



THERMAL SYSTEMS

CURING IN SECONDS

Light. Power. Perfection.



RDS UV LED

Create your Connections.

www.rehm-group.com



ENERGY-EFFICIENT CURING WITH UV LED TECHNOLOGY

UV curing for maximum precision in electronics manufacturing

The RDS UV LED oven was developed specifically for the requirements of modern electronics manufacturing. With precise UV LED technology, it cures protective coatings, adhesives and potting compounds quickly, evenly and in a resource-efficient manner – with minimal space requirements. The stationary, full-surface exposure of the circuit board results in a homogeneous exposure field across the entire circuit board. The result: homogeneous coating quality, shorter process times and a significantly better energy, space and cost balance.

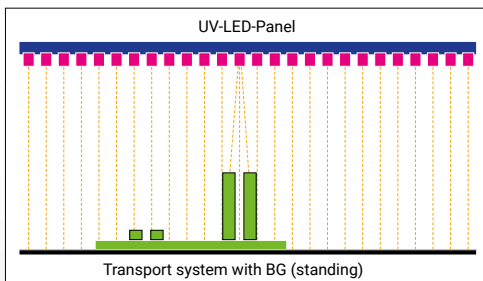
Future-proof thanks to EU-compliant technology

The RDS UV LED is already completely mercury-free and thus already meets the requirements of upcoming environmental legislation for sustainable and legally compliant production processes.



ViCON Software

The new generation of systems is equipped with the user-friendly ViCON system software, which features touchscreen operation and many other clever features.



Semi-Batch-Betrieb

Semi-batch operation, which combines the advantages of stationary exposure with those of inline production, results in a very short cycle time of just a few seconds with simultaneous full-surface, homogeneous exposure – even with components of varying heights.



HIGHLIGHTS



› UV LED technology:

Energy-efficient, durable, mercury- and ozone-free

› Energy efficiency::

Up to 70% lower energy consumption compared to conventional UV lamps

› Fast and precise:

Stationary full-surface exposure for maximum homogeneity and short cycle times

› High process reliability:

Uniform UV distribution guarantees consistent curing results – regardless of component heights

› Gentle temperature input:

Minimal heat load for sensitive electronic components

› Productivity:

LED modules with over 20,000 operating hours
– low maintenance and reliable for curing in seconds

› Modular design:

Adaptable to various PCB sizes up to 500 x 500 mm, with automatic transport width adjustment (50–508 mm)

› Flexible integration:

Ideal for inline systems or as a stand-alone solution

› Industry 4.0 ready:

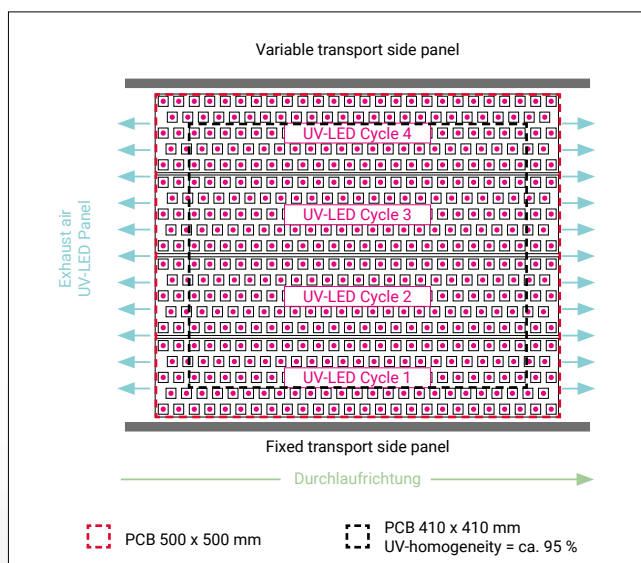
Inline-capable, MES and Hermes compatible

› Compact & sustainable:

Up to 70% smaller footprint and energy consumption

UV LED TECHNOLOGY

The UV LED technology of the RDS UV LED enables targeted, energy-efficient and environmentally friendly curing of UV protective coatings and adhesives. Defined wavelengths (365, 385, 395 or 405 nm) activate the coating evenly – without infrared radiation and without heat stress on the components, with very short cycle times.



Segmented UV LED panel with two different mechanical configurations.

The long service life of the LED modules reduces maintenance and operating costs, while the stable UV intensity ensures consistently high coating quality. UV LED lamps also offer numerous technical advantages for curing UV coatings. They are immediately ready for use and reach their full output without a warm-up time, which simplifies process control and shortens cycle times.

The LED light source consists of 4 segments, each 125 mm wide, which are automatically switched on based on the defined PCB width, resulting in a maximum PCB width of up to 500 x 500 mm.

In order to achieve maximum exposure homogeneity in the edge area of the circuit board, the circuit board can be irradiated by up to 45 mm. This results in a maximum circuit board size of 410 x 410 mm with a homogeneity distribution of up to 95 %.

The system is characterised by a significantly lower exhaust air volume of 500 m³/h compared to other systems. In addition, UV LED systems operate without mercury and do not generate ozone, making them both environmentally friendly and safe for industrial use.

READY FOR YOUR PRODUCTION. **CONNECTIONS FOR THE FUTURE.**

Rehm Thermal Systems is a leading expert in connection technologies for electronics manufacturing. With innovative system solutions for soldering, drying and coating, we enable our customers to create reliable connections on electronic assemblies – individually, process-secure and future-oriented.

Since 1990, we have been developing and manufacturing energy-efficient production equipment at our headquarters in Germany and an additional production site in China – all in accordance with the highest quality standards. Our worldwide subsidiaries and distributors provide tailor-made solutions and competent service – wherever electronics are produced

Create your Connections – with Rehm, you shape the products of tomorrow.

