

PRESS RELEASE

centrotherm thermal solutions scores major success at the Productronica 2007: The brand new VLO 20 vacuum soldering system makes a big impression!

- *The VLO 20 comes with a lamp heating unit and is designed to meet the highest requirements of any R & D department or small production site with varying applications.*
- *Once again, the thermal processing and semiconductor production expert proves its innovative strength and know-how in the field of high-end vacuum soldering system technology.*

Blaubeuren, Germany, 17 December 2007 – This year, the Productronica 2007, the world's leading trade show for electronics manufacturing, held in Munich, Germany ended on a positive note for organizers, exhibitors and visitors. More than 40,000 trade fair visitors got a close-up view of trendsetting products and system solutions presented by the 1,484 exhibitors which had come from more than 35 countries. **centrotherm thermal solutions GmbH & Co. KG**, manufacturer of high-end equipment for thermal semiconductor production and photovoltaic processes, wowed visitors of the international trade show with its latest product developments. The **VLO 20** vacuum soldering system with its lamp heating unit and a design which meets the highest requirements of any R & D department or small production site with varying applications, caught the people's attention with its flux less, void less and ultra clean soldering technology. In addition, the Swabian high-tech company also presented its **VLO 300** vacuum soldering system. This vacuum soldering furnace is especially designed for high-volume production and offers a large variety of applications thanks to the possible use of various gas atmospheres such as nitrogen (N₂), hydrogen (H₂) up to 100 % or N₂/H₂ 95/5 %, as well as a high process temperature of up to 650 °C. Live demos and soldered samples at the booth gave visitors a close-up impression of the performance capabilities and the process safety of the vacuum soldering systems.

High-tech Production Tools
for Microelectronics and
Semiconductor Technology

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The **VLO 20** vacuum soldering system with its lamp heating unit was developed by **centrotherm thermal solutions** to provide a better heat-up rate than systems equipped with heating and cooling sinks (plates) and can operate at a process temperature of up to 450 °C . In addition, the **VLO 20** offers excellent temperature uniformity. The system is designed for production processes using various gas atmospheres. It also provides dry chemical activation with radio frequency plasma or microwave plasma (RF/MW) for ultra-clean soldering joints. The **VLO 300** vacuum soldering system is designed to be the soldering oven "workhorse" for high-volume production. Equipped with individually controllable, integrated heating and cooling sinks (plates), the system also offers an excellent temperature constancy. Both **VLO 300** and **VLO 20** can process lead free paste or pre-forms without additional flux.

"Our **VLO 20** and **VLO 300** vacuum soldering systems meet the demands of two different types of production: On one hand we address facilities that use the **VLO 20** in their R & D department or for low-volume production. The long-lasting, high-capacity **VLO 300** on the other hand addresses companies with cost-effective, high-volume production requirements. Both vacuum soldering systems are predestinated for a variety of applications such as hybrid microelectronic assemblies, power semiconductors, optoelectronic packaging, wafer level or UHB LED packaging and for MEMS package sealing – to name but a few of the areas of application", explains Dr. Andrea Elser, Business Development Manager at **centrotherm thermal solutions**. "Based on the same control software, both versions are equipped with a touch screen including a process control computer – the centrotherm machine control (cmc). This makes our equipment very user-friendly with respect to the operation but also for writing or editing of process profiles or for recipe storing. The modular set-up as well as the possibility to simultaneously run and control multiple processes are a major advantage especially in terms of safety critical processes", says Dr. Andrea Elser. A serial interface can be used to transfer data from the system to a computer. This makes for easy offline programming and reliable service monitoring.

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For more than 30 years, centrotherm thermal solutions has designed, produced and sold high-end equipment as well as components for thermal semiconductor and photovoltaic processes. The range of products includes horizontal and vertical furnaces, conveyor furnaces, vacuum soldering systems as well as process technology services. The photovoltaic equipment is exclusively marketed by the sister company centrotherm photovoltaics AG.

For further information on the company and on the products, got to:

www.centrotherm-ts.de

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