

WORK-S

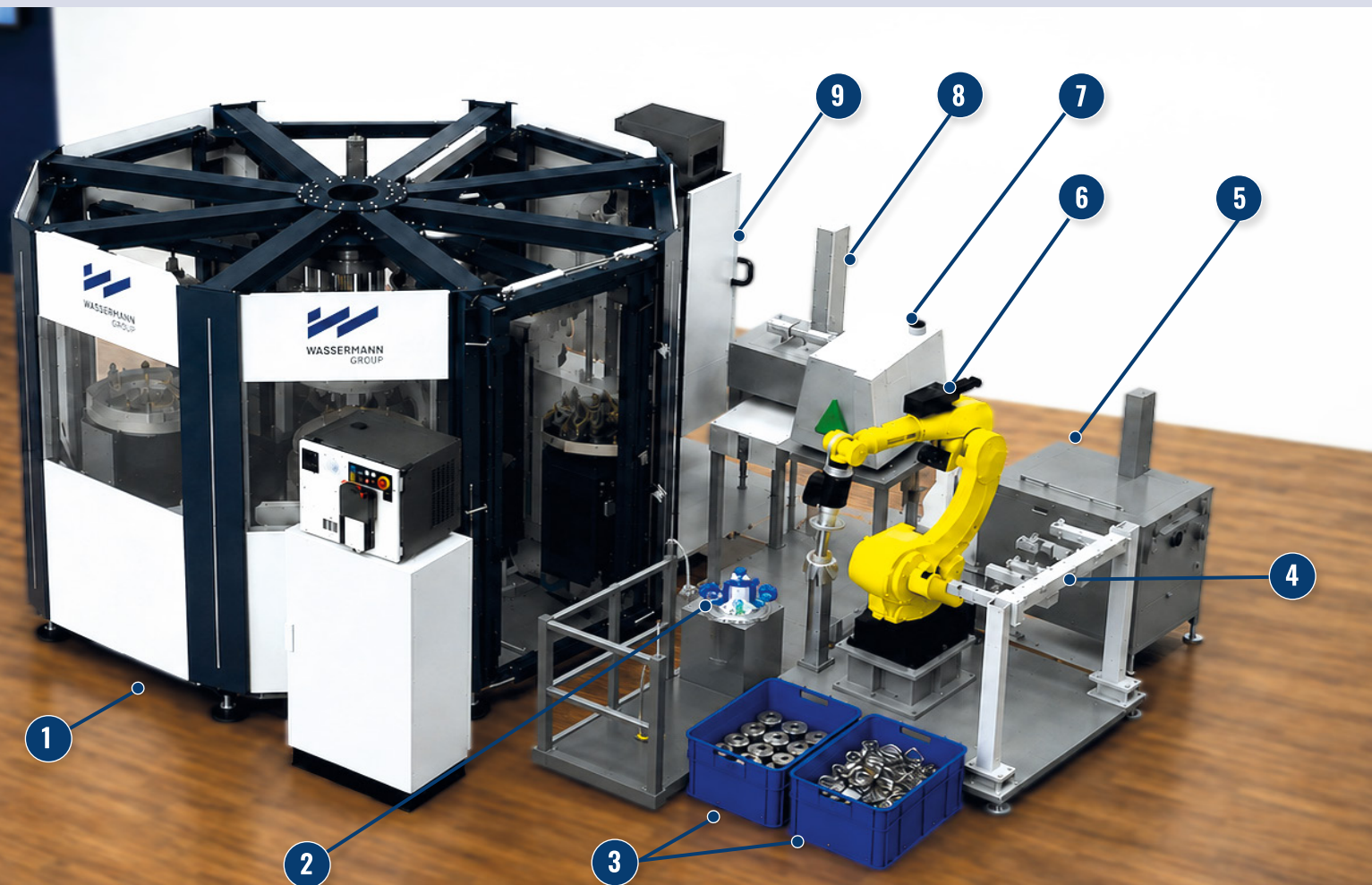
Automated production of ready-to-install components

From raw parts delivered in raw material boxes to fully assembly-ready components: this is what the fully automated manufacturing cell from JTA Connection and WASSERMANN GROUP stands for.

Each workpiece is handled only once and then passes through the entire production process automatically from clamping in the fixture and machining to deburring, washing, measuring, and marking. This reduces handling effort, saves valuable time, and ensures maximum process reliability.

The integrated pallet storage system minimizes setup times and also enables unmanned shifts at night and on weekends.

As a result, machine utilization is optimized and productivity is sustainably increased.



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| 1. | Pallet storage system WORK-S 800 | 6. | 6-axis robot with camera system and changeable gripper |
| 2. | Loading station with clamping cube | 7. | Marking unit |
| 3. | Raw part and finished and boxes | 8. | Deburring cell with deburring tools |
| 4. | Magazine for gripper jaws | 9. | HMI with Nexus software for the complete cell |
| 5. | Washing machine | | |

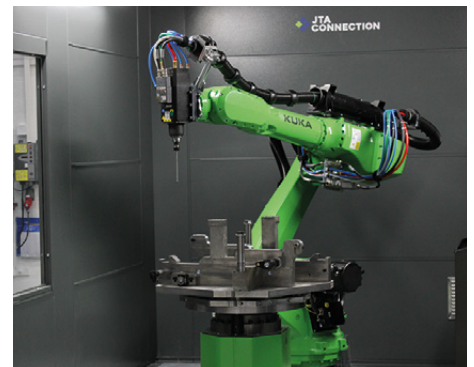
We think automatically

Consistent unmanned manufacturing – even with high product variability

Pre-equipped machine pallets in the integrated pallet storage system, combined with a robotic loading cell including bin-picking technology, form the basis for cost-effective unmanned production during night shifts and weekends.

Through the intelligent integration of machining, handling, and downstream processes, the robot ensures a continuous material flow. Intermediate storage is reduced, throughput times are shortened, and processes are sustainably optimized.

The result: maximum cost efficiency in the production of ready-assemble components – while maintaining high flexibility and variety of variants.



Intelligent control with the NEXUS cell control system

The intuitively designed NEXUS cell control system combines maximum user-friendliness with powerful features for productive and future-proof manufacturing. Proven functionalities support efficient operation of the manufacturing cell and create the foundation for cross-site digitalization and networking of production processes.

Key features include:

- Automatic production planning and prioritization of individual orders
- Flexible real-time adjustment of production sequences
- Intuitive HMI touchscreen with convenient subprogram management
- Predictive resource checks to prevent downtime
- OEE analysis and automated reporting for performance evaluation
- OPC UA interfaces for seamless integration with higher-level IT and MES systems
- Remote diagnostics and error analysis for the entire manufacturing system
- Continuous online software updates with new features and optimizations



With the NEXUS cell control system, the manufacturing cell becomes an intelligently networked production system – flexible, transparent, and ready to meet the demands of the digital factory.