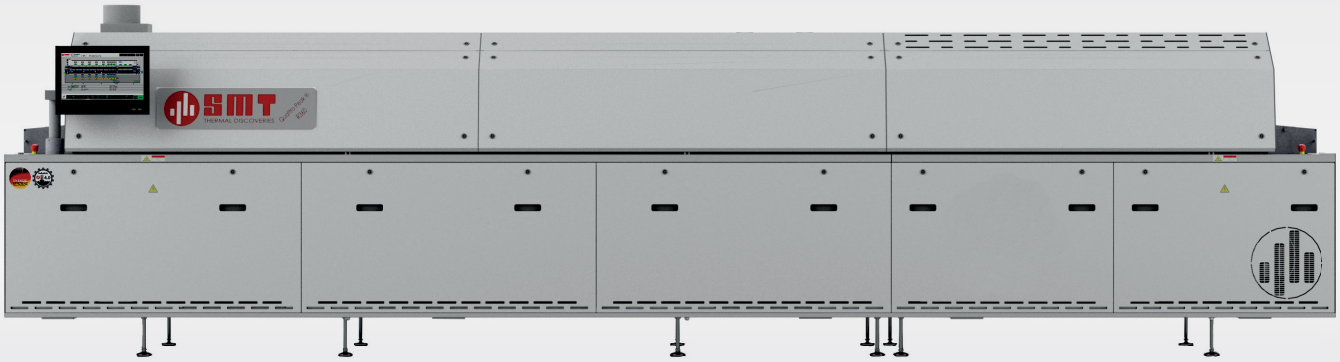
QUALITY „MADE IN GERMANY“
REFLOW SOLDERING SYSTEM
SMT QUATTRO PEAK®

FULL CONVECTION REFLOW SOLDERING SYSTEM

WITH NEW SOFTWARE
THERMAL TOOLS!



Long life cycle and high process stability

- **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“

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QUALITY „MADE IN GERMANY“

SMT soldering systems are distinguished amongst others by **long life cycle, high process stability, and extremly low power and nitrogen consumption**.

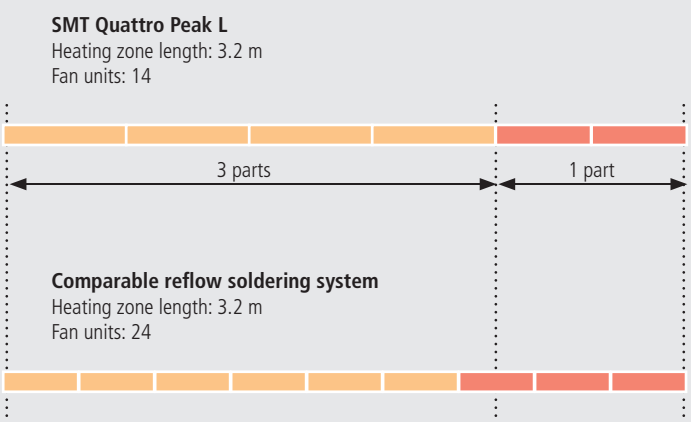
- Flexible machine portfolio from XXS ... Quattro Peak XL Plus
- Minimal consumption of energy and nitrogen
- Reliable conveyor system from single up to multi lane concept

ZONE CONCEPT

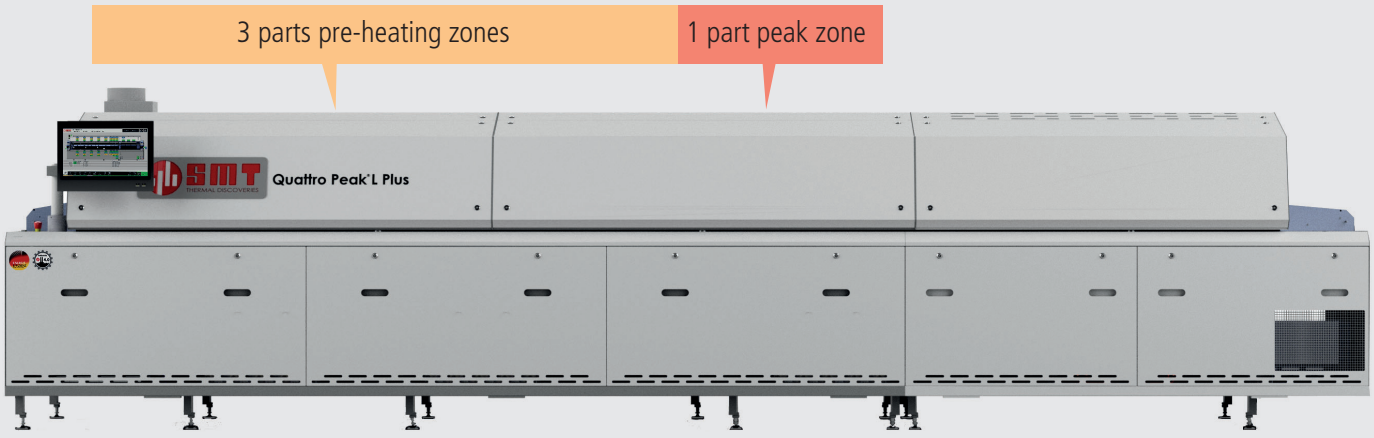
The number of zones has no influence on a good ΔT. Important is a high air volume. SMT achieves this with a few but powerful fans.

- Small ΔT with a perfect heat transfer
- 3 parts of pre-heating (3 min) plus 1 part peak (1 min) relates to 4 min IPC-JEDEC/solder paste recommendation (complete QP series)

EXAMPLE

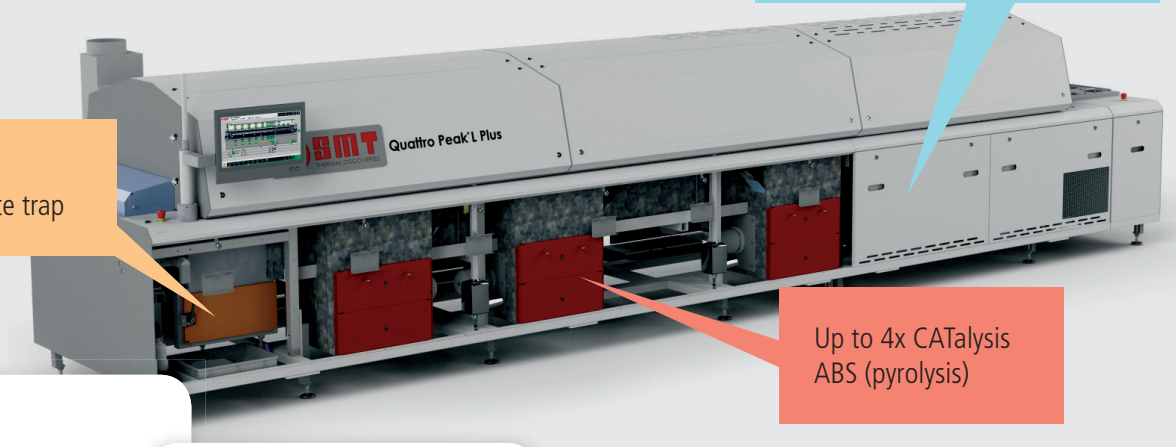


fewer zones = less fan units = lower consumption



PROCESS GAS CLEANING

Tool-free, easy maintenance & least requirements of consumables, process gas cleaning up to 6 places in the oven, cleaning directly at the process area, suction of the process gases through piping not necessary.



Condensate trap with multi-stage filter system

infeed condensate trap

Up to 4x CATalysis ABS (pyrolysis)

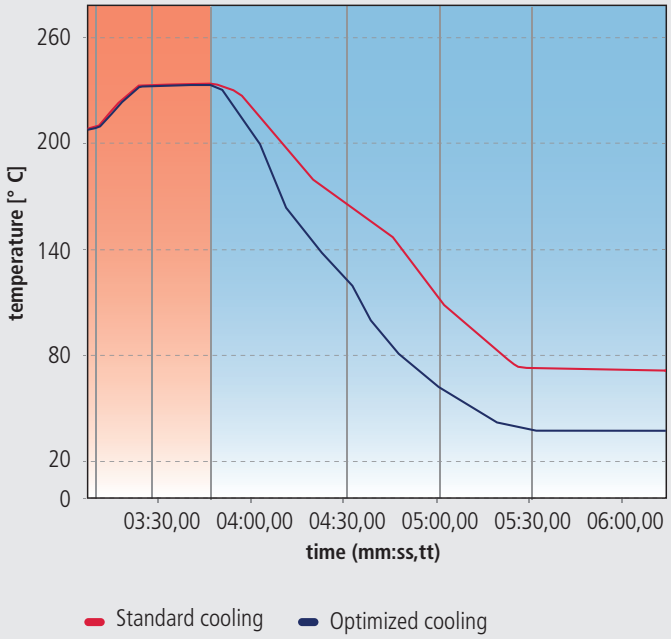
- Less contamination
- Longer maintenance interval
- Reduced maintenance effort
- More efficient production

COOLING CONCEPTS

The length of the cooling zone and the equipment (heat exchanger plates, optimized air baffles, etc.) can be selected flexibly. The cooling medium supply takes place via an integrated cooling unit or an external cooling tower respectively the domestic water supply.

Your Benefit:

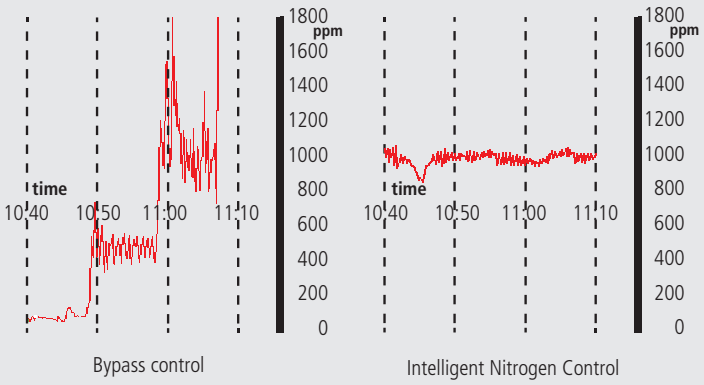
- Stable cooling performance, no power loss over the operating time through the use of flat cooling plates
- Cooling plate with long lifetime and planned maintenance (cannot get clogged), exchange of the cooling plates not necessary
- Easy to clean



INTELLIGENT NITROGEN CONTROL

Intelligent nitrogen control with optimized control mode **reduces nitrogen consumption** to a minimum. In addition a usable nitrogen parameter is provided for traceability.

- Lambda probe (automotive technology) in peak zone
- Continuous live measurement of residual oxygen values
- Probe exchange (calibration) in < 10 minutes



Process stability
Continuous residual oxygen values

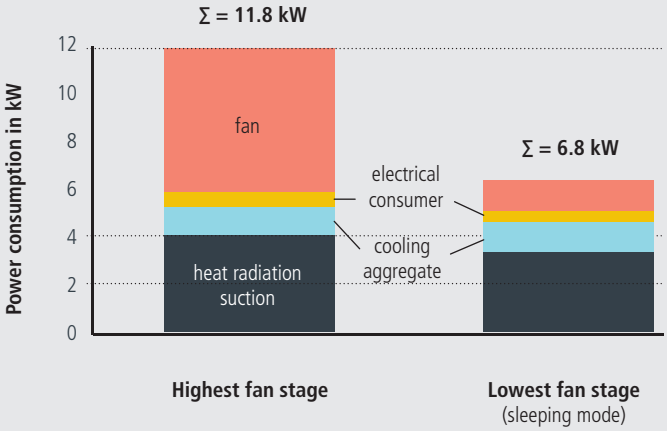
→ less operating costs

PROCESS

Individual fan control in all zones

- → Individually adjustable fan speed in each zone (process optimization for the flexible setting of profiles)
- → Increased energy saving potential
- → Active monitoring of the fans
- → Fan control is separated from the fan motors in the system (no thermal stress and therefore more durable)

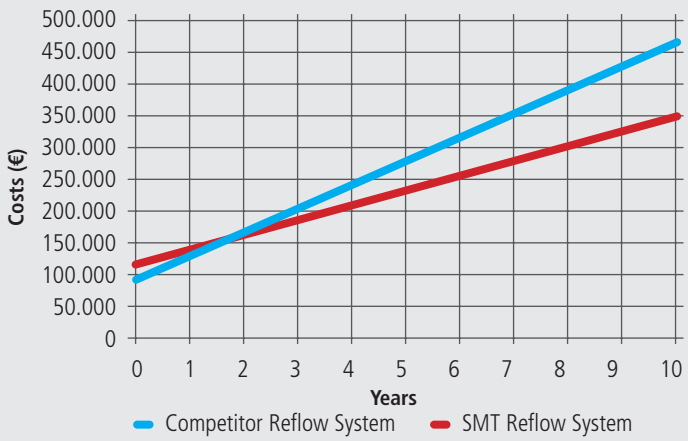
CONSUMPTION OF A REFLOW SOLDERING SYSTEM
with 3.6 m heating and 1.5 m cooling zone, 1-lane



PROFITABILITY

The purchase of an SMT reflow soldering system always pays off. After just two years, any higher investment costs for a system can be amortized by the low operating costs. Contact us so that we can create your **individual calculation** together.

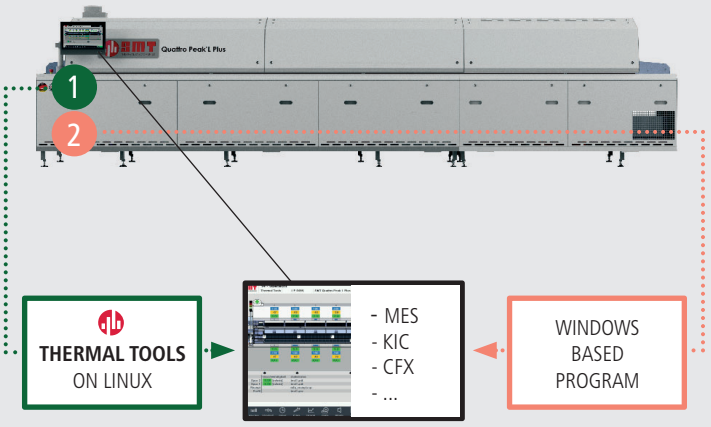
TOTAL COST OF OWNERSHIP



SOFTWARE

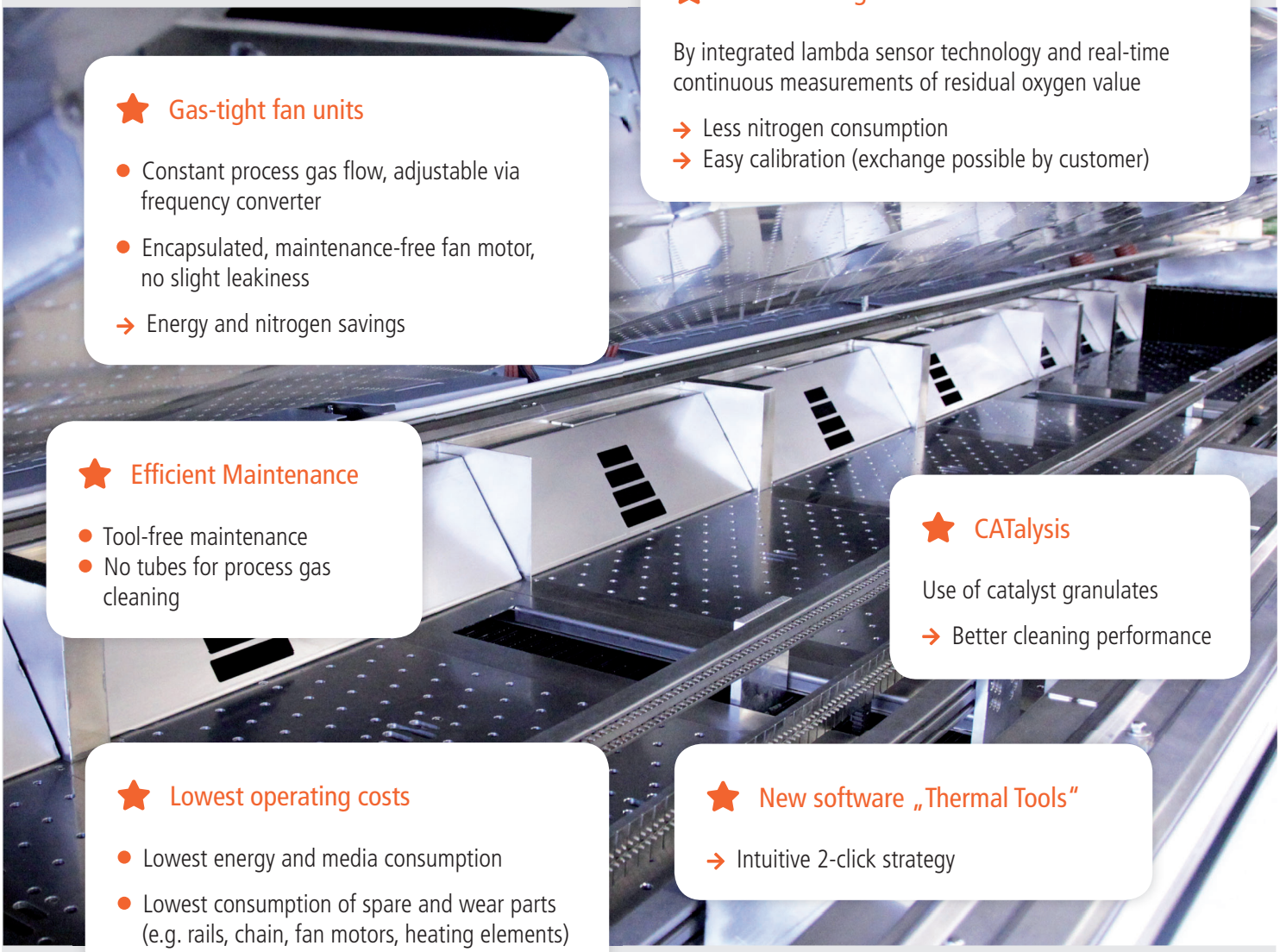
The innovative software architecture from SMT combines the advantages of two large operating systems.

- Stability and security against viruses via Linux-based software → time saving + security
- Windows compatible for e.g. interface options MES, KIC, CXF or other line software solutions
- Customer-oriented update routine can be done by the customer → time saving
- Intuitive operating software, you can select the right page with only two clicks → time saving



1 monitor for 2 systems

YOUR BENEFIT



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 possible by customer)

Efficient Maintenance

- Tool-free maintenance
- No tubes for process gas cleaning

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

TECHNICAL DATA

QUATTRO PEAK®	Pre-heating zones	Peak zones	Cooling zones	heating zones	ø Transport speed	Cycle time/per product	Active cooling length 1.)	Energy consumption at full load/with sleeping mode 2.)
XXS				1.1 m	0.30 m/min	40 s	910 mm	approx. 5 kW h / 4 kW h
XS				1.6 m	0.40 m/min	30 s	1223 mm	approx. 6 kW h / 5 kW h
S				2.1 m	0.50 m/min	24 s	1057 mm	approx. 10 kW h / 7 kW h
M				2.6 m	0.65 m/min	19 s	1057 mm	approx. 10 kW h / 7 kW h
L				3.2 m	0.80 m/min	15 s	1531 mm	approx. 10 kW h / 8 kW h
L Plus				3.6 m	0.95 m/min	13 s	1531 mm	approx. 11 kW h / 9 kW h
XL				4.1 m	1.05 m/min	12 s	1531 mm	approx. 12 kW h / 9 kW h
XL Plus				4.6 m	1.20 m/min	10 s	1531 mm	approx. 14 kW h / 11 kW h

1.) Up to 5 cooling zones from QP S possible. Each additional cooling zone: 474 mm

2.) Chain conveyor, 220 mm transport width, fan speed reduction and no other options

The reflow soldering systems are individually configurable. You can choose from different lengths for the heating and the cooling zone. Additionally there is a choice between single, dual or triple lane.

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

Subject to change without notice, March 27, 2020

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