ASSCON
Vapor Phase Technology

VP310

Vapor phase soldering systems

Top equipment for labs and small series

The main target areas of application for the vapor phase soldering system VP310 series are labs, and prototype and small series manufacturing operations. Due to the compact dimensions and the fact that no stationary supply systems are needed for operation, it is perfect for trouble-free application at many different sites. 240V power supply are all that is needed.

FLEXIBLE SYSTEM CONCEPT

The handling of VP310 is remarkably easy and the oven provides every user with error-free soldering of top-quality electronic board assemblies. The flexibility is high for both the adjustment of soldering parameters of the board assembly and control of the process. Each individual step can be initiated manually when needed, such as board loading, modification of temperature gradient, activation of vapor generation and the start of the soldering procedure. The electronic control with its precise sensors for the heating element and the temperatures of the liquid and the vapor ensure fully secure operation. Visual process control is made possible by an inspection window.

After the solder reflow is complete, the process is stopped by the operator or the oven-inherent function automatic solder break (ASB). After this, the content of the cooling water reservoir flows into the cooling coil and cools down the process medium so that the vapor blanket in the chamber disperses. Then, the oven can be opened safely for removing the soldered product.

OPTIMUM RESULTS

The electronic board is heated up and soldered homogeneously, regardless of size and weight, using vapor as the medium for heat transfer. Consistently uniform heat energy is distributed across the entire PCB assembly, and even 3D assemblies can be processed easily and flawlessly.

ADVANTAGES

- User-friendly lab and prototype reflow soldering system
- Flexible process conditions
- Can be used for PCB assemblies of various different of sizes
- High application mobility for rework, repair and quality control and assurance
- Oxygen-free process in preheat and soldering stages
- Suitable for lead-free with no restrictions
- ASB (automatic solder break) when the soldering procedure is complete
- TGC (temperature gradient control) adjustable
- OPC (optical process control) through inspection window

60 kg
Weight

0,75 kWh
Average energy consumption*

* time of operation per hour

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RANGE OF APPLICATION	**LABORATORY I QUALITY CONTROL I RESEARCH AND DEVELOPMENT I EDUCATION**

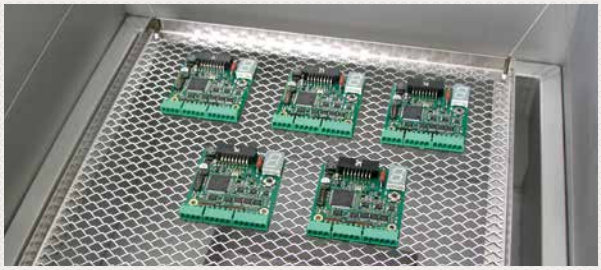
PRODUCT	**VP310**

TECHNICAL DATA

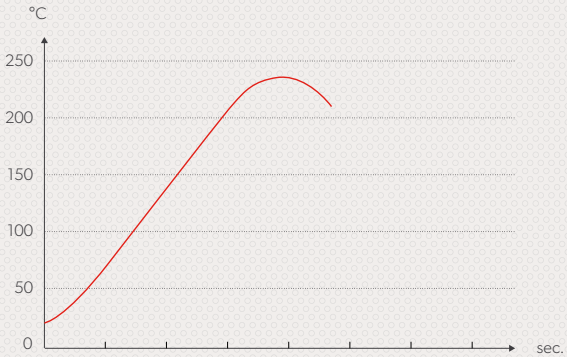
Maximum solder product format (mm)	300 x 300 mm	**Cooling water drain**	1 x hose 8 mm
Maximum height of PCB assembly	50 mm	**Process temperature***	100 to 260 °C
Supply voltage	3 + N + PE 240 V/50 Hz/60 Hz	**Standard cycle time**	6 min.
Power rating	2.0 kW	**Equipment weight**	60 kg
Average energy consumption	0.75 kWh		
Capacity of cooling water/intake	2 liter		

TYPICAL APPLICATION AREAS

- Lab usage for qualification and test of soldering processes
- Secure SMT reflow soldering of single PCB assemblies
- Quality control and assurance of soldering pastes and printed circuit boards
- Rework and repair of PCB assemblies with safe and reliable desoldering and resoldering of components



Workpiece carrier with PCB assembly in feeding position



Oven system VP310 provides flexible process conditions

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