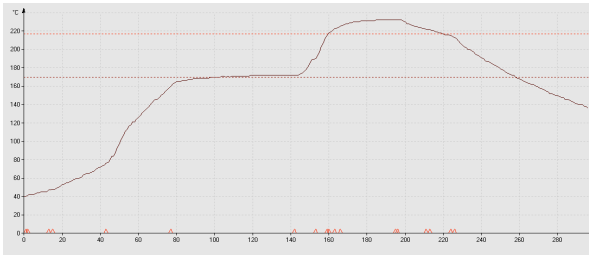
The SLC/BLC series allows the precise processing of complex PCB boards without any pre-testing.
Through the combination of the Soft Vapor Phase and the soldering automatic, the system can run linear temperature profiles as well as Plateau temperature profiles.
During operation the sensor based process control adjusts the temperature points automatically in order to provide reliable soldering results.

Features

- 2-Chamber Vapor Phase Soldering Machine
- Lead and lead-free soldering with fast changeover
- Maximum process window at minimum temperature
- Easy and comfortable operation through touch screen monitor for programming
- Live temperature profile monitoring, documentation, and optimization with IBL Software VP-Control
- Rapid Cooling System
- IR-heater unit (ideal for glue hardening, optional)
- Lowest energy consumption
- Observation window into process chamber



Linear Temperature profile



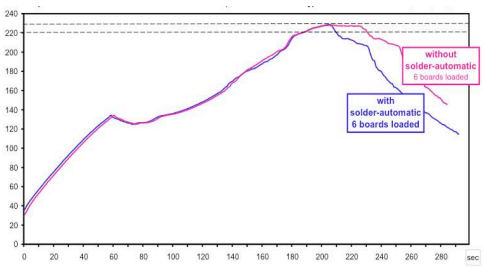
Plateau Temperature profile

Modes of Operation

Heat Level Mode (HL-Mode)
Energy transfer is controlled by adjustable heating power. Generates different, nearly linear temperature profiles.

Soft Vapor-Phase Mode (SVP-Mode)
Soft Vapor stands for slow stepping into the vapor phase and the ability to stay in different positions. The movements of the carrier up and down, are easily programmable.

Automatic-Mode
The solder automatic provides a reliable soldering performance and optimizes the residual time of the boards in the vapor phase to minimize thermal stress.



Limitation of the time above liquidus
After the solder temperature is reached a timer will begin. The solder cycle will finish automatically after the adjusted time over liquidus.

Options

- Display indicator for the height of the vapor level
- Serial interface for PC adaptation
- Monitoring software VP-Control for convenient documentation and fine adjustment of the soldering process
- Temperature sensors for VP-Control (max. 3 channels)
- Adapter for easy access of thermocouples
- Rapid Cooling System
- Anti Fog System (AFS) for clear vision of the soldering process
- Cooling device for closed loop machine cooling
- ReSy system– for repair of QFP's and BGA's

Standard Equipment / Specifications

- Machine operation with TFT touch panel
- 2 process chambers with internal air-lock separation
- Soft Vapor Phase (SVP) mode for soft temperature rise
- Soft Vapor Temperature Control (SVTC) based process
- Syncro mode for process reliability
- Premium solder automatic incl. internal channels for comfortable temperature measuring and profiling
- Observation window into process chamber
- Integrated illumination of the soldering area
- Monitoring of cooling water temperature
- Integrated board cooling
- Automatic fluid level indicator
- Automatic liquid filtering
- Work piece carrier temperature control and compensation
- Fluid recovery system
- Energy management system, incl. program storage
- Automatic or time controlled soldering process

Overview BLC/SLC – Series

System	Machine Dimensions Batch System (WxDxH) mm		Maximum board size (WxDxH) mm	
SLC 309	37" x 69.3" x 52"	940 x 1760 x 1320	11.8" x 13.3" x 3.2"	300 x 340 x 80
SLC 509	46.9" x 69.3" x 52"	1190 x 1760 x 1320	21.2" x 13.3" x 3.2"	540 x 340 x 80
SLC 609	50.8" x 69.3" x 52"	1290 x 1760 x 1320	25.1" x 13.3" x 3.2"	640 x 340 x 80
SLC 809	58.7" x 69.3" x 52"	1490 x 1760 x 1320	33.0" x 13.3" x 3.2"	840 x 340 x 80
BLC 509	46.9" x 77.2" x 52"	1190 x 1960 x 1320	21.2" x 21.3" x 3.2"	540 x 540 x 80
BLC 609	50.8" x 77.2" x 52"	1290 x 1960 x 1320	25.1" x 21.3" x 3.2"	640 x 540 x 80
BLC 809	58.7" x 77.2" x 52"	1490 x 1960 x 1320	33.0" x 21.3" x 3.2"	840 x 540 x 80
Special sizes upon Request			**e.g.** 25.2" x 25.6" x 3.2" 33.0" x 25.6" x 3.2"	640 x 650 x 80 840 x 650 x 80
SLC inline Depth				11" = 300 mm
BLC inline Depth				15" = 400 mm
Max. PCB Height (all systems)		3" 80 mm / 2" 50 mm		
Water connection (all systems)		½"		