

08/12/2025

SBZ**122/75**

Machining centres



- Designed for economical and efficient machining of aluminium, PVC and thin-walled steel profiles
- All operations, such as routing, drilling and tapping, are performed while the profile bar is stationary to protect the profile surfaces
- A-axis continuously adjustable from -120° to +120°
- C-axis continuously adjustable from -220° to +220°
- All five axes can move simultaneously with RTCP (Rotation Tool Centrepoint)
- The additional C-axis makes it possible to machine the face of profiles from the left and right
- Clamp positioning autonomous
- Better machining results thanks to the intelligent control technology
- · Fast positioning of the machining unit with up to 120 m/min thanks to dynamic servo drives
- Tapping without compensation chuck
- The 2-axis add-on unit with the A-axis and C-axis can also accommodate a saw blade with a diameter of 180 mm
- Automatic clamp recognition and clamp positioning
- Ergonomic operation thanks to the advanced inclined bed
- Automatic tool changer with twelve tool tray positions (without tools)
- State-of-the-art 5-axis controller
- The absolute rotary encoder system means no main axis homing is required
- Automatic clamp recognition and positioning prevents collisions
- Power torque routing motor with enclosed speed control for short spindle start-up and braking times.
- Certified, drive-integrated safety functions
- Low power consumption thanks to the intelligent control technology
- DC link coupling in the axis drives for greater energy efficiency
- Uninterruptible power supply (UPS)
- Windows operating system
- 18.5" panel PC, i5 processor, USB ports and network connection
- Simple, stress-free program entry with eluCam on the operating panel, even during operation
- Remote online maintenance

Machine configuration

elumatec AG Pinacher Straße, 61 75417 Mühlacker Germany Tel +49 7041-14-184 sales@elumatec.com

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- Water-cooled 7 kW, S1 routing spindle
- Autonomous clamp positioning
- Automatic clamp recognition
- Enclosure to protect the operator
- Four horizontal, pneumatic material clamping units
- A material stop on the left
- Tool holder HSK-F63
- Swarf trays for swarf removal
- Minimum-volume lubrication system
- High performance cutting fluid
- Hand-held operator terminal
- Depth gauge

Options

- Tools
- Tool holders
- Saw blade, 180 mm
- Length measurement on both sides
- Additional stop for overlength machining (left)
- Material reference stop (right) for positioning workpieces with overlength machining
- Green Line cooling unit for the control cabinet with reduced energy consumption
- Barcode scanner
- Protective enclosure can optionally completely enclose the machine on all sides
- Four clamps as standard. Can be equipped with up to eight clamps
- Double clamping and other accessories on request
- 21.6" panel PC, i7 processor
- Note holder
- Sound insulation hood
- Clamping unit optimised to prevent collisions



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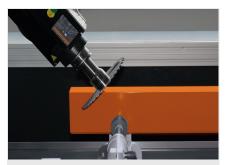
A-axis angle adjustment

Continuously adjustable angle setting from - 120° to $+120^{\circ}$ C-axis



C-axis

Continuously adjustable angle setting from - 220° to +220°. Enables profile end machining from the left and right.



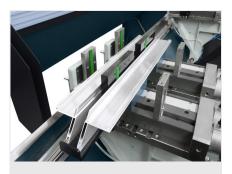
Profile machining centre SBZ 122/75

The two-axis add-on unit with the A-axis and C-axis can also accommodate a saw blade with a diameter of 180 mm



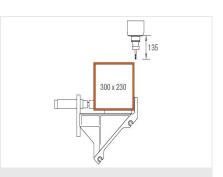
Tool magazine

The tool magazine with 12-fold tool changer allows quick, easy setup and minimal secondary time



Profile machining centre SBZ 122/75

Double clamping unit



Machining area, Y and Z-axes

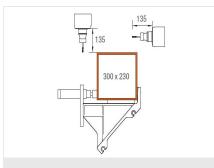
Profile machining from above

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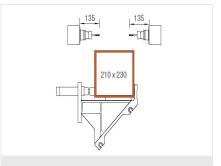


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Machining area, Y and Z-axes

Profile machining from above and from behind



Machining area, Y and Z-axes

Profile machining from the front and from behind





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Max. machining length without profile end machining 3,851 mm
Max. machining length with profile end machining 3,525 mm

Traverse path X-axis
4,176 mm, Vmax. 120 m/min.
Traverse path Y-axis
1,040 mm, Vmax. 60 m/min.
Traverse path Z-axis
540 mm, Vmax. 30 m/min.
Direction of machining
5 (above, behind, front, left, right)
Positioning accuracy
+/- 0.1 mm

Routing spindle speed max. 20,000 rpm

Routing spindle power 7 kW, S1 (water-cooled)

Tool holder HSK-F63

Tool changing automatic
Tool tray positions in the automatic magazine 12
Angle head No

Disc milling cutter diameter 120 mm

Saw blade diameter 180 mm

Tool length (from extent of taper) max. 150 mm

Clamp positioning autonomous

Clamp positioning autonomous
Clamps Premium (with linear guides)
Software eluCam

Compressed air supply > 7 bar

Power supply 400 V, 3~, 50 Hz, 25 A Air consumption per minute approx. 185 I with spraying

Total length 7,643 mm

Depth 2,171 mm

Height 3,000 mm

Weight approx. 3,800 kg

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