# **barbaric**

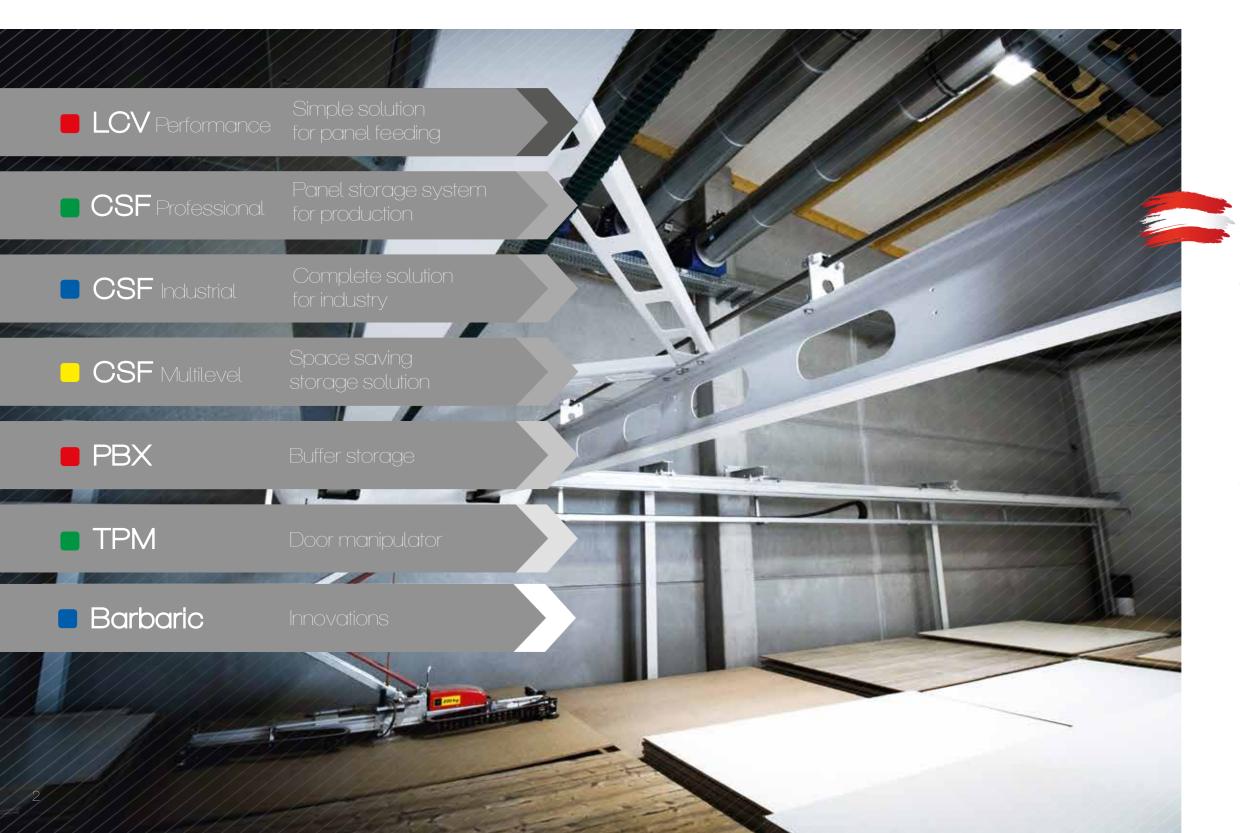


# Panel handling

compact - fast - custom-made



# ldeas that move



# Barbaric Quality Made in Austria

Barbaric is a successful and dynamic company with headquarters and manufacturing facility in Austria specializing in sophisticated lifting technology. Our goal is the individual production of custom-made solutions for our customers in the field of glass and panel manipulation. Through integration of modern components developed in our company we can offer ergonomic and cost-effective systems with short payback periods.





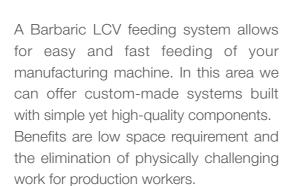


#### Simple and functional

All essential functions of the panel storage system CSF were retained at the feeding system LCV. By concentrating on essential functions the system can convince with simplicity and reliability.

### Feeding system

# Performance



It's an investment with tremendous value for craft and industry production.

#### Manipulator

All functions are integrated to save space.

- > lifting motor
- horizontal motor
- > rotational motor (optional)
- > electrical cabinet





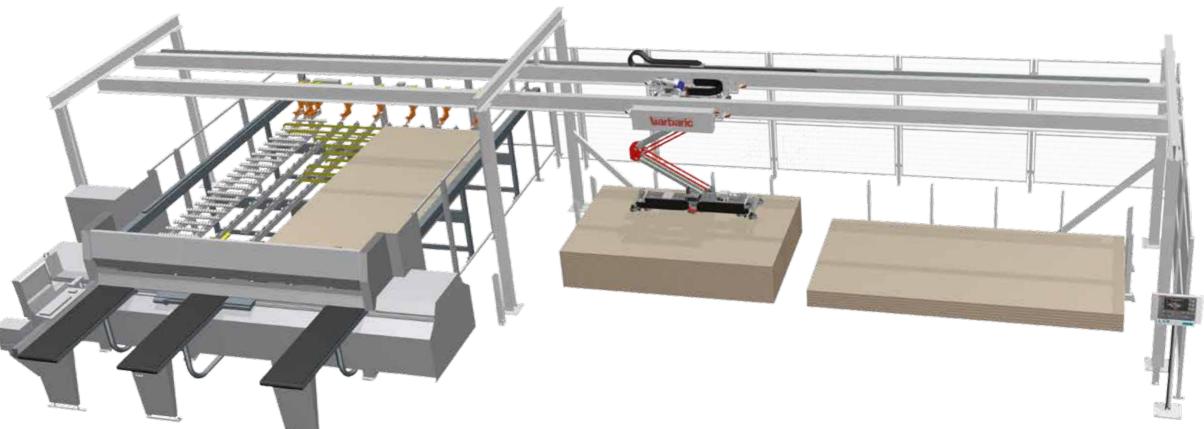
- > manually adjustable aluminium traverse
- > automatic size adjustment (optional)
- > panel sizes of 2000 mm to 4200 mm
- > panel weight of 200 kg
- > vacuum generation via energy-saving ejector



Ideas that move.

Feeding system





### Technical data

STANDARD

OPTIONAL

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# Function and operation

- > visualization in 2D and 3D system
- > simple and intuitive user interface
- fully automated standardized hard ware interfaces for different saw manufacturers
- > automated panel feeding

# Your benefits at a glance

- optimized material flow
- > gentle manipulation: no damage of the panels during transport
- > optimization of space
- > reduced personnel expenses
- > simplification and alleviation of production
- higher capacity utilization of your manufacturing machine
- > flexibility in production processes
- > payback periods below one year possible
- > fully automated panel handling

Plant size		
» System design » Length	two-axis system (XZ) up to 50 m	three-axis system (XYZ)
Movement speeds		
» X-axis	80 m/min	
» Z-axis	25 m/min	
Panel sizes		
» Length	2000 – 4200 mm	max. 5600 mm
» Width	600 – 2100 mm	longer on request
» Thickness	from 8 mm	
» Panel weight	200 kg	up to 300 kg
Stacking		
» Stack height	1800 mm	up to 2500 mm
» Stack distance	150 mm	









# Know-how and design

CAD-optimized product design and low net weights meet the high demands of fast speed and short cycle times. Optimum use of space - only 100 mm lateral distance in all directions is required.



# - CSF Professional

#### Manipulator

Unique design and narrow body. All essential functions and components are integrated. Touch screen and user control panel can be placed anywhere around the storage system.



#### Rotation function, panel measurement and angle correction

With the 90° rotation unit, panels can be stored in all directions. In each stacking process the panels are measured and weighed. High process reliability through continuous measuring and recording of the weight of the panels. Orientation of the angular position while driving. 180° rotation unit optional.









The panel storage system CSF Professional combines functionality, performance and design in one machine. With hundreds of systems installed worldwide barbaric has become a specialist in warehouse logistics and vacuum technology.

For each company in the crafts, supplying or industry, we offer suitable storage solutions.









Sorted, grouped and

Flexible design options for stacking in the

warehouse. Sorted or chaotic stacks can

A change in the stack due to new materials

also be mixed within a warehouse.

or groups is possible at any time.

chaotic stacking

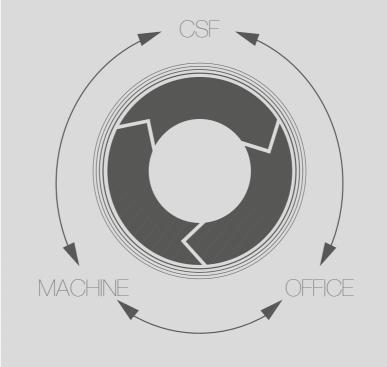
# The suction traverse - functional yet compact

Functionality even in little details.

Modern, decentralized control modules and valve terminals create an easy and compact structure.

Energy-saving ejectors ensure economical and quiet operation.

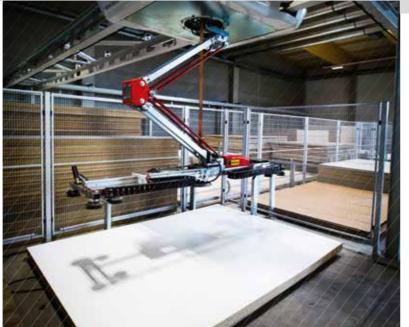
- > utomatic length adjustment
- > panel measurement
- > weight measurement
- > MDF- and thin panel package
- > maintenance-free
- > power saving function



# Interfaces for established manufacturers

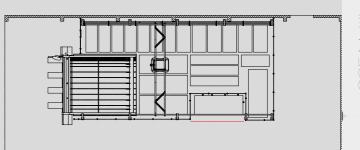
The basis for an efficient production is the connection of the storage system with the manufacturing machine.

- > open data interfaces
- > existing hard- and software interfaces for almost all machine manufacturers
- > automatic monitoring of stock quantities
- either storage system controls saw or saw controls storage system
- > by default a re-integration of cutting rests into the storage is possible
- > any number of Office stations
- > Innovative Web surface **\omegarbaric**.live
- > status message by E-Mail
- > customized versions available



## Individual design for each customer

Each Barbaric panel storage system is adapted to the specific customer requirements. We develop the ideal concept in close cooperation with our customers. This results in ergonomic solutions for internal logistics.



### Control and operation

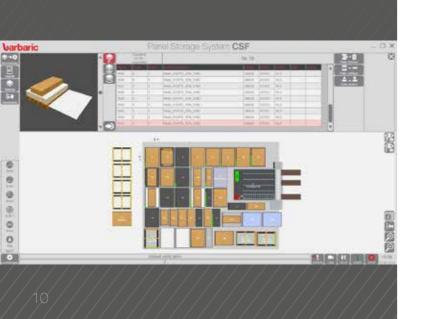
Various storage configurations can be realized with our standard software.

- > integrated service tool for remote maintenance
- > simple, touch-enabled surface
- > Windows-based application
- > extensive error analysis, with optional camera tool
- integrated warehouse management and inventory management
- > XY-alignment functions for the alignment of parts on machine stoppers



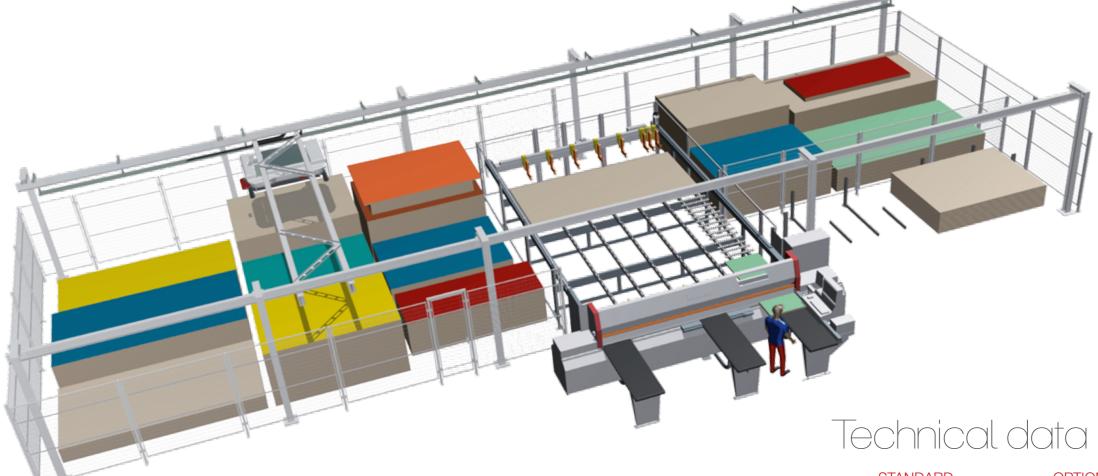
#### Optional Label Printing System LPS

For production processes with a continuous level of automation, we can place production labels on the panels right before cutting. This facilitates the identification of items and the communication with the individual production machines.



Panel storage system

# Professional



#### **STANDARD**

#### **OPTIONAL**

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#### Function and operation

Highly efficient production facilities require modern

- > SQL database



#### Your benefits at a glance

- > higher capacity utilization of your manufacturing
- > highest flexibility in production processes
- re-integration of rest pieces
- > integrated warehouse management

System size		
» Crane runway	up to 50 m	longer on request
» Crane bridge	up to 13 m	up to 16,5 m
Movement speeds		
» X-axis	130 m/min	
» Y-axis	110 m/min	
» Z-axis	40 m/min	
Panel sizes		
» Length	2000 – 4200 mm*	max. 5600 mm
» Width	600 – 2100 mm	others on request
» Thickness	from 6 mm	from 3 mm
» Panel weight	200 kg	up to 300 kg
Rest sizes (for re-integration)		
» Length	2000 – 4200 mm*	1200 - 4200 mm
» Width	600 – 2100 mm	
Stacking		
» Stack height	1800 mm	up to 2500 mm
» Stack distance	150 mm	100 mm







With the panel storage system CSF Industrial we can offer an individual solution for your special demands. There are no constraints on your wishes.

Renowned industrial enterprises count on the stability and reliability of Barbaric systems.



The equipment integrated within the manipulator provides a highly reliable system.

Maintenancefree components throughout the system ensure high system availability.



Performance for

functionality and performance.

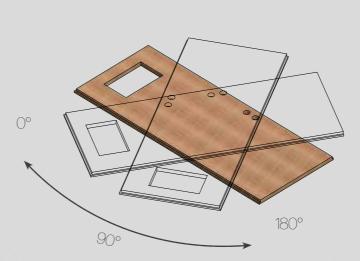
> cycle times below 1 minute

conveyor belts

industrial producers

Our panel storage system CSF Industrial meets the high industrial demands for

> movement speeds up to 150 m/min > crane bridge lengths up to 25 m > integration of chain conveyors or



# up to 180°

With the 180° rotation device, parts can be aligned on both sides. A special angle correction of +/- 5° guarantees straight and correct stacks. The XY-alignment functions ensure the alignment of parts on machine stops. This allows doors to match the orientation and the veneer or they can be outsourced to another machine for processing.





#### Manipulator



# Suction traverse - equipped with all the functions you need

Depending on the application, the suction traverse is adapted to specific customer requirements and materials. Optional load increase and increase of stroke are realized.

- > standard suction traverse
- > vacuum grippers
- > special suction traverse
- > separation unit
- > ionization nozzle for the plastic panels
- > handling for wooden boards

#### Safety system

Our safety facilities comply with all local standards. In conjunction with other machinery, special safety concepts are also realized in agreement with the customer.

- > centralized safety PLC with online access
- possibility of integration of various machines





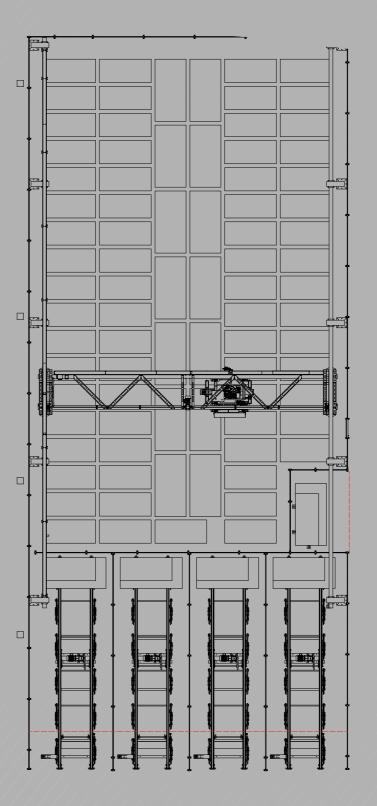
#### Software

Connection to customer databases and ERP systems are implemented in the house. Integration options of

- > various databases
- > ERP systems
- > RFID systems
- > CAM systems
- > optimization systems



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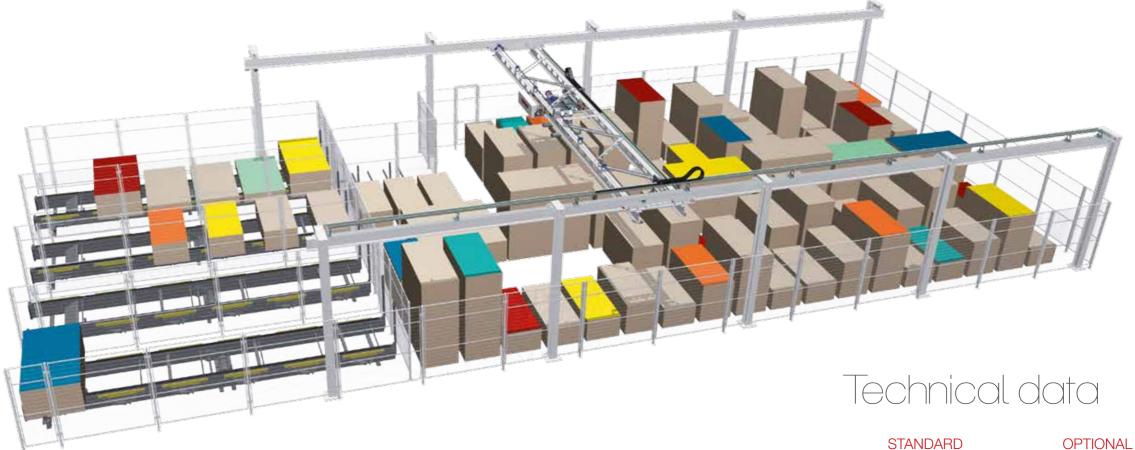


Individual customer solution implemented at Bayer Built Woodworks Inc., USA

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Panel storage system





System size

# Functions and operation

- > all basic functionalities of the panel storage system CSF integrated
- > adjustment to existing software solutions
- > optimized utilization of storage space
- > transparency with regards to stock quantities
- > simple inventory proceedure, current stock levels at all times
- > fully automated panel handling
- > highly flexible system
- > cycle times below 1 minute possible
- > special designs according to your requirements

# Your benefits at a glance

- > extremely large storage areas possible (up to 25 m x 70 m)
- > optimized material flow
- > gentle manipulation, no damaging of the panels during transport
- > optimization of space
- > reduced personnel expenses
- simplification and alleviation of production processes
- > high transportation services
- > highest machine availability
- > highest flexibility in production processes
- > significant increase in productivity

Gyotom 6i20		
» Crane runway	up to 70 m	
» Crane bridge	up to 25 m	
Movement speeds		
» X-axis	150 m/min	
» Y-axis	150 m/min	
» Z-axis	60 m/min	
Panel sizes		
» Length	2000 – 4200 mm*	max. 5600 mm
» Width	600 – 2100 mm	others on request
» Thickness	from 6 mm	others on request
» Panel weight	200 kg	others on request
Panel rest sizes (for re-integration)		
» Length	2000 – 4200 mm*	1200 - 4200 mm
» Width	600 – 2100 mm	
Stacking		
» Stack height	1800 mm	up to 2500 mm
» Stack distances	150 mm	up to100 mm

<sup>\*</sup> Panels up to 5600 mm long can be lifted and transported eccentrically.



3







# SF Multilevel

Multilevel storage systems offer the maximum efficiency for customers with high production halls. With the CSF Multilevel Barbaric offers the possibility to store boards on the upper floor and to feed the processing machines at ground level.

For particularly high performance and storage capacity even multiple storage manipulators can be implemented one above the other. An optimal solution for high-performance industrial plants.



## A solution out of one hand

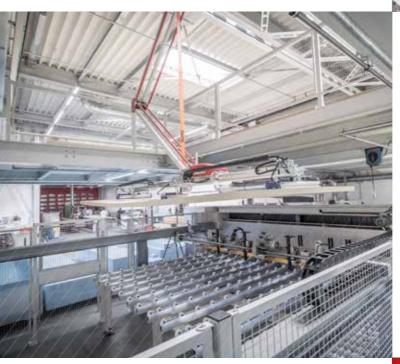
We are proud to offer a complete handling solution:

- > Steel construction
- > Mezzanine Floor oden
- > Maintenance Stairs
- > Automatic Sliding Doors
- > Camera system (multiple angles)

# A highlight — our double-scissor load arm

The construction in a double-scissor configuration offers many advantages:

- > Lifting height of 4200 mm
- > Optimal storage efficiency through storage in upper level
- > Flexibility in space configuration
- > Adequate height of lower level with 3200 mm





#### Machine feeding

No matter which kind of processing machine – any machining center can be placed on the ground floor. With a comfortable ground level height of 3200 mm the lower floor has a sufficient height for machine operation and even fork lift operation. The steel construction can also be used to mount dust extraction pipes or stationary installations.

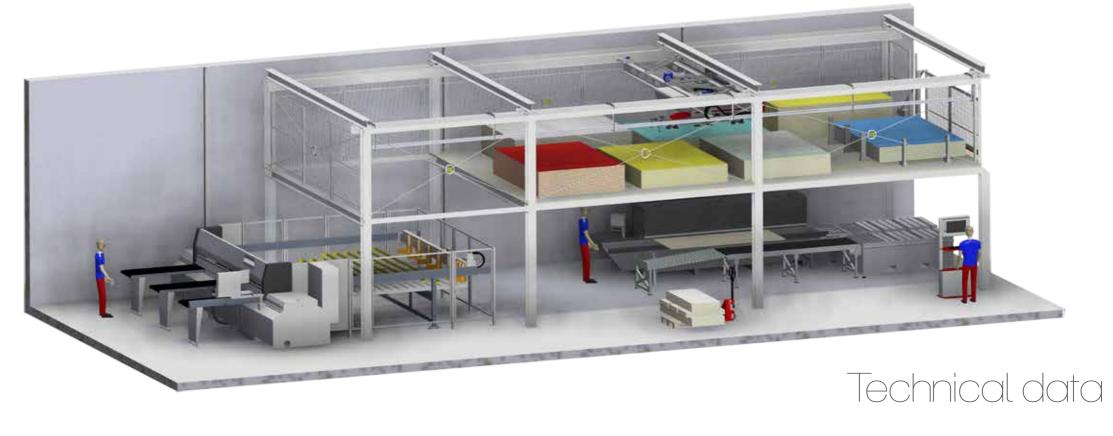


Ideas that move

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Panel storage system

# Multilevel



#### Functions and operation

- > Sliding doors at the store-in place for maximum

- > adjustment to existing software solutions
- > optimized utilization of storage space

#### Your benefits at a glance

ny datamata panamana
ghly flexible system
cle times below 1 minute possible

	STANDARD	OPTIONAL
System size		
» Crane runway	up to 70 m	
» Crane bridge	up to 15 m	
Movement speeds		
» X-axis	150 m/min	
» Y-axis	150 m/min	
» Z-axis	60 m/min	
Panel sizes		
» Length	2000 – 4200 mm*	max. 5600 mm
» Width	600 – 2100 mm	others on request
» Thickness	from 6 mm	from 3 mm
» Panel weight	200 kg	300 kg
Panel rest sizes (for re-integration)		
» Length	2000 – 4200 mm*	1200 - 4200 mm
» Width	600 – 2100 mm	
Stacking		
» Stack height	1200 mm	others on request
» Stack distances	150 mm	up to100 mm



#### Industrial handling solutions - individually crafted for our customers - are just as much a specialty of Barbaric as the standard machines. We are proud to offer highly-customized machines that fit the customer's needs perfectly.

Later in the project, recurrent meetings and project arrangements are the key to success. Together, the project goals are defined and discussed again and again. We see communication as one of the most important skills of our team.

After the customer acceptance at our factory, the assembly team takes over the installation directly at the customer. Our installation technicians as well as trained staff of industry partners convince with a professional and hassle-free assembly. During the commissioning phase, control engineers from Barbaric impress with a quick startup phase and subsequent plant optimization. The final step is the training of the operating and maintenance personnel

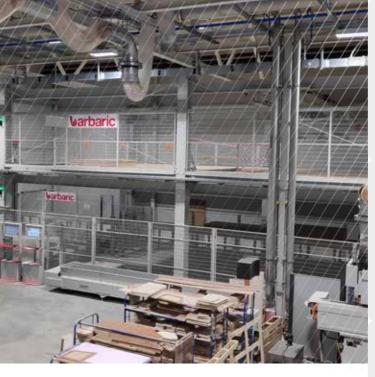
#### The project starts with an idea

As one of the key points of a successful collaboration, we see the close partnership with the customer. During the concept and quotation phase, competent support is guaranteed by our sales and project team. Especially in this phase, the course is set for the future investment.

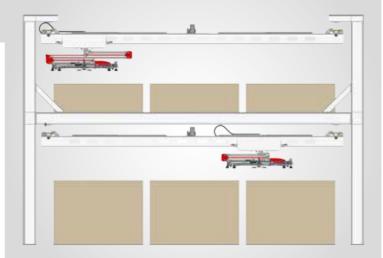
and of course the successful handover to the customer.

#### Our services at a glance

- > Initial planning and concept creation
- > Analysis of customer data
- > Simulation with mathematical calculation models
- > Modern 3D Construction
- > Design Reviews with the customer
- > Multiple project meetings
- > Assembly and startup
- > Acceptance and performance testing
- > Service and Maintenance concept



#### Second storage manipulator at lower level possible.



CSF Multilevel storage system with 2 manipulators.

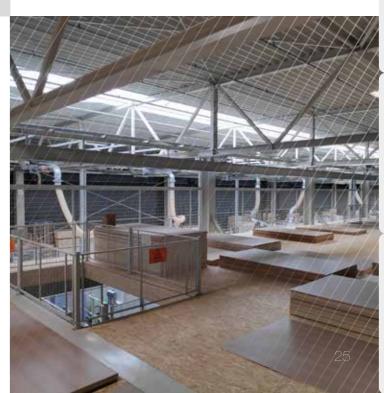
#### Example of a customer project at a reputable RV producer

- > Planning and concept creation
- > Industrial CSF Multilevel Storage system with 2 manipulators
- > Storage foot print of 70 m x 10m
- > 1800 mm stacking height on ground level
- > 800 mm stacking height on upper level
- > Over 120 stacking positions (2500 x 1250 mm)
- > Three-shift-operation
- > Integration of conveyor technology
- > Label printing stations with dual-printer-heads for simultaneously labelling multiple label sizes
- > Integration of garbage conveyor system
- > Communication to the ERP system of the customer
- > Backup- and failure plans

#### Software solutions

Especially in the field of industrial handling solutions we emphasize a high level of communication between production machines:

- > Highly customized handling software
- > Communication between multiple production machines
- > Multiple User control terminals
- > Control terminals in production as well as office
- > Special software for controlling production jobs, communicating with customer ERP solution, etc.
- > Backup solutions





From the idea of the customer to constructive

implementation, from production to assembly

and finally the customer handover - you will be

accompanied by an experienced team of

technicians. The machines that we offer can be

as complex as the customer wishes - we set no

limit to your imagination.





### Buffer storage

# -PBX

### Buffering of parts in furniture manufacturing

The buffer storage PBX assures a constant flow of parts in the production. In order to cushion different processing times of individual machines, the interim storage of parts is indispensable for a modern production line.

#### Designs

- > One-sided version with a single XYZ manipulator
- > Two-sided design with two XYZ manipulators
- > Versions with various conveyor systems in the surrounding area of the buffer

#### Technical Data

- > approx. 120 m² storage area in a small space
- > cycle times of up to 6 parts/min.
- > max. panel size 2,8 x 1,95 cm
- > max. panel thickness 25 mm, optional: 40 mm
- > individual designs possible
- > Each drawer is individually driven, enabling overlapping opening and closing processes

#### Advantages at a glance

- > Flexibility of production
- Individual and instantaneous access to all parts at all times
- > Increase of productivity
- > Optimization of personnel costs
- > Continuous material flow at the edge bander
- > Grouping of parts for individual orders
- Cushioning of different processing times on individual machines
- > Unbundling of production
- > Safety buffer in case of machine failures
- > Parts tracking and visualization





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deas that move





#### Door manipulator



With the door manipulator TMP company Barbaric sets new standards in terms of optimized production processes in the door manufacturing.

The system has a very slim and compact design that allows for a very quick manipulation of boards and extremely low cycle times.

Also, roller conveyors or barcode scanning stations can be integrated into the automatic system.

The application area is for example the automatic feeding of a CNC, subsequent stacking of machined doors or other stacking prpcesses.

The perfect solution for relieving your employees and increase of productivity.



#### Techncal data

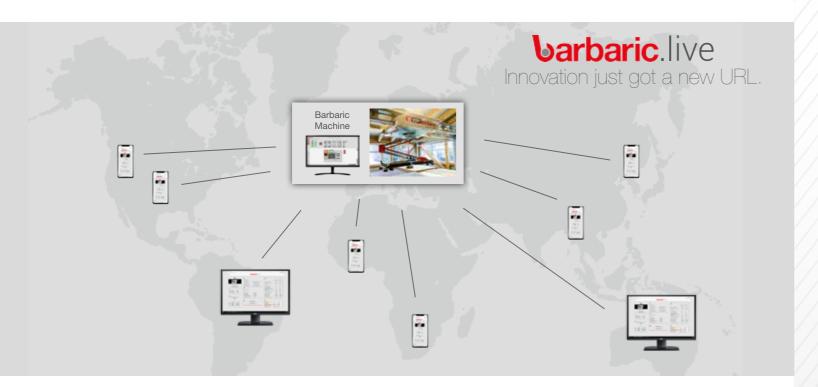
- > up to 6 cycles per minute
- > use of grippers structured door surfaces
- > vacuum generation by ejectors
- > up to 100 kg load capacity
- > stack height up to 1800 mm
- > low constructional height





# **Varbaric** Innovations

The greatest advancements at a glance.







#### **barbaric**.live

Access to your machine immediately and world-wide.

- > Real-time analysis of machine data
- > Detailed machine infos
- > Live-stream of the machine overview
- > Error reports and analysis
- > Maintenance and service info



### **barbaric** Client 3.0

The current version not only introduces new and innovative features but also comes with a completely new design.

### Panel and parts handling for production and industry

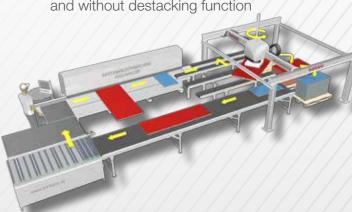






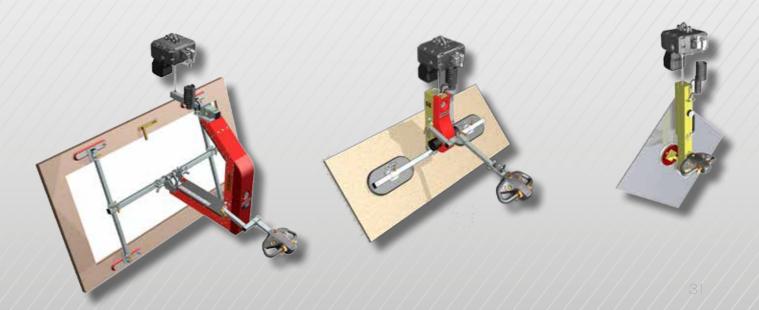
#### Return systems RTS

Return systems for edge banding machines with and without destacking function



#### Manual handling solutions

Vacuum lifters for manual handling manipulation of flat, commercial wood panels, door panels or special lifting devices for applications in the wood processing industry.



#### Ideas that move.



## **barbaric**

#### Headquarters

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