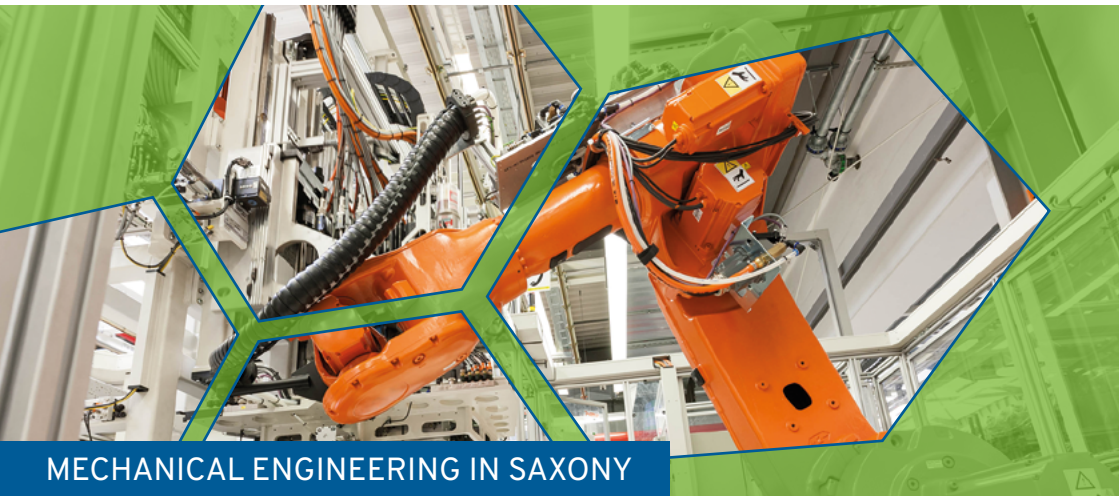


# SAXONY!



MECHANICAL ENGINEERING IN SAXONY

# ENABLING MODERN PRODUCTION

# MECHANICAL ENGINEERING IN SAXONY ...

- More than 200 years of tradition – Saxony is the cradle of German mechanical engineering
- Characterized by such global players as **Siemens**, **NILES-SIMMONS**, **Starrag**, or **Koenig & Bauer** as well as numerous SMEs with exceptional competencies in providing solutions for a wide range of customer needs and requirements
- Hotbed for skilled professionals with above-average proportion of engineers: The Faculties of Mechanical Engineering at **Chemnitz University of Technology** and **TUD Dresden University of Technology** are among the leading faculties of their kind in Germany
- Strong network partners: **VEMASinnovativ**, Innovation Cluster **Robotics Saxony**, **Smart Systems Hub**



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## ... OFFERS:

1. Koenig & Bauer Sheetfed AG & Co. KG,  
Radebeul; 2. Starrag GmbH, Chemnitz;  
3. Fraunhofer Institute for Machine Tools  
and Forming Technology IWU, Chemnitz



Title: Aumann Limbach-Oberfrohna GmbH

- Robotics, digitalization, and AI solutions according to the latest state of automation technology
- Machine tools as well as printing, textile, and special-purpose machinery providing solutions for such diverse branches as the semiconductor, automotive, and food industries, energy and medical technology, and many more
- Specialists for the planning and implementation of complete systems, production lines, and factories
- Innovative solutions for more energy and resource efficiency in production

# SMART FAB



An emission-free production while at the same time increasing the efficiency of resources is in the focus of the cluster **eniPROD** Chemnitz. The “climate-neutral factory” is one of five research fields of the **Fraunhofer IWU** in Chemnitz. Such companies as **N+P** from Meerane and **LOGSOL** from Dresden as well as **imk Industrial Intelligence** from Chemnitz are developing software solutions for the planning and operation of sustainable logistics and production processes all the way to factory planning and digital twins.

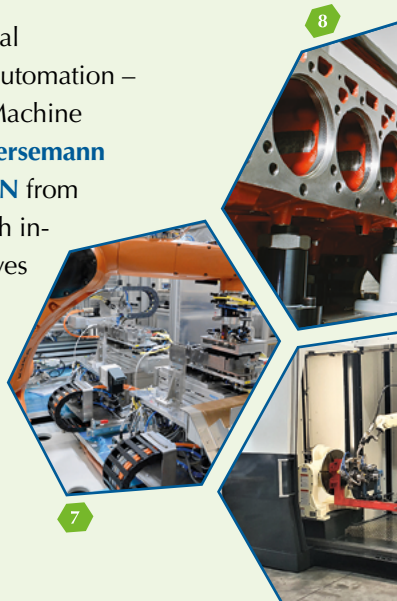
*4. Freiberg University of Mining and Technology;  
5. BEAS Technology GmbH, Chemnitz; 6. SchAz - Training  
and Application Center at the Chemnitz-based ICM institute*

# MORE EFFICIENCY THROUGH AUTOMATION

Thanks to the interaction of its competencies in mechanical engineering and ICT, Saxony puts its very own stamp on automation – at the interface between robot manufacturers and users. Machine manufacturers with a long tradition such as **SITEC** and **Hiersemann** from Chemnitz, **WESOBA** from Schwarzenberg, or **XENON** from Dresden supply customer-specific production systems with integrated robotics solutions. **Wandelbots** from Dresden paves the way towards adaptive, software-defined production ecosystems – vendor-neutral. The center **CPS - Cognitive Production Systems** at the Fraunhofer IWU assists primarily SMEs in digitalizing their production.

7. *XENON Automatisierungstechnik GmbH, Dresden;*

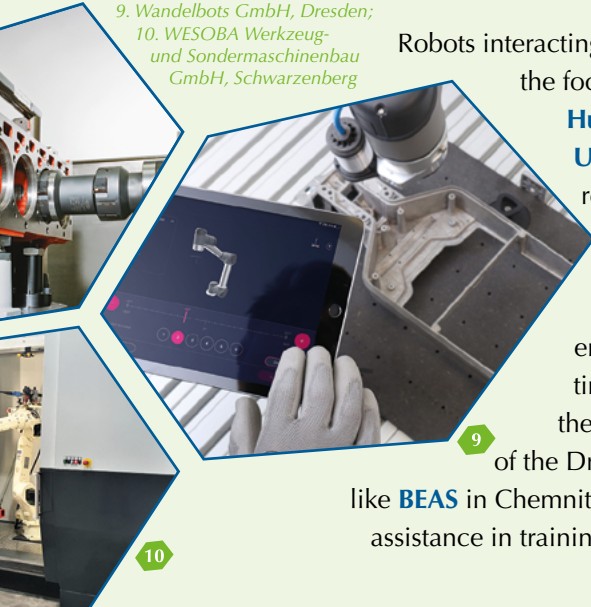
8. *Starrag GmbH, Chemnitz*



# HUMANS AND MACHINES AS COLLEAGUES

9. Wandelbots GmbH, Dresden;  
10. WESOB Werkzeug-  
und Sondermaschinenbau  
GmbH, Schwarzenberg

Robots interacting with humans securely and reliably are the focus of the **Professorship of Robotics and Human-Machine Interaction at Chemnitz University of Technology**. The university's research center **Hybrid Societies** and the cluster **CeTI at Dresden University of Technology** conduct interdisciplinary research on making human-machine encounters more efficient virtually in real time. The center **SchAz** at ICM Chemnitz, the **Competence Center Robotics in Crafts** of the Dresden Chamber of Crafts, or companies like **BEAS** in Chemnitz offer “hands-on robotics” and provide assistance in training employees in the automation process.



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# 3D PRINTING – MORE SPEED, FLEXIBILITY, PRECISION

Manufacturing complex components faster while reducing material consumption are in the focus of Saxon experts. **ALOtec Dresden** provides systems for additive manufacturing using laser cladding and arc welding. Software solutions that improve the efficiency in 3D printing are developed by **ARC Solutions** in Chemnitz. **Metrom** from Hartmannsdorf supplies industrial 3D printers. The network **Building 3D** and the **Freiberg University of Technology** are working on new application fields and sustainable materials for additive processes.

12



11



11. METROM Mechatronische  
Maschinen GmbH, Hartmannsdorf;

12. NILES-SIMMONS-  
HEGENSCHEIDT GmbH, Chemnitz

# SAXONY! – A CENTER OF GERMAN MECHANICAL ENGINEERING



**1,000**

companies



More  
than

**45,000**

employees



**10.7%**

share in Saxony's  
industrial turnover

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