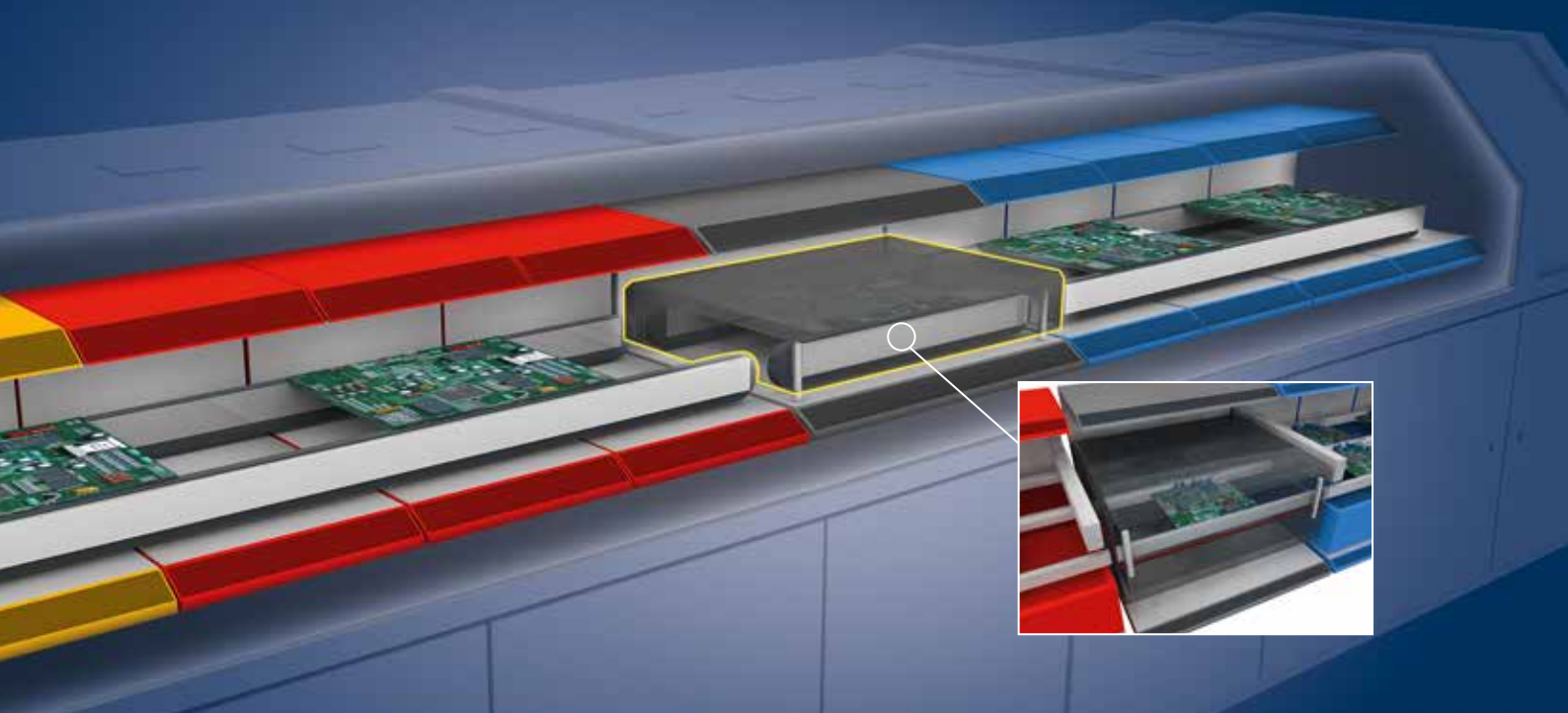


THERMAL SYSTEMS

# Reduce voiding with vacuum during the soldering process

Reflow convection soldering with vacuum



CONVECTION SOLDERING  
VisionXP+ Vac

# New! 2-in-1 Solution for Reflow Soldering with and without Vacuum

Energy-efficient, low maintenance and void-free – we offer innovative solutions for reflow soldering based on diverse options for the VisionXP+ system. A new vacuum unit now permits convection soldering processes with vacuum application – within one single process step.

The VisionXP+ with vacuum option reliably removes voids and outgassing immediately after melting the solder – while the solder alloy is completely in the liquid phase.

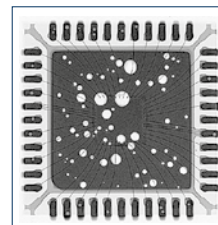
Void rates of less than 2 % are made possible with vacuum values between 100 mbar – 10 mbar. Pressure progress and speed can be set individually and moreover be saved as profile parameter in the product recipe. This integrated solution results in a more time-efficient and stable production sequence.

A costly rework or rejection of the pcb assembly due to excessive voiding is obsolete!

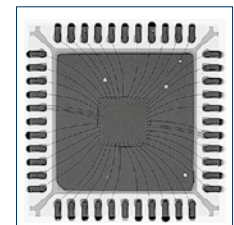
Void ratios below **2 %** possible



opened vacuum chamber



without vacuum



with vacuum

- > Vacuum measured in the process chamber and not at the vacuum pump
- > Vacuum down to 2 mbar for reducing the number of voids in the solder joints
- > Three-part conveyor: heating zone, vacuum zone and cooling zone
- > Automatic positioning of the process chamber to the processing or the maintenance position
- > Low maintenance due to the integrated pyrolysis unit and separate filtering of the evacuated atmosphere from the vacuum chamber
- > Minimal downtime thanks to low maintenance
- > Outstanding cooling performance, cooling time can be extended by means of transport speed