



COMPLETE CATALOGUE ALUMINIUM CONSTRUCTION

THE PERFECT SOLUTION FOR EVERY REQUIREMENT.



elumatec

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1 | A COMPANY WITH A TRADITION DATING BACK TO 1928

elumatec was established at the main location in Mühlacker near Stuttgart in 1928. In the beginning, elumatec produced light-metal sand-cast parts. Today, we are the leading premium supplier in the segment of profile machining for a vast array of different requirements and materials. With 720 employees as well as our subsidiaries, branches and dealers in over 50 countries, we are always just around the corner from you. The results of our many years of work are characterised by impressive references, numerous patents and inventions, over 28,000 customers and more than 5,000 profile machining centres manufactured.

Only quality produces quality – Machines made by elumatec

As the leading premium supplier, our focus is not simply on sales figures, but on the even more important aspect of maintaining a leading position in terms of quality. Our machines are only rated “market ready” once they meet our high standards in terms of reliability, efficiency, and accuracy. Our guaranteed supply of spare parts for ten or more years ensures a high level of production reliability.

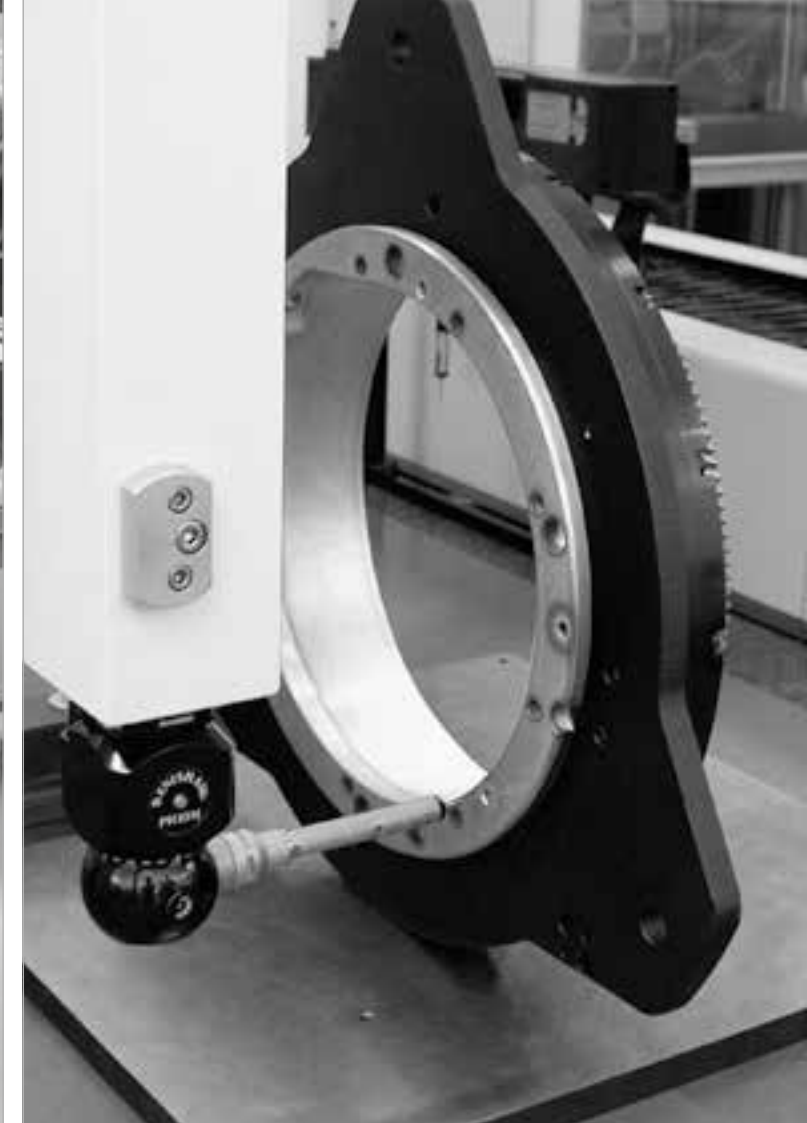
Our quality concept is based on our proximity to you as well as on the know-how and dependability present at all levels of our company – from development and design to manufacturing and on to sales and after-sales service. With commitment and passion we develop the best-possible solution for you, seeing ourselves both as a service provider and a dependable partner.

Our know-how is your advantage

We operate in an environment characterised by very dynamic customers – in the most diverse industry sectors with completely different requirements – and must react to changing requirements and needs in an instant. And we do, all the time, with our short response times, close proximity the world over and the highest level of commitment. Consequently, we assess our capabilities continuously and know that this requires ongoing learning and unceasing development of our competencies. This enables us to initiate and shape change processes.

Lean & Green

The broad spectrum of machines and solutions that we offer has made us rely on flexible and lean production processes. The key concept of “Lean & Green” is applied consistently in our production process: We pay careful attention to the conservation of material and energy resources in all of our processes – from vendors on to the finished product.



2 | AVAILABLE LOCALLY ALL AROUND THE WORLD –
OUR CONTRIBUTION TO YOUR SUCCESS

We are there for you on site – worldwide

With our subsidiaries, branches and dealers in over 50 countries and cooperation partners in many more, we are available locally around the world. We are represented worldwide, locally and you can always reach us. From implementation to maintenance and repairs, you can quickly and easily benefit from our service.

We even go one step further: We will gladly help you set up your machines, provide your employees with valuable, practical knowledge and perform important servicing and maintenance work. Together, we can work out customised service agreements that are tailored to precisely suit your needs.



- elumatec AG: HQ Germany

elumatec Australia

elumatec Austria

elumatec Bosnia-Herzegovina

elumatec Bulgaria

elumatec Canada

elumatec China, Shanghai

elumatec China, Beijing

elumatec China, Shenzhen

elumatec Croatia

elumatec Czech Republic

elumatec France

elumatec Greece, Cyprus

elumatec Hungary

elumatec India, Bangalore

elumatec India, Mumbai

elumatec India, New Delhi

elumatec Italy

elumatec Kosovo
- elumatec Malaysia

elumatec Middle East

elumatec Netherlands

elumatec Norway

elumatec Poland

elumatec Romania

elumatec Russian Federation

elumatec Serbia

elumatec Singapore

elumatec Slovak republic

elumatec South Africa, Johannesburg

elumatec South Africa, Capetown

elumatec South Africa, Durban

elumatec South Korea

elumatec Sweden

elumatec Switzerland

elumatec Turkey

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- Sales & Service Partner Argentina

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Sales & Service Partner Taiwan

Sales & Service Partner Thailand

Sales & Service Partner Ukraine

Sales & Service Partner Vietnam

You can find our contact persons in your area at <https://www.elumatec.com/en/elumatec-worldwide>

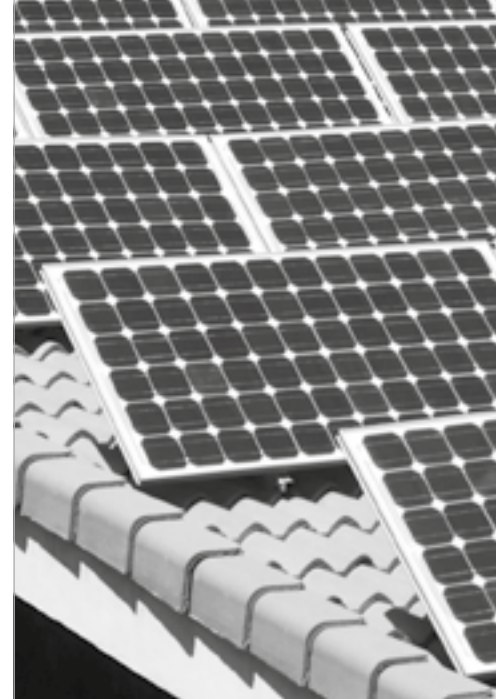
3 | THE PERFECT SOLUTION FOR EVERY REQUIREMENT

We offer you our expertise in finding the perfect solution

We think things through. With our extensive portfolio of processes, methods and products, we can find the exact solution you need for your special requirements. We cover the whole spectrum from craftsman's enterprises to industrial profile machining operations.

Our range includes basic, manual-operation machines as well as complex, state-of-the-art profile machining centres with CNC control. Moreover, we offer all of the other components you need for setting up efficient, safe and ergonomic production lines, including assembly equipment, roller conveyors, transport trolleys, glazing units and tools. Our machines and operating equipment have a modular design and all components are compatible with each other. This gives you the flexibility you need to adapt your production equipment at any time to suit the growing demands of your enterprise – all from a single source.

We also offer assistance in the planning of your production. We draw on our experience which goes back generations, and always keep the practical issues in mind. All of our products are "made by elumatec", which stands for our promise of quality with exceptional precision, durability and stability.





4 | SAWS

We offer a great variety of saws and equipment variants for nearly every requirement including precision cutting of lengths and angles. Our range of saws includes saw blade diameters from 280 mm to 650 mm. With our double mitre saws, cuts are made using the outer dimension, which means that profile tolerances are automatically excluded from the cutting length. You can use the optional PC control to conveniently import the required cutting data from common spreadsheet programs via a network or a USB port.

When developing our saws, we placed a special emphasis on a low-vibration design and very high precision as well as exceptional robustness and guaranteed durability. Planning for long-term, economical production must always take the people involved into account. This is why ergonomic workstation design is one of our top priorities. This is also one of the top features of our saws, as their unique ergonomic design is unparalleled on the market. All of our saws can be loaded and unloaded ergonomically and operated without fatigue. The process of continuous optimisation combined with our many years of experience form the basis of our expertise.

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4.1 | DOUBLE MITRE SAWS

Double mitre saw DG 244

The reliable elumatec principle “Cutting from below”:

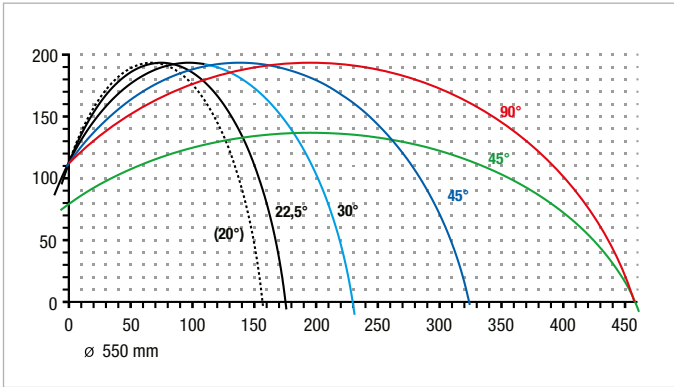
- Provides unhindered access to support table
- A large saw blade diameter and optimal use of the saw blade offer an ideal cutting capacity for all cutting variations
- Standard for elumatec: external dimension cuts at all angle positions. This means no length calculations are necessary when cutting profiles of different heights. This is a big advantage when cutting special angles
- The universal pivoting and tilting of both saw units allows cutting of high and wide profiles as well as every type of compound mitre cut. Consequently, many profiles can be cut without support blocks
- Safety hoods
- Equipped with saw blades as standard
- Pulsed coolant system

Technical specifications

- Minimum cutting length at 90° 375 mm
- Minimum cutting length tilted at 45° 375 mm
- Pivoting range inwards, pneumatically, 90°–45° (manually up to 22.5° inwards and up to 140° outwards with digital display)
- Tilting range inwards, pneumatically, 90° – 45° (intermediate angles manually adjustable with digital read-out display and turret stop)
- For cutting range, see cutting diagram
- Saw blade diameter 550 mm
- Saw blade speed 2,250 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output per motor 4 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 40 l without spraying, 64 l with spraying

Cutting length variants

- 4,500 mm
- 6,000 mm
- 7,500 mm



Options

- DG 244 M machine bed made of steel sheet (only at cutting length 4,500 mm and 6,000 mm)
- Hydro-pneumatic saw feed
- Saw feed – minimum cutting length 400 mm
- Profile lifting bars
- Additional software for E 580: optimisation program, software module for chop and oversize length cuts
- Mobile or automatically retractable workpiece supports
- Material clamping units
- Transom stop and lead-cut stop
- Label printer
- Exhaust connectors, extraction system
- Clock system
- Roller conveyor
- Saw blades
- High performance cutting fluid

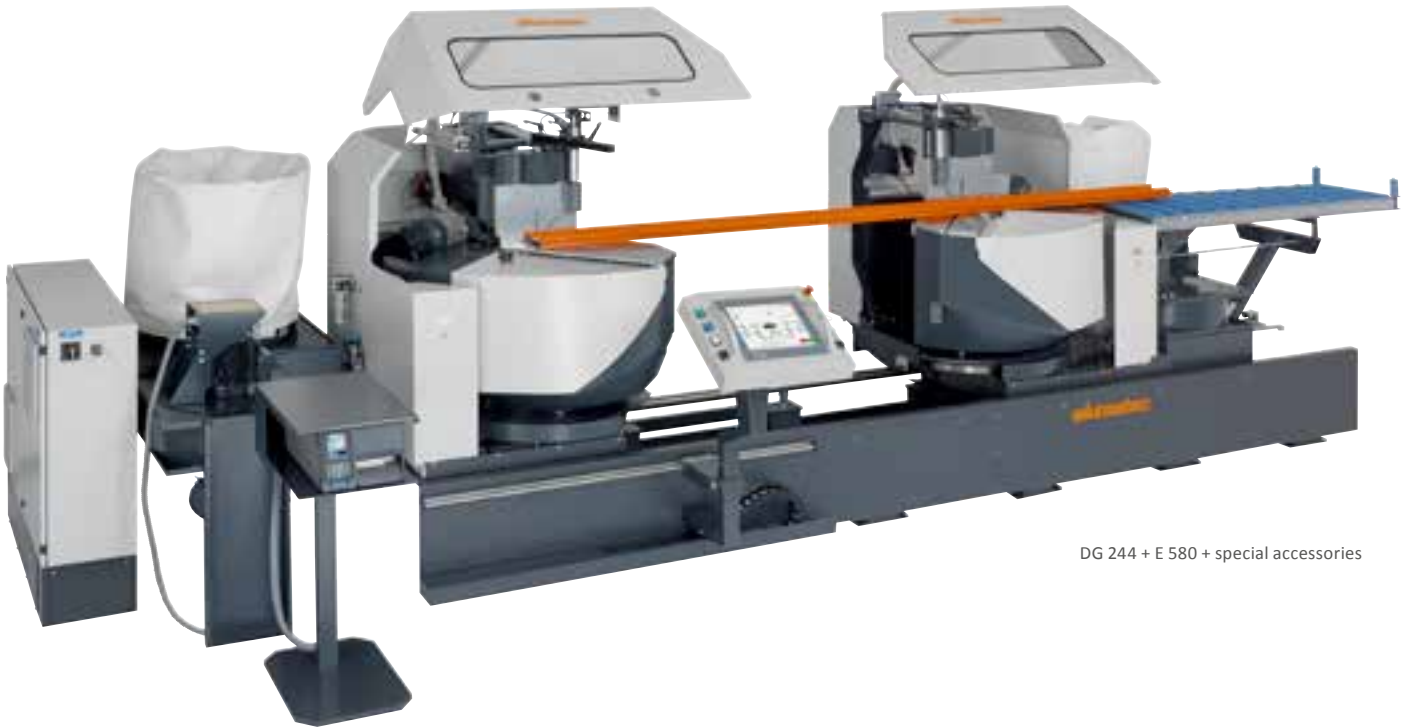
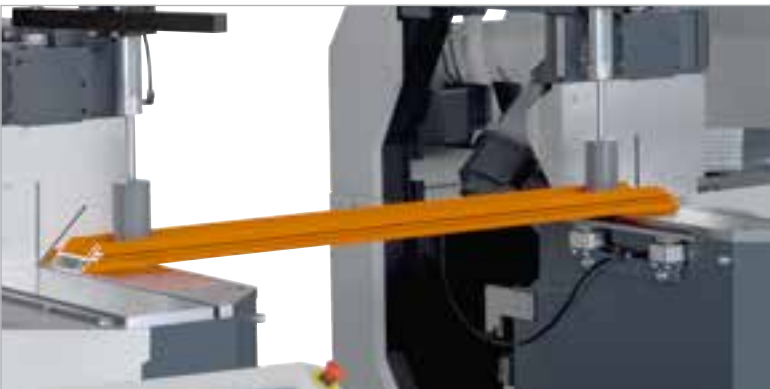


Controller variants

Positioning control E 390

PC control E 580

See page 38



DG 244 + E 580 + special accessories

4.1 | DOUBLE MITRE SAWS

Double mitre saw DG 104

- The optimal double mitre saw for series production as well as for special applications
- The universal pivoting and tilting of both saw units allows cutting of high and wide profiles as well as every type of compound mitre cut. Consequently, many profiles can be cut without support blocks
- External-dimension cuts possible for all cutting variants. Consequently, no complicated length calculations are necessary. This is a big advantage when cutting special angles
- Pivoting range with digital angle display
- Safety hoods
- Equipped with saw blades as standard
- Equipped with digital display E 111 as standard
- Pulsed coolant system

Technical specifications

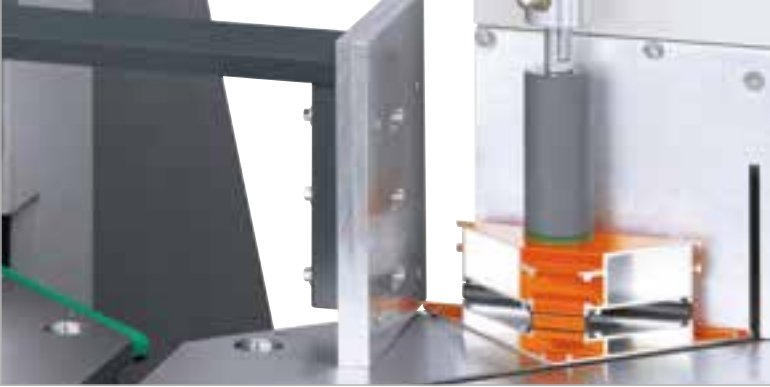
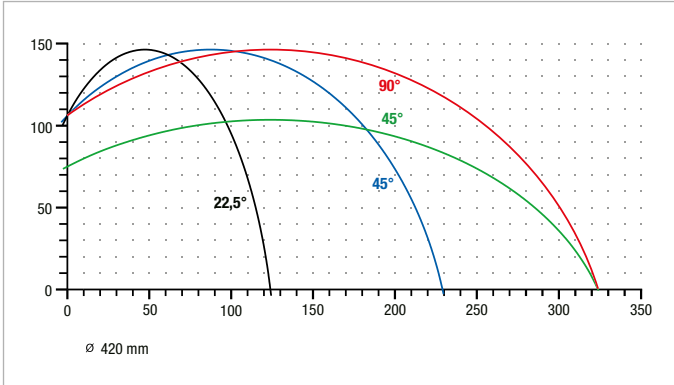
- Minimum cutting length at 90° 350 mm
- Minimum cutting length tilted at 45° 350 mm
- Pivoting range inwards 90° – 45° (up to 22.5° manually with digital display)
- Tilting range inwards, pneumatically, 90° – 45°
- For cutting range, see cutting diagram
- Saw blade diameter 420 mm
- Saw blade speed 2,800 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output per motor 4 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 40 l without spraying, 64 l with spraying

Cutting length variants

- 3,000 mm
- 4,500 mm
- 6,000 mm

Options

- DG 104 M machine bed made of steel sheet (Cutting length 4,500 mm, 6,000 mm)
- Profile lifting bars
- Software for E 580: Software module for chop and oversize length cuts
- Mobile or automatically retractable workpiece supports
- Material clamping units
- Transom stop and lead-cut stop
- Label printer for variants with E 390 and E 580
- Exhaust connectors, extraction system
- Clock system
- Roller conveyors
- Saw blades
- High performance cutting fluid



Controller variants

Manual cutting length adjustment with digital display E 111

Positioning control E 390

PC control E 580

See page 38



DG 104 + E 580 + special accessories

4.1 | DOUBLE MITRE SAWS

Double mitre saw **DG 142**

- External-dimension cuts possible for all cutting variants
- Ideal machine for high-volume series production when cutting at 90° and 45°
- Equipped with saw blades as standard
- Equipped with digital display E 111 as standard
- Vertical pneumatic material clamping unit
- Safety hoods

Technical specifications

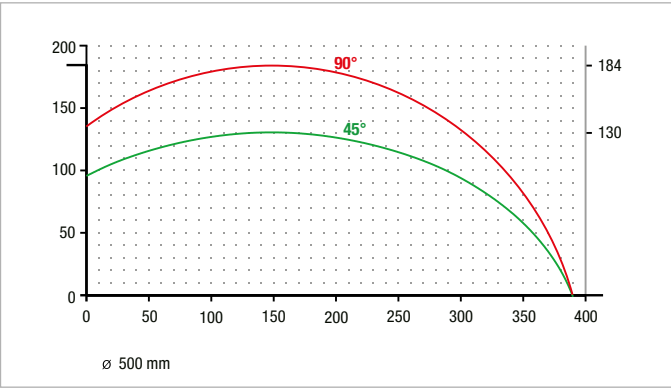
- Minimum cutting length at 90° 370 mm
- Minimum cutting length tilted at 45° 370 mm
- Tilting range inwards 90° – 45°
- For cutting range, see cutting diagram
- Saw blade diameter 500 mm
- Saw blade speed 2,300 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output per motor 4 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 40 l without spraying, 64 l with spraying
- Intermediate angle optional 90° – 45°

Cutting length variants

- 3,000 mm
- 4,500 mm
- 6,000 mm

Options

- DG 142 M machine bed made of steel sheet (only at cutting length of 4,500 mm)
- Intermediate angle setting by hand wheel and digital display E 111
- Additional software for E 580: optimisation program, software module for chop and oversize length cuts
- Label printer for variants with E 390 and E 580
- Mobile or automatically retractable workpiece supports
- Material clamping units
- Transom stop and lead-cut stop
- Extraction system
- Roller conveyor
- Saw blades
- High performance cutting fluid
- Pulsed coolant system



Controller variants

Manual cutting length adjustment with digital display **E 111**

Positioning control **E 390**

PC control **E 580**

See page 38



DG 142 + E 580 + special accessories

4.1 | DOUBLE MITRE SAWS

Double mitre saw **DG 79**

- The solid cast construction with integrated turn table ensures optimal profile support for cutting to length with angular accuracy
- Continuous pivoting range adjustment of the saw heads from 0° to 45° to the left and right. This makes external and internal dimension cuts possible
- Vertical and horizontal pneumatic material clamping units ensures optimal profile fixation
- Equipped with saw blades as standard
- Equipped with digital display E 111 as standard
- Pulsed coolant system

Technical specifications

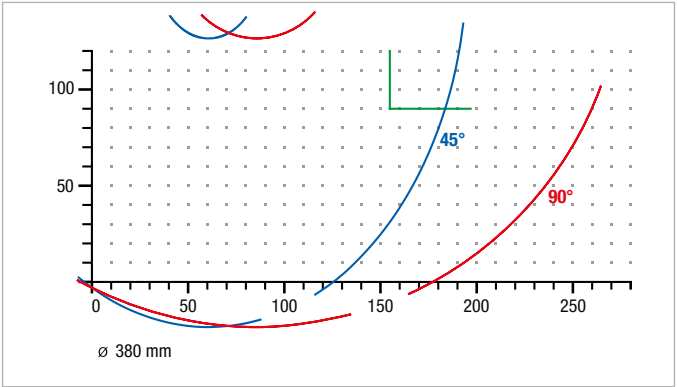
- Minimum cutting length at 90° 520 mm
- Minimum cutting length pivoted at 45° 520 mm
- Positive location points at 15°, 30°, and 45°
- Pivoting range from 0° to 45° continuously adjustable
- Hydro-pneumatic saw feed
- For cutting range, see cutting diagram
- Saw blade diameter 380 mm
- Saw blade speed 2,800 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output per motor 3 kW
- Compressed air supply 7 bar

Cutting length variants

- 3,000 mm
- 4,500 mm
- 6,000 mm

Options

- DG 79 M machine bed made of steel sheet (Cutting length 3,000 mm, 4,500 mm)
- Workpiece supports
- Transom stop
- Extraction system
- Material clamping units
- Roller conveyors
- Saw blades
- High performance cutting fluid



Controller variants

Manual cutting length adjustment with digital display **E 111**

Positioning control **E 355**

See page 38



DG 79 + E 111

4.2 | MITRE SAWS

Mitre saw MGS 245/00

The universal saw for special applications

- The reliable elumatec principle “Cutting from below”:
- Free access to the table surface for optimal loading and unloading of profiles
- The patented saw arm suspension creates a cutting pressure towards the workpiece fence which ensures safe clamping of the workpiece
- Safety hood opens automatically
- Pulsed coolant system
- Equipped with saw blade as standard
- Pivoting range of 22.5° to the left and right manually with digital angle display
- Tilting range pneumatic 90°–45° (intermediate angles by means of turret stop and digital display)

Technical specifications

- Pivoting range, manually, 22.5° to the left and right with digital display E111
- Tilting range pneumatically from 90° to 45° with digital display
- For cutting range, see cutting diagram
- Saw blade diameter 550 mm
- Saw blade speed 2,250 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 4 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 20 l without spraying, 32 l with spraying
- Length 1,900 mm, depth 1,550 mm, height 2,100 mm, weight 1,150 kg

Mitre saw MGS 245/31

See MGS 245/00, however:

- 3-axis PC control, E 580, for electronic pivoting and tilting
- Electronically controlled length adjustment of the length stop and measuring system
- 10.4" Touch Colour display
- Network connection RJ45, 10/100 Mbit
- Length adjustment 6,000 mm

Mitre saw MGS 245/30

See MGS 245/31, however:

- Length adjustment 4,500 mm

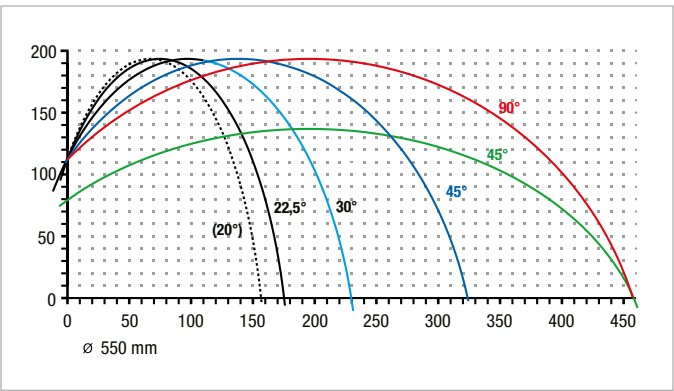
Mitre saw MGS 245/32

See MGS 245 /31, however:

- Length adjustment 7,500 mm

Options

- Hydro-pneumatic saw feed
- Extraction system
- Saw blades
- High performance cutting fluid



MGS 245/00 + special accessories

4.2 | MITRE SAWS

Mitre saw MGS 105

The machine for special applications

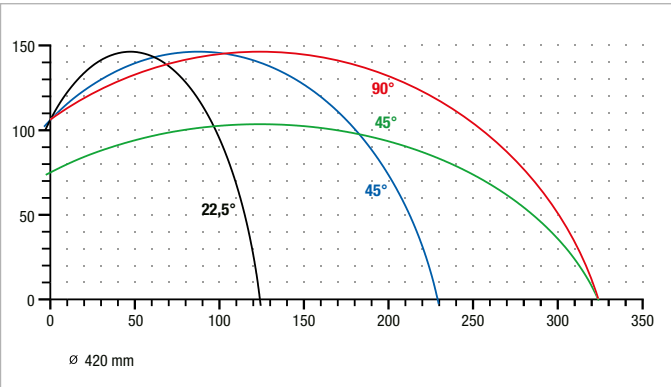
- The reliable elumatec principle “Cutting from below”:
- Free access to the table surface for optimal loading and unloading of profiles
- The patented saw arm suspension creates a cutting pressure towards the workpiece fence which ensures safe clamping of the workpiece
- Safety hood opens automatically
- Pulsed coolant system
- Equipped with saw blade as standard

Technical specifications

- Pivoting range, manually, 22.5° to the left and right with digital display E111
- Tilting range pneumatically from 90° to 45°
- For cutting range, see cutting diagram
- Saw blade diameter 420 mm
- Saw blade speed 2,800 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 4 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 20 l without spraying, 32 l with spraying
- Length 1,400 mm, depth 1,500 mm, height 1,880 mm, weight 750 kg

Options

- Extraction system
- Length stop and measuring systems, see page 41
- Roller conveyors
- Saw blades
- High performance cutting fluid



MGS 105

4.2 | MITRE SAWS

Mitre saw MGS 72/30

- Stable, ground, continuous support table with turn table on precision bearings.
- Wear-resistant and quiet multi-V belt drive
- Manual saw feed
- Equipped with saw blade as standard
- Table-top unit

Technical specifications

- Pivoting range from 0°–45°, continuously adjustable to the left and to the right
- Positive location points at 15°, 30°, and 45°
- For cutting range, see cutting diagram
- Saw blade diameter 380 mm
- Saw blade speed 2,800 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 3 kW
- Length 780 mm, depth 900 mm, height 815 mm, weight 120 kg

Options

- Machine base
- Pneumatic material clamping unit
- Quick-acting clamping device
- Length stop and measuring systems, see page 41
- Roller conveyors
- Saw blades
- Pulsed coolant system
- High performance cutting fluid

Mitre saw MGS 72/10

See MGS 72/30, however:

- Machine base
- Pneumatic material clamping units (2x horizontal, 1x vertical)
- Pulsed coolant system

Technical specifications

- Length 780 mm, depth 900 mm, height 1,600 mm, weight 210 kg

Mitre saw MGS 73/33

See MGS 72/10, however:

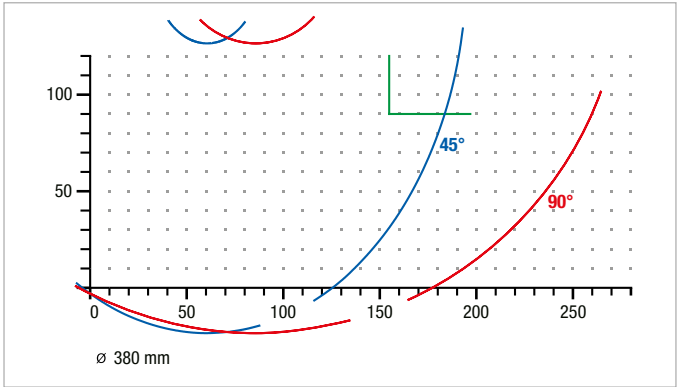
- Hydro-pneumatic saw feed
- 2-hand operation

Technical specifications

- Compressed air supply 7 bar
- Length 850 mm, depth 900 mm, height 1,450 mm, weight 220 kg

Options

- Extraction system
- Length stop and measuring systems, see page 41
- Roller conveyors
- Saw blades
- High performance cutting fluid



MGS 73/33 + AMS 200 + roller conveyor

4.3 | TABLE SAWS

Table saw TS 161/00

- Accuracy is achieved by cutting from below
- Wide pivoting range of up to 0° to the right and up to 45° to the left
- The special pivoting mechanism with integrated turn table enables working from the front at any angle position
- The workpiece stop is adjustable to allow optimal use of the saw blade capacity for wide and flat profiles
- Manual saw feed
- Manual material clamping unit (vertical)
- Equipped with saw blade as standard
- Table-top unit

Technical specifications

- For cutting range, see cutting diagram
- Saw blade diameter 280 mm
- Saw blade speed 3,200 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 1.05 kW
- Length 650 mm, depth 750 mm, height 1,300 mm, weight 130 kg

Table saw TS 161/21

See TS 161/00, however:

- With machine base
- Pneumatic material clamping unit (vertical)
- Pulsed coolant system
- Maintenance unit

Options

- Digital display for pivoting angles
- Extraction system
- Length stop and measuring systems, see page 41
- Roller conveyors
- Saw blades
- High performance cutting fluid

Table saw TS 161/22

- Accuracy is achieved by cutting from below
- Wide pivoting range of up to 0° to the right and up to 45° to the left
- The special pivoting mechanism with integrated turn table enables working from the front at any angle position
- The machine body does not move
- The workpiece stop is adjustable to allow optimal use of the saw blade capacity for wide and flat profiles
- Machine with base
- Pneumatic material clamping unit
- Digital display for pivoting E111

Technical specifications

- For cutting range, see cutting diagram
- Power supply 230/400 V, 3~, 50 Hz
- Power output 1.1 kW
- Saw blade diameter 280 mm
- Saw blade speed 3,200 rpm
- Compressed air supply 7 bar
- Air consumption per working cycle with spraying: 10 l

Included accessories:

- One hard metal saw blade for aluminium and PVC, 280 mm diameter, 88 teeth
- Machine base
- Pneumatic material clamping unit (vertical)
- Pulsed coolant system

Table saw S 161/30

See TS 161/21, however:

- Pneumatic saw feed
- Manual safety hood
- Length 650 mm, depth 750 mm, height 1,300 mm, weight 170 kg

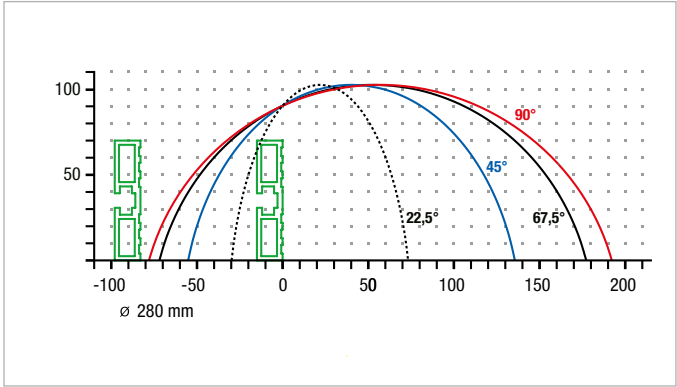
Table saw TS 161/31

See TS 161/22, however:

- Pneumatic saw feed
- Safety hood
- 2-hand operation
- Digital display for pivoting E111

Technical specifications

- Air consumption per working cycle with spraying: 15 l



TS 161/21



TS 161/30

4.4 | AUTOMATIC SAWS

Automatic saw SA 142/35

- Suitable for high-volume cutting of aluminium profiles for window manufacturing and industrial applications
- Material infeed (cycling) protects the surface of the workpiece through profile lifting systems at the bearing and locating face
- 1, 2 or 3 stroke feed can be selected using a selector switch
- Angled cuts of up to 45° are possible by tilting the saw unit (option)
- Large cutting range for wide profiles
- Equipped with saw blade as standard

Technical specifications

- Pivoting range 90° – 45° continuously adjustable (optional)
- For cutting range, see cutting diagram
- Saw blade diameter 500 mm
- Saw blade speed 2,800 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 4 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 50 l without spraying, 64 l with spraying
- Length 2,850 mm, depth 1,400 mm, height 1,580 mm, weight 770 kg
- Feed distance per cycle 5–600 mm (up to three cycles possible)

Options

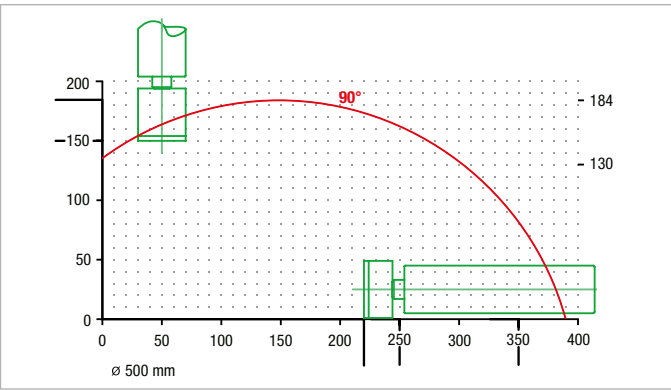
- Digital display E 111
- Hydro-pneumatic saw feed
- Extraction unit
- Roller conveyors
- Saw blades
- High performance cutting fluid
- Clamping method for multi-part clamping
- Clamping method for parts smaller than 5 mm

Automatic saw SA 142/37

See SA 142/35, however:

Technical specifications

- Power output 5.5 kW



Automatic saw SA 73/36

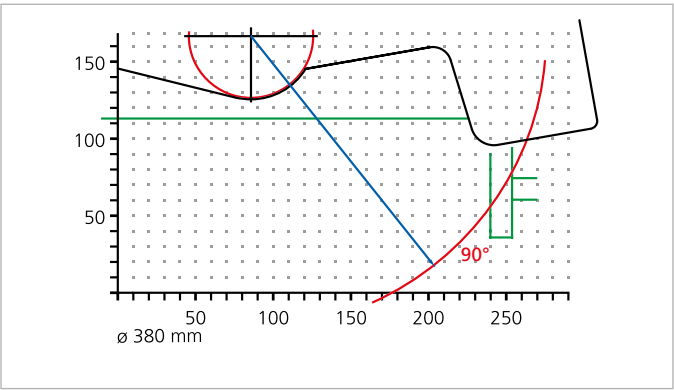
- Suitable for high-volume cutting of aluminium profiles for window manufacturing and industrial applications
- Material infeed (cycling) protects the surface of the workpiece by means of a single-stage profile lifting system
- 1, 2 or 3 stroke feed can be selected using a selector switch
- Reliable material feed using two horizontal clamping cylinders
- Automatic machine shut-down at the end of the profile
- Pulsed coolant system
- Equipped with saw blade as standard
- Digital display as standard

Technical specifications

- Cutting range 150 x 110 mm
- Saw blade diameter 380 mm
- Saw blade speed 2,800 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 3 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 19 l without spraying, 31 l with spraying
- Length 1,500 mm, depth 1,100 mm, height 1,550 mm, weight 290 kg
- Feed distance per cycle 5–250 mm (up to three cycles possible)

Options

- Extraction unit
- Roller conveyor
- Saw blades
- High performance cutting fluid



4.5 | GLAZING BEAD SAWS

Glazing bead saw GLS 192/07

- V-cutting saw equipped with two saw blades for 45° cuts
- Equipped with two vertical material clamping units as standard
- Equipped with exhaust connectors for connection to an extraction system
- Pulsed coolant system
- Automatic saw feed with foot switch operation

Technical specifications

- Saw blade diameter 200 mm
- Saw blade speed 2,800 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 0.9 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 20 l
- Length 510 mm, depth 1,200 mm, height 1,180 mm, weight 140 kg

Options

- Profile clamping system for special glazing beads
- Extraction unit for residual pieces
- Roller conveyors
- Length stop and measuring systems, see page 41
- Profile support blocks
- Saw blades
- High performance cutting fluid
- For glazing bead measuring systems see page 44



Table saw TS 161/21

- Accuracy is achieved by cutting from below
- Wide pivoting range of up to 0° to the right and up to 45° to the left
- The special pivoting mechanism with integrated turn table enables working from the front at any angle position
- The workpiece stop is adjustable to allow optimal use of the saw blade capacity for wide and flat profiles
- Manual saw feed
- Equipped with saw blade and machine base as standard
- Pneumatic material clamping unit (vertical)
- Pulsed coolant system
- Maintenance unit

Technical specifications

- Saw blade diameter 280 mm
- Saw blade speed 3,200 rpm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 1.05 kW
- Length 650 mm, depth 750 mm, height 1,300 mm, weight 130 kg

Options

- Digital display for pivoting angles
- Extraction system
- Length stop and measuring systems, see page 41
- Roller conveyors
- High performance cutting fluid



4.6 | NOTCHING SAWS

Notching saw **AKS 134/64**

- High-performance notching saw for aluminium profiles with an exceptionally large cutting range
- For demanding applications in the areas of curtain wall construction, conservatories and special designs
- Machining is performed with moving saw units while the profile is stationary, which ensures high accuracy and low space requirements
- Clamping of several profiles is possible due to the wide stop plate
- Support table with compound slide and pivoting back fence is manually adjustable for optimal use of the cutting range
- Horizontal and vertical profile clamping
- Automatic working cycle at a 90° pivoting angle (2-hand operation when cutting special angles)
- Hydro-pneumatic saw feed
- Minimum-volume lubrication system for saw blades

Technical specifications

Lower saw unit (vertical):

- Saw blade diameter 650 mm
- Tilting angle max. 45° towards front and 55° towards back, home position: Saw blade vertical
- Max. cutting height of 260 mm at 90°
- Max. cutting height of 187 mm at 135°
- Max. cutting height of 130 mm at 30°
- Power supply 230/400 V, 3~, 50 Hz
- 3 kW of power with motor brake
- Saw blade speed 1,400 rpm

Upper saw unit (horizontal):

- Saw blade diameter 500 mm
- Tilting angle max. 55° downwards and 60° upwards, home position: Saw blade horizontal
- Notching depth, max. 190 mm
- Power supply 230/400 V, 3~, 50 Hz
- 3 kW of power with motor brake
- Saw blade speed 2,710 rpm
- Travel 950 mm

Support table with working height of 990 mm:

- Pivoting range from 30° left to 30° right, home position 0°
- Pivoting range manual with digital display
- Compressed air supply 7 bar
- Air consumption per working cycle 35 l without spraying, 45 l with spraying
- Length 3,000 mm, depth 1,570 mm, height 1,770 mm, weight 1,400 kg



AKS 134/64 + special accessories



Notching saw **AKS 134/65**

See **AKS 134/64**, however:

- Equipped with a 4-axis controller for automatic adjustment of the horizontal and vertical saw blades for angle cutting, as well as for height adjustment and notching depth
- Values from design drawings can be entered directly via the keyboard

Options

- Laser indicator for cutting line
- Noise protection package
- Saw blades
- High performance cutting fluid



AKS 134/65 + special accessories

4.6 | NOTCHING SAWS

Notching saw **AKS 134/00**

- Variable notching possibilities for mullion and transom combinations, e.g. for curtain walls, conservatories, sky lights, and special designs
- Precise and safe notching is ensured because the workpiece is fixed and only the saw units move
- Both saw units can be simultaneously adjusted in height by means of a hand wheel (analogue display on the hand wheel)
- The cutting depth is set using an analogue display
- Manual adjustment of saw blade cutting angles with digital display of the tilting angles
- Support table with compound slide and pivoting back fence is manually adjustable for optimal use of the cutting range
- The angle of the pivoting back fence is shown on a digital display
- Horizontal and vertical profile clamping
- Automatic working cycle at a 90° pivoting angle (2-hand operation when cutting special angles)
- Hydro-pneumatic saw feed

Technical specifications

- Lower saw unit (vertical):
- Saw blade diameter 550 mm
 - Tilting range from 45° forwards to 60° towards the rear
 - Max. cutting height of 210 mm
 - Power supply 230/400 V, 3~, 50 Hz
 - Power output 3 kW with motor brake
 - Saw blade speed 2,800 rpm
 - Manual tilting angle adjustment with digital display (standard)
 - Travel 830 mm max.

- Upper saw unit (horizontal):
- Saw blade diameter 500 mm
 - Tilting range from 55° downwards up to 60° upwards
 - Notching depth, max. 190 mm
 - Power supply 230/400 V, 3~, 50 Hz
 - Power output 3 kW with motor brake
 - Saw blade speed 2,800 rpm
 - Manual tilting angle adjustment with digital display (standard)
 - Travel 830 mm max.

- Support table with working height of 990 mm:
- Pivoting range from 30° left to 30° right, home position 0°
 - Pivoting range manual with digital display

- Compressed air supply 7 bar
- Air consumption per working cycle 35 l without spraying, 45 l with spraying
- Length 3,000 mm, depth 1,420 mm, height 1,600 mm, weight 1,250 kg



Notching saw **AKS 134/10**

- See **AKS 134/00**, however:
- Equipped with a 4-axis controller for automatic adjustment of the horizontal and vertical saw blades for angle cutting, as well as for height adjustment and notching depth
 - Values from design drawings can be entered directly via the keyboard

Options

- Laser indicator for cutting line
- Noise protection package
- Saw blades
- High performance cutting fluid



AKS 134/10

4.6 | NOTCHING SAWS

Notching saw **AKS V-550**

- Notching for cross-bars in curtain wall manufacturing
- Precise and safe notching is ensured because the workpiece is fixed and only the saw units move
- The cutting depth is set using an analogue display
- Manual adjustment of 550 mm saw blade cutting angles with digital angle display
- Horizontal and vertical profile clamping
- 2-hand operation for sawing cycle

Technical specifications

Saw unit for notch cuts fixed at 0°

- Saw blade diameter 350 mm
- Power output 2 kW with motor brake
- Saw blade speed 2,800 rpm

Saw unit for notch cuts 90°+45° and 90°-20°:

- Saw blade diameter 550 mm
- Power output 3 kW with motor brake
- Saw blade speed 2,800 rpm

- Maximum notch size: 210 mm x 100 mm
- Compressed air supply 7 bar
- Weight 480 kg

Options

- Saw blades
- High performance cutting fluid



AKS-V 550

4.7 | CONTROLLER VARIANTS

Manual cutting length adjustment with digital display **E 111** [01]

- Accurate dimension adjustment using digital display
- Switching from absolute dimensions to chain dimensions
- Actual values of the display are stored when mains is switched off
- Quick read-out from the digital display. Resolution 0.1 mm
- Switching between mm/inches
- Input of any desired reference value by means of front keypad

Positioning control **E 390**

- Absolute measuring system, independent of drive
- Pneumatic locking at position
- Ergonomic location of the control unit
- Positioning accuracy +/-0.1 mm
- Memory for 999 data records
- Multilingual user interface
- Switching between mm/inches
- 5.7" touchscreen
- Touch-optimised user interface
- Interfaces for NEDO measuring rod and label printer
- USB port for data transfer

PC CONTROL **E 570**

- Machine available with 1 or 3 axes
- Absolute measuring system, independent of drive
- Pneumatic locking at position
- Robust, low-wear direct drive for moving saw unit
- Ergonomic location of the control unit
- Positioning accuracy +/-0.1 mm
- PC with Windows OS for operating the machine
- Multilingual user interface
- Remote online maintenance
- Switching between mm/inches
- 10.4" touchscreen
- Touch-optimised user interface
- Interface for NEDO measuring rod, label printer and barcode scanner
- USB port for data transfer
- Network connection for integration into company network

PC control **E 580** [02]

- Machine available with 1, 3 or 5 axes
- Absolute measuring system, independent of drive
- Pneumatic locking at position
- Robust, low-wear direct drive for moving saw unit
- Ergonomic location of the control unit
- Positioning accuracy +/-0.1 mm
- PC with Windows OS for operating the machine
- Multilingual user interface
- Remote online maintenance
- Switching between mm/inches
- 12" touchscreen
- Touch-optimised user interface
- Interface for NEDO measuring rod, label printer and barcode scanner
- USB port for data transfer
- Network connection for integration into company network





5 | LENGTH STOP AND MEASURING SYSTEMS

We offer a broad spectrum of high-quality manual or automatic length stop and measuring systems as well as a wide variety of options – such as centring units, various length stop systems or roller conveyors – for almost any need and requirement. Moreover, use our optional PC control to conveniently transfer all of the data you need from common calculation programs via the network or a USB port.

Product overview	Product	Page
Length stop and measuring system	AMS 200 + E 570	42
Length stop and measuring system	MMS 200 + E 111	43
Length stop and measuring system	MMS 100	43
Glazing bead measuring system	EMA 201	44
Manual measuring system for glazing beads	MMA 201	44

5.1 | LENGTH STOP AND MEASURING SYSTEMS

Length stop and measuring systems **AMS 200, MMS 200, MMS 100**

- For cutting aluminium profiles to length accurately
- For mounting on all single-head saws (right-hand side)
- Stop carriage can be folded back for positioning of profiles
- Automatic retraction unit: No re-cutting by the saw blade (optional)
- Patented rail and carriage system

Length variants **AMS 200, MMS 200, MMS 100**

- 1,500 mm (only for MMS 100)
- 3,000 mm
- 4,500 mm
- 6,000 mm
- Variant for left-hand attachment on request

Controller variants

Length stop and measuring system **AMS 200 with E 570**

- Length stop and measuring system with 1-axis control for cutting-length positioning

Technical specifications

- Machine configurations with 1, 3 or 5 axes
- Length measurement using an absolute measuring system independent of drive
- Pneumatic locking at position
- Robust, low-wear direct drive for moving saw unit
- Ergonomic location of the control unit
- PC with Windows operating system
- Four USB ports
- 12" touchscreen
- One serial RS 232 interface
- Two network ports, RJ45, 10/100 Mbit
- Ports for connecting additional keyboard and mouse

Optional

- Label printer
- EMA measuring and reading system



Versions with hand wheel drive

Length stop and measuring system **MMS 200 with E 111**

- Length stop and measuring system with sliding stop and difference scale for quick and accurate adjustment
- Digital display E 111

Technical specifications

- Accurate dimension adjustment using digital display
- Switching from absolute dimensions to chain dimensions
- Actual values of the display are stored when mains is switched off
- Quick read-out from the digital display with a resolution of 0.1 mm.
- Power supply 230 V, 1~, 50/60 Hz
- Switching between mm/inches
- Input of any desired reference value by means of front keypad

Versions with manual adjustment

Length stop and measuring system **MMS 100 with manual adjustment**

- Adjustment on stop carriage
- Manual locking



MMS 200 + E 111

5.2 | GLAZING BEAD MEASURING SYSTEMS

Manual measuring system MMA 201

- Manual measuring of glazing beads using mechanical scanning
- Manual measuring up to 1,500 mm, with extension up to 2,500 mm

Glazing bead measuring system EMA 201

- Electronic measuring of glazing bead profiles with an accuracy of 0.2 mm
- Manual cutting data input via measuring chip (telescopic measuring rod) or online
- Wireless measuring data transfer via measuring chip, independent of location and with no bothersome connection cables
- Light, handy telescopic measuring rod which can store 255 different measurements
- Electronic telescopic measuring rod (measuring length 2,500 mm) and measuring chip included as standard

Optional

- Length variants

Positioning control E 355

- Measuring system is independent of drive
- Positioning accuracy +/- 0.1 mm per metre
- Pneumatic locking at position
- 5.7" matrix display with membrane keyboard and hand wheel for navigation through the operation menus

- Memory for 1,000 data records. Correction values for profiles
- The block number, length dimension, profile number, angular position and quantity can be saved in the memory
- Language selection
- Switching between mm/inches
- RS 232 interface
- USB port on the front

Optional

- Label printer

PC control E 580

- Machine available with 1, 3 or 5 axes
- Absolute measuring system, independent of drive
- Pneumatic locking at position
- Robust, low-wear direct drive for moving saw unit
- Ergonomic location of the control unit
- Positioning accuracy +/-0.1 mm
- PC with Windows OS for operating the machine
- Multilingual user interface
- Remote online maintenance
- Switching between mm/inches
- 12" touchscreen
- Touch-optimised user interface
- Interface for NEDO measuring rod, label printer and barcode scanner
- USB port for data transfer
- Network connection for integration into company network





6 | ROUTERS

As the inventors of the stationary copy router AS 70 (1966), the product range we offer is not only broad, but also very innovative. This range runs from the universal 1-spindle copy router to multi-spindle copy routers for efficient door manufacturing. All routers are extremely stable and accurate and have powerful motors. That means that smooth and accurate routing using stops or templates is a matter of course.

We also offer a broad range of different end milling machine models. These provide the same technical advantages as our copy routers, and variable angle adjustment is included in all versions as standard.

Product overview	Product	Page
3-spindle copy router	KF 178	48
2-spindle copy router	KF 78	49
1-spindle copy router	AS 170	50
1-spindle copy router	AS 70	52
End milling machine	AF 223	54
End milling machine	AF 222	54

6.1 | MULTI-SPINDLE COPY ROUTERS

3-spindle copy router **KF 178/10**

- The ideal machine for economical door manufacturing
- For routing lock cylinders and round rosettes (safety locks) in profile systems or multi-chamber profiles with large dimensional depths
- Three copy routing units which operate completely independently
- Separate control of the horizontal and vertical router heads
- The workpiece is clamped upwards towards the contact surface of the lock, which eliminates the need for readjustment of the machine for the backset when working with profiles of different heights
- The “Spindle Lock” feature makes tool changing easy
- Flexible back-stop system with support rollers and adjustable folding stops

Technical specifications

- Top routing unit:
- Cutting range using stops or copy templates 340 x 100 mm
 - Travel 110 mm

- Bottom routing unit:
- Cutting range using stops or copy templates 240 x 85 mm
 - Travel at front 95 mm
 - Travel at back 45 mm
 - Spindle speed 12,000 rpm
 - Clamping range for profiles 115 x 100 mm
 - Power supply 230/400 V, 3~, 50 Hz
 - Power output per motor 0.74 kW

- Compressed air supply 7 bar
- Air consumption per working cycle 12 l without spraying, 24 l with spraying
- Length 980 mm, depth 1,250 mm, height 1,610 mm, weight 360 kg

3-spindle copy router **KF 178/13**

- See **KF 178/10**, however:
- Continuously adjustable speed control from 3,000–12,000 rpm. This allows routing of even thin-walled steel and stainless steel profiles

Options

- Copy templates
- Copy template blanks
- Collets
- Stop systems
- Cutting tools
- High performance cutting fluid



KF 178/10

2-spindle copy router **KF 78/23**

- For routing lock cylinders and handle holes up to a profile thickness of 70 mm
- Routing in two planes (vertical and horizontal) using two copy routing units which operate completely independently
- Copy routing at a ratio of 1:1 using both router spindles
- Routing using stops or copy templates
- Plastic-coated table protects profile surfaces
- Pneumatic clamping, horizontal
- Pulsed coolant system

Technical specifications

- Horizontal cutting range:
- Cutting range using a stop 300 x 100 mm
 - Cutting range using a copy template 270 x 70 mm
 - Travel 80 mm

- Vertical cutting range:
- Cutting range using a stop 290 x 100 mm
 - Cutting range using a copy template 230 x 70 mm
 - Travel 120 mm

- Spindle speed 12,000 rpm
- Clamping range for profiles 150 x 150 mm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 0.74 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 12 l without spraying, 24 l with spraying
- Length 940 mm, depth 1,150 mm, height 1,600 mm, weight 260 kg

Options

- Copy templates
- Copy template blanks
- Collets
- Stands and guide bars
- Workpiece supports and stops
- Cutting tools
- High performance cutting fluid



KF 78/23

6.2 | 1-SPINDLE COPY ROUTERS

1-spindle copy router **AS 170/00**

- Large cutting range despite compact design
- Copy routing using side stops or templates at a ratio of 1:1
- Pneumatic tracer point with two levels for two different cutter diameters
- Our patented copy lever suspension ensures precision routing with a minimum of effort
- The table height is adjustable to accommodate very high profiles of up to 400 mm
- The “Spindle Lock” feature makes tool changing easy
- Pneumatic material clamping unit
- Pulsed coolant system

Technical specifications

- Horizontal cutting range using a stop 300 x 120 mm
- Horizontal cutting range using a copy template 285 x 110 mm
- Spindle speed 12,000 rpm
- Clamping range for profiles 150 x 130 mm, adjustable up to 400 mm
- Travel 105 mm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 0.74 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 12 l without spraying, 24 l with spraying
- Length 780 mm, depth 790 mm, height 1,545 mm, weight 210 kg

1-spindle copy router **AS 170/10**

- See **AS 170/00**, however:
- Incl. stop system

Options

- Copy templates
- Copy template blanks
- Tracer points
- Collets
- Stop systems
- Material clamping units
- Cutting tools
- High performance cutting fluid



AS 170/10



6.2 | 1-SPINDLE COPY ROUTERS

1-spindle copy router AS 70/44

- Versatile for many applications in aluminium and PVC profile machining
- Precision routing with a minimum of effort and easy, two-lever operation
- Copy routing at a ratio of 1:1 transfers the cutting pattern from a template to the profile
- Your own custom templates can be created (by copying the template to a blank)
- Copy routing using stops is also possible (only rectangular cutting patterns)
- Can be set up in only a few steps
- Pneumatic material clamping unit
- Manual tracer point with three levels for different cutter diameters
- Pulsed coolant system

Technical specifications

- Horizontal cutting range using a stop 230 x 90 mm
- Horizontal cutting range using a copy template 230 x 90 mm
- Spindle speed 12,000 rpm
- Clamping range for profiles 180 x 130 mm
- Travel 110 mm
- Power supply 230/400 V, 3~, 50 Hz
- Power output 0.74 kW
- Compressed air supply 7 bar
- Air consumption per working cycle 12 l without spraying, 24 l with spraying
- Length 720 mm, depth 650 mm, height 1,440 mm, weight 120 kg

1-spindle copy router AS 70/45

- See AS 70/44, however:
- Speed switching from 12,000 rpm to 6,000 rpm for cutting thin-walled steel profiles

1-spindle copy router AS 70/50

- See AS 70/44, however:
- Table-top unit
 - Manual material clamping unit
 - No pulsed coolant system
 - Length 720 mm, depth 650 mm, height 960 mm, weight 75 kg

Options

- Copy templates
- Collets
- Stands and guide bars
- Workpiece supports and stops
- Material clamping units
- Cutting tools
- High performance cutting fluid



AS 70/50



AS 70/44



6.3 | END MILLING MACHINES

End milling machine AF 223/01

- For machining transoms and door profiles made of aluminium
- Large cutting range of up to 400 mm
- Continuously adjustable table height
- Automatic work sequence
- Tool diameters of up to 280 mm can be used
- The material stop can be pivoted up to 60° to the left and right. Notching up to 30° (acute angles, left and right). Detent at 90° with index pin
- Two installation positions for the material stop
- With quick tool change system and “Spindle Lock” for easy tool changing
- Precise, smooth-action and low-wear recirculating ball guides
- Horizontal and vertical pneumatic material clamping provides flexibility
- Depth stop for four different notching depths
- Pulsed coolant system
- Automatic safety curtain

Technical specifications

- Cutting tool diameter max. 280 mm
- Cutter bore 40 mm
- Max. profile height 200 mm
- Cutting height 145 mm
- Cutting depth 110 mm
- Cutting length 400 mm
- Spindle speed 2,800 rpm
- Travel 550 mm
- 2.5 kW of power at 400 V / 50 Hz
- Compressed air supply 7 bar
- Power output 2 kW
- Air consumption per working cycle 15 l without spraying, 25 l with spraying
- Length 1,540 mm, depth 905 mm, height 1,000 mm, weight 280 kg

Options

- Extraction system
- 4-fold turret stop for table height
- Digital display
- Cutting tools
- High performance cutting fluid

End milling machine AF 222/02

See AF 223/01, however:

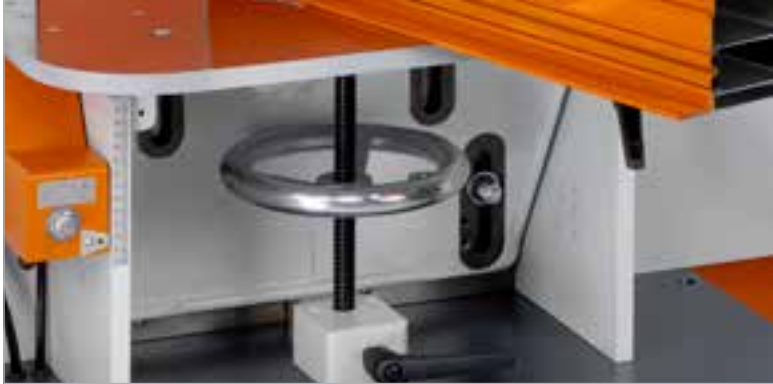
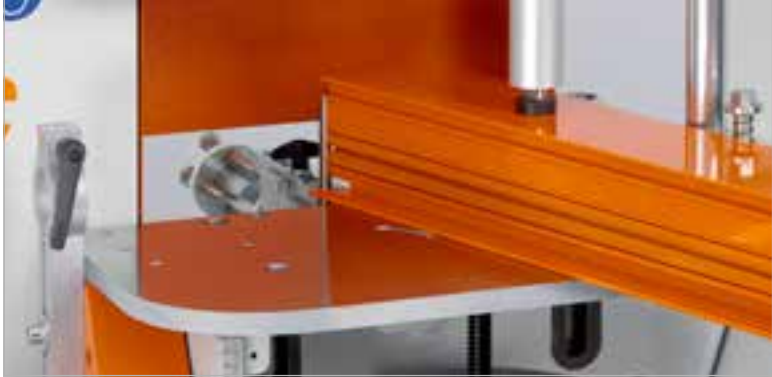
- Manual feed of the routing unit
- Integrated connecting piece with extractor hose for connection to an extraction system

Technical specifications

- Profile height max. 165 mm
- Air consumption 10 l per working cycle, 20 l with minimum-volume lubrication system
- Length 1,540 mm, depth 905 mm, height 1,000 mm, weight 248 kg

Options

- Extraction system
- 4-fold turret stop for table height
- Digital display
- Cutting tools
- High performance cutting fluid



AF 223



7 | CORNER CRIMPERS

Our corner crimping machines can be used for numerous profile systems, such as for windows, doors, frames or fly screens. They are exceptionally stable and have a long service life. Due to their extremely high pressing force, they are also ideal for use with large profiles.

Product overview	Product	Page
Corner crimper	EP 124	58
Corner crimper	EP 120	60

7 | CORNER CRIMPERS

Corner crimper EP 124

- For pressing profiles with large dimensions with the highest quality requirements
- The machine is easy to adjust and operate and has short changeover times thanks to a simple blade-changing system
- Extremely high pressing force due to large-volume bellows cylinder (maintenance free)
- With retractable, hydro-pneumatically controlled counter bearing
- The specially-designed counter bearing head allows pressing of frames with an inner dimension starting at 150 mm (clear dimension)
- The pressing depth can be set separately for each tool carriage
- An adjustable pressing blade is also available to compensate for the profile chamber offset (5 to 15 mm as standard, 15 to 35 mm as an option)
- Support arms and pressing blades included as standard
- 2-hand operation

Technical specifications

- Pressing height 140 mm
- Pressing force 70 kN (7 t)
- Pneumatic drive
- Power supply 230 V, 1~, 50/60 Hz
- Compressed air supply 7 bar
- Air consumption per working cycle 35 l
- Length 1,100 mm, depth 950 mm, height 1,230 mm, weight 534 kg

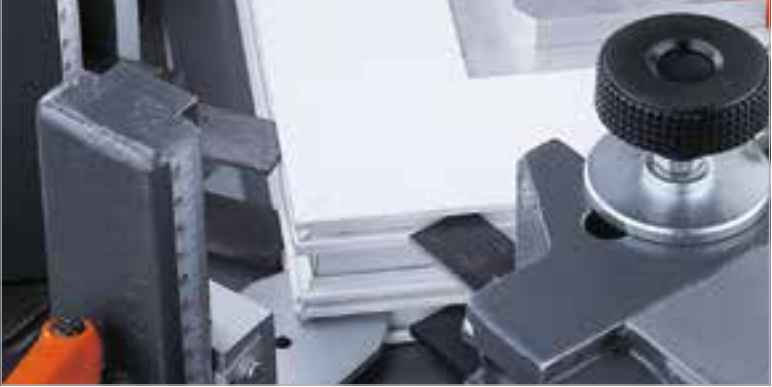
Options

- Support table for pre-assembly and depositing
- Counter bearing
- Special pressing blade



Corner crimper EP 124/20

- See EP 124, however:
- Pressing height 200 mm
 - Length 1,100 mm, depth 950 mm, height 1,230 mm, weight 545 kg
 - The ideal machine for curtain wall elements



7 | CORNER CRIMPERS

Corner crimper EP 120

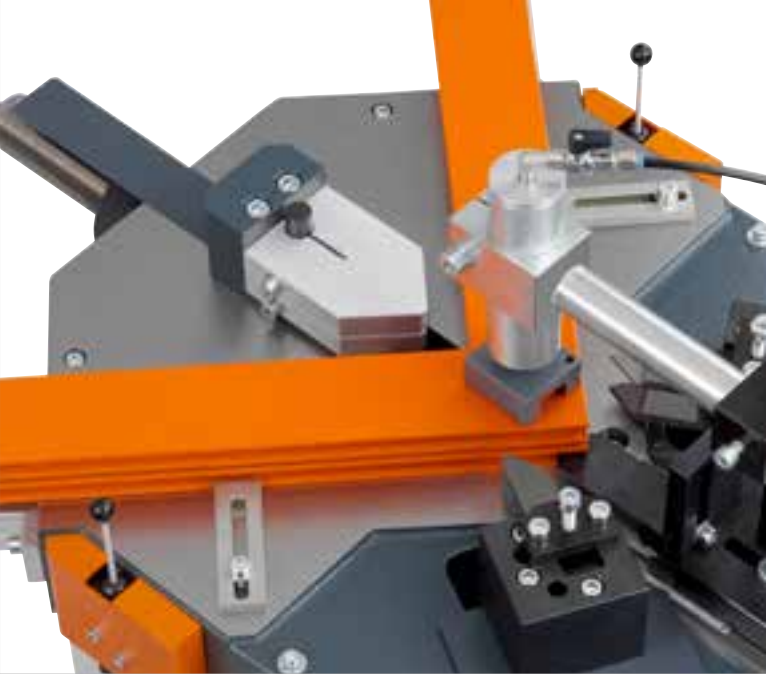
- For pressing profiles with a height of up to 68 mm
- Extremely high pressing force due to large-volume bellows cylinder (maintenance free)
- The machine is easy to adjust and operate
- Counter bearing can be positioned pneumatically, mechanical locking
- Support arms and pressing blades included as standard
- 2-hand operation

Technical specifications

- Pressing height 68 mm
- Pressing force 40 kN (4 t)
- Pneumatic drive
- Compressed air supply 7 bar
- Air consumption per working cycle 30 l
- Length 650 mm, depth 820 mm, height 1,270 mm, weight 205 kg

Options

- Additional support
- Special pressing blade



EP 120



8 | PROFILE MACHINING CENTRES

With their robust and compact design, our profile machining centres are used in the most diverse aluminium, PVC and steel profile machining applications, especially in the manufacturing of windows, doors, and curtain walls.

An optional shuttle operation mode with alternating loading of the work areas – with doors, for example – increases productivity by up to 30 percent since the machine can be prepared for the next part while the previous part is still being machined.

Profile surfaces are optimally protected: All operations, such as routing, milling, drilling and tapping, are performed while the profile bar is stationary (SBZ 151 to SBZ 122).

Robust, low-wear direct drives on all axes allow rapid home positioning of the machining assembly at speeds of up to 150 m/min.

Profile machining centres with eluCam offer easy programming right on the machine. Alternatively, programming can also be done in the office using the comprehensive eluCad software.

Further product highlights:

- Automatic clamping adjustment
- Automatic length measurement of the profile bar, including a wireless barcode scanner
- eluCad (office software package for optimised production management)
- Fully loaded with standard equipment features

Pass-through systems:

- Pass-through systems can be configured as a fast automatic saw or a flexible machining centre
- Transportation on rollers is easy on profile surfaces
- Profile loading and unloading magazine
- Continuous machining of window and door profiles as well as simple curtain wall parts

Product overview	Product	Page
5-axis profile machining centre	SBZ 151 Edition 90	64
5-axis profile machining centre	SBZ 150 eluCam	66
4-axis profile machining centre	SBZ 141 eluCam	68
4-axis profile machining centre	SBZ 140 eluCam	70
3-axis profile machining centre	SBZ 131 eluCam	72
3-axis profile machining centre	SBZ 130 eluCam	74
3-, 4-, 5-axis profile machining centres	SBZ 122/7x	76
Cut-to-length centre, pass-through system	SBZ 616/02	78
Profile machining centres, pass-through systems	SBZ 628 S 628 XL 628 XXL	80
Profile machining centre, pass-through system	SBZ 630	82
Profile machining centre, pass-through system	SBZ 631	82

8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 151 Edition 90**

- 5-axis profile machining centre
- Designed for flexible and efficient machining of aluminium and thin-walled steel profiles
- All operations, such as routing, drilling, tapping, thread milling, notching and sawing, are performed while the profile bar is stationary to protect the profile surfaces
- Fast positioning of the machining unit with up to 66 m/min thanks to dynamic servo drives
- 6-sided machining. From below with an angle head (optional)
- The on-board tool magazines ensure that tool changing times are kept short, thereby optimising machining cycles
- One magazine can be equipped with 13 standard tools and seven special tools (angle routing head and special cutters). An additional magazine for the saw blade, diameter 400 mm or 500 mm
- Autonomous clamp positioning with absolute measurement system
- Two separate working zones enable machining in shuttle operation. Secure access with safety fences and light barriers
- 5-axis CNC control with independent CNC for 3D machining, notching and cutting
- The absolute rotary encoder system means no axis homing is required
- Network connection and USB port
- Operating terminal with Windows operating system and 15" flat screen
- Remote online maintenance
- eluCloud ready

Technical specifications

- Traverse path X-axis 6,000 mm, 7,300 mm, 9,000 mm, 10,300 mm, 12,000 mm, 13,300 mm, 15,000 mm, 16,300 mm, Vmax. 66 m/min.
- Y-axis traverse path 1,150 mm, Vmax. 40 m/min.
- Z-axis traverse path 715 mm, Vmax. 40 m/min.
- Pivoting angle A-axis for saw blade with diameter of 500 mm +/- 100° (for saw blade with diameter of 400 mm +/- 110°)
- C-axis pivoting angle +/- 182°
- Positioning accuracy:
 - o X-/Y-/Z-axis +/- 0.1 mm/m
 - o A-/C-axis +/- 0.1°
- Max. spindle speed 24,000 rpm
- Spindle power output 20 kW S1
- Right tool changer, 20 tool positions
- Left tool changer, one saw blade with a diameter of 500 mm (400 mm optional)
- Possible on special tool positions
 - o 13x max. 50mm
 - o 1x max. 180 mm (saw blade)

- o 1x max. 100 mm
- o 5x max. 63 mm (optionally 2x WFK)
- Tool holder HSK-63F
- Compressed air supply 7 bar
- Power supply 400 V, 3~, 50 Hz, 50 A
- Air consumption per minute approx. 265 l with spraying

Machining lengths

SBZ 151 Edition 90 – 6.0 m

- Max. machining length with profile end machining, 5,680 mm
- Max. machining length without profile end machining, 6,000 mm

SBZ 151 Edition 90 – 7.3 m

- Max. machining length with profile end machining, 6,980 mm
- Max. machining length without profile end machining, 7,300 mm

SBZ 151 Edition 90 – 9.0 m

- Max. machining length with profile end machining, 8,680 mm
- Max. machining length without profile end machining, 9,000 mm

SBZ 151 Edition 90 – 10.3 m

- Max. machining length with profile end machining, 9,980 mm
- Max. machining length without profile end machining, 10,300 mm

SBZ 151 Edition 90 – 12.0 m

- Max. machining length with profile end machining, 11,680 mm
- Max. machining length without profile end machining, 12,000 mm

SBZ 151 Edition 90 – 13.3 m

- Max. machining length with profile end machining, 12,980 mm
- Max. machining length without profile end machining, 13,300 mm

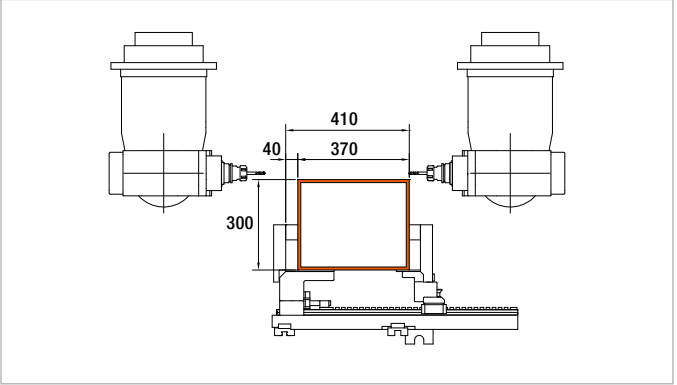
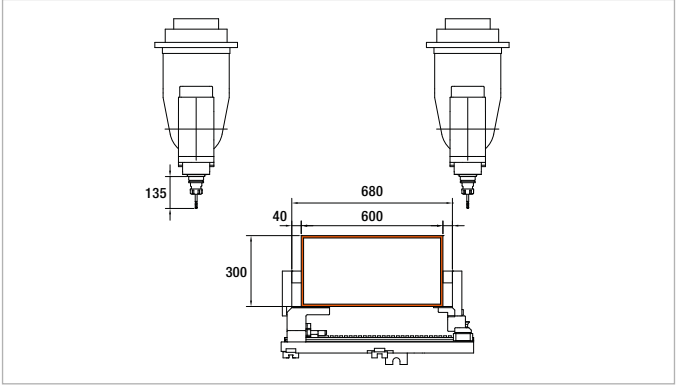
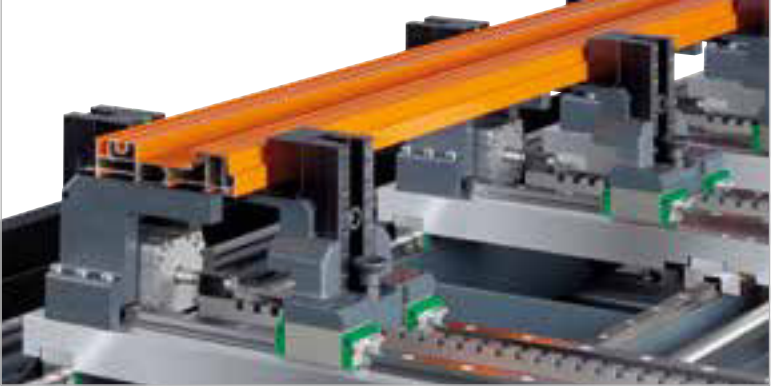
SBZ 151 Edition 90 – 15.0 m

- Max. machining length with profile end machining, 14,680 mm
- Max. machining length without profile end machining, 15,000 mm

SBZ 151 Edition 90 – 16.3 m

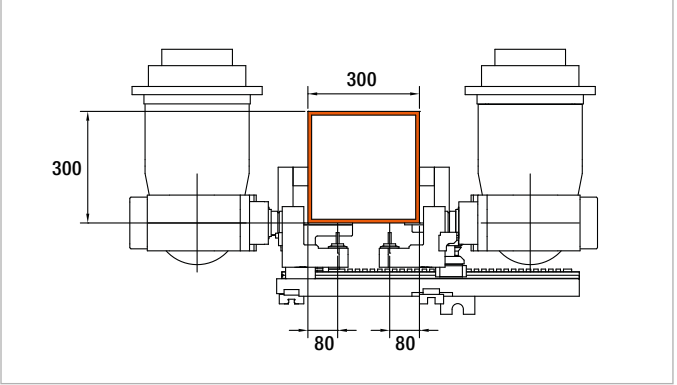
- Max. machining length with profile end machining, 15,980 mm
- Max. machining length without profile end machining, 16,300 mm

Longer versions available upon request



Options

- Automatic length measurement on both sides
- Automatic length measurement on both sides with Z travel
- Tool length measurement and fracture detection
- Tapping without compensation chuck
- Clock system
- 3D wireless measurement sensor
- Tools
- Tool holders
- Collet chucks
- Collets
- Angle routing heads for machining from below
- Saw blades
- Chips conveyor belt
- Vapour extractor
- Label printer
- Barcode scanner



SBZ 151 Edition 90 + special accessories

8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 150 eluCam**

- 5-axis profile machining centre
- Designed for economical and efficient machining of aluminium and thin-walled steel profiles
- All operations, such as routing, drilling, tapping, thread milling, notching and sawing, are performed while the profile bar is stationary to protect the profile surfaces
- 6-sided machining. From below with an angle head (option)
- Operator software with graphic 3D display of workpieces
- The magazine can be equipped with nine standard tools, five special tools (angle routing head and special cutters) and one saw blade
- Robust, low-wear direct drives on all axes allow rapid home positioning of the machining assembly
- Automatic clamp recognition and clamp positioning
- 5-axis controller for 3D machining, 15" colour display, USB ports, network connection
- Windows operating system
- eluCam

Technical specifications

- X-axis traverse path 6,500 mm, 7,800 mm, 9,500 mm 10,800 mm, 12,500 mm (additional lengths on request) Vmax. 70 m/min.
- Y-axis traverse path 1,000 mm, Vmax. 40 m/min.
- Z-axis traverse path 630 mm, Vmax. 40 m/min.
- A-axis pivoting angle: +/- 110°; freely programmable in 1/10° steps
- A-axis pivoting angle: +/- 182°; freely programmable in 1/10° steps
- Max. spindle speed 24,000 rpm
- Spindle power output 15 kW S1
- Cutting tool diameter max. 100 mm
- Disc milling cutter diameter of max. 100 mm
- Saw blade diameter up to 400 mm max.
- Tool holder HSK-63F
- Compressed air supply 7 bar
- Power supply 400 V, 3~, 50 Hz, 80 A
- Air consumption per minute approx. 200 l with spraying

Machining lengths

SBZ 150 – 6.0 m

- Max. machining length with profile end machining, 5,900 mm
- Max. machining length without profile end machining, 6,220 mm

SBZ 150 – 7.3 m

- Max. machining length with profile end machining, 7,200 mm
- Max. machining length without profile end machining, 7,520 mm

SBZ 150 – 9.0 m

- Max. machining length with profile end machining, 8,900 mm
- Max. machining length without profile end machining, 9,220 mm

SBZ 150 – 10.3 m

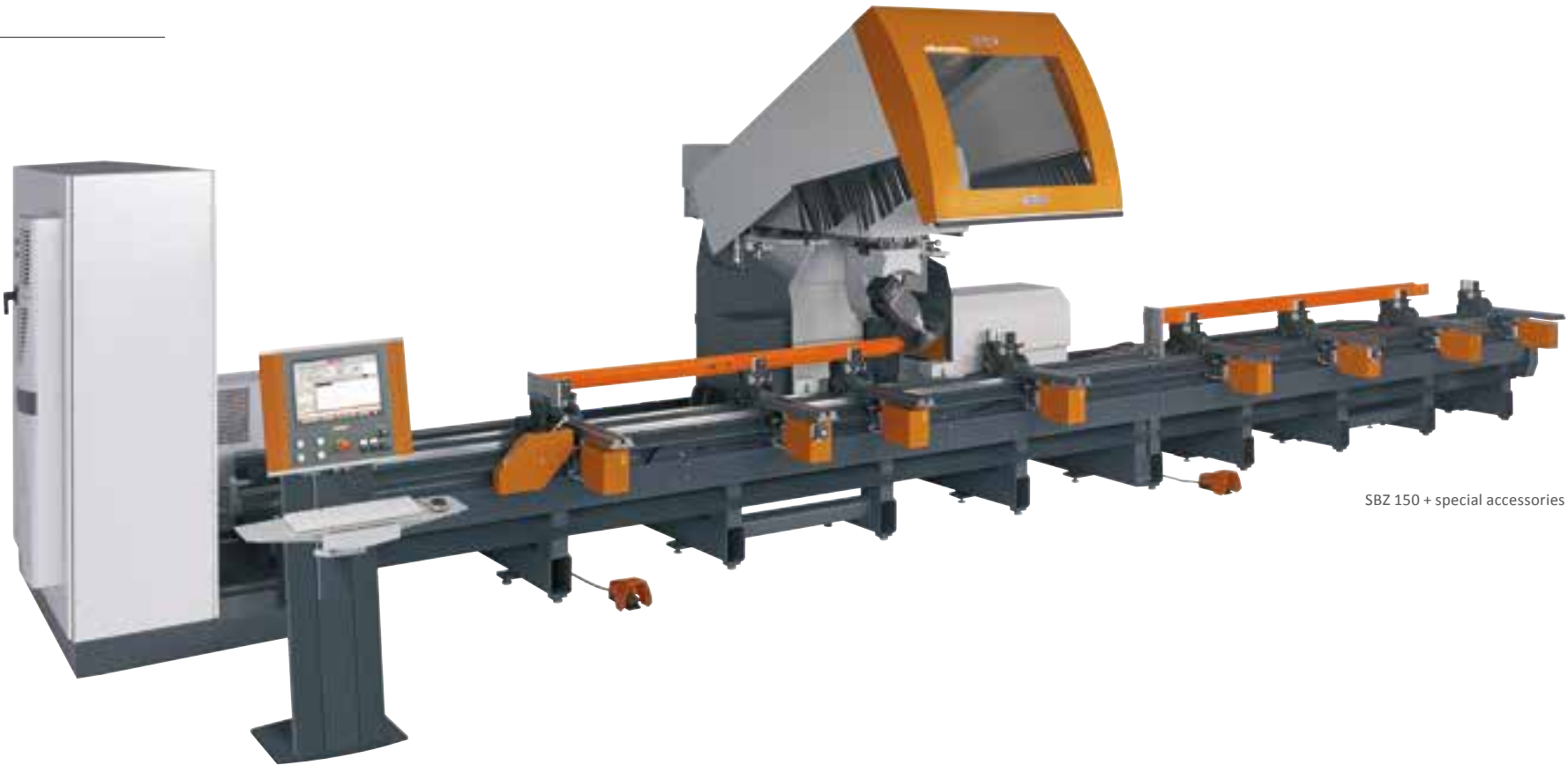
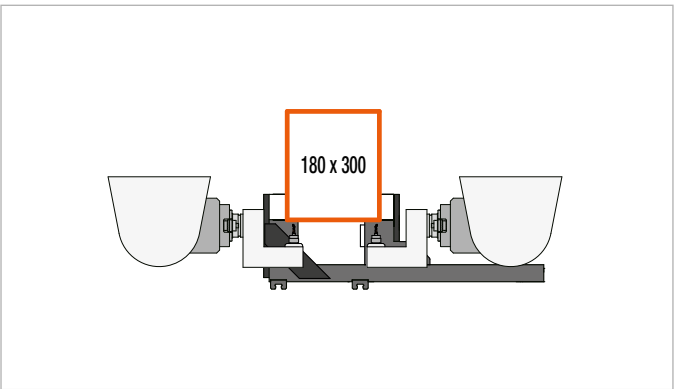
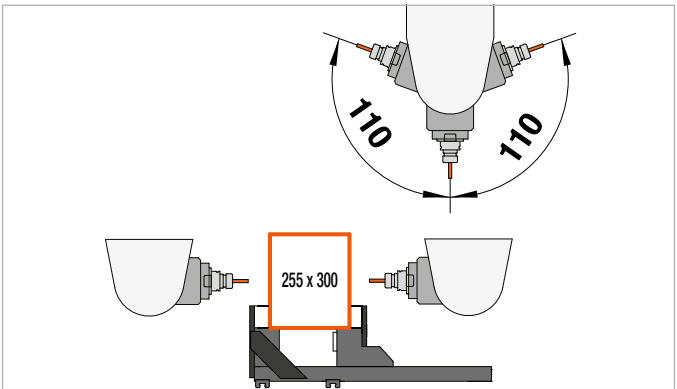
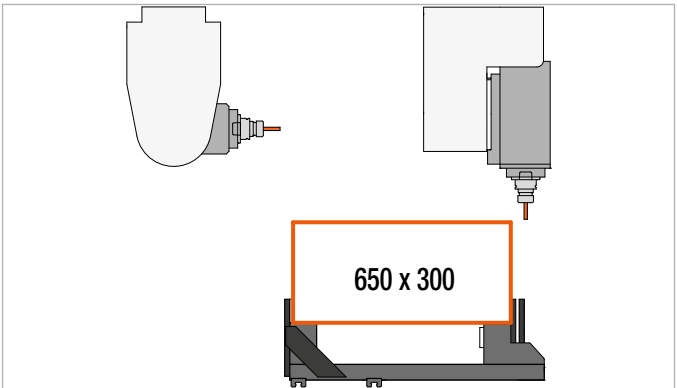
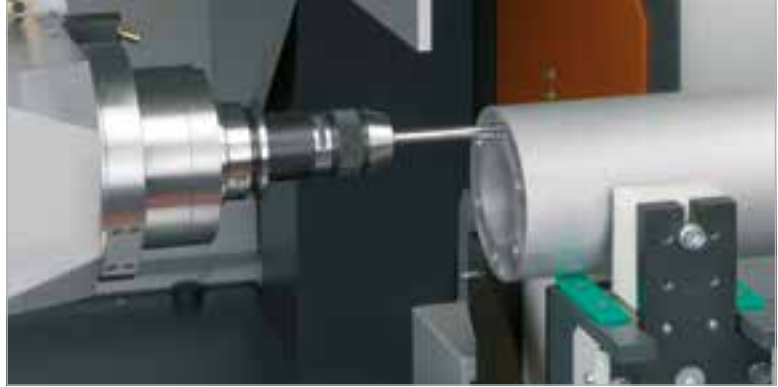
- Max. machining length with profile end machining, 10,200 mm
- Max. machining length without profile end machining, 10,520 mm

SBZ 150 – 12.0 m

- Max. machining length with profile end machining, 11,900 mm
- Max. machining length without profile end machining, 12,220 mm

Options

- Shuttle operation for working on two sides
- Angle routing head for machining from below
- Automatic length measurement
- Chips conveyor belt
- Barcode scanner
- Label printer
- Clock system
- Tool holders
- Collet chucks
- Collets
- Saw blades
- Tools
- eluCad (office software package for optimised production management)



SBZ 150 + special accessories

8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 141 eluCam**

- 4-axis profile machining centre
- Designed for economical and efficient machining of aluminium 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
- Machining with all tools at angles continuously adjustable from -90° to +90°
- Autonomous clamp positioning with absolute measurement system
- The on-board tool magazine ensures that tool changing times are kept short, thereby optimising machining cycles
- The magazine can be equipped with eight tools
- Two rotating angle heads with two different tools are optionally available for double-bar and end machining (0°–90°–180°–270°) (optional)
- Two separate working zones enable machining in shuttle operation (optional)
- Certified, drive-integrated safety functions
 - STO = Safe Torque Off
 - SS1 = Safe Stop 1
 - SLS = Safely Limited Speed
- 4-axis controller
- 15" colour display, USB ports and network connection
- Windows operating system
- eluCam

Technical specifications

- X-axis traverse path 4,200 mm, 7,600 mm, 9,700 mm (additional lengths on request) Vmax. 63 m/min
- Y-axis traverse path 845 mm, Vmax. 60 m/min.
- Z-axis traverse path 620 mm, Vmax. 60 m/min.
- A-axis pivoting range: -90° 0° +90°
- Max. spindle speed 24,000 rpm
- Spindle power output 11 kW S1
- Tool changer for eight tools, additional tool positions on request
- Compressed air supply 7 bar
- Power supply 400 V, 3~, 50 Hz, 63 A
- Air consumption per minute approx. 180 l with spraying

Machining lengths

SBZ 141 – 4.2 m

- Max. machining length with profile end machining, 4,200 mm
- Max. machining length without profile end machining, 4,320 mm

SBZ 141 – 7.6 m

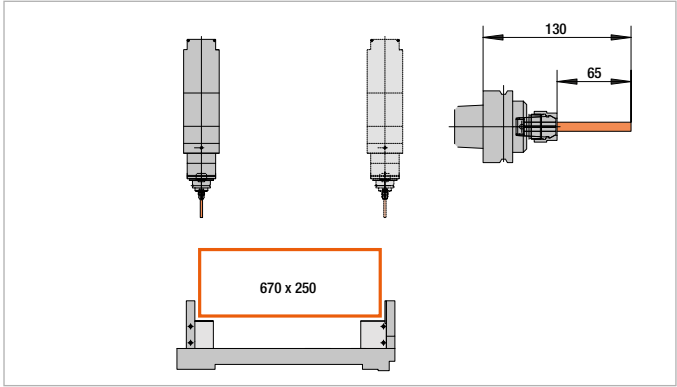
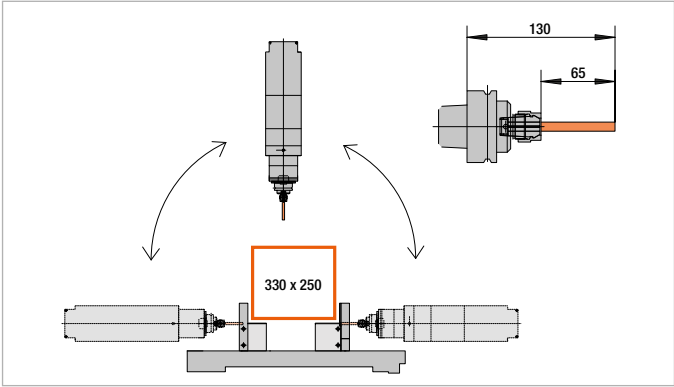
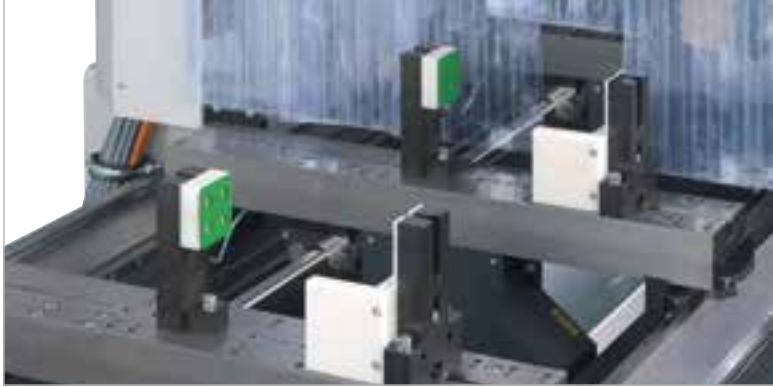
- Max. machining length with profile end machining, 7,600 mm
- Max. machining length without profile end machining, 7,720 mm

SBZ 141 – 9.7 m

- Max. machining length with profile end machining, 9,700 mm
- Max. machining length without profile end machining, 9,820 mm

Options

- Shuttle operation for working on two sides
- Automatic length measurement on both sides
- Clamping unit accommodates double profile machining
- Barcode scanner
- Stationary tool magazine (16x)
- On-board tool changers for angle head
- Angle routing heads
- Saw head
- Tool holders
- Collet chucks
- Collets
- Tools
- eluCad (office software package for optimised production management)



8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 140 eluCam**

- 4-axis profile machining centre
- Designed for economical and efficient machining of aluminium 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
- Machining with all tools at angles continuously adjustable from -90° to +90°
- The on-board tool magazine ensures that tool changing times are kept short, thereby optimising machining cycles
- The magazine can be equipped with eight tools
- A rotating angle head with two different tools is available for double-bar and end machining (0°–90°–180°–270°) (option)
- Two separate working zones enable machining in shuttle operation (optional)
- Automatic clamp positioning
- 4-axis controller
- 15" colour display, USB ports and network connection
- Windows operating system
- eluCam

Technical specifications

- X-axis traverse path 4,200 mm, 6,400 mm, 7,600 mm 9,700 mm (additional lengths on request) Vmax. 63 m/min
- Y-axis traverse path 850 mm, Vmax. 60 m/min.
- Z-axis traverse path 650 mm, Vmax. 60 m/min.
- A-axis pivoting angle -90° to + 90° continuously adjustable
- Max. spindle speed 24,000 rpm
- Spindle power output 11 kW, S1
- Tool changer for eight tools, additional tool positions on request
- Compressed air supply 7 bar
- Power supply 400 V, 3~, 50 Hz, 63 A
- Air consumption per minute approx. 180 l with spraying

Machining lengths

SBZ 140 – 4.2 m

- Max. machining length with profile end machining, 4,080 mm
- Max. machining length without profile end machining, 4,200 mm

SBZ 140 – 6.4 m

- Max. machining length with profile end machining, 6,280 mm
- Max. machining length without profile end machining, 6,400 mm

SBZ 140 – 7.6 m

- Max. machining length with profile end machining, 7,480 mm
- Max. machining length without profile end machining, 7,600 mm

SBZ 140 – 9.7 m

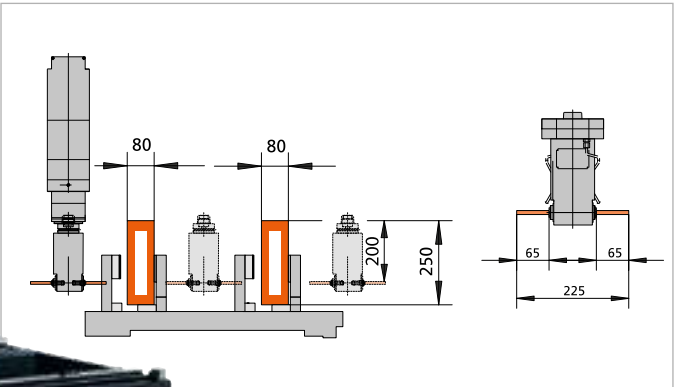
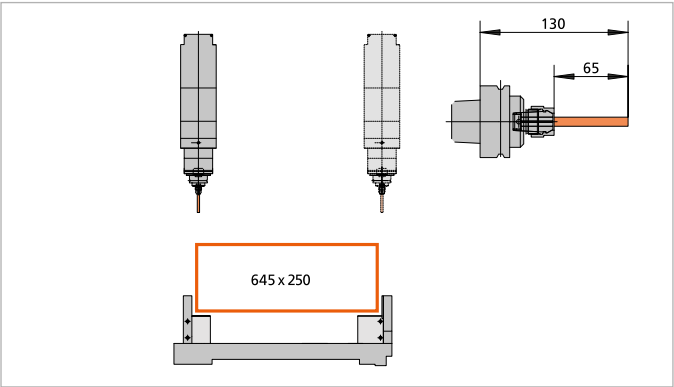
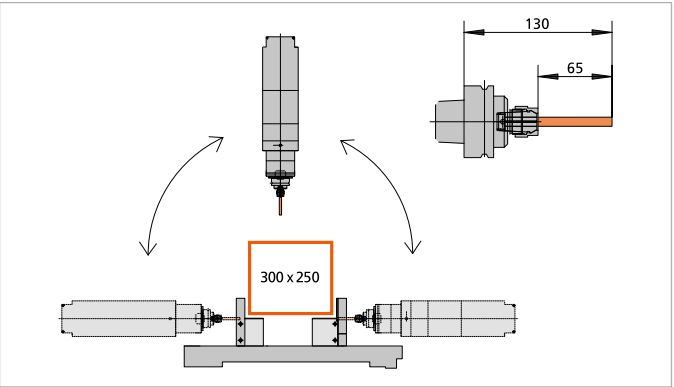
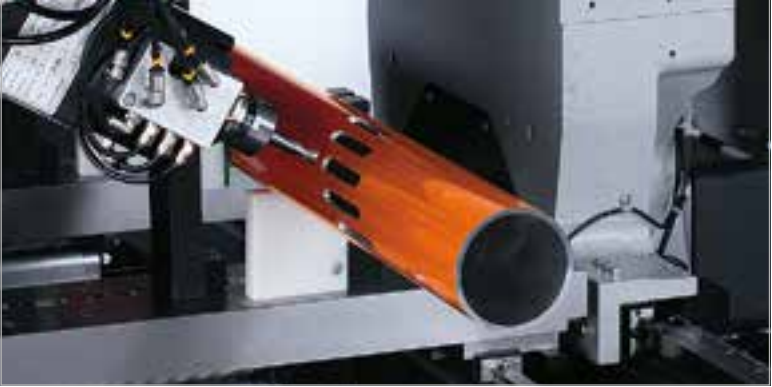
- Max. machining length with profile end machining, 9,580 mm
- Max. machining length without profile end machining, 9,700 mm

Options

- Automatic length measurement
- Clamping unit accommodates double profile machining
- Barcode scanner
- Stationary tool magazine
- Angle routing heads
- Tool holders
- Collet chucks
- Collets
- Saw head
- Tools
- eluCad (office software package for optimised production management)



SBZ 140 + special accessories



8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 131 eluCam**

- 3-axis profile machining centre
- Designed for economical and efficient machining of aluminium, steel and stainless steel profiles
- All operations, such as routing, drilling and tapping, are performed while the profile bar is stationary to protect the profile surfaces
- The on-board turret head ensures that tool changing times are kept very short, thereby optimising machining cycles
- The turret head can be equipped with eight tools or four angle routing heads
- Autonomous clamp positioning enables clamp arrangement during secondary time
- 3-axis controller
- The tool spindle is designed as an additional axis
- Angle heads for lateral and profile end machining
- 15" colour display, USB ports and network connection
- Windows operating system
- eluCam

Technical specifications

- X-axis traverse path 4,200 mm, 7,200 mm, 8,500 mm 10,200 mm, 11,500 mm (additional lengths on request) Vmax. 60 m/min
- Y-axis traverse path 485 mm, Vmax. 60 m/min.
- Traverse path Z-axis 340 mm, Vmax. 60 m/min.
- Spindle speed 6,000 rpm max., 18,000 rpm with high-speed spindle
- Spindle power output 5.5 kW
- Tool changer for eight tools on a turret head
- Compressed air supply 7 bar
- Power supply 400 V, 3~, 50 Hz, 63 A
- Air consumption per minute approx. 100 l with spraying

Machining lengths

SBZ 131 – 4.2 m

- Max. machining length with profile end machining, 4,080 mm
- Max. machining length without profile end machining, 4,200 mm

SBZ 131 – 7.2 m

- Max. machining length with profile end machining, 7,080 mm
- Max. machining length without profile end machining, 7,200 mm

SBZ 131 – 8.5 m

- Max. machining length with profile end machining, 8,380 mm
- Max. machining length without profile end machining, 8,500 mm

SBZ 131 – 10.2 m

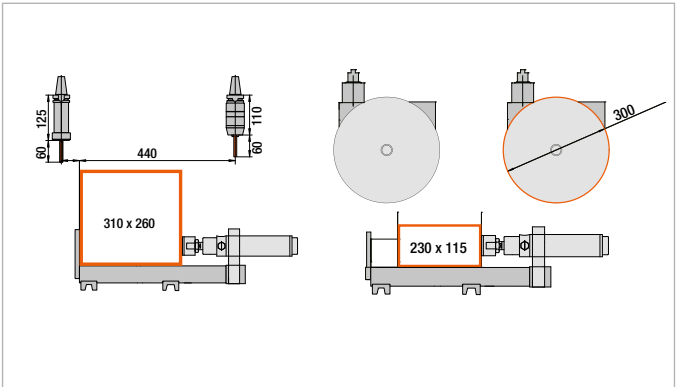
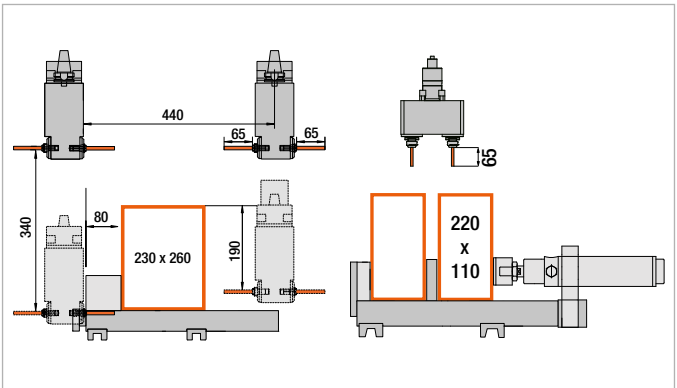
- Max. machining length with profile end machining, 10,080 mm
- Max. machining length without profile end machining, 10,200 mm

SBZ 131 – 11.5 m

- Max. machining length with profile end machining, 11,380 mm
- Max. machining length without profile end machining, 11,500 mm

Options

- Shuttle operation for working on two sides
- Cycling program with special clamping device and outfeed conveyor
- Automatic length measurement
- Angle routing heads
- High-speed spindle
- Slow spindle
- Saw head
- Clamping unit accommodates double profile machining
- Barcode scanner
- Tool holders
- Collet chucks
- Collets
- Tools
- eluCad (office software package for optimised production management)



SBZ 131 + special accessories

8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 130 eluCam**

- 3-axis profile machining centre
- Designed for economical and efficient machining of aluminium, steel and stainless steel profiles
- All operations, such as routing, drilling and tapping, are performed while the profile bar is stationary to protect the profile surfaces
- The on-board turret head ensures that tool changing times are kept very short, thereby optimising machining cycles
- The turret head can be equipped with eight tools or four angle routing heads
- Automatic clamp positioning enables the machine to position the material clamps
- 3-axis controller
- The tool spindle is designed as an additional axis
- Angle heads for lateral and profile end machining
- 15" colour display, USB ports and network connection
- Windows operating system
- eluCam

Technical specifications

- X-axis traverse path 4,200 mm, 7,200 mm, 8,500 mm 10,200 mm, 11,500 mm (additional lengths on request) Vmax. 60 m/min
- Y-axis traverse path 485 mm, Vmax. 60 m/min.
- Traverse path Z-axis 340 mm, Vmax. 60 m/min.
- Spindle speed 6,000 rpm max., 18,000 rpm with high-speed spindle
- Spindle power output 5.5 kW
- Tool changer for eight tools on a turret head
- Compressed air supply 7 bar
- Power supply 400 V, 3~, 50 Hz, 63 A
- Air consumption per minute approx. 100 l with spraying

Machining lengths

SBZ 130 – 4.2 m

- Max. machining length with profile end machining, 4,080 mm
- Max. machining length without profile end machining, 4,200 mm

SBZ 130 – 7.2 m

- Max. machining length with profile end machining, 7,080 mm
- Max. machining length without profile end machining, 7,200 mm

SBZ 130 – 8.5 m

- Max. machining length with profile end machining, 8,380 mm
- Max. machining length without profile end machining, 8,500 mm

SBZ 130 – 10.2 m

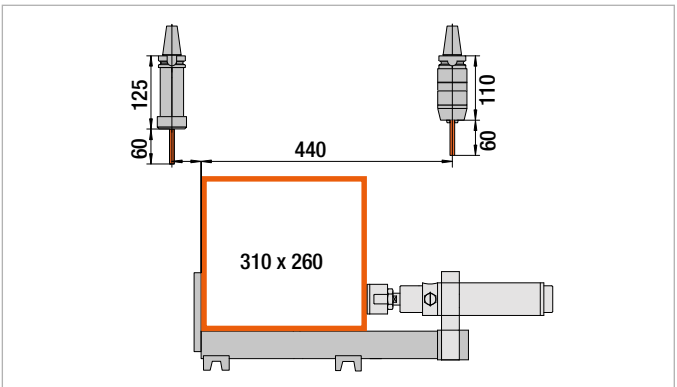
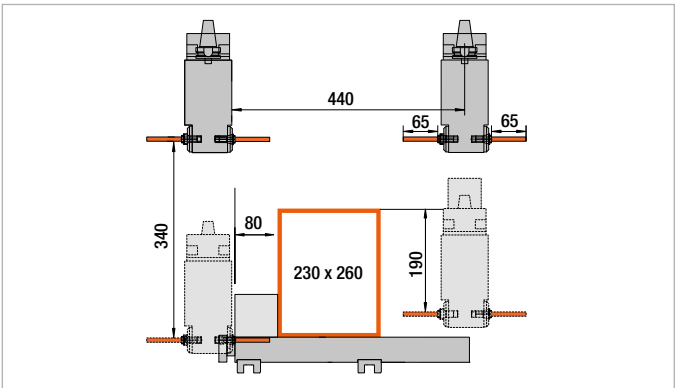
- Max. machining length with profile end machining, 10,080 mm
- Max. machining length without profile end machining, 10,200 mm

SBZ 130 – 11.5 m

- Max. machining length with profile end machining, 11,380 mm
- Max. machining length without profile end machining, 11,500 mm

Options

- Shuttle operation for working on two sides
- Automatic length measurement
- Angle routing heads
- High-speed spindle
- Slow spindle
- Saw head
- Clamping unit accommodates double profile machining
- Barcode scanner
- Collet chucks
- Collets
- Tools
- eluCad (office software package for optimised production management)



SBZ 130 + special accessories

8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 122/7x**

The different models and equipment variants allow users to configure and select a machine the perfectly fits their requirements:

- **SBZ 122/70 plus: 3-axis basic model**
automatic clamp positioning, tapping without compensation chuck, large machining area, machining from above, 5-sided machining optionally with rotating angle head
- **SBZ 122/71: 3-axis model for metal construction applications**
includes automatic clamp positioning, tapping without a compensation chuck, 5-sided machining with rotating angle head
- **SBZ 122/73: 4-axis model for metal construction applications**
includes automatic clamp positioning, tapping without a compensation chuck, A-axis for continuously variable angle adjustment, 3-sided machining
- **SBZ 122/74: 4-axis model for metal construction and industrial applications**
includes autonomous clamp positioning, clamps with linear guides, tapping without a compensation chuck, A-axis for continuously variable angle adjustment, 3-sided machining
- **SBZ 122/75: 5-axis model for metal construction and industrial applications**
includes autonomous clamp positioning, clamps with linear guides, tapping without a compensation chuck, C-axis for profile end machining from the left and right, 5-sided machining

Configuration options

- 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. Can be equipped with up to eight clamps
- Material reference stop (right) for positioning workpieces with overlength machining
- Additional stop for overlength machining (left)
- Length measurement on both sides
- Double clamping and other accessories on request

For more information, see our individual “SBZ 122 model family” brochure

<https://www.elumatec.com/en/catalogs>



Machine bed

The new design is fully comprehensive. The travelling column moves on a machine bed that is executed as a modern inclined bed. Swarf automatically falls off of the 45° incline, making cleaning much easier. The operator can step close to the workpiece table when positioning profiles, ensuring an ergonomic economy of motion. The bed is dimensioned for high rates of travel with minimal oscillation. The machine has a large work area despite its small overall footprint. Noise reduction is a further benefit of the protective enclosure.



Clamps

Included as standard equipment on the SBZ 122 are four completely redesigned clamps featuring a slim form and high degree of stiffness. The machine can optionally be equipped with up to eight clamps. In the SBZ 122/74 and SBZ 122/75, the clamps are equipped with linear guides instead of round guides.



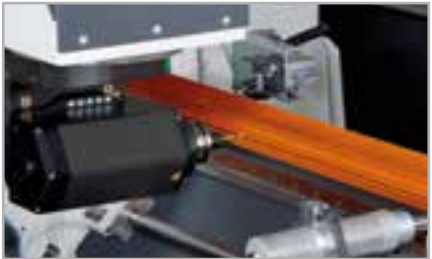
Tool magazine (SBZ 122/70 plus, SBZ 122/71)

SBZ 122 models with a machining length of four meters are equipped with a stationary tool magazine with four positions as standard. Additional tool magazines can be installed as needed anywhere along the X-axis. (16 standard tools und two angle heads)



Tool magazine (SBZ 122/73/74/75)

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



A-axis angle adjustment (SBZ 122/73/74/75)

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



C-axis (SBZ 122/75)

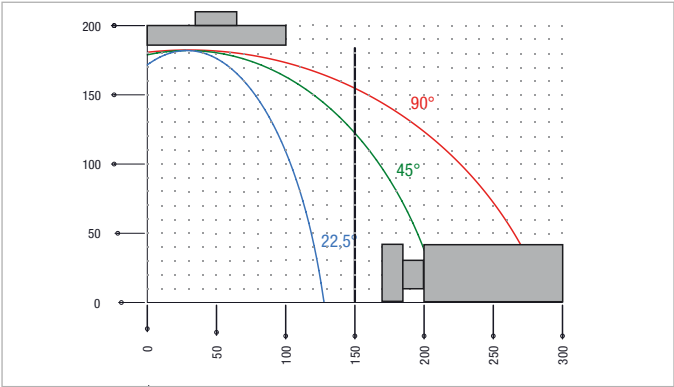
Continuously adjustable angle setting from -220° to +220°
Enables profile end machining from the left and right

8 | PROFILE MACHINING CENTRES

Cut-to-length centre **SBZ 616/02**

- Automatic saw for aluminium profiles
- Loading magazine for up to nine profiles
 - Lifting function for cycling the empty compartments
 - In- and outfeed with motorised, continuously adjustable gripper
 - Rubberized gripper jaws prevent profile damage
 - Hydro-pneumatic saw feed
 - Pulsed coolant system
 - Outfeed for parts using a belt conveyor, plus lifting function for outfeed of the finished profiles with no impact on the automatic process.

Technical specifications
<ul style="list-style-type: none">• Large saw blade with a diameter of 550 mm• For cutting range, see cutting diagram• Saw motor 4 kW• Continuously adjustable pivoting range with servo drive from -22.5° to +22.5°
Optional
<ul style="list-style-type: none">• Label printer



8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 628**

The different models allow users to configure and select the machine that perfectly fits their requirements:

- **SBZ 628 S: Pass-through system for windows, doors and curtain walls**
 - Four spindles for routing or drilling
 - Separating cuts from -45° to 90° (lead cut), from 90° to 45° (lead cut) continuously adjustable
- **SBZ 628 XL: Pass-through system for windows, doors and curtain walls**
 - Up to eight spindles for routing or drilling
 - Different separating cut strategies from 22.5° to 157.5° and notching (pivoting)
 - Quick-change systems for tension rollers and clamping plates for atypical profiles
 - Mode for manual insertion and clamping of non-stationary profiles
- **SBZ 628 XXL: Pass-through system for windows, doors and curtain walls**
 - Up to eight spindles for routing or drilling
 - Different separating cut strategies from 22.5° to 157.5° (pivoting)
 - Additional saw unit from 45° to 135° (tilting)
 - Combined notching
 - Quick-change systems for tension rollers and clamping plates for atypical profiles
 - Mode for manual insertion and clamping of non-stationary profiles

Machine configuration

- Left loading magazine for automatic production processes
- The routing spindles can be positioned continuously over 360° on the profile bar, and the cutting angle can be adjusted continuously over 360° for machining profiles in various clamping situations
- A generously dimensioned noise abatement enclosure and the easy-access controls and maintenance elements simplify operation
- Machined profiles are placed gently onto the unloading magazine
- Versions customised to meet specific customer requirements can be designed upon request

For more information, see our individual
“SBZ 628 model family” brochure

<https://www.elumatec.com/en/catalogs>



SBZ 628 XL

8 | PROFILE MACHINING CENTRES

Profile machining centre **SBZ 630**

- Profile machining centre with loading and outfeed magazine
- Due to its modular design, the **SBZ 630** can be set up either as a dedicated automatic saw, **SBZ 630/01**, or as a complete profile machining centre, **SBZ 630/11**, depending on the requirements
- When set up as a profile machining centre for aluminium, the machining tasks are carried out in one machining station with the possibility of up to 30 machining units
- Cutting to length is then subsequently performed with the 7-axis sawing station
- The work sequence can be set up to run from left to right or from right to left

Technical specifications

- Profile lengths and residual pieces from 500–7,500 mm
- Loading magazine for seven profile bars with profile widths of up to 250 mm
- Automatic height, side and rotational axes (350°) of the gripper arm
- Automatic horizontal setting of the vertical clamps (5–70 mm)
- Machining module for up to 30 routing units
- 1-blade saw 7 kW for variable saw cuts at 45°–135° tilted or pivoted
- Profile outfeed via outfeed conveyor

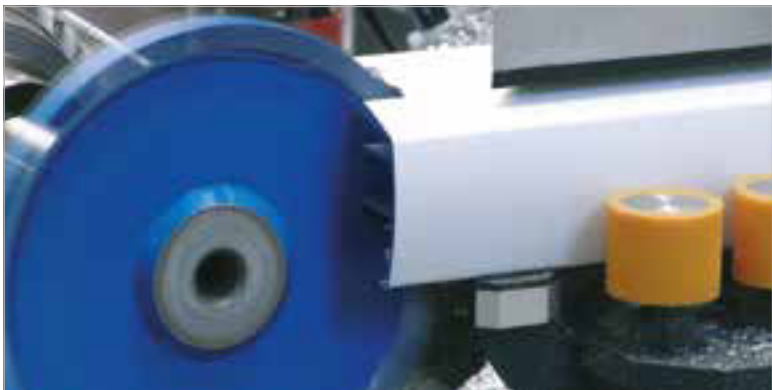
Options

- Label printer
- Barcode scanner
- Loading magazine for ten profile bars with profile widths of up to 130 mm
- eluCad (office software package for optimised production management)



Profile machining centre **SBZ 631**

- See **SBZ 630**, however:
- With notching module AM 631
 - SBZ 630/11/L + special accessories



SBZ 630/11/L + special accessories

9 | PRODUCTION PLANNING – OPTIMISED PRODUCTION PROCESSES

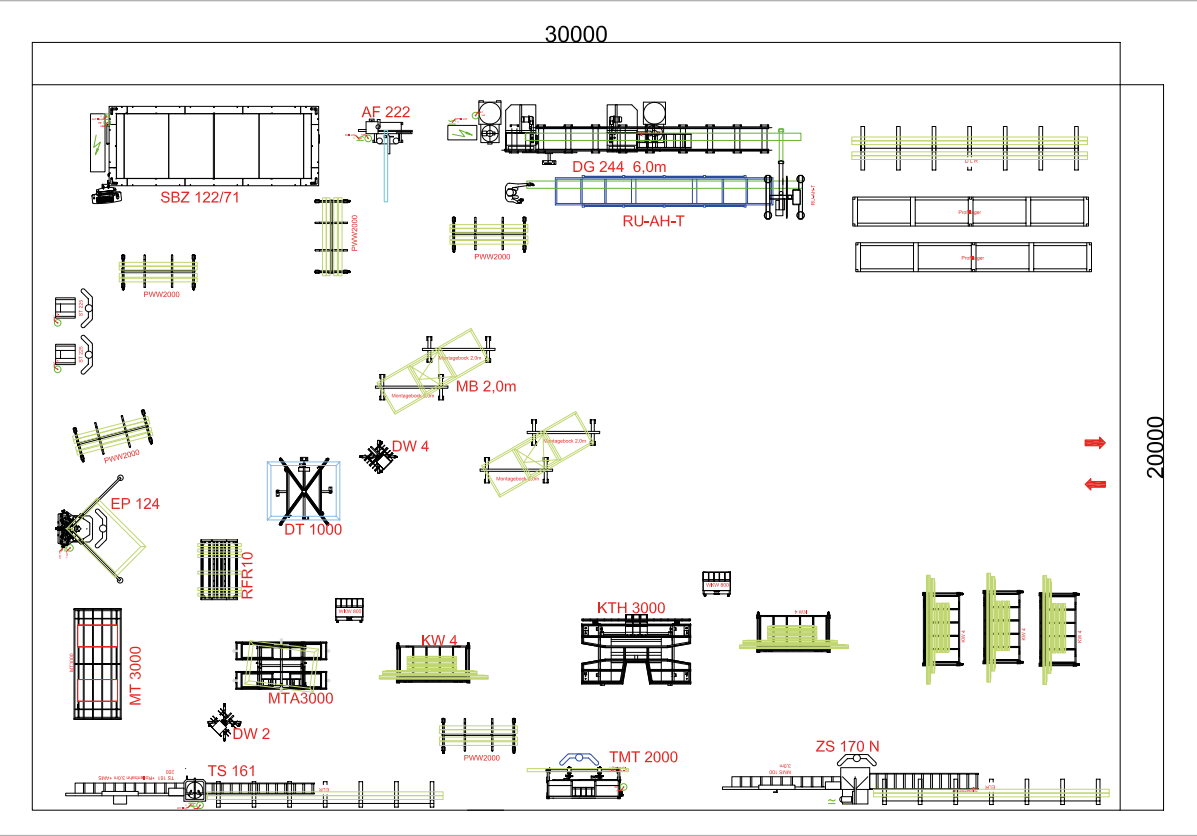
When selecting the ideal product, one of the most important things to consider is which machine(s) can be integrated most easily and economically into your existing production process.

We offer you comprehensive solutions combined with international experience. Whether you are engaged in series or job production, we can always assist you in setting up suitable production structures.

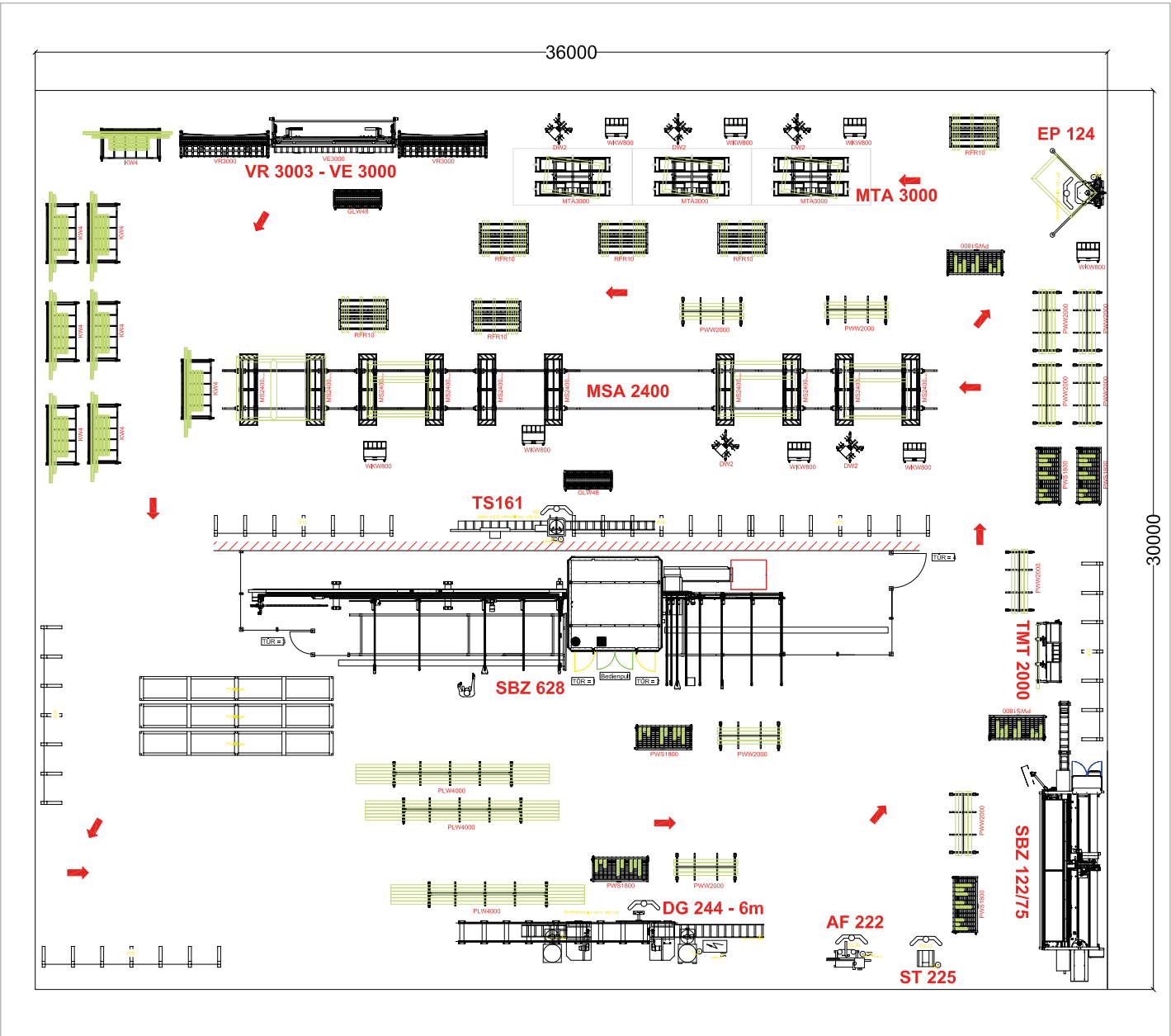
Together, we will examine your shop or production facility, analyse your environment and assist you in the subsequent design or optimisation based on the results. Short paths, material supply and material flow are only a few of the characteristics of an optimised production process. Other factors are covered by our broad product portfolio ranging from work tables to machining centres and on to glass handling systems, including sorting, for effective production planning.

Everything we provide is perfectly compatible – and you can have it all from a single source. This is a foundational element for the economic longevity of your company, whether for new planning or for change processes.

You can find all of the elumatec operating and assembly equipment in our separate catalogue, “Assembly and logistics”.



Production planning for windows and doors



Production planning for windows, doors and curtain walls

10 | ELUCAD SOFTWARE FROM ELUSOFT



elusoft GmbH – Solutions for intelligent and economical profile machining

elusoft GmbH develops software solutions which allow you to create machining programs for elumatec profile machining centres quickly and easily. Among these is “eluCad”, a software package for profile machining that has proven itself in practice and is used worldwide in many different industry sectors. The range of services elusoft offers includes support, seminars and production consulting. elusoft GmbH is a subsidiary of elumatec AG.

eluCad makes it easy to program profile machining centres. This user-friendly software is designed so that the user does not have to program using ISO code directly – all that is required is the entry of the data in a logically structured graphic user interface. Operating the program is intuitive, can be customised and is characterised by practical functionality. A 3D view provides a clear overview by displaying the designed parts realistically on the screen. The profile machining software can take data from various different design programs and process them further. eluCad generates the machining program and optimises the tools and machining paths for the selected profile machining centre. A collision check prevents expensive machine crashes and associated down times. New tools can be created quickly and easily in the software.

Recognise and program machining tasks automatically

The greatest benefit you gain from being our customer comes from the know-how of the team that stands behind the products: It consists of experienced practitioners who use their creativity, know-how and passion to develop our targeted solutions. These characteristics have enabled the team to take and maintain a leading role in what they do best. The constantly changing variety of products our customers offer requires continuous innovation and adaptability

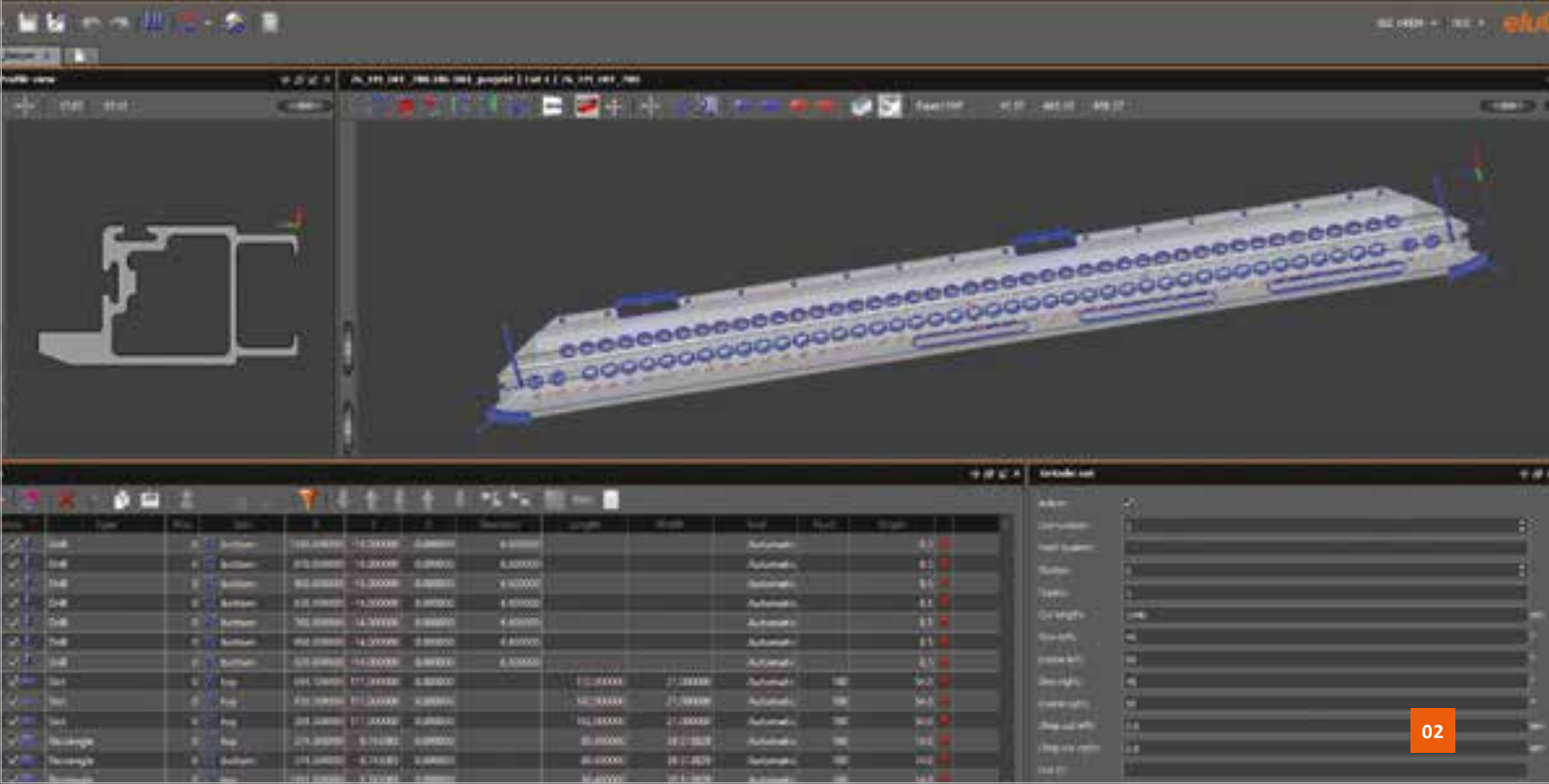


on the part of elusoft. The team is both ready and able to meet this challenge. Among the highlights is a 3D converter which in mere seconds recognises and programs the information about the profile length, profile cross-section and machining tasks that is contained in a 3D model. This automatic conversion eliminates the need to enter the data by hand. Create your machining programs quickly and transfer them to the machine easily. The converter arranges profiles in the correct clamping configuration right away based on database information. For example, curtain wall elements with multiple profile parts can be imported as a complete assembly.

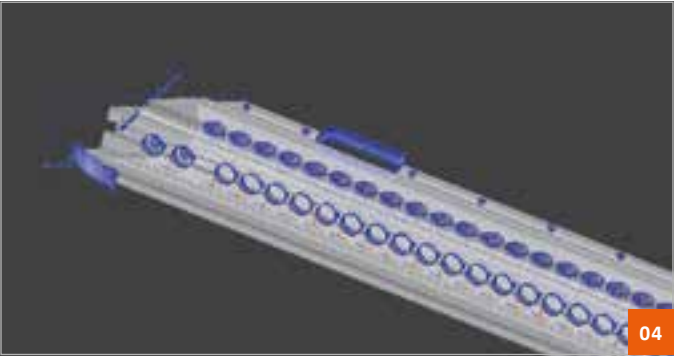
elusoft’s range includes software products such as Bar Optimisation, Bar Machining, Clamp Management, Cycle Machining (for fast production of small parts) and CSV interfaces as well as other interfaces. The spectrum of services includes: Support by experienced application engineers, seminars on the eluCad profile machining software and the supplementary modules, product consulting on the customer’s premises, the development of specialised production software or special solutions, the integration of optional features on the machine, support with problematic jobs, ISO-code training, start-up of programs and monitoring the quality of the milling and routing results. For more information, please visit our homepage www.elusoft.de

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- 01 The elusoft headquarters are in Dettenhausen near Stuttgart.
- 02 Intuitive operation, clear presentation, customisable to your needs. Machining programs can be created quickly and easily with eluCad.
- 03 3D model of a 2,400 mm long profile on which 261 machining tasks must be programmed. 3D models that are available as a step file, sat file or Parasolid file can be programmed automatically using the 3D Converter.
- 04 The result after using the 3D Converter: The Converter recognized the cross-section of the profile as well as all of the machining tasks which were then programmed automatically. And all that only took a few seconds.
- 05 The ncw file delivered by the 3D Converter can now be used to control the profile machining centre. This approach provides programming in seconds and efficient operations.



10 | ELUCLOUD



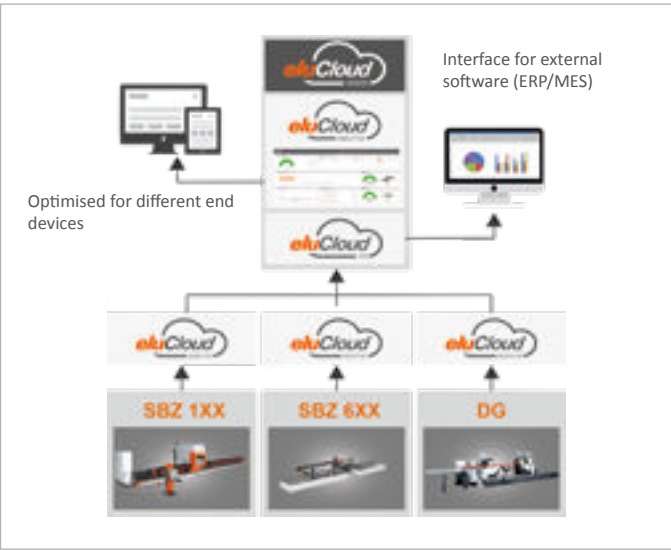
eluCloud – processing machine data to obtain decision-relevant information

eluCloud is the joint “Industry 4.0” solution from elumatec and elusoft for the digitalization and analysis of machine and production data. An analysis of these data helps to optimize production processes and to proactively plan maintenance tasks. This allows cost reductions, increased machine availability and improved productivity.

eluCloud captures machine and production data while systems are in operation. The data is provided in real time, meaning that what is currently taking place in production and what has already been accomplished can be viewed at any time from anywhere. In this way, eluCloud enables deviations from the desired production flow to be recognised quickly. The live display of the current machine status and real-time calculation of current machine efficiency are among the most useful features; Problems in production become apparent very quickly as a result and the data collected help in structured troubleshooting and analysis. eluCloud also offers an overview of currently running jobs and detailed information on the parts produced, and this data provides the basis for exact analysis of production times and individual optimisations. The eluCloud product group also helps in demonstrating to potential clients: “We are a reliable and technologically advanced partner.”

The eluCloud product group

The eluCloud product group modules allow machine and product data to be collected and analysed. Standardised analysis of this data can then be carried out directly in eluCloud, and the data can also be used for individual analyses, for example in order to process data in individual ERP systems.



eluCloud Monitor

The eluCloud Monitor compiles the machine and product data collected from the local machines, which makes it the key component in the overall eluCloud solution. As the name suggests, its purpose is to monitor the captured data, and modern elumatec machine controllers can capture a wide variety of data types in real time for this purpose. This can include, for instance, information about the quantities of parts produced, error messages or detailed time protocols concerning tool use or spindle run times. One example of how this exact time information helps is in recognising required maintenance intervals in advance, which means they can be planned more efficiently.



PROGRESS THROUGH KNOWLEDGE
Using data analysis to guarantee success



ANALYSIS



IOT



EFFICIENCY



CLOUD



4.0



MONITORING

eluCloud Server

The eluCloud Server collects all data from the connected machines. It stores all status messages and makes them available for analysis and utilisation. The eluCloud server was specially developed to be integrated into a company’s existing IT infrastructure, meaning that, provided that the company has server hardware capacity available, the eluCloud Server can be installed on existing systems with ease. The eluCloud Monitor module and the eluCloud Server form the basic equipment for customers who wish to use eluCloud.

eluCloud Analytics

eluCloud Analytics is an additional module for subsequent analysis of product and machine data. It enables detailed analysis of areas such as production utilization, progress of job processing, processing times for jobs, analysis of individual machines, analysis of the entire machine pool or processing times for individual parts. With the processed information and its user-friendly filter options, eluCloud Analytics also supports the optimisation of production times: through the capture and analysis of non-productive times such as clamp positioning operations, tool changes or part orientation changes, the techniques employed in production can be refined and the times can be reduced sustainably. The module also helps with troubleshooting and product costing analysis. Using filter functions allows exact determination of the required production times for a job or a part, This knowledge also serves as a very good basis for the costing of future jobs. Using this information as a basis also allows questions such as, “When did which downtimes occur?” and “What was the reason for this?” can be answered easily after the fact.

eluCloud API

A core characteristic of every “Industry 4.0” solution is seamless communication between individual machines or between the machine and the software, which is often referred to as the “Internet of Things”. This can be implemented with the help of eluCloud API. The term “API” refers to an interface with which eluCloud can be integrated into existing solutions and linked to other software solutions. The machine data and analysis results which are compiled in eluCloud can be accessed and further processed for this purpose by external programs, such as cost accounting programs and ERP or MES systems.



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