

WE ARE EXHIBITING AT THE "WOCHE DER UMWELT"

Environmental review of the Federal President and the DBU in the park of Bellevue Palace



The exhibitors that will be presenting their innovative ideas and projects at "Woche der Umwelt" on 7 and 8 June 2016 before the impressive backdrop of the Bellevue Palace have now been determined. Already for the fifth time since 2002, the environmental show will be held in the park of the Berlin headquarters of the German President. This year, it was once again difficult for the jury to select from among the more than 600 applications. Rehm Thermal Systems is one of 190 exhibitors from Germany and Switzerland that will be presenting themselves in terms of the issues of climate protection, energy, resources, soil and biodiversity, mobility and transport, construction and housing. The machine manufacturer from Blaubeuren impressed with the development of the world's first reflow convection soldering system that does not require cooling water.

Dr. Heinrich Bottermann, Secretary General of the DBU, is pleased with the keen interest of the involved partners from business, academia, civil society, politics and the media: "This year, as well, visitors can have a fascinating insight into the variety of new, environmentally friendly technologies, products, services and concepts that are ready to responsibly shape our future". In making their choice, the jury, which was appointed by the Federal President, focused particularly on quality, innovation and exemplary character of the projects submitted, as well as on whether the project had a high degree of social, technical and economic potential for implementation. Several thousand invited visitors will be able to experience this once again this summer. Rehm Thermal Systems will present innovative cooling technology for reflow soldering.

Nitrogen for inerting and cooling

The reflow soldering of electronic assemblies with nitrogen requires energy that is linked to different material flows. The largest share (more than 40 %) of the total energy of a reflow



1. View from Bellvue Palace on a part of the venue of the "Woche der Umwelt" 2012

2. Numerous listeners were attracted by the main forums of "Woche der Umwelt"

3. Successful pilot project: VisionXP+ with Liquid Nitrogen is already in use at Steca Elektronik

soldering system is needed by the cooling water. The innovative technique of VisionXP+ with Liquid Nitrogen does not use any cooling water and works with liquid nitrogen cooling. For almost every electronics manufacturer, the nitrogen required for soldering is stored in liquid form in tanks. Instead of discharging the energy stored there unused into the ambient air, it can be used more efficiently for cooling directly in the reflow soldering system. The cryogenic liquid nitrogen (-196 °C) releases its coolness inside the cooling section, is vaporised and then used in a gaseous state for inerting. As a result, the system is provided with the necessary cooling as well as the inert process environment. There is no longer any need for energy-intensive re-cooling by means of cooling water and a refrigeration unit. "Thanks to this principle of the multiple use of nitrogen, about 17 tons of CO₂ and 30,000 kWh of power can be saved per system", says Rehm Development Manager Dr. Hans Bell. In the field of nitrogen technology, the Swabian machine manufacturer was supported by the partner Air Liquide. Rehm already received the Umwelttechnikpreis Baden-Württemberg 2015

(the Environmental Technology Award Baden-Württemberg 2015) in July of last year for this innovation. Now, the visitors in Berlin can also become informed about the clever cooling principle.

Interesting framework programme for "Woche der Umwelt"

Parallel to the exhibition, there will be a high-calibre and diverse range of presentations for the "Woche der Umwelt" in Berlin. On the main stage, leading representatives from politics, business, science and society will speak in moderated discussions on the key issues and, among other things, highlight new developments regarding the following issues: How can the further energy policy be designed? How is climate change progressing? How efficiently are resources used? How can innovations be promoted at the highest level?

In addition and for further discussion, 70 to 80 professional forums will also be offered regarding current sustainability issues with some 400 experts.