

One step ahead through innovation



# As a systems integrator, we deliver innovative automation solutions customized to your specific needs

For more than 50 years, we have been shaping the automation industry by delivering customized system solutions as a trusted systems integrator. As a family-owned business, we blend tradition with innovation - driven by structured innovation management, ongoing research, and cutting-edge robotics and mechatronics.

What began as a small mechanical engineering firm has grown into one of the leading manufacturers of customized automation solutions. Our customers have always been at the heart of what we do. Through expert consultancy, from concept and design to production of tailor-made systems, special machinery and AMR solutions, we help significantly enhance the efficiency, cost-effectiveness, and flexibility of our clients' manufacturing operations.

## Your Partner for the Future of Manufacturing

BÄR's automation technology enables flexible and customized solutions for your production needs. We utilise advanced technologies including automated guided vehicles (AMRs) and high-performance robotic arms. This allows us to deliver specialised solutions that support more efficient, scalable and adaptable manufacturing and intralogistics processes.







### **Customized Automation & Assembly Technology Solutions**

Automation of production processes is a key success factor for today's competitive businesses. As a systems integrator, we provide customized solutions tailored to each customer's specific requirements. From planning and design to manufacturing and implementation, we manage the full process in-house. We build systems and complex assembly lines integrating stations and modules such as conveyors and robotic arms, covering the entire production workflow. Our customers benefit from our extensive experience across the automotive, medical technology, food, and general manufacturing sectors.



### **Automated Guided Vehicle Solutions**

Our AMRs are highly autonomous while retaining full flexibility, allowing seamless integration into existing and evolving production environments. Our proprietary energy management system ensures round-the-clock availability. We offer modular, scalable solutions to meet each client's specific needs—with our ConTrax® system providing the ideal platform.

# From Concept to Delivery - Your Complete Automation Partner





### Design/development concept

To better understand the needs of our customers, we rely on close collaboration. Jointly we create an individual concept which is able to react flexibly to dynamic changes in production. Our focus thereby is on investment-proof systems with an adjustable degree of automation.



### **Design & Engineering**

Our expert engineering team delivers commercially viable, customized automation systems with rapid turnaround. Using advanced simulation and streamlined workflows, we ensure a smooth transition from design through to final production.



### **Software**

Using the latest insights and in response to evolving customer demands, our skilled PLC software engineers develop tailored automation software across a range of hardware platforms—including custom machines and AMRs.





### **Manufacturing & Assembly**

Our in-house manufacturing gives us full control over every step of the production process. We can quickly adapt to changes, reduce external dependency, and control costs. From CAD design to finished systems, everything is delivered under one roof.



### **Commissioning**

Following production, we handle full on-site system integration and ensure a smooth commissioning process. Prior to deployment, we conduct thorough testing and real-world simulations to guarantee optimal performance from day one.



### Ongoing Support & Maintenance

Our commitment doesn't stop at commissioning. With tailored service packages, spare parts supply, and ongoing maintenance, we help ensure your operations remain safe, efficient, and uninterrupted.

# Autonomous Mobile Robots (AMRs)

Our AMRs offer maximum flexibility and customisation. With decades of automation and assembly expertise, we design AMRs that integrate seamlessly into existing or changing production setups without complex conversion. Our modular approach enables scalable systems that adapt easily to shifting requirements or throughput goals.



### **Integrated Control System**

At the heart of our AMR platforms is a powerful guidance and control system. It manages route planning, coordinates with peripheral devices, and handles communication across the network. Developed in-house, it allows for complete customisation and streamlined integration.

### **Smart Energy Management**

Our AMRs are powered by LiFePo batteries or Booth Caps, selected based on application needs. Both options support 24/7 operation with parallel charging capabilities - whether inductive or conductive - ensuring continuous productivity and maximised fleet efficiency.





### **Autonomous Navigation**

Our AMRs use magnetic and optical guidance, SLAM laser navigation, and sensor fusion to navigate independently and detect dynamic obstacles. Their omnidirectional capabilities also allow smooth operation in tight spaces. We combine navigation methods to deliver precise, reliable positioning.



### **Safe Operation**

Our AMRs are equipped with advanced safety features that allow them to detect obstructions and respond immediately - by rerouting or stopping - to prevent collisions with people, machinery, or other vehicles.



### **Flexible Payload Capacity**

Whether handling small parts or multi-ton components like car bodies, our AMRs are engineered to match varying payload requirements. We offer tailored solutions for each application's size and weight specifications

# Modular Robotics for future Production

Our modular ConTrax® platform allows AMR systems to be adapted and extended with ease. From power modules to robot arms, navigation tools to lifting systems - each component is customisable. ConTrax® supports seamless integration into any production layout, powered by our advanced control and navigation technologies.







This modular mobile robotics platform features interchangeable robots, grippers, power modules, and load handlers - capable of manipulating components of varying weight and sensitivity. With autonomous navigation, the ConTrax® Robotic System supports logistics, handling, and assembly tasks across production environments.

### CONRAX® ASSEMBLY SYSTEM

This next-generation assembly transport solution moves components efficiently between stations. Its modular track design allows for fast reconfiguration - unlike traditional belt or roller conveyors - making it ideal for scaling or adjusting to product changes.



The ConTrax® Logistic System automates internal material transport via AMRs between warehouses and production lines. Each load module is adaptable to the material's shape and size. With autonomous navigation and modular architecture, the system is flexible, scalable, and precise.

### Customized

# Automation & Assembly Systems

For over five decades, we have helped our clients automate manufacturing, logistics and data processes. Our customized systems and special-purpose machinery are built for flexibility and scalability, supporting dynamic production demands while improving competitiveness. Whether AGVs, robotics, or modular production lines, we provide expert, future-ready automation.







### **Branches**

- Pharmaceuticals
- Automotive
- Medical technology
- Food industry
- Manufacturing
- Intralogistics
- White goods
- Wood industry
- Plastics industry
- Electronics industry
- E-mobility

And much more



### **Solutions**

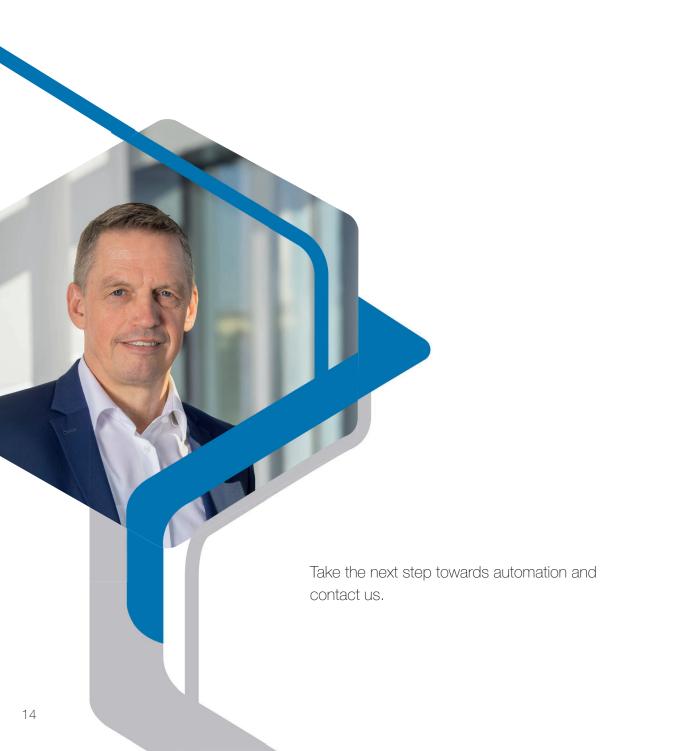
- Wire harness assembly
- Powertrain
- Axle assembly
- Gearbox assembly
- Body transportation
- Goods picking
- Marriage (automotive)
- Assembly systems
- Robot cells
- Battery assembly

And much more

# Always One step ahead through innovation

"This principle applies to both our customers - who seek forward-thinking automation - and ourselves. We continuously evolve, driven by Industry 4.0, and remain actively involved in pioneering research. We don't follow trends - we set them."

Ralf BÄR, CEO BÄR Automation





Our Current
Research Initiatives



Since 2014, we've been a founding member of the ARENA2036 research campus. Our current "Welldefined" project focuses on hardware-neutral shared safety tech for AMRs, supporting resilient, low-carbon value chains.

### next20EM

The "Next2OEM" project aims to digitalise and automate the full value chain of wiring harnesses for the automotive sector bringing production back to Germany. BÄR contributes its deep expertise in assembly logistics and smart manufacturing.





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