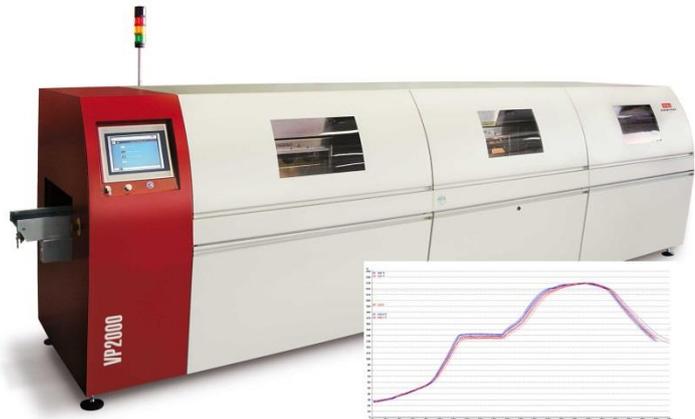


Simple, efficient, safe - vapor phase soldering

Vapor phase soldering is the ideal process for modern soldering technology. Electronic assemblies can be soldered faultlessly in each configuration. Easy and flexible adjustable temperature gradients assure for each product the optimal, absolutely reproducible temperature profile. No complex test series and line set-up times – applicable from prototype up to serial production. This saves time and money and assures moreover a constant excellent product quality.

Vapor as energy transfer medium is one of the most efficient procedures of heating assemblies. The efficiency is many times higher than heating through convection. Because of the usage of a special liquid GALDEN® an oxygen-free process atmosphere is given, where the whole pre-heat and oxidation process is running oxidation-free.



During the vapor phase soldering process vapor condenses on the assembly, which therefore is directly and completely sealed tightly with a liquid film. The energy transfer begins and the pre-heating and soldering process starts. Through the control of the condensing vapor quantity, each temperature profile (ramp profile/linear profile) is variably adjustable.

The application of Dynamic Profiling – a patented process for active control of temperature profiles – supports the simple and fast creation of temperature profiles. Simultaneously, Dynamic Profiling guarantees through the continuous temperature measurement an absolute process safety in series operation.

Vapor phase soldering has significant advantages versus convection soldering:

- No overheating or delamination, since the boiling point of the process medium determines the maximum reachable process temperature
- Temperature differences (dT) on the assembly with less than 1°C reachable – also with extremely heavy solder material
- Oxidation-free soldering process (no nitrogen needed)
- Very low energy requirement because of the high efficiency at the energy transfer
- In connection with a vacuum process, void free solder joints can be realized

The result is top-quality with minimum operating costs

