

SBZ 625/26

Cutting and machining
centers



Automated CNC through-bar machining line consisting of specific units for milling, drilling, V-notch, cutting, contouring and fastening reinforcements. The line is designed for high capacity production.

Modular design for flexible customisation and enormous productivity

The SBZ 625/26, which can be equipped with up to 62 axes, allows companies the greatest possible freedom when it comes to individual customer requirements. The machining and throughfeed centre consists of two independent lines made up of up to eleven sub-modules. Further modules are conceivable in the future. The SBZ 625/26 is already replacing the individual machines in PVC processing, enabling the complete processing of window and front door profiles.

Parallel processing for accelerated production

Less labour, faster results: Several work steps can be carried out simultaneously on the SBZ 625/26. This is made possible by the decoupling of processing on the bar: the processing and sawing stations can be operated separately; milling or drilling is carried out at the front of the machine, while sawing is carried out at the rear. The possible height of the profiles is 230 mm, the maximum part length is 4,000 mm.

High degree of automation for higher output with fewer personnel

The software also provides an efficiency boost when using the SBZ 625/26. Thanks to eluCloud, the machine can be easily integrated into the customer's existing production. The SBZ 625/26 becomes part of the network and is also ready for Industry 4.0 applications and processes.

The user interfaces of the SBZ 625/26 have been consistently revised.

The display is now web-based and has a responsive design. This means that basically any end device can be used. Transparent, understandable, intuitive to use: User-friendliness was the top priority during development. Several monitors that provide the operator with visual feedback ensure a complete overview during production.



Integrated user interface

Thanks to its clear 21" TFT display, Windows operating system and touchscreen, the SBZ 625/26 profile machining center is easy and intuitive to operate. Detailed and comprehensible graphic displays improve communication between man and machine.



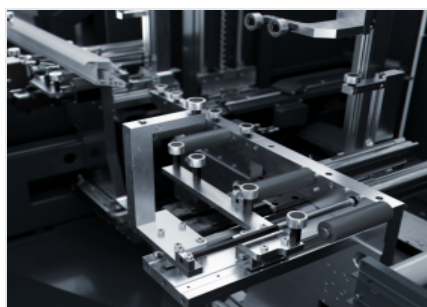
Loading table

The loading magazine of the SBZ 625/26 profile machining center can be loaded with up to 10 profiles with a length of 1,000 - 6,500 mm, depending on the profile cross-section. The machine is equipped with 8 conveyor belts as standard (can be extended as an option). The ergonomic loading height of 910 mm makes it easy for the operator to load profiles.



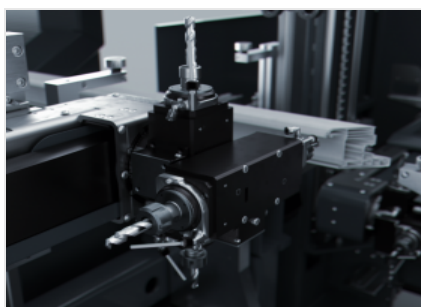
Parallel gripper

The external gripper system uses a linear servo drive to bring even complex profile cross-sections into the exact processing position in the shortest possible time. The parallel external gripper also has a programmable digital setting of the clamping jaw pressure.



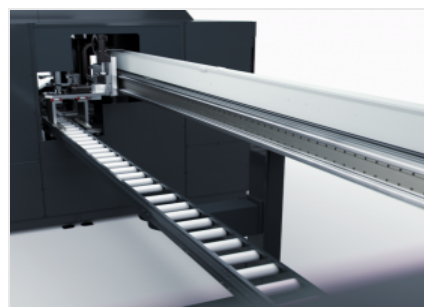
Profile clamping

Equipped with two clamping towers in the infeed and outfeed, each with a 200 mm stroke for profile support, the SBZ 625/26 bar processing center relies on innovative clamping technology. A large number of horizontal and vertical clamps guarantee optimum profile clamping at all times, from infeed to outfeed.



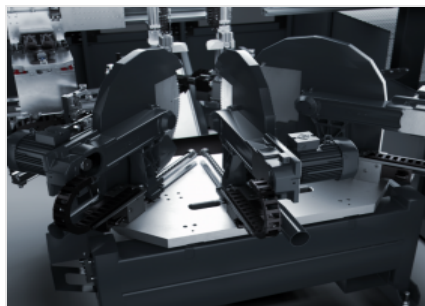
Pvc routing unit

Parallel processing rethought: A processing tower at the front and rear, each movable in 4 axes, enables simultaneous processing of the profile. With up to 8 tools on 4 air-cooled milling spindles and a rotation angle of 270°, the SBZ 625/26 profile machining center is ideally equipped for all relevant PVC processing.



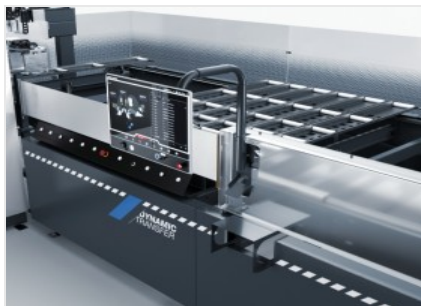
Intermediate buffer

The combination of an additional parallel gripper and a buffer section of 7,000 mm enables a decoupled machining process. While the drilling and milling is being carried out in the processing station, the intermediate buffer allows the cutting to be carried out in parallel. Optionally also available with a V-notch.



Vertical cutting unit

The linear-guided sawing unit consists of 3 saws with a saw blade diameter of 550 mm (optionally 650 mm) and a drive power of 2.2 kW. Cutting angles of 45°, 90° and 135° are possible. The panel clamps hold the workpiece absolutely reliably and ensure trouble-free profile transport, while the saw's fixed cutting angles enable high cutting speeds to be achieved.



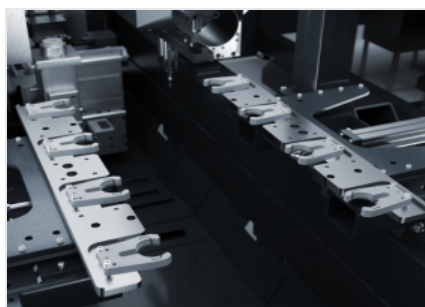
Dynamic transfer

The dynamic transfer with a length of up to 10 meters enables an optimized, constant material supply between the two modules without waiting times. The reinforcement steel is fed manually to up to 6 cassettes simultaneously by means of a chain drive. Integrated steel recognition as standard and a 21" screen for profile/order data ensure a smooth process.



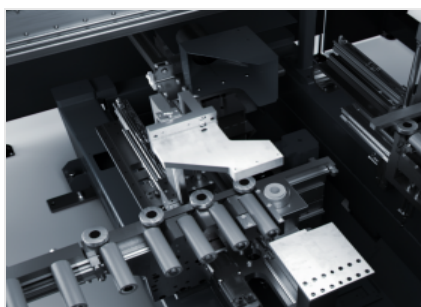
Fastening station

The steel screwing station for fastening the reinforcing steel is equipped with up to 8 torquecontrolled screwing units and enables screwing heights of 20-150 mm. Screw spacings of 150-450 mm are possible in the X-axis.



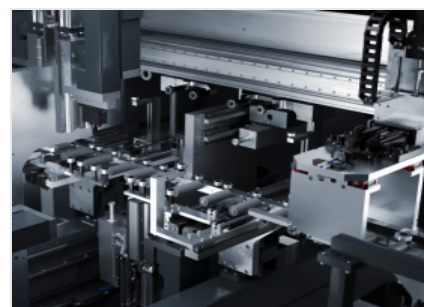
Milling & drilling

The transom milling station was designed for end machining and has an automatic tool changer with up to 8 tools and a 5 kW spindle for a maximum tool diameter of 200 mm.



Seamless contouring unit (option)

With the help of 4 CNC-controlled axes, the module with 2 units enables contour preparation for the seamless process.



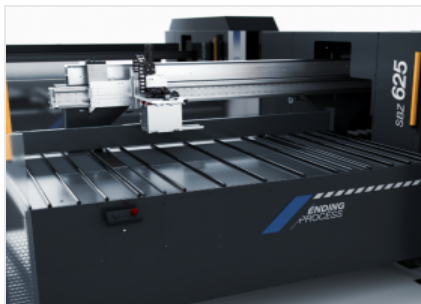
Milling unit for pvc and steel

The machine unit for processing PVC and steel is equipped with up to 16 air-cooled 1.2 kW spindles and a handle hold drilling unit (1.6 kW).



Mounting preparation

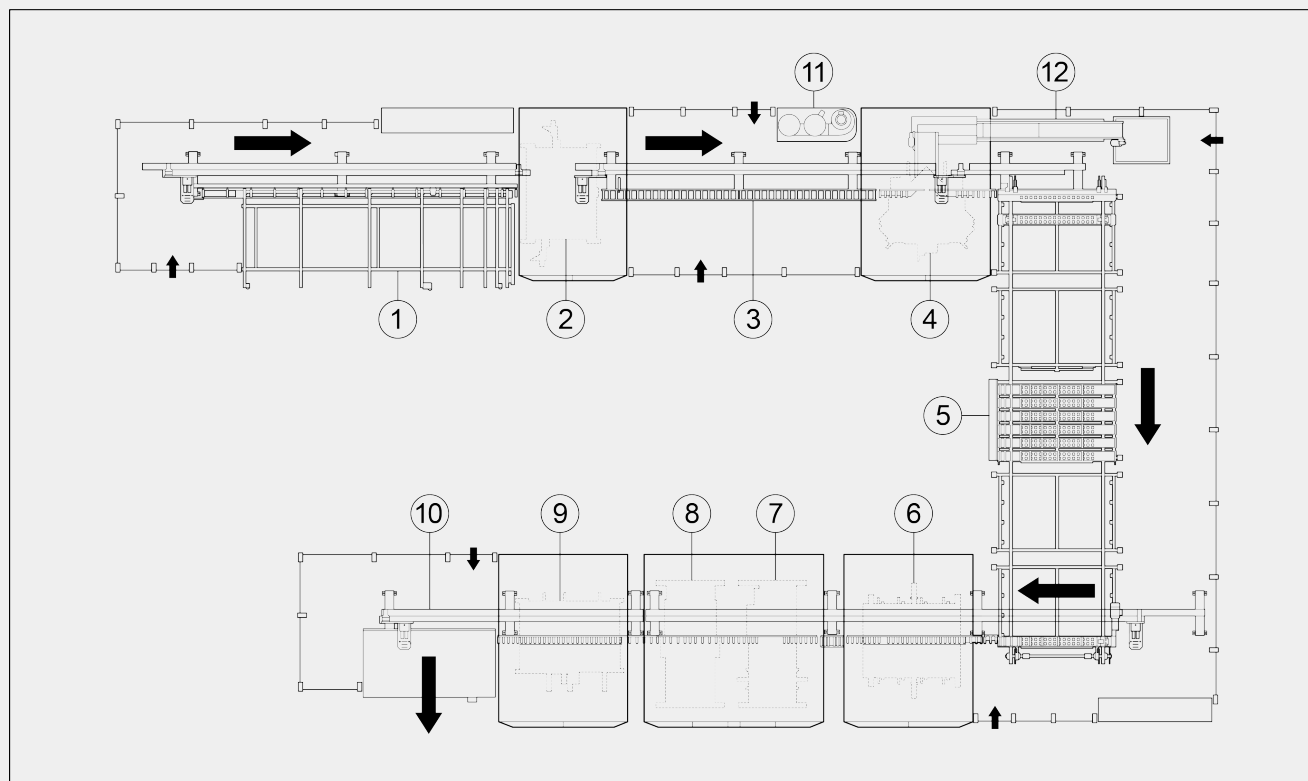
The station for mounting holes is equipped with up to 3 drilling units for PVC and steel with powerful 1.6 kW motors.



Unloading table

The unloading table with pneumatic pusher for workpieces up to 4,000 mm can be positioned inside or outside the line.

LAYOUT



- 1 - Pusher and infeed roller
- 2 - Milling units
- 3 - Intermediate buffer
- 4 - Vertical cutting unit
- 5 - Dynamic transfer
- 6 - Fastening unit
- 7 - Contour unit for Seamless
- 8 - Drilling unit
- 9 - Milling unit
- 10 - Unloading unit
- 11 - Electrical preparation for external extraction
- 12 - Climbing conveyor (optional)

GENERAL SPECIFICATIONS

NC axis no.	40
Milling unit	●
Cutting unit	●
Machine dimensions (m)	23,5 x 15
Linear axis with parallel gripper	●
Electro spindles adjustable with NC	●
Industrial cabinet and panel PC	●

**GENERAL SPECIFICATIONS**

Human Machine Interface graphic software	●
Connection to ERP system	●
Light grid	●
Metal mesh enclosure guard	●
Working pressure (bar)	6 ÷ 8
Air consupntion (l/min)	1.100
Installed power (kW)	45

WORKING CAPACITY

Max. loadable length (mm)	6.500
Min. loadable length (mm)	1.000
Max. length that can be machined on a single workpiece (mm)	4.000
Min. profile length (mm) (45° for 90 mm profile width)	300
Min. profile length (mm) (45° for 120 mm profile width)	360

Included ● Available ○