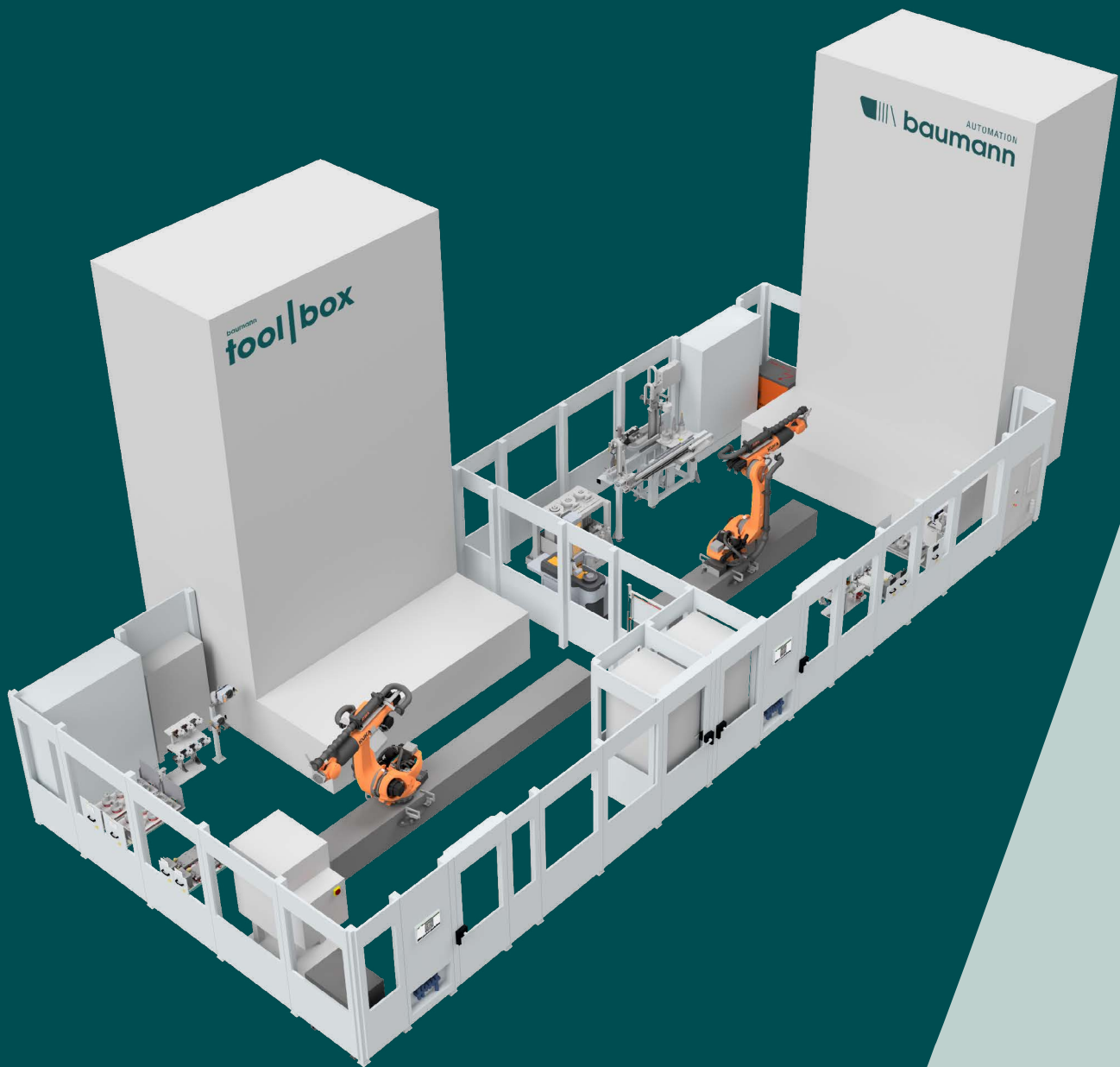


baumann
tool | box



**FULLY AUTOMATED
TOOL PREPARATION**

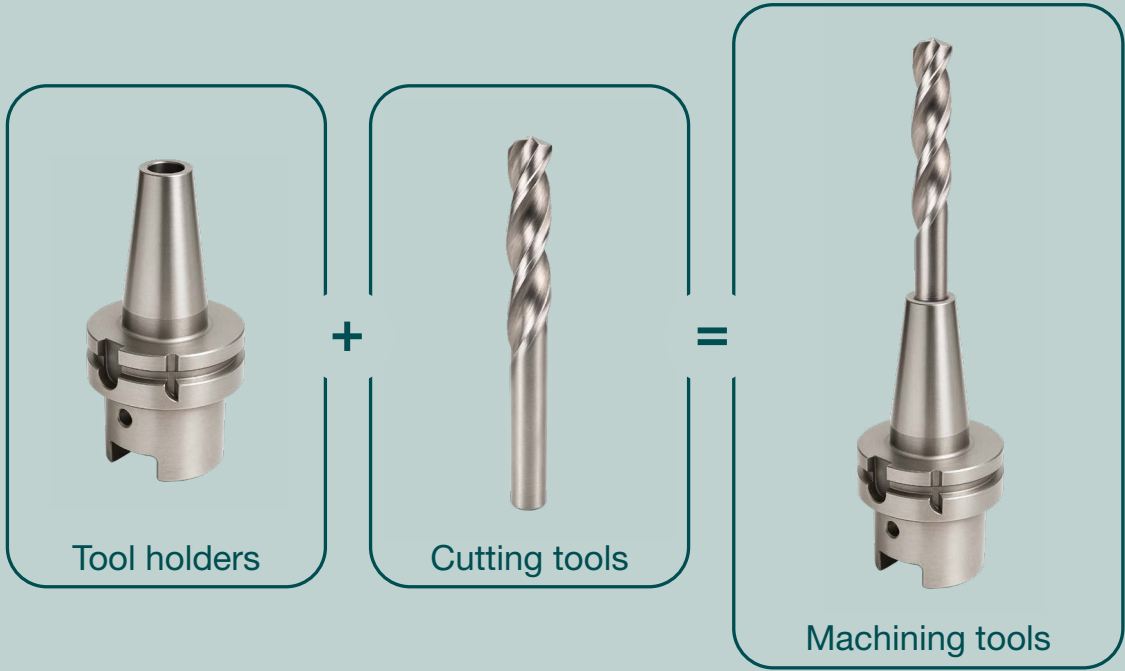
FULLY AUTOMATED TOOL PREPARATION

In many manufacturing companies, loading and unloading of shrinking and measuring devices, storing and retrieving tools, as well as feeding tool assemblies to the machine are still carried out manually.

This approach is labor-intensive, leads to high operating costs, and complicates planning. In addition, personnel-related downtime risks, quality fluctuations, and the increasing shortage of skilled workers pose additional challenges to stable production processes.

Automated tool handling significantly **increases productivity**, **reduces errors**, and sustainably **lowers costs**.

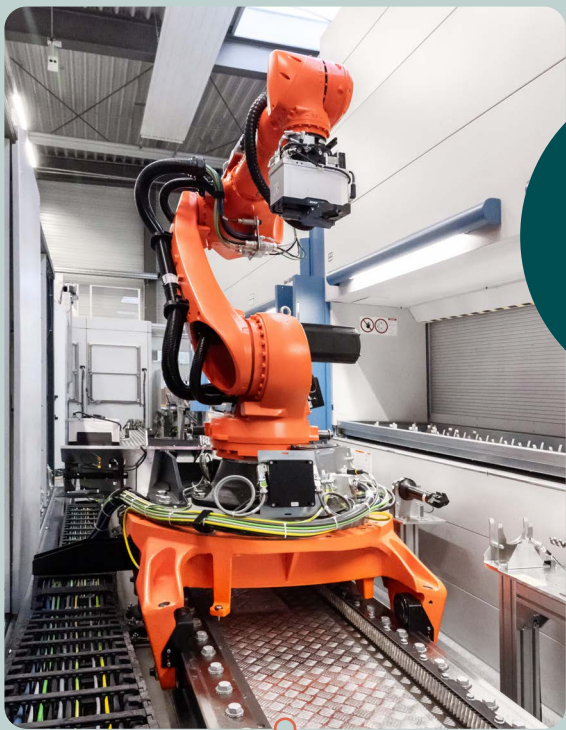
- Lower operating costs through reduced personnel requirements
- Elimination of quality fluctuations caused by manual intervention
- No misplacements or incomplete documentation
- Fewer tools required thanks to centralized coordination
- Reduced effort in personnel coordination and shift planning
- Increased resilience to the shortage of skilled workers



Supply, storage,
and preparation of
cutting tools and
tool holders

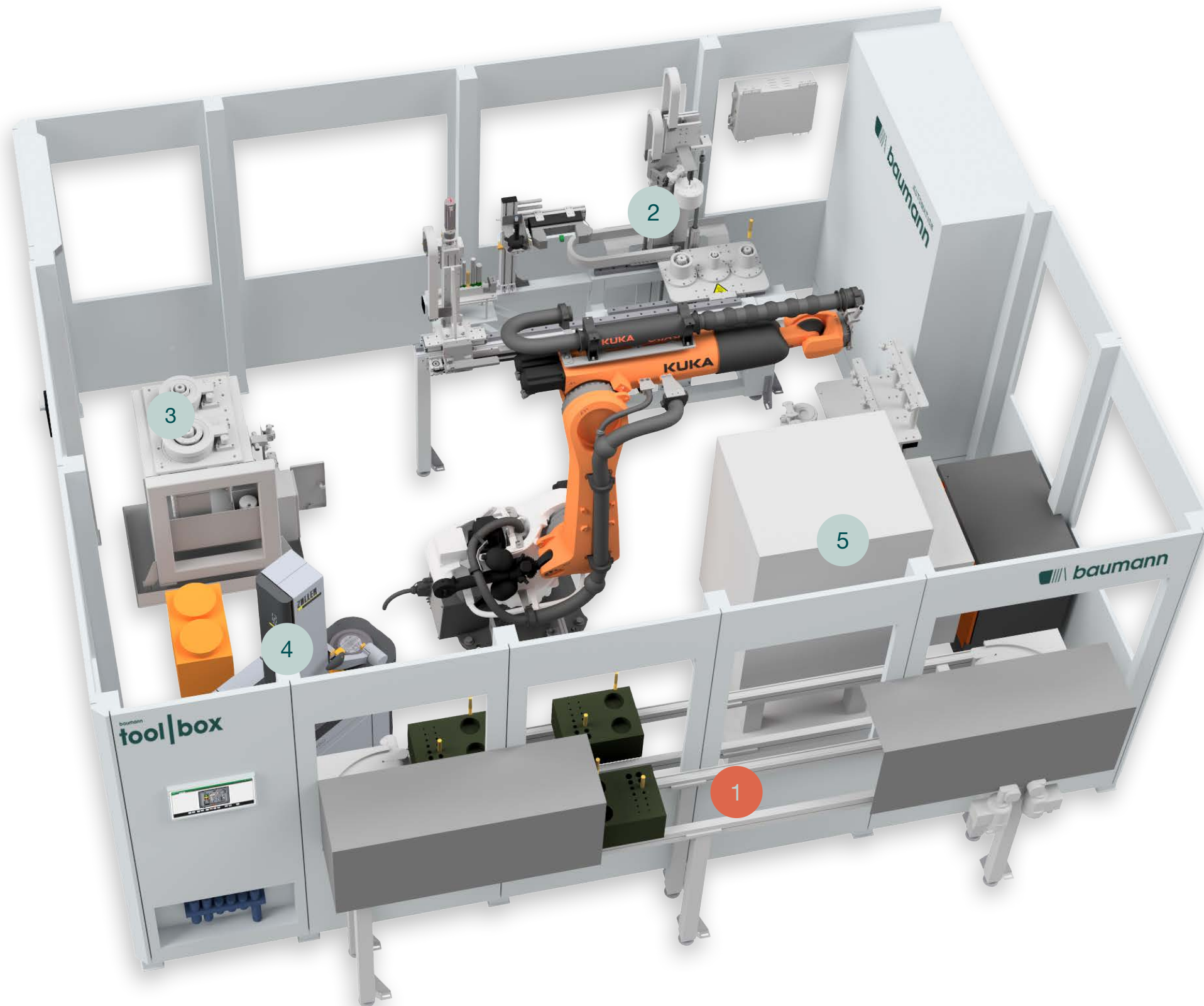
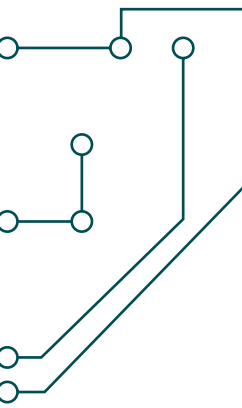


Joining and
separating of cutting
tool and tool holder
by means of shrink
fitting



Measurement,
cleaning, storage,
and provision of tool
assemblies

TOOL | BOX 300 BASIC



1. Workpiece carrier for manual loading and unloading of tools and HSK holders
2. Shrinking station
3. Cooling station

4. Measuring machine
5. Cleaning system (spray cleaning with filter and oil separator)

CONFIGURATION EXAMPLE

- Up to 300 tool changes per day
- HSK holders: HSK63, HSK100
- Tool Identification: RFID or DMC
- Expandable with storage lifts for the storage of tools, fixtures, and tool assemblies

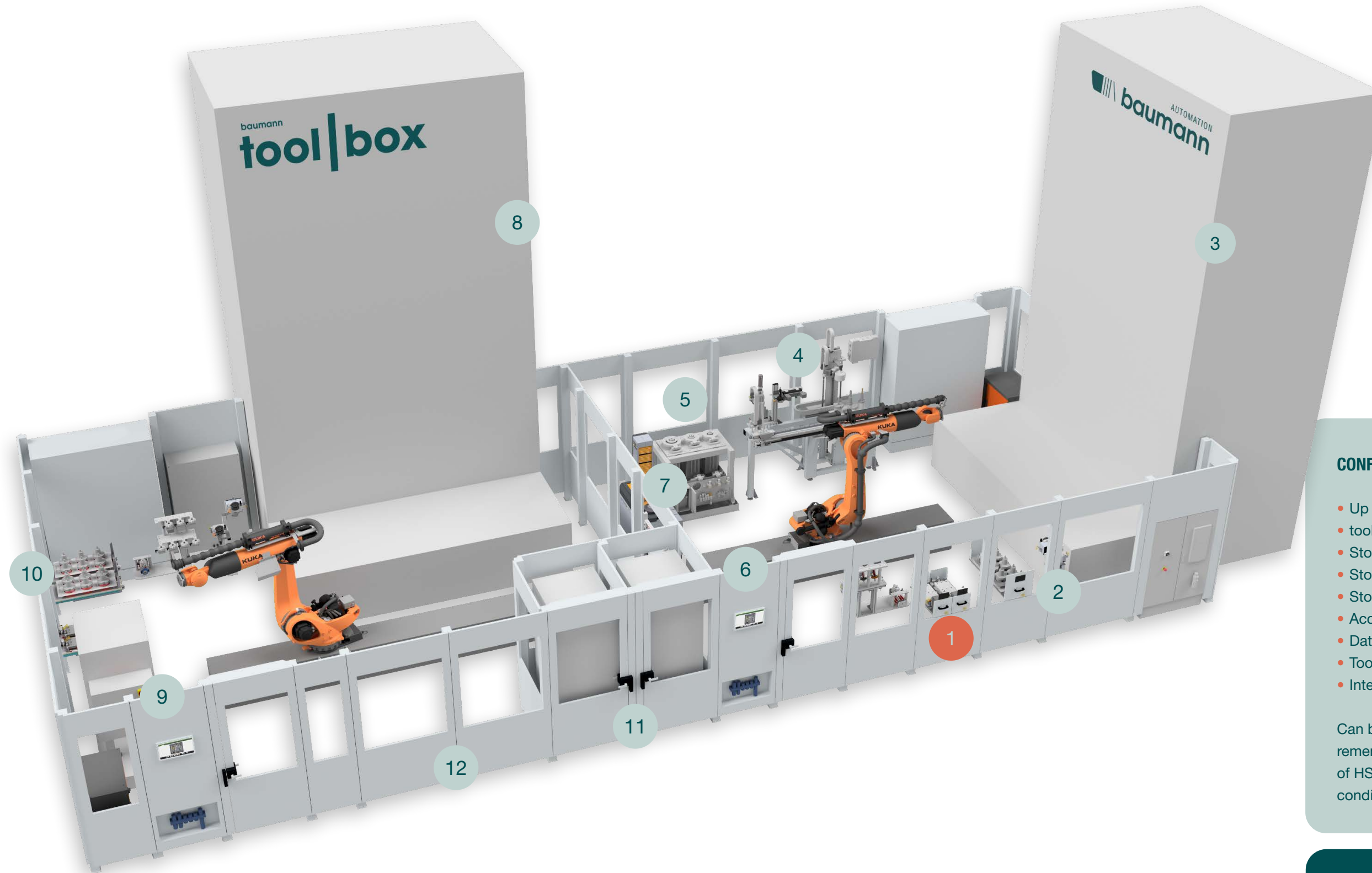
Can be adapted to customer-specific requirements (e.g. number of tool changes, range of HSK sizes, etc.) as well as specific local conditions.



Watch our video on fully automated tool preparation and gain insights into real-world system operation.

TOOL | BOX 300

System Variant for up to 300 Tool Changes per Day



CONFIGURATION EXAMPLE

- Up to 300 tool changes per day
- tool holders: HSK63, HSK100
- Storage locations for tools: 6,000
- Storage locations for holders: 1,000
- Storage locations for tool assemblies: 1,300
- Access points for 2 transport trolleys
- Database management
- Tool life management
- Interface to tool planning

Can be adapted to customer-specific requirements (e.g. number of tool changes, range of HSK sizes, etc.) as well as specific local conditions.

1. Drawers for manual loading and unloading of cutting tools and tool holders
2. DMC reading station for identification of tool holders and tool measurement
3. Storage lift for cutting tools and tool holders
4. Shrinking station
5. Cooling station
6. Measuring machine

7. Transfer shuttle between Cell 1 and Cell 2
8. Storage lift for tool assemblies
9. Cleaning system (spray cleaning with filter and oil separator)
10. Drawer for manual loading of non-shrunk tool assemblies
11. Removal and supply of new and used tool assemblies via transport trolleys
12. Reserved spaces for integration with automated guided vehicles (AGVs)



Watch our video on fully automated tool preparation and gain insights into real-world system operation.

OPTIONS & PROCESSES

OPTIONS

- Scalable for any number of tool changes per day
- Integration of additional HSK sizes
- Adaptation of storage capacity for holders, tools, and tool assemblies
- Application-specific cleaning system
- Additional access points for transport trolleys
- Integration of manual workstations for indexable insert changes
- Integration of automated guided vehicles (AGVs) as an alternative to transport trolleys
- Integration of a gantry portal for handling e.g. heavy-duty tools
- Integration of existing equipment (e.g. measuring machines, storage lifts)
- ERP system interface
- Database management of shrinking parameters
- Layout customization to local conditions



High-precision alignment and automated shrink fitting of cutting tool and tool holder



Manual workstations for changing indexable inserts



Drawer-based loading and unloading of cutting tools and tool holders



Robot-based cleaning of tool assemblies

We would be pleased to present our solution to you in detail and jointly assess the optimization potential in your production.

Get in touch – we look forward to the exchange.

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