



**PROCESSMASTER**  
**AUTOMATED PROCESS STABILIZATION**  
Solution for global automated process setting and control for all layer systems

- Increased yield & reduced cost of quality & claim management; larger product portfolio with more profitable products

**RECIPEMASTER**  
**AUTOMATED RECIPE CHANGE**  
Reproducibility by standardized condition with automated recipe switch and ramp-up

- Increase yield & reduced labor cost, optimized material & power consumption, recipe creation for new profitable products

**TIPCOS**  
**TIPPING POINT CONTROL**  
Automated determination of tipping point and fixing working points close to tipping point to ensure best deposition rates in reactive sputter processes.

- Optimized working points for ultimate layer properties and high deposition rates.

**PROCOS**  
**PROCESS CONTROL SYSTEM**  
Controlling reactive sputtering of compound layers fixing working points in transition area

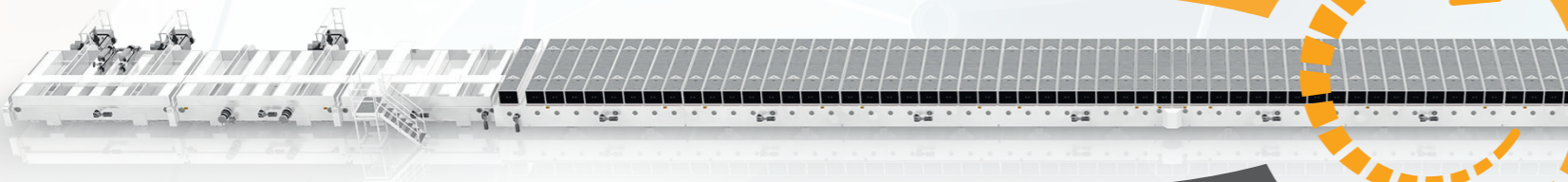
- Optimized layer & stoichiometry uniformity, Increased productivity; less energy consumption for same deposition rate

**TRIM & SHIM**  
**ONLINE TRIMMING & SHIMMING SERVICE**  
Quick optimization of the thickness uniformity („% range“) of a single thin layer

- Reduced maintenance times and increased product quality; enables applications with high uniformity requirements

**PROCESSVIEW**  
**DASHBOARD**  
Visualization of chosen process and equipment parameters and defined thresholds

- Expose further process and equipment optimization potential to reduce operating costs and increase product quality



**CATALOG**  
**SPARE PARTS & MORE**  
Bill of material with integrated 3D models for navigation & identification of spare & wear parts

- Optimized parts management & ordering process; automatic change management enables real-time access to recent data

**ANALYSIS**  
**TARGETS & MAGNET BARS**  
Management of all targets and magnet bars, synchronized with machine PLC

- Fast overview of status quo and basis for systematic analysis



Smart services



Smart software for analysis & process automation



Smart data solutions and interfaces for long-term system integration

**With VA INDIGO, we will assist you in digitalizing your workflows in connection with the machine operation - from installation and training to operation, maintenance, troubleshooting as well as service and support.**

The world is getting more and more digital and the industry with it – a development that is often referred to as Industry 4.0.

One aspect of Industry 4.0 is the digitalization and networking of machines, logistics, periphery systems and resources based on collecting, analyzing and transferring data. This will enable the optimization of not just one production step but a complete value chain - thereby facilitating new modes of operation and new ways of producing goods more flexibly. Furthermore, it will open new ways of providing products and services.

Based on this worldwide development, VON ARDENNE will support customers in fulfilling future requirements such as autonomy, connectivity, productivity, predictability and flexibility – and help you enter the next era of production.

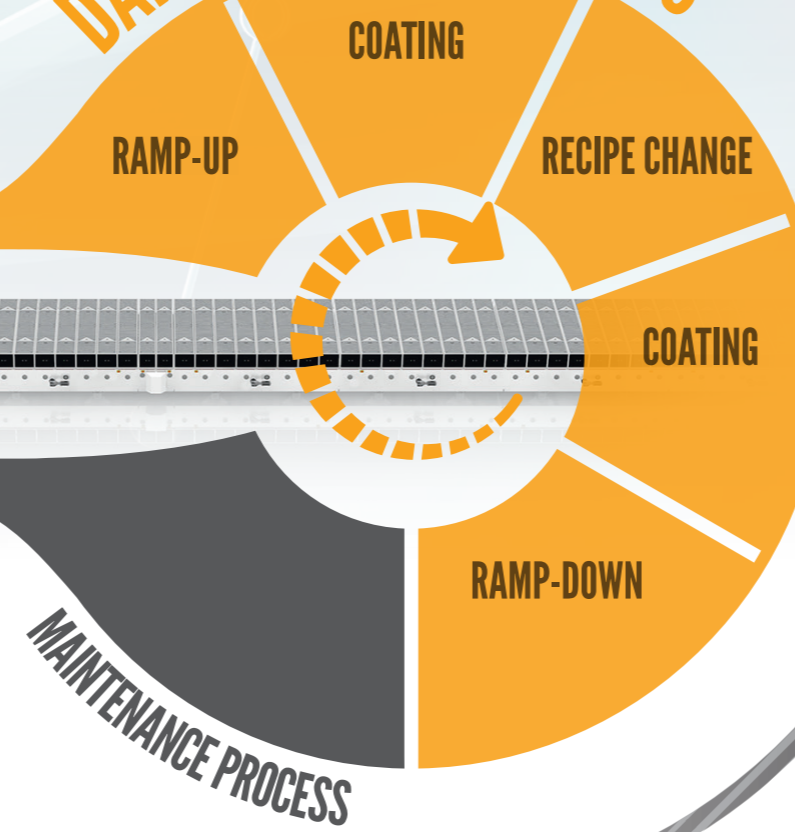
With our experience of more than 60 years in PVD technology and PVD equipment manufacturing, we know our machines and components from A to Z and how to use the generated data. This know-how in combination with our expertise in engineering, machine and system design as well as individual services has led to our new digital product and service portfolio: VA INDIGO.

**Industry 4.0 is changing the way we ...**

- ... operate processing equipment
- ... connect the processing chain
- ... develop new solutions and
- ... run industrial business

**With VA INDIGO, you will be equipped to lead the way.**

**DAILY COATING PROCESS**



TECHNICAL SUPPORT

TRAINING

**my.VA CUSTOMER PORTAL**  
Online service platform offering access to information & services to our customers

- Quick access to up-to-date information regarding customer-specific equipment & services. 24/7 procurement worldwide

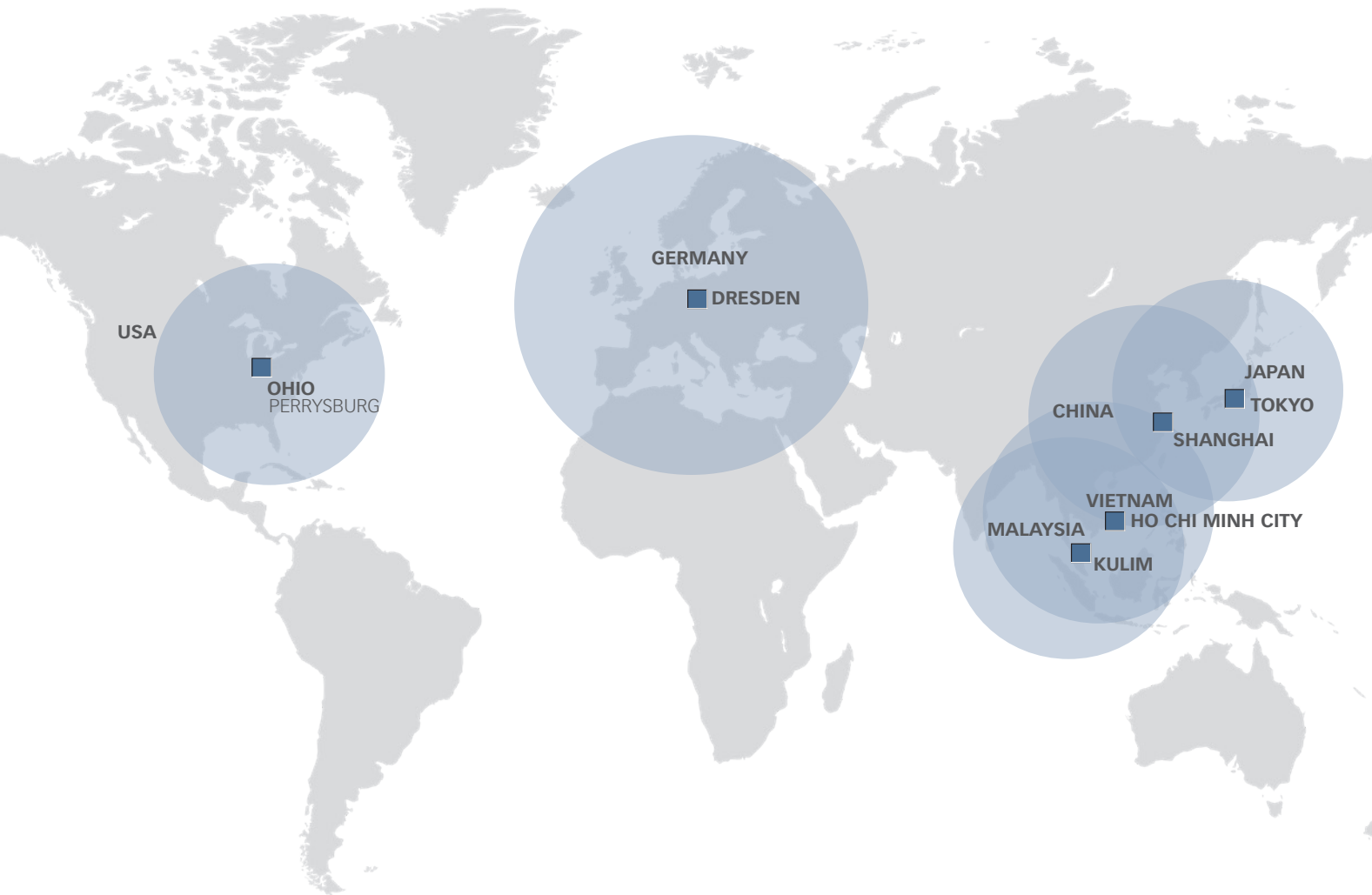
**LIVE AUGMENTED REALITY SUPPORT**  
AR glasses connect the customer virtually with the VON ARDENNE's support team

- Fast, effective support during maintenance, troubleshooting or other issues without the need for travel lead to cost & time savings

**COLLEGE EASY ACCESS TO KNOWLEDGE**  
E-learning content covering specific topics necessary for machine operation & service

- Interactive training independent from time and location; individual content and learning pace; automated tests & exercises





PRODUCT  
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PRODUCT  
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COMPONENTS



www.vonardenne.biz

## 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.



SALES  
CONTACTS



SERVICE  
CONTACTS

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