

Corporate News

centrotherm presents solar cell concepts for the future at the SNEC PV photovoltaic trade fair in Shanghai

- **Production concepts for highly efficient p- and n-type solar cells**
- **Passivated contacts offer enormous potential for solar cell efficiencies up to 26 %**
- **Award for new LPCVD production system c.DEPO LP**
- **centrotherm solutions offer maximum flexibility in production line upgrades to new cell concepts**

Blaubeuren, May 28, 2018 – From today, centrotherm international AG, Blaubeuren, (ISIN: DE000A1TNMM9 and DE000A1TNMN7) is presenting its highly efficient solar cell concepts and related production solutions to the international public at the world's most important photovoltaic trade fair, SNEC PV in Shanghai. These include already established solutions for mono and bifacial PERC solar cells as well as coming solar cell concepts with passivated contacts such as TOPcon (Tunnel Oxide Passivated contacts) and POLO (Polysilicon on Oxide). The latter offer considerable efficiency potential of 23.5 % to 26 % compared with currently 22 % efficiency in PERC solar cells, which Asian customers are already achieving with the centrotherm AIO_x production solution in mass production. The new five-stack c.PLASMA 2.600 PECVD system will also deliver significantly higher wafer throughput, boosting production as a consequence.

The exhibition highlight is a POLO solar cell from the Institute for Solar Energy Research in Hamelin (ISFH), which holds the current world record on a crystalline p-type wafer with a 26.1 % efficiency. For its research and development partner ISFH, centrotherm has deposited the polysilicon layer of the POLO solar cell in a LPCVD process. Here, the new centrotherm LPCVD production system, the c.DEPO LP, was included in PV Magazine's "Technology Highlights 2018", and ranks number five among the 25 most innovative production solutions for the photovoltaic industry.

The centrotherm technology and product portfolio offers the customer a crucial advantage: thanks to its production systems' process diversity, customers can gradually retrofit the new cell concepts to their solar cell lines. Exchanging centrotherm production systems is not required. Depending on the cell concept, only further process steps or systems need to be added. This offers the customer a high degree of investment security and, the same time, low cost of ownership. The flexibility app on the trade fair stand demonstrates to the public this variation variety of centrotherm production solutions.

Note: from May 28 to May 30, 2018, centrotherm is an exhibitor at the SNEC PV Power Expo in the New International Expo Center in Hall E 3/555.

About centrotherm international AG

centrotherm has been developing and realizing innovative thermal solutions for over 60 years. As a leading and globally operating technology group, we offer production solutions for the photovoltaic, semiconductor and microelectronics industries.

The continuous further development of our successful solutions in thermal processing and coating, such as for manufacturing crystalline solar cells and power semiconductors, form the basis for our successful partnerships with industry, research and development.

Our customers worldwide appreciate our production systems' process stability, scalability and availability in mass production. Above and beyond this, our work is distinguished by the fact that we create high-end process technology solutions which are specific for our customers and tailored to their requirements, and the fact that we are outstanding in system building.

We jointly confront the daily challenges of setting new trends, maximizing the efficiency of producing, for example, solar cells and semiconductors, and securing investments, coupled with our long machine lifetimes.

In this way, we generate valuable competitive advantages for our customers through targeted process innovations and production solutions.

Our around 650 staff worldwide are committed to the further development of high-tech solutions for key markets.

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