elumatec

a voilàp company

SBZ 145 (PM)

PORTAL MACHINING CENTERS

Designed for the requirements of metal construction and industrial use, the SBZ 145 with its 5 processing axes offers a processing area of 560 mm x 350 mm x 7,500mm. Equipped with an autonomous clamping axis and a generously designed tool magazine for milling cutters, drills, thread cutters and saw blades. The SBZ 145 has numerous processing options for cutting from the profile bar with processing or optionally in pendulum operation with processing of pre-cut individual parts (2x 3.250mm).

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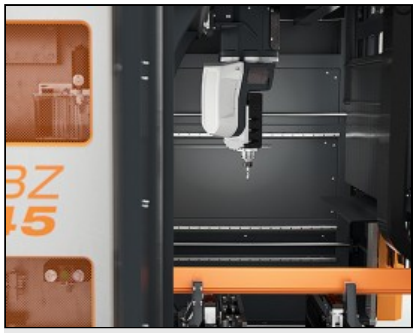
The right to make technical alterations is reserved.

Two separate workzones

Optionally for pendelum mode or for bar processing

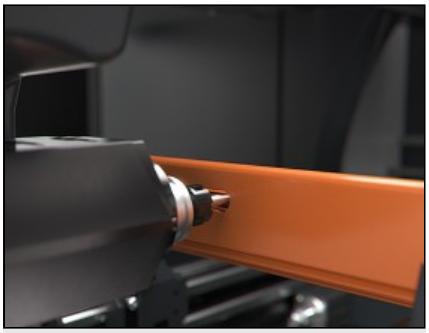


Low machine height

Low space requirement due to internal Z-axis and cable chain

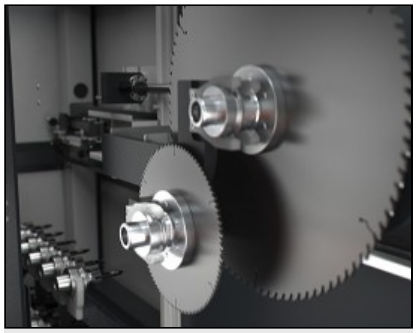
Fast and easy clamp positioning

Autonomously moving clamps with quick setting possibilities / Clamp movement with V-axis



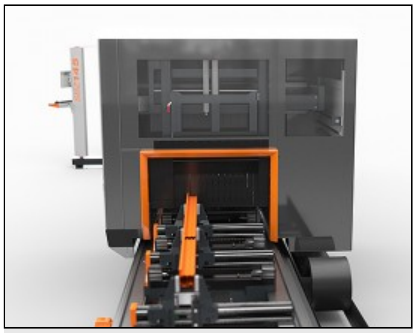
Optimized processing cycles

Maximum flexibility due to automatic tool assignment, collision control and clamp management



Sawblades

The on-board tool magazine provides space for up to two sawblades with diameters from 254 to 500 mm



Robust and stable portal design in modern appearance

High positioning accuracy with stable machine bed and portal supported on both sides

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Tool magazine

Ensures short tool change times: The horizontal, on-board mobile tool changer with 18 tool seats (3 rows of 6 tools each)

Bar processing

Production of the individual parts from the solid bar. The individual parts are automatically pulled apart for end-face processing or notching

Protection of profile surface

All operations such as milling, drilling, thread cutting, thread milling, notching and sawing take place with the profile in a fixed clamp position

Viewing window

The generously dimensioned window at the front of the portal provides an optimum view of the processing area and allows easy access for maintenance and cleaning work

For metal construction and industrial use

5-axis profile machining center with option for 6-sided machining from below with angle head

Clean and efficient solution for waste pieces

The chip conveyor is integrated in the machine bed

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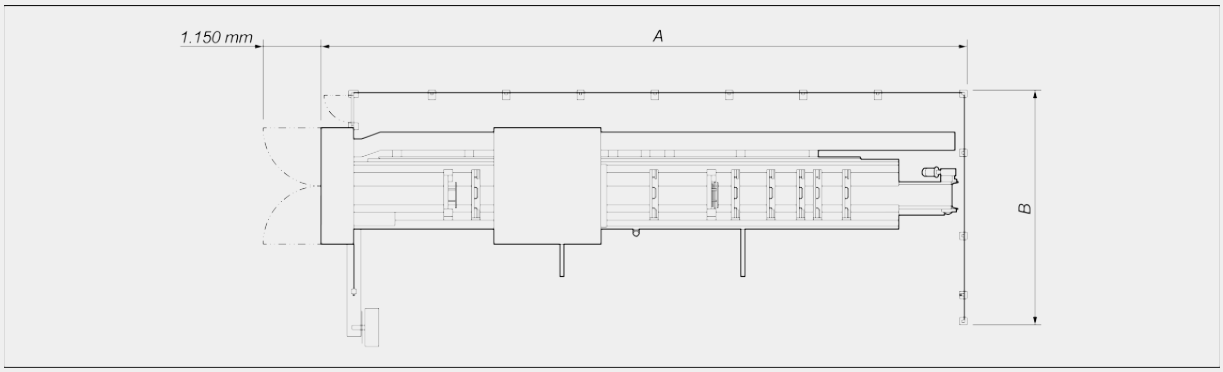
SBZ 145 (PM) / PORTAL MACHINING CENTERS

LAYOUT



SBZ 145 (PM)	**7,5 m**	**10,5 m**
Total length (A) (mm)	12.060	15.330
Depth (B) (mm)	4.587	4.587
Height (mm)	2.450	2.450
Weight (kg)	10.300	13.000

The overall dimensions and the weight may vary depending on the product configuration

AXIS STROKES

X AXIS - 7,5m / 10,5m (mm)	7.500 / 10.500
Y AXIS (mm)	1.300
Z AXIS (mm)	730
A AXIS	-110° / +110°
C AXIS	-182° / +182°

POSITIONING ACCURACY

X AXIS (mm)	± 0,1
Y AXIS (mm)	± 0,1
Z AXIS (mm)	± 0,1
A AXIS	± 0,1°
C AXIS	± 0,1°

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POSITIONING SPEED

X AXIS (m/min)	80
Y AXIS (m/min)	60
Z AXIS (m/min)	60
A AXIS (°/s)	120
C AXIS (°/s)	120
V AXIS (m/min)	40

AXIS ACCELERATION

X AXIS (m/s²)	4,0
Y AXIS (m/s²)	3,0
Z AXIS (m/s²)	3,0
V AXIS (m/s²)	3,0

ELECTROSPINDLE

Maximum power in S1 (kW)	11
Maximum speed (rpm)	24.000
Maximum torque (Nm)	11
Toolholder cone	HSK F63
Water cooling	●

OPERATING MODE

Pendular mode with 2 lefthand materialstops	●
Bar processing	●

SAFETY DEVICES AND PROTECTION

Side access guard (fence / protective panel)	●
Access protection frontside (Light curtain / laser)	●
Protective device rear side (fence)	○

MACHINING FACES

With direct tool (front/top/back, ends)	3 + 2
With angle machining head (front/top/back, ends, bottom)	3 + 2 +1

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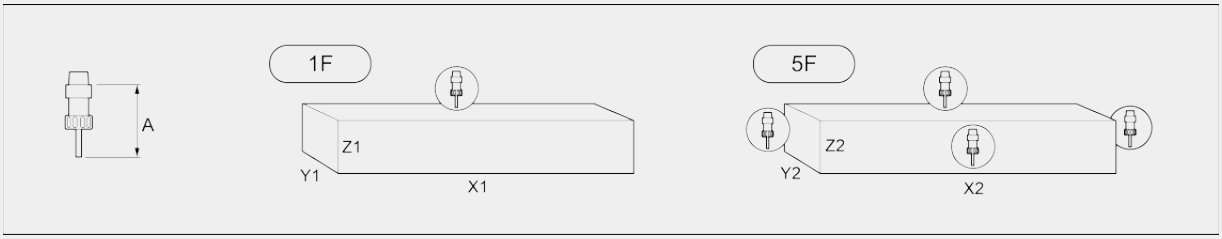
WORK AREA

1F = 1 face machining **5F = 5 faces machining**



		A	X1	Y1	Z1	X2	Y2	Z2
SBZ 145 - 7,5 m	single mode	145	8.100	560	350	7.750	560	350
	double mode	145	3.250	560	350	2.900	560	350
SBZ 145 - 10,5 m	single mode	145	11.100	560	350	10.750	560	350
	double mode	145	4.750	560	350	4.400	560	350

Dimensions in mm

AUTOMATIC TOOL MAGAZINE

Tool magazine traveling along	●
U AXIS (Tool changer)	●
Magazin Type: linear tool changer	●
Number of tools in magazine	18
Number of special tools in the magazine: saw blades	2
Tool position level 1 (up to D=100mm and L=210mm)	6
Tool position level 2 (up to D=63mm and L=210mm)	6
Tool position level 3 (up to D=63mm and L=145mm)	6
Special tool 1: blade up to D=500 mm	1
Special tool 2: blade up to D=250 mm	1
Number of places for special tools D=100 mm max.	5
Maximum tool length (from taper) (mm)	210
Maximum disk cutter (instead of blade 2) (mm)	250
Maximum tool weight with tool holder (kg)	8
Tool holder set HSK63 + collets	○

WORKPIECE LOCKING

V AXIS (Autonomous clamp positioning)	●
Number of clamps - 7,5m / 10,5m	8 / 10
Number of additional clamps with max. travel	2
Maximum number of clamps, including stop, with maximum travel range 7,5m / 10,5m	16 / 20

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PROFILE POSITIONING

Number of material stop (clamping position left)	2
Material stop in position 2 (connected to the clamp)	●

SWARF AND WASTE CONVEYOR

Chip conveyor integrated in machine bed	●

SUCTION

Fume extraction	●

PNEUMATIC CONNECTION

Pressure (bar)	7
Air consumption (Nl/min)	500

ELECTRICAL CONNECTION

Standard power supply	400 V, 3~, 50 Hz, 63 A

CONTROL UNIT

Microsoft® Windows® 10 Embedded	●
Panel PC 21,5" multitouch	●
USB ports and network connection	●
UPS - Uninterruptible power supply	●
Barcode reader	●
Hand control	●
Label printer with a speed of 150 mm/sec	○

SOFTWARE

eluCam 2d/3d Cad module	●

Included ● Available ○

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