

SBZ 122/75

PROFILE MACHINING CENTRE



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5-axis model for metal construction and industrial applications

- Designed for economical and efficient machining of aluminium, PVC and 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 $+120^{\circ}$
- C-axis continuously adjustable from -220° to $+220^{\circ}$
- All five axes can move simultaneously with RTCP (Rotation Tool Centrepint)
- Moreover, the additional C-axis makes it possible to machine the face of profiles from the left and right
- Linear guides for autonomous clamp positioning
- 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
- Automatic tool changer with twelve tool tray positions (without tools)
- Modern 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 with power feedback and brake energy buffering in the drives ensure energy recovery
- Green Line cooling unit for the control cabinet with reduced energy consumption
- Windows operating system
- 15" flat screen display, USB ports and network connection
- Simple, stress-free program entry with eluCam on the operating panel, even during operation
- Remote maintenance via TCP/IP using existing Internet connection

Machine configuration

- 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
- Green Line cooling unit for the control cabinet
- Swarf trays for swarf removal
- Minimum-volume lubrication system
- High performance cutting fluid
- Hand-held operator terminal
- Depth gauge

Technical specifications

- 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. 50 m/min.
- Direction of machining 5 (above, behind, front, left, right)
- Positioning accuracy +/- 0.1 mm
- Max. spindle speed 20,000 rpm
- Spindle power output 7 kW, S1 (water-cooled)
- Tool holder HSK - F63
- Automatic tool changing
- Twelve tool tray positions in the automatic magazine
- Disc milling cutter diameter 120 mm

- Saw blade diameter 180 mm
- Tool length (from extent of taper) max. 150 mm
- Clamp positioning autonomous
- Premium clamp (with linear guides)
- eluCam software
- Compressed air supply > 7 bar
- Power supply 400 V, 3~, 50 Hz, 22 A
- Air consumption per minute approx. 185 l with spraying
- Total length 7.534 mm
- Depth 2,180 mm
- Height 2,800 mm
- Weight Approx. 2,650 kg

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
- Barcode scanner
- Protective enclosure can optionally completely enclose the machine on all sides, with additional sound insulation
- Easy and intuitive operation thanks to the modern elumatec Customer Interface (ECI)
- Stationary tool magazine
- Four clamps as standard. Up to eight clamps can be equipped as an option
- Double clamping and other accessories on request



A-axis angle adjustment

Continuously adjustable angle setting from -120° to +120° C-axis



C-axis

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



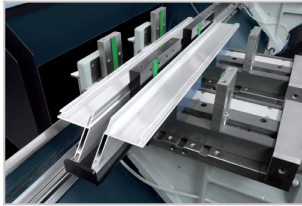
Profile machining centre SBZ 122/75

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

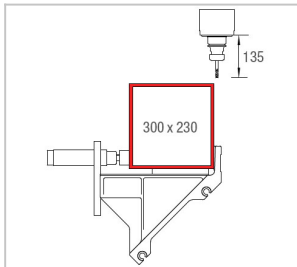


Tool magazine

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

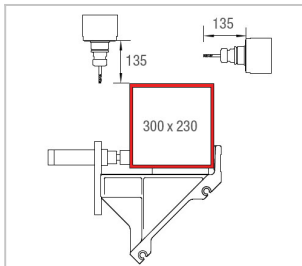


Double clamping unit



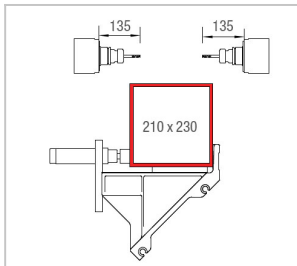
Machining area, Y and Z-axes

Profile machining from above



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