

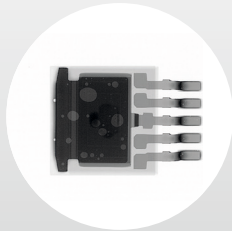


QUALITY „MADE IN GERMANY“
VACUUM REFLOW SOLDERING SYSTEM
SMT QUATTRO PEAK® VAC

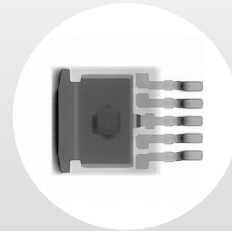


INLINE VACUUM REFLOW SOLDERING SYSTEM

WITH NEW SOFTWARE
THERMAL TOOLS!



PROCESS WITHOUT VACUUM



PROCESS WITH VACUUM

Void-free soldering since 2009 !

- ✓ Lowest Maintenance Effort
- ✓ Lowest Nitrogen Consumption
- ✓ Lowest Energy Consumption
- + Tool-free maintenance of all SMT systems
- + CATalysis - process gas cleaning
- + Sustainable energy and nitrogen saving concept
- + Proven Vacuum Reflow Technology (since 2009)
- + Individual fan control in all zones
- + NEW Software Thermal Tools!

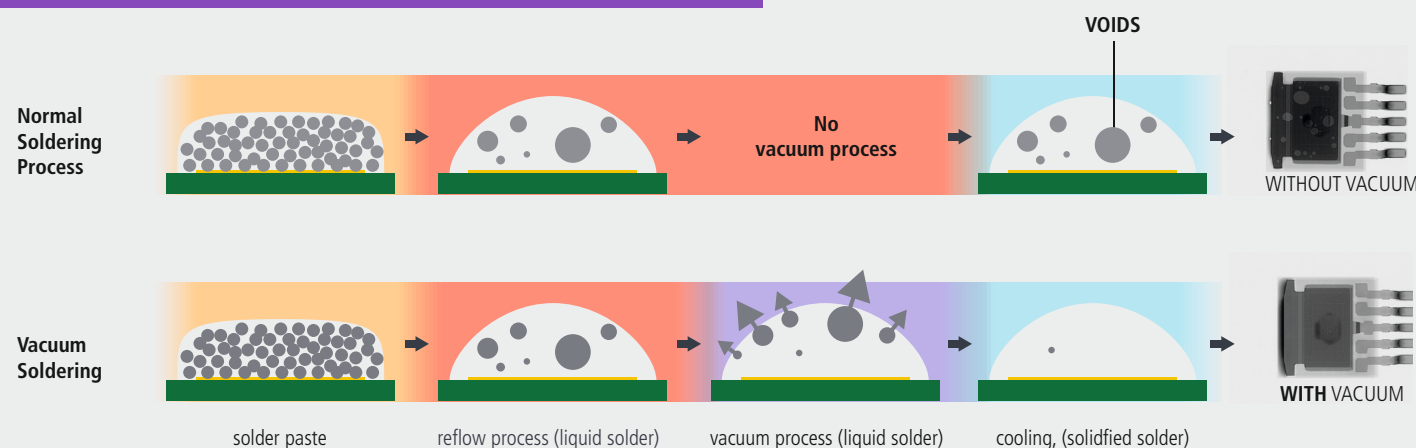
smt-wertheim.com

VOID-FREE SOLDERING SINCE 2009

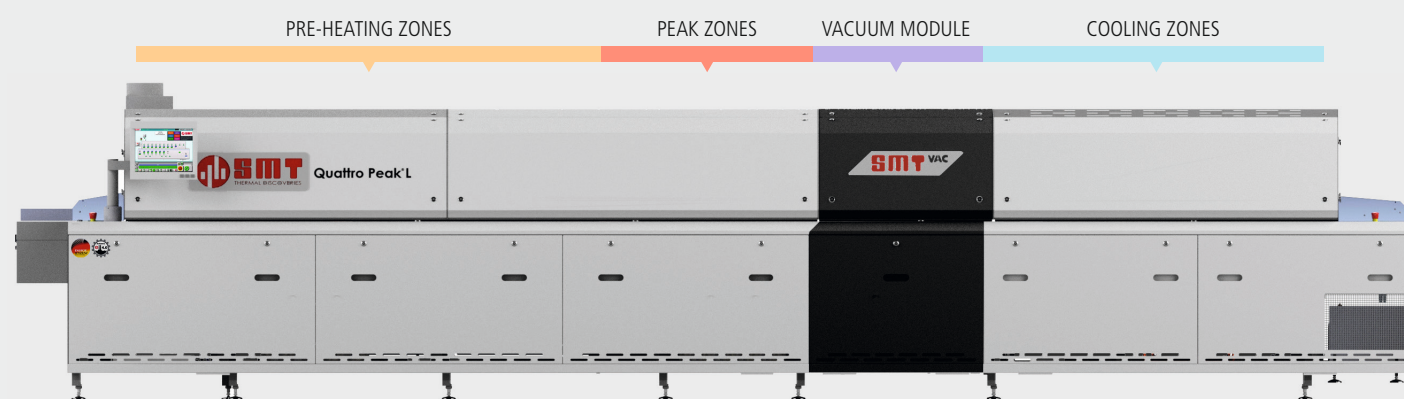
Void-free soldering is a basic requirement in the high-performance electronics. Life-sustaining devices, control systems on the plane and driving assistance systems in the automotive sector have one thing in common: They have to run completely safe and error-free over an extended period of time. Basic requirement for accomplishing this is an almost **void-free solder joint**. Voids in a solder joint have to be reduced to an acceptable minimum.



SOLDERING PROCESS WITH AND WITHOUT VACUUM



STRUCTURE OF A VACUUM REFLOW SYSTEM



- Vacuum module between peak and cooling zone
- Stainless steel vacuum chamber
- Inline system
- Nitrogen-capable
- Vacuum and non-vacuum process possible
- All vacuum parameters are individually adjustable

VACUUM HIGHLIGHTS

Optimized transfer

→ increased process stability

Heavy load transport with optimized profile coating

→ up to 10 kg/m in the vacuum system

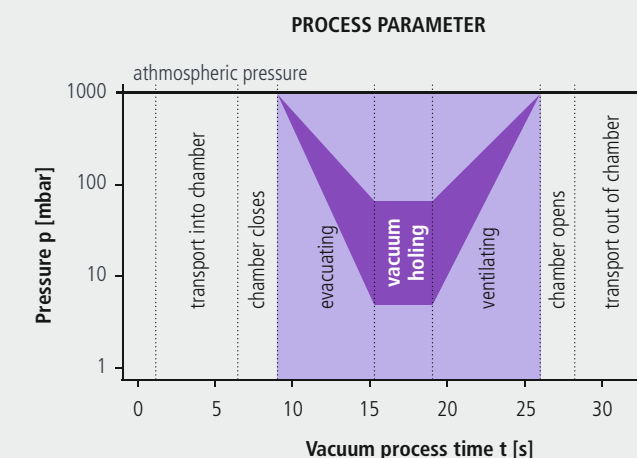
Easy access for maintenance

Product with a length of 100 mm possible

Cycle evacuation for complex components possible

Profiles can be set with or without vacuum

Continuously center support (plate link chain)



REFLOW-HIGHLIGHTS

★ Gas-tight fan units

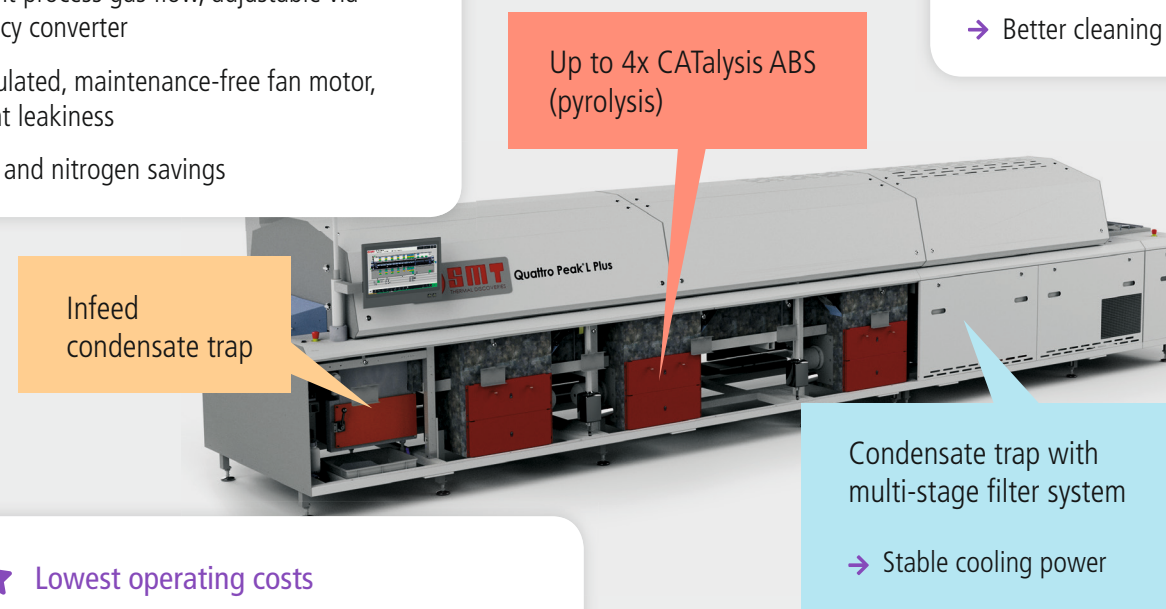
- Constant process gas flow, adjustable via frequency converter
- Encapsulated, maintenance-free fan motor, no slight leakiness
- Energy and nitrogen savings

★ Precise nitrogen control

- By integrated lambda sensor technology and real-time continuous measurements of residual oxygen value
- Less nitrogen consumption
- Easy calibration (exchange can be done by customer)

★ CATalysis

- Use of catalyst granulates
- Better cleaning performance



★ Lowest operating costs

- Lowest energy and media consumption
- Lowest consumption of spare and wear parts (e.g. rails, chain, fan motors, heating elements)

★ New software Thermal Tools

- Intuitive 2-click strategy

- + **Voids will be reduced up to 99 %**
 - optimized solder joint quality
- + 2- and 3-lane transport systems possible
- + **Reliable transport transfer in the system**
- + Suitable for PCBs, DCB, stamping grid and carrier

- + Powerful vacuum pump (300 m³/h)
→ **fast and reliable vacuum process**
- + **Parameter individually adjustable:** evacuation time; vacuum hold time; ventilation time, vacuum pressure
- + Trainings from our vacuum process specialists possible

VACUUM	Pre-heating zones	Peak zones	VAC	Cooling zones	Heating zones	Ø Transport speed	Cycle time/per product	Active cooling length ^{1.)}	Energy consumption system at full load/ vacuum module ^{2.)}
S		3.0 m	0.80 m/min	59 s	1057 mm	approx. 10 kW h/7 kW h			
M		3.4 m	0.95 m/min	50 s	1057 mm	approx. 10 kW h/7 kW h			
L		4.1 m	1.15 m/min	42 s	1531 mm	approx. 11 kW h/7 kW h			
L Plus		4.6 m	1.30 m/min	37 s	1531 mm	approx. 12 kW h/7 kW h			
XL Plus		5.6 m	1.60 m/min	30 s	1531 mm	approx. 14 kW h/7 kW h			

- 1.) Up to 5 cooling zones possible. Each additional cooling zone: 474 mm
- 2.) Chain conveyor, 220 mm transport width, fan speed reduction and no other options

ASK US, WE HAVE **THE PERFECT SOLUTION**
FOR YOUR APPLICATION!

Subject to change without notice, March 03, 2020

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