



THERMAL SYSTEMS

## Press Release

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### Reduced voids for highest quality demands

**With the RDS VAC, Rehm Thermal Systems offers a system for vacuum extraction after material application – for reliable results in medical technology, electromobility or renewable energies**

Highly durable and reliable electronic components are of great importance for many sectors, such as the energy sector or medical technology. An LED headlight in a vehicle or the charging station of an e-vehicle produce a lot of heat that must be reliably dissipated – via gap filler or heat conducting materials. Even stricter requirements apply in medical technology. High-quality applied protective materials in products such as PCA probes, spinal cord stimulators or cardiac pacemakers are absolutely vital here. This poses new challenges for the industry, while driving it forward to new innovations at the same time. With the dispensing and coating systems of the Protecto series, Rehm Thermal Systems has systems in its portfolio that protect electronic assemblies in a variety of ways and thus ensure the functionality of the assembly. For an optimal result, a vacuum can be applied after the material application with the RDS VAC in order to reduce possible air inclusions (voids) and thus meet the high quality demands on the electronics.

The quality of electronic components can be significantly affected by voids. Voids are variable and can be found in different places in varying degrees. These air inclusions can also expand when the unit is powered – in other words when it generates heat. This can have serious consequences under certain circumstances: Incorrect values from sensors go unnoticed, heat dissipation no longer functions correctly, thereby leading to earlier failure of the components – with physical destruction of small and light elements in the worst case scenario.

With the dispensing and coating systems of the Protecto series and the RDS VAC, Rehm Thermal Systems has a compact complete line for the highest product quality requirements in its portfolio. Ranging from material preparation, the dosing system optimally matched to the application, through to vacuum extraction for eliminating air bubbles: Rehm supplies everything from a single source and can draw on many years of experience in the field of vacuum technologies.

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The precision dosing needle of the Protecto brings the material so close to the edge of the component that the capillary force pulls the protective coating under the component. Since air inclusions cannot be completely ruled out in this process despite all the precision, these are then reduced to an absolute minimum in the vacuum chamber of the RDS VAC. The result is a highly reliable assembly. With a vacuum value between 100 mbar and 10 mbar, pore area fractions of less than 2 % can be realised with the RDS VAC. The pressure curve and the speed at which the vacuum is pulled can be set individually.

At **Bondexpo in Stuttgart**, the leading trade fair for bonding technology and an important industry meeting place for all aspects of industrial joining and bonding, Rehm Thermal Systems will be presenting its product portfolio in the areas of dispensing, bonding techniques and application processes from 5 to 8 October. See for yourself – at the Rehm stand in Hall 5, 5508.

*Images are attached: Reduced voids for highest quality demands: With the RDS VAC, Rehm Thermal Systems offers a system for vacuum extraction after material application – for reliable results in medical technology, electromobility or renewable energies (Image: Rehm Thermal Systems).*

### **About Rehm Thermal Systems**

Rehm is a technology and innovation leader in the state-of-the-art, cost-effective manufacturing of electronic assembly groups. It specialises in thermal system solutions for the electronics and photovoltaics industry. We are a globally active manufacturer of reflow soldering systems with convection, condensation or vacuum, drying and coating systems, functional test systems, equipment for the metallisation of solar cells as well as numerous customised systems. We have a presence in all key growth markets and, with more than 30 years of industry experience, we are able to implement innovative production solutions that set new standards.