

# PROFILE PROCESSING TECHNOLOGY

**BAZ 1000**  
Cutting and Machining Centre

BASIC  
MEDIUM  
TANDEM

**SCHIRMER**



# MODULAR PRODUCTION ARCHITECTURE

Companies grow. Demands on production change.

The SCHIRMER BAZ 1000 has a modular design.

Ready to achieve everything that professional profile machining demands today – and also tomorrow.

## Modular is better.

We are living in exciting times where small businesses grow dynamically and large corporations must be more flexible than ever before. The challenge: Profile machining on a new high-end level.

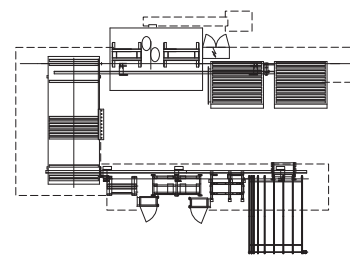
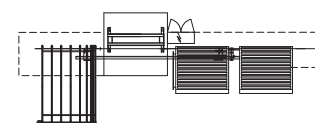
High-end means: Machine produces more units and different profile types in quick succession when required, absorb order peaks, realise specific requirements professionally and maintain a high level of flexibility in all areas.

Entire processing modules can be newly incorporated and integrated even after years. That means sustainability, that means realising success with industry 4.0.

**It is possible: With SCHIRMER modular plus. Consulting and Engineering with vision.**

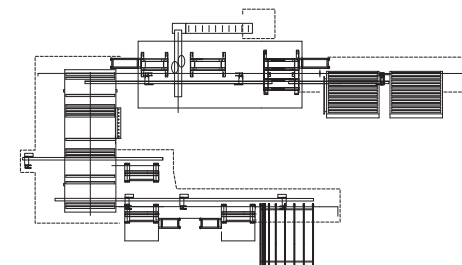
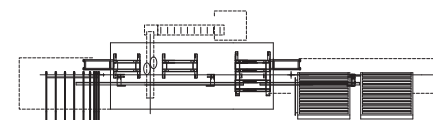
## BASIC LINE

Dimensioned for up to 160 window units per shift. Continuous operation with two transport grippers. Remarkably compact design. The advantages: short machining process, customer-specific design of G-modules, individual configuration of the sawing technology. All technologies for reinforcement insertion, milling, drilling, automatic keeper Insertion, automatic offloading, etc. are available.



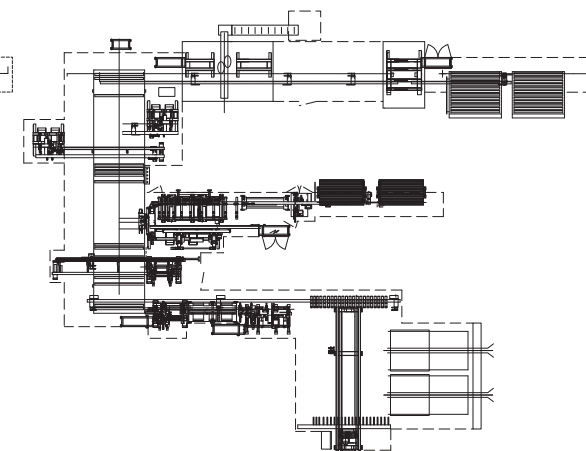
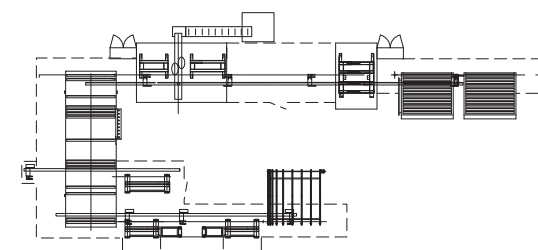
## MEDIUM LINE

Dimensioned for up to 200 window units per shift. Continuous operation with three transport grippers. A bar profile can be fed into the machine while processing is still in progress. The advantages: high performance capacity with maximum precision, customer-specific design of G-modules, individual selection of the sawing technology. All technologies for reinforcement insertion, milling, drilling, automatic keeper Insertion, automatic offloading, etc. are available.



## TANDEM LINE

Dimensioned for up to 300 window units per shift. Operation with four transport grippers and a delivery section. Two bar profiles are machined simultaneously and independently. The advantages: high performance capacity, maximum precision, customer-specific design of G-modules, individual selection of the sawing technology. All technologies for reinforcement insertion, milling, drilling, automatic keeper Insertion, automatic offloading, etc. are available.



## Built-in investment safety.

SCHIRMER has actively driven the development of modular cutting and machining centres for over 30 years now. Our technical sales department has the know-how and the experience for system concepts that can be flexibly expanded modularly at any time. Well-positioned today with all options in the future: The BAZ 1000 provides maximum modularity for increases in capacity and adaptations to new profile systems.

## BAZ 1000: It contains all our expertise. Modular plus "made by Schirmer".

Profiles are positioned carefully, precisely and fast from module to module by high-dynamic transport grippers using SCHIRMER linear drives. Control in real time using EtherCAT and PLC. Operated by using a touchscreen.



# INNOVATIVE TECHNOLOGY IN THE SMALLEST OF SPACES

## Orbit

The Orbit module revolves around the profile to be processed. Thanks to simultaneous linear and rotary movements along 8 axes, the drilling and milling tools take the shortest paths around the bar profile. Fast tool positioning and complex machining from all angles!

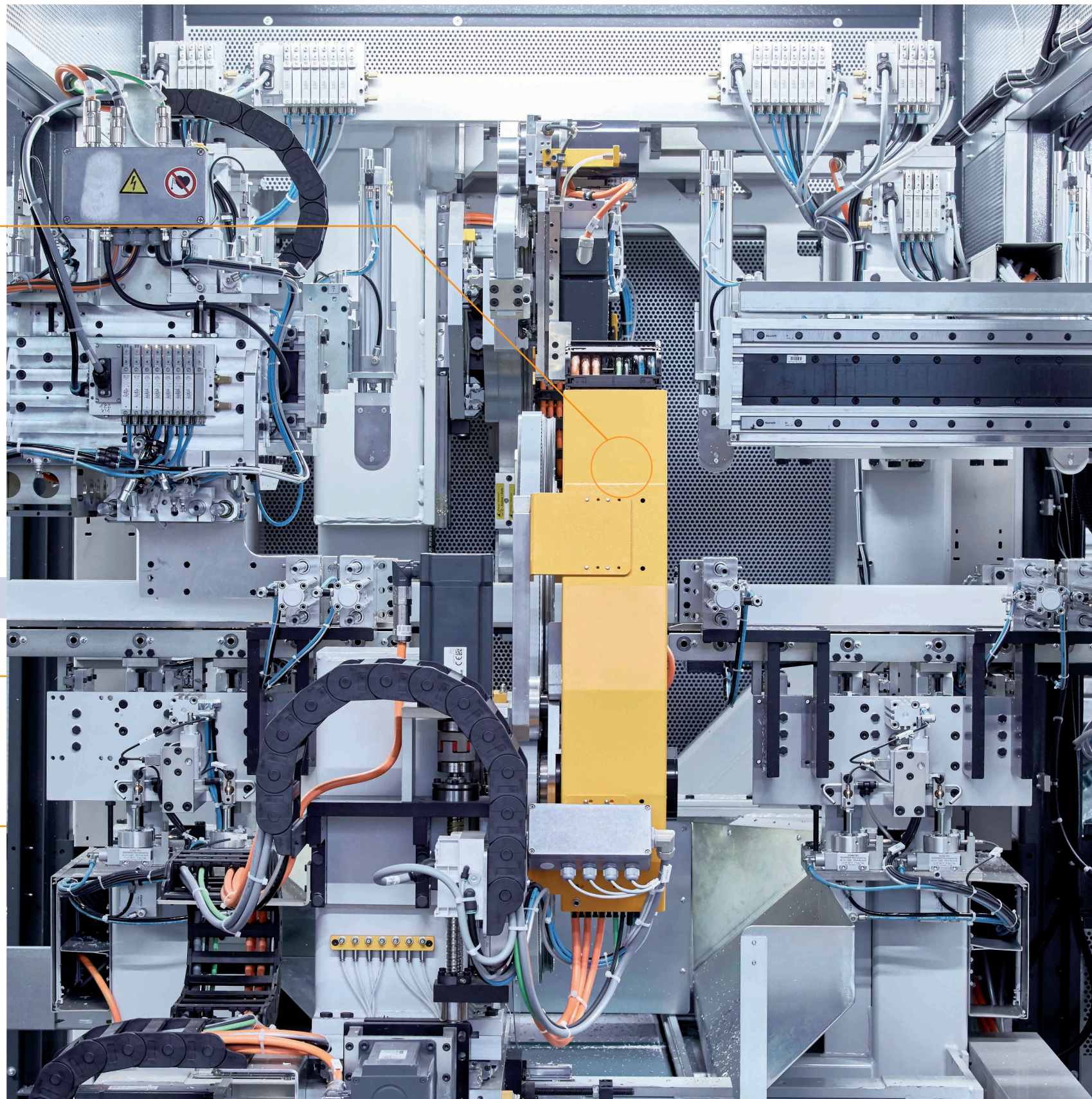
## Compact

The modular concept of the BAZ 1000 permits a compact construction design according to customer specifications. High efficiency on a small production area!

## Flexibility

Profile neutrality without setup times:

- automatically adjustable supports and transport grippers
- profile-specific saw feed and speed
- flexible processing of remaining length
- creating new machining processes and profiles easily
- automatic positioning and screw-fastening of various keepers and other mounting parts



## Forward-looking

Innovation at the highest level. Fast adaptations to changing market demands. SCHIRMER is using PC control by Beckhoff Automation: PC-based control technology. Universal, fast, efficient – short control cycle times and highly precise activation of all servo axes. For maximum machine availability and production reliability.

## User-friendly

Machine operators have a lot of responsibility. Machine status? Temperature? Maintenance intervals? Tool change? A well-engineered Human Machine Interface (HMI) makes the difference: Always keep track of everything; always have everything under control and uncomplicated data entry using a touchscreen. Individual analysis of the current production and machine data.

## Service

Our service team supports you on site during commissioning, maintenance, troubleshooting and – should it become necessary – we naturally also perform repairs and retrofitting. We train your employees, offer professional service hotline, supply wear and spare parts.



## SCHIRMER ORBIT

Speed, reliability, SCHIRMER precision:

The orbit is a ring module and is rotatable around 360°. It revolves around the profile for fast and careful machining.

Thanks to simultaneous linear and rotary movements along 8 axes, the drilling and milling tools take the shortest paths around the bar profile. Fast tool positioning and complex machining from all angles, maximum flexibility: Only SCHIRMER can be that innovative.

**The advantages:**

- optimised motion sequences
- complex machining
- fast, precise, powerful

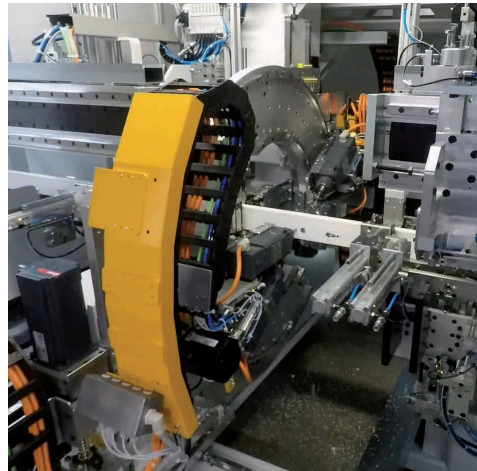
Orbit

# IDEAS INNOVATIONS ENTHUSIASM



#### Orbit module

Thanks to simultaneous linear and rotary movements along 8 axes, the drilling and milling tools take the shortest paths around the bar profile. Fast tool positioning and complex machining from all angles for maximum flexibility

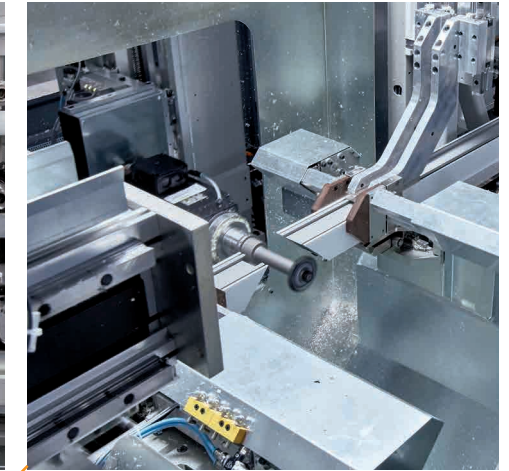
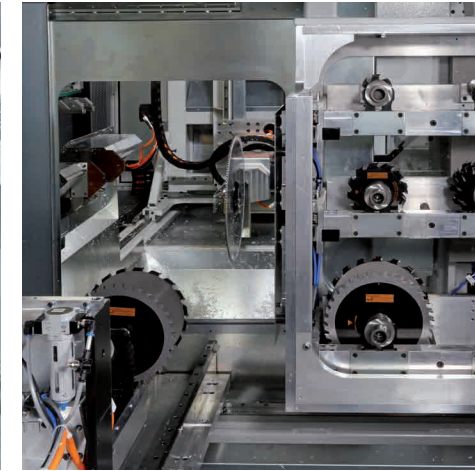


#### Saw module

- FLEX tilting saw with up to 4 servo axes with a maximum angle setting between 30° and 150°
- ULTRA SPEED VU saw for mitre cuts of 45° for cutting cycles of approx. 7 seconds per profile
- Steel saw module for 90° cuts



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#### Milling module

Maximum precision for top high precision fit and sealing quality. The milling module with automatic tool changer for:

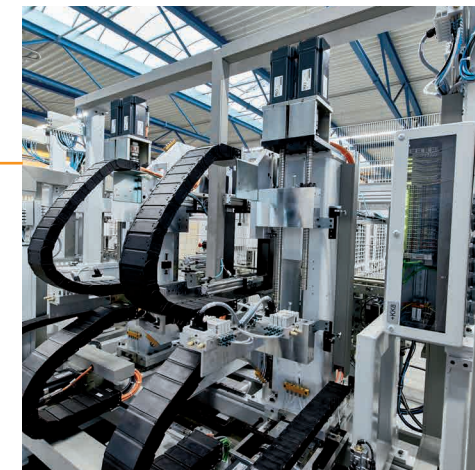
- Seals, gaskets, beads/grooves
- mechanic transom joints
- window sills and low thresholds
- frontal processing of add on profiles
- HFL-timber optic milling technology



#### Positioning and clamping technology

- safe
- dynamic
- gentle on surfaces
- flexible

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MEDIUM  
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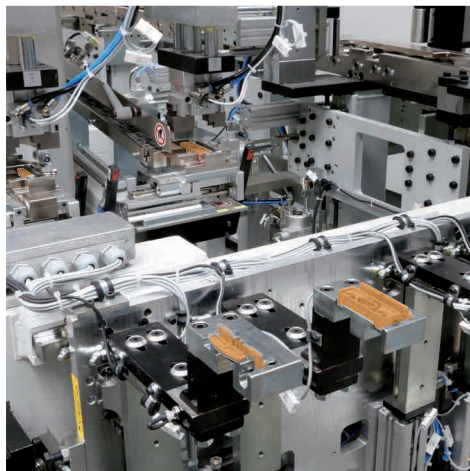
#### NC drilling module

Compactly incorporated servomotors! Whether it's dowel holes, transom joints, corner and stay bearing, locking handle or marking holes that are to be drilled: Everything is possible. For good quality.

# AUTOMATION PRECISION



**Labelling module for identification**  
Automatic application of labels or laser marking. Codify process-internal data on profiles and facilitate the assignment of the profile sections. Customer-specific solutions, according to requirements.



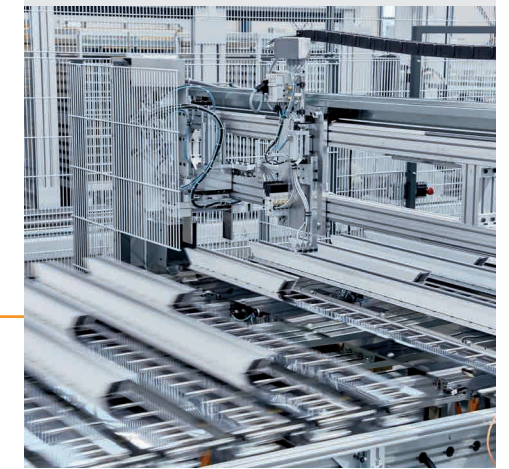
**Locking part module**  
Exact feed and delivery of locking parts. Fast mounting and precise screw-fastening in one work process.

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**Cross conveyor transport module with buffer function**

Transport system for the smooth, accurate, process-related feed of various profile types. All parts always at the right place at the right time. The cross conveyor transport module permits the flexible configuration of the different modules. Machining can be performed without interrupting the production process.



**Screw-fastening module using servomotors**

Exact positioning and screw-fastening of steel reinforcements. High flexibility and performance thanks to the simultaneous use of several fastening modules.



**Operating panel**

Process-reliable display of production and machine data. Easy to operate thanks to intuitive menu navigation and the visual representation of machining processes.



**Automatic profile stacking**  
Depending on the plant configuration, the finished profiles can be sorted into up to 4 carts meaning that material use is optimised and highly efficient. There are no standstill times for the entire plant while the carts are exchanged.



# AUTOMATION PRECISION



# SCHIRMER

Profile Processing Technology



PVC  
Aluminium  
Steel  
Composites  
Wood-Aluminium

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