

SmartFlow System - automation for laser cutting machines

Seamless material flow between storage, cutting, and processing stations

Optimized organization and real-time access to multiple sheet types & thicknesses

Precise preparation of sheet sets for cutting or further production stages

SYSTEM ELEMENTS

The SmartFlow System is configured based on the required storage capacity, the number of integrated laser cutting machines, and the specifics of the production process. It consists of one of the Storage modules (01), complemented by a Transport module (02), an Access point (03), and dedicated software (04).

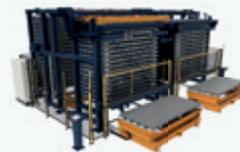
01 | Storage module with station and depalletizer



MonoTower®



TwinTower®



TransferTower®

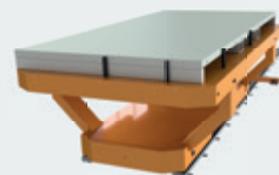


MultiTower®

02 | Transport module: Multiloader



03 | Access point for cut details sorting



04 | Software for production planning and scheduling integrated with ERP, CAD/CAM

BENEFITS

- » Fast turnaround for urgent orders
- » Increased production process efficiency
- » Reduced picking errors
- » Reduced or eliminated forklift traffic
- » Efficient execution of short production runs
- » Unattended cutting possible — e.g. during night shifts or weekends
- » Fewer full-time positions required in the production process
- » Effective and efficient production planning through ERP and WMS integration
- » Up to 85% utilization of machine production capacity

STORAGE PARAMETERS

Storage type	MonoTower®	TwinTower®	TransferTower®	MultiTower®
System model	3015	4020	6020	
Maximum sheet storage dimensions	3x1.5 m	4x2 m	6x2 m	
Shelf load capacity	up to 3 t	up to 5 t	up to 5 t	
Sheet thickness	0.5 mm - 25 mm	0.5 mm - 25 mm	0.5 mm - 25 mm	
Unloading/loading cycles per hour	up to 40	up to 30	up to 30	
Number of shelves transported per hour	up to 20	up to 20	up to 20	
Cut parts storage capacity	Yes	Yes	Yes	
System height	up to 20 m	up to 20 m	up to 20 m	

BAUMALOG WORKFLOW

We work closely with our clients, following the structured process below. It helps us to deliver solutions tailored to specific operational needs.

- | | | |
|---|---|--|
| <p>01 Analysis
» Production hall layout and material flow</p> | <p>02 Planing
» Material flow and machine setup</p> | <p>03 System design & production
»</p> |
| <p>04 Installation and commissioning
»</p> | <p>05 Integration and training
»</p> | <p>06 Service and maintenance
»</p> |

SOFTWARE

Baumalog software is sold exclusively with Baumalog products. All Baumalog automated storage and transport systems are equipped with control software that can be integrated with the software (ERP, WMS, CAD/CAM) currently used by the customer.



WE MAKE THEM FLOW

We integrate our systems seamlessly with laser cutting machines from various leading brands—ensuring smooth material flow and optimized production.

TRUMPF | Bystronic | Mazak | Eagle | Mitsubishi | LVD | Durma | Amada | BLM | Salvagnini