

Manz enters vacuum coating market for production of cSi solar cells with new tool for front and back side coating

- Fully-automated system uses vertical coating technology
- Unique approach to cleaning process and carrier unit
- Manz now covers all major technological steps for the production of cSi solar cells with own equipment

Reutlingen, 1 August, 2012. Manz AG will enter the market for vacuum coating equipment for manufacturing cSi cells and introduces its new PECVD tool VCS 1200 for front and back side coating of cristalline silicon solar cells at the EU PVSEC in Frankfurt. The passivation, realized in a plasma enhanced chemical vapor deposition process, is essential in silicon-based photovoltaics.

As the name implies, the **V**ertical **C**oating **S**ystem 1200 uses a brand-new technology for vertical processing with a throughput of 1,200 wafers/hour. In combination with a high-performance plasma source and a new carrier system, both patent-pending, the coating process does not leave any pinmarks or flakes on the wafers. The new machine and process technology leads to a remarkable increase of cell efficiency. The quick-change cleaning concept minimizes downtime because it enables cell manufacturers to clean process chamber and carriers outside of the machine.

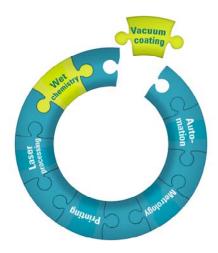
The new vacuum coating tool is the first fully-inhouse developed product of Manz Coating GmbH, founded in 2010. Managing Director Mathias Höfler says: "This short time-to-market is the result of our research power of 50 highly-specialized engineers. The new tool closes a gap for us: Manz now covers all major technological steps of cSi cell production."

By integrating the VCS 1200 for back side passivation in existing production lines, manufacturers can regain their profitability. Dieter Manz, CEO of Manz AG, states: "The entire PV industry is going through challenging times right now. That is why cell manufacturers need to cut the costs per watt. With our innovative PECVD tool we can offer them a perfect solution at lowest cost of ownership." A first public demonstration

Press release



will be held at industry fair EU PVSEC in Frankfurt/Main, Germany, 24-28 September 2012.



Going full circle now: With vacuum coating Manz now covers all major cSi produion technologies.

High-resolution graphics available from Stefan Richter, Storymaker GmbH s.richter@storymaker.de, +49 7071 938 72 213

About Manz

Manz AG, headquartered in Reutlingen, Germany, is one of the world's leading high-tech engineering firms. Founded in 1987, in recent years the company has grown from an automation specialist into a supplier of integrated production lines for crystalline solar cells and thin-film solar modules, manufacturing flat panel displays, and production systems for lithium-ion batteries. The company, led by founder Dieter Manz, has been listed on the stock exchange in Germany since 2006, and currently operates production facilities in Germany, China, Taiwan, Slovakia, and Hungary. At the beginning of 2012, Manz AG had approximately 2,000 employees, 950 of which work in Asia. With its slogan, "Passion for Efficiency," Manz's engineers are making a promise to offer its customers – all companies active in important future markets – increasingly efficient production equipment.

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