

Efficient and powerful

The new system generation

INNOVATION



Vision
Convection soldering

VisionXP+ – The new Generation for energy-optimised soldering

An important energy factor of the VisionXP+ series is the EC fan motors that have been integrated for some time. Their use not only makes the system noticeably quieter but also more sustainable. This enables an energetically optimal state and optimal zone separation.

In addition, Rehm has developed ProMetrics, a tool that not only ensures process stability but also allows for efficient profiling with a focus on reducing resource consumption. Another highlight is the new 3-stage Eco-Mode, which allows you to save energy and nitrogen individually based on the idle state of the system. However, it's not just software-based solutions that contribute to energy-efficient soldering processes.

Optimised system technology plays another part: Improved residue management, a new cooling design, optimised gas flow, and the new mechatronic curtain at the system's entrance and exit, which virtually eliminates the escape of nitrogen into the environment, are groundbreaking for sustainable electronics manufacturing. The nitrogen savings when using the mechatronic curtain alone can reach up to 20%.

The new cooling design, with a 30% larger separation area for residues, extends the service life of filters and agglomerators. By separately adjusting each zone through direct control of the EC motors, more flexible cooling gradients are also achieved.

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- › Eco Mode – short, medium, long
- › Patented mechatronic curtain for nitrogen savings
- › New cooling system design with optimised gas flow
- › Easy access to relevant areas
- › TCS – Temperature Control System

A close-up photograph of a person's hands holding a smartphone over a laptop keyboard. The person is wearing a blue button-down shirt. A white text box with a thin blue border is overlaid on the left side of the image, containing the title and a tagline.

Convection Soldering

With safety to the right quality

Reflow soldering with convection Versatility with the VisionXP+

Whether laptop, smartphone or control systems in cars – almost every technical end product contains sensitive electronics. In order to guarantee perfect functioning, the contacting of the electrical components on the circuit board through high-quality soldering is crucial. Rehm Thermal Systems develops reflow soldering systems for your production, which are optimally into the production environment.

Reflow convection soldering is now even more powerful, sustainable and easy to maintain! Rehm Thermal Systems presents the VisionXP+ with new features such as the three-stage eco-mode, optimisations in the cooling section as well as further developments in the design and the comprehensive operating data acquisition.

Convection Soldering even more energy-efficient

The innovations of the VisionXP+

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Design



Resources



Maintenance



Process technology



Eco Mode
short, medium, long

The new 3-stage Eco Mode of the VisionXP+ provides smart energy savings during the unproductive times of the system.

Eco Mode short

(recommended as soon as the system is idle)

The fan speed is reduced while keeping the system temperature stable, saving approximately 30% of electricity and nitrogen during unproductive times.

Eco Mode medium

(recommended after 20 minutes of idle time)

The fan speed is reduced, and at the same time, the temperature and nitrogen can be reduced by a specified percentage.

Eco Mode long

(recommended after 120 minutes of idle time)

A separate program defines the corresponding parameters, including fan speed, temperatures, nitrogen, and transport width, among others.



User-friendly due to modern design

The new PC swivel arm with an adapted design not only makes the VisionXP+ look more modern and robust but also more flexible. The new design gives the PC arm a less protruding appearance, allowing for optimal technical integration. Another advantage is the easy access to the inlet area and the ergonomic arrangement of the monitor.



User-friendly, ergonomic design for more free space

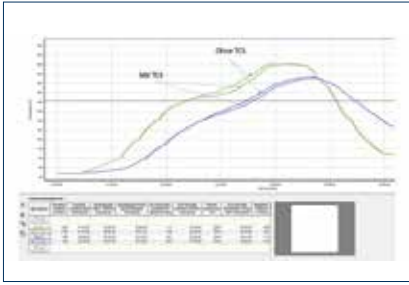


Efficient fan technology with EC motors

An established feature of the VisionXP+ is the use of efficient EC fan technology. The integrated motor electronics of each individual fan can be controlled individually. This allows for the retrieval of operating data such as speeds, motor temperatures, and electrical power parameters through a bus system (Industry 4.0). Other advantages of the new EC motors include reduced noise levels, lower power consumption, and the elimination of frequency converters.



Proven EC fans for energy-efficient soldering and low noise level



Automatic regulation of the cooling of individual zones



TCS – Temperature Control System

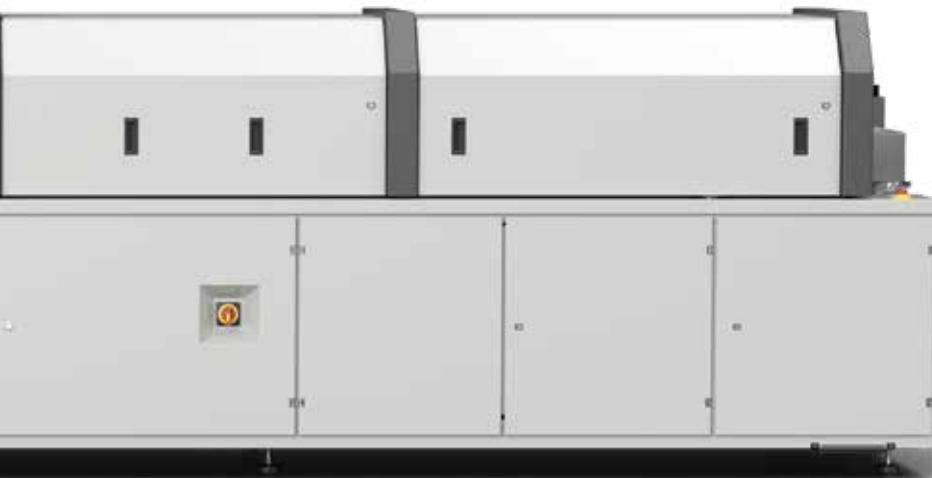
The VisionXP+ has been enhanced with a Temperature Control System (TCS). This automatic regulation of the cooling of individual zones ensures that the preset temperature is maintained, especially for large, heavy, and demanding assemblies. This control system leads to additional energy optimisation and better zone separation.



Easy access to relevant areas

The redesign of the extraction hoods at the inlet and outlet ensures optimal accessibility while maintaining functionality. This ensures that the extraction remains active, even when manual insertion, such as for inspection measurements, requires the inlet/outlet area to be free.

The swiveling gas/water build-up plate also improves accessibility for maintenance purposes, saving time. This reduced downtime of the system results in lower outage costs.



Redesign of the reflow system for improved accessibility



Mechatronic curtain for nitrogen savings

The optimised process chamber of the VisionXP+ reduces the nitrogen consumption, making the VisionXP+ even more sustainable for efficient manufacturing. The new mechatronic curtain at the inlet and outlet of the system significantly reduces the escape of nitrogen into the environment, with a potential savings of up to 20%.



Always Informed

When different PCB widths are being processed, the width adjustment function is monitored, and the operator is informed about its condition.

The optional filter monitoring, including volume flow control, also ensures a constant cooling performance.



New cooling system design with optimised gas flow

The optimised process chamber of the VisionXP+ reduces the nitrogen consumption, making the VisionXP+ even more sustainable for efficient manufacturing. The new mechatronic curtain at the inlet and outlet of the system significantly reduces the escape of nitrogen into the environment, with a potential savings of up to 20%.



Patented mechatronic curtain with high savings potential



Integrated filter monitoring of the individual zones including volume flow control



Innovative gas flow of the newly designed cooling section



Rehm Worldwide

As a leading manufacturer of innovative thermal system solutions, we have customers on every continent. With our own locations in Europe, the Americas and Asia as well as agencies in 24 countries we are in position to serve the international markets quickly and to offer outstanding on-site service – worldwide and round the clock!

