

Dresden, 30 August 2024

## **New & Gigantic: GIGA|nova Coating Systems for Gigawatt Production in Photovoltaics to Be Launched on US Market During RE+ Exhibition**

VON ARDENNE will exhibit at the RE+ in Anaheim from September 9 to 12, 2024.

At the same time, the German high-tech coating equipment manufacturer will launch the new GIGA|nova coating equipment platform on the US photovoltaics market. It will be available in two versions: the GIGA|nova SCX and the GIGA|nova DCX.

These systems are designed for customers who want to set up solar cell production facilities with an annual capacity of more than two gigawatts. There is no comparable carrier-based system on the market with a higher throughput than the GIGA|nova (up to 1.3 gigawatts annual capacity).

The horizontal inline PVD<sup>1</sup> coating system GIGA|nova SCX is specially designed for the single-sided deposition of functional layers on thin wafers for solar cell manufacturing based on TOPCon, IBC and perovskite tandem technology. VON ARDENNE has already delivered GIGA|nova SCX systems with a production capacity of more than 20 gigawatts.

The GIGA|nova DCX is specially designed for the double-sided deposition of functional layers on thin wafers for cell manufacturing based on heterojunction, TOPCon and perovskite tandem technology.

### **Based on an industry-proven platform**

The development of the GIGA|nova SCX and DCX benefited from the experience of VON ARDENNE gained in delivering more than 300 coating systems for mass production to companies in the photovoltaic industry. The GIGA|nova inline coating systems are based on patented VON ARDENNE coating technology for large substrate areas. The system is very wide and can therefore process many substrates simultaneously. Thus, it is particularly suitable for applications with high productivity at very low costs.

Thanks to its modular design, GIGA|nova systems can be equipped with magnetrons with rotating targets for sputter deposition. Furthermore, it can be fitted with linear thermal evaporators for upcoming perovskite tandem cell technology.

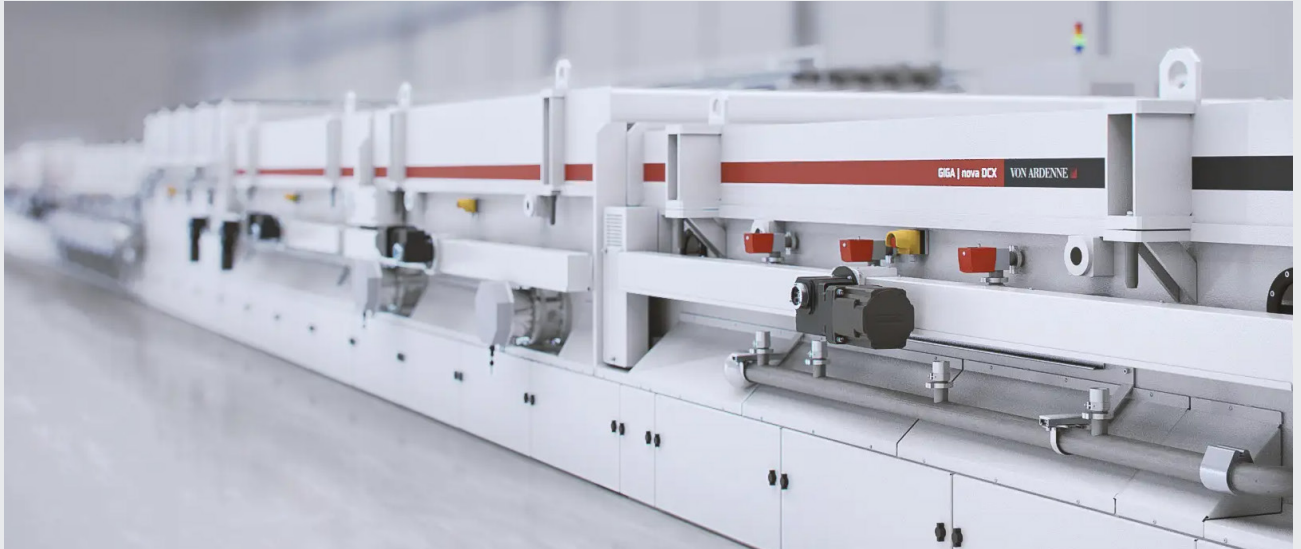
### **Many applications in high-efficiency photovoltaics**

The equipment is suited for applications such as TCO coatings for heterojunction technology (HJT) or tunnel oxides in combination with n- or p-doped silicon for TOPCon and IBC technology. In addition to metal layer coatings for copper plating, the new equipment platform can deposit ETL, HTL, perovskite absorber, TCO and recombination layers for tandem perovskite technology.

At the RE+, the PV team of VON ARDENNE will be pleased to answer any questions about the GIGA|nova, PVD technology or other topics related to the field. Among them will be Dr. Sebastian Gatz, VP Photovoltaics at VON ARDENNE. "We are looking forward to meeting the photovoltaics community in the US and many of our valued customers and partners." said Mr. Gatz, who will give a presentation and take part in a podium discussion.

<sup>1</sup>PVD (physical vapor deposition) describes a variety of vacuum deposition methods, e.g. sputtering or evaporation.

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VON ARDENNE GIGA|nova DCX – PVD coating tool for high-volume manufacturing with an annual capacity of up to 1.3 GW  
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## ABOUT VON ARDENNE

VON ARDENNE develops and manufactures systems for the industrial vacuum coating of materials such as glass, wafers, metal strip or polymer films. Our customers use these materials to manufacture high-quality products such as solar cells, architectural glass, fuel cells or microelectronic components for sensors and optics. With more than 60 years of experience in electron beam technology and 50 years of experience in magnetron sputtering, VON ARDENNE is a pioneer and world-leading supplier of equipment and technologies in PVD thin film and vacuum process technology. Further information can be found on the company's website at <http://www.vonardenne.com>.

## VON ARDENNE AT THE RE+

**Date:** September 9 – 12, 2024

**Venue:** Marriott Hotel Anaheim

**Booth:** 1317

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