

## OUR STRENGTHS



### IN-HOUSE TECHNOLOGY & APPLICATION CENTER

- Sample coatings of customer applications
- Development of customized layer stacks
- Product & process verification and optimization
- Testing of new technologies and components



### GLOBAL PROJECT EXPERIENCE

VON ARDENNE equipment is used in over 50 countries.

We have established an installed base of hundreds of coating systems worldwide, ranging from small tools to equipment for large-area coating applications for several markets.



### CLOSE PARTNERSHIP

VON ARDENNE has a network of partners for even more profound R&D work and to identify future technologies. It consists of:

- Fraunhofer Institutes such as IPMS, FEP, IST and ISE
- Institutes of the Helmholtz Association (Jülich, Berlin)
- Universities (Kiel, Dresden, Sheffield)
- Companies such as FAP GmbH, scia Systems GmbH



### PROFESSIONAL SIMULATION SUPPORT

We offer professional simulation technology to ensure best process quality with regards to plasma, heat and cooling. Furthermore, our simulation tools help demonstrate, develop and improve layer properties and define or optimize processes, details and the performance of our systems.



### COMPREHENSIVE SERVICE PORTFOLIO

- VON ARDENNE service hubs around the world
- On-site service
- Remote access by our technology department
- Regular technical and technological trainings
- Spare & wear part warehouse close to customers
- Lifecycle extension of wear parts



### UPGRADES & RETROFITS

As soon as your business is growing, your VON ARDENNE equipment will grow accordingly - thanks to its modular design and the upgrades we provide. We will also supply you with the necessary technology upgrades if you decide to change your applications.

Furthermore, when your equipment is ageing, we will retrofit your systems with new components, no matter if they are VON ARDENNE or third-party machines.



vonardenne.com

## WHO WE ARE & WHAT WE DO

VON ARDENNE develops and manufactures industrial equipment for vacuum coatings on materials such as glass, wafers, metal strip and polymer films. These coatings give the surfaces new functional properties and can be between one nanometer and a few micrometers thin, depending on the application.

Our customers use these materials to make high-quality products such as architectural glass, displays for smartphones and touchscreens, solar modules and heat protection window film for automotive glass.

We supply our customers with technologically sophisticated vacuum coating systems, extensive expertise and global service. The key components are developed and manufactured by VON ARDENNE itself.

Systems and components made by VON ARDENNE make a valuable contribution to protecting the environment. They are vital for manufacturing products which help to use less energy or to generate energy from renewable resources.



## WORLDWIDE SALES AND SERVICE

VON ARDENNE GmbH (headquarters) | Am Hahnweg 8 | 01328 DRESDEN | GERMANY  
 Sales: +49 (0) 351 2637 189 | sales@vonardenne.com  
 Service: +49 (0) 351 2637 9400 | support@vonardenne.com

VON ARDENNE Vacuum Equipment (Shanghai) Co., Ltd. | +86 21 3769 0555 | +86 21 6173 0200 | sales-vave@vonardenne.com; support-vave@vonardenne.com

VON ARDENNE Malaysia Sdn. Bhd. | +60 4408 0080 | +60 4403 7363 | sales-vama@vonardenne.com; support-vama@vonardenne.com

VON ARDENNE Japan Co., Ltd. | Tokyo office | +81 3 6435 1700 | +81 3 6435 1699 | sales-vajp@vonardenne.com; support-vajp@vonardenne.com

VON ARDENNE North America, Inc. | Ohio office | +1 419 386 2789 | +1 419 873 6661 | sales-vana@vonardenne.com; support-vana@vonardenne.com

VON ARDENNE Vietnam Co., Ltd. | +84 966 29 29 50 | sales-vavn@vonardenne.com; support-vavn@vonardenne.com

VON ARDENNE India Pvt. Ltd. | sales-VAID@vonardenne.com; support-vaid@vonardenne.com

# VON ARDENNE



HISS HORIZONTALLE BESCHICHTUNGSANLAGE

## HISS

### HORIZONTALE BESCHICHTUNGSANLAGE

Hochflexible & skalierbare Inline-Systeme  
für horizontalen Substrattransport



# HISS PLATFORM

## HOCHFLEXIBLE & SKALIERBARE INLINE-SYSTEME FÜR HORIZONTALEN SUBSTRATTRANSPORT

Die HISS ist eine modulare Beschichtungsanlage für die horizontale Beschichtung von Substraten. Sie ist die beste Wahl, wenn Sie nach einer sehr flexiblen Produktionsanlage mit kleinem oder mittlerem Durchsatz suchen, die mit bewährter Technologie ausgestattet ist.

Dank ihres modularen Aufbaus kann die HISS nach Ihren Bedürfnissen konfiguriert werden. Wir bieten verschiedene Konfigurationen an, wie zum Beispiel die Version mit nur einem Ende für einen kleineren Produktionsumfang.

Das System bietet eine hohe Prozessflexibilität für Sputterprozesse und thermisches Verdampfen.

Der flexible und dynamische Aufbau der Anlage mit standardisierten Modulen ermöglicht eine kundenspezifische Konfiguration. Die Anlage kann also an neue Prozesse oder Anforderungen angepasst werden. Daher können unsere Kunden mit dieser Anlage auf Änderungen der Anforderungen an Produkt und Prozess reagieren.

### Beidseitige oder einseitige Beschichtung

passend zur Ihren Substrat- & Prozessanforderungen



### Hohe Prozessflexibilität

durch Kompatibilität mit verschiedenen Prozesseinheiten



### Leicht anpassbar an Ihre Bedürfnisse

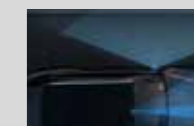
durch flexible Konfigurationsoptionen



## ANWENDUNGEN



ADVANCED PANEL-LEVEL PACKAGING



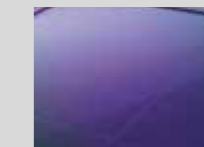
RADARANTENNEN



METALLISCHE BIPOLARPLATTEN



LEITERPLATTEN



IBC-SOLARZELLEN



TOPCON SOLARZELLEN



HETEROJUNCTION-SOLARZELLEN



PEROVSKIT-TANDEM-SOLARZELLEN



LEISTUNGSELEKTRONIK



## BASIC FACTS

Subject to change without notice due to technical improvement.

### Substrates

Glass, polymers, metals ...

### Coating area

Up to 1000 x 600 mm<sup>2</sup>

### Deposition arrangement

Double-sided or single-sided

### Substrate temperature

RT ... 250°C

### Deposition technology

Magnetron sputtering, linear evaporation, pre- and post-treatment ...

### Transport type

Carrier or glass transport

### Loading & unloading

Optional automation by robot

### System control

Siemens SPS and WinCC