

High-Tech Distribution and Consulting

merconics is a competent and experienced partner for the distribution of advanced capital equipment and process materials for the European semiconductor and photovoltaic industry and related markets. The systems of our suppliers can be used in a variety of segments of the above-mentioned markets, such as advanced chip or solar components manufacturing and respective R&D activities. We focus our efforts on providing solutions that enable our customers to meet today's challenging technology and manufacturing requirements.

>focus< today on

Mustang Solar

Mustang Solar a Sarasota, Florida based company designs and manufactures sputter and evaporation process equipment for thin film photovoltaic production both for deposition roll-to-roll and on glass substrates.

Orion

The Orion series is a production proven roll-to-roll deposition system for CIGS, Metals and oxide materials on both flexible stainless steel and polymers can be uniformly deposited at highest throughput. The substrate width can vary from 20-120 cm. Available deposition technologies include Magnetron Sputtering with planar and rotatable sources, co-evaporation and PECVD.



Fig. 1: Orion PVD40 roll-to-roll deposition system for ZnO, ITO, Molybdenum and other thin films

Applications

The Orion platform can be used for various products like flexible electronics. Flexible substrates for organic and other PV can be coated with contact layers (TCO) for front- and backside in high quality. For CIGS beside the Molybdenum and ITO/ZNO/TNO layers also a homogenous absorber can be deposited.

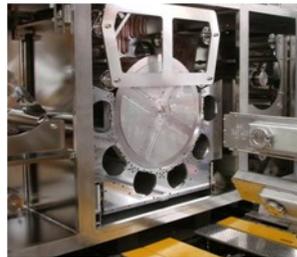


Fig. 2: Orion PVD system

A series of Orion deposition systems can be configured according to customer process requirements eg. to form the frontend of a CIGS manufacturing line. Capacities can start at 5MW and can be upgraded to 50 MW by adding more sources and equipment.

Advantages of the Orion products:

- Lowest CoD
- Single side touch with Interleaf
- Single operator roll changing
- Remote diagnostics and monitoring

Sprint Flex

For flexible substrates the stand-alone Sprint Flex tools offers a small format R&D or Pilot production ideal for flexible substrate process development.

Horizon

For rigid substrates like glass (up to 3.3m x 6.2m) the Horizon product line offers the same flexibility and variety as the Orion series. The sputter, evaporation or sublimation deposition systems can be configured either in batch or in-line mode.



Mustang Solar Engineering and Design support through manufacturing, installation and process demonstration guarantees optimal performance and yield.

Please contact merconics to learn more about the Mustang Solar product lines.

Partners deliver success

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