

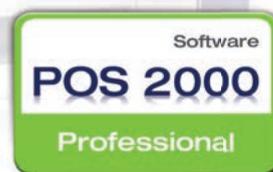
**SCHRÖDER**  
GROUP



FOLDING MACHINE  
**PowerBend Multi**

# PowerBend Multi

The new motorized folding machine PowerBend Multi (PBM) is the successor to our well-known and tested MPB. It is an allrounder for thin sheet metal processing. It's hallmarks: easy and fast handling, high production output and versatile equipment.

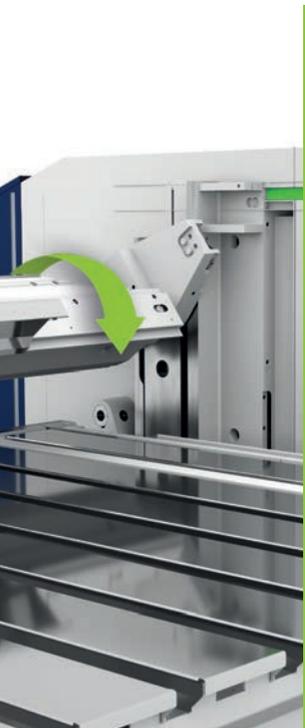


The PowerBend Multi (PBM) is the new, improved version of the industrial sheet metal folder MPB developed 20 years ago. This machine brings the functional perfection of industrial folding machines to thin sheet metal processing and replaces the reliable allrounder MPB with many new functionalities. PowerBend Multi (PBM) optimally serves the increased requirements especially in the plumbing segment and repair stores.

The precision, performance and speed of this machine reduce unit costs in series production. At the same time, the equipment options and powerful software ensure all the freedom you need to produce prototypes, single orders and small batches.

## Shorter set-up times: the rotating clamping beam

Changing jobs or complex tasks with different folding tools - when equipped with the rotating clamping beam, the PBM always has a second set of tools ready. The rotating clamping beam also has the advantage of a variable clamping beam geometry. This gives you additional freedom for „bulky“ workpieces.

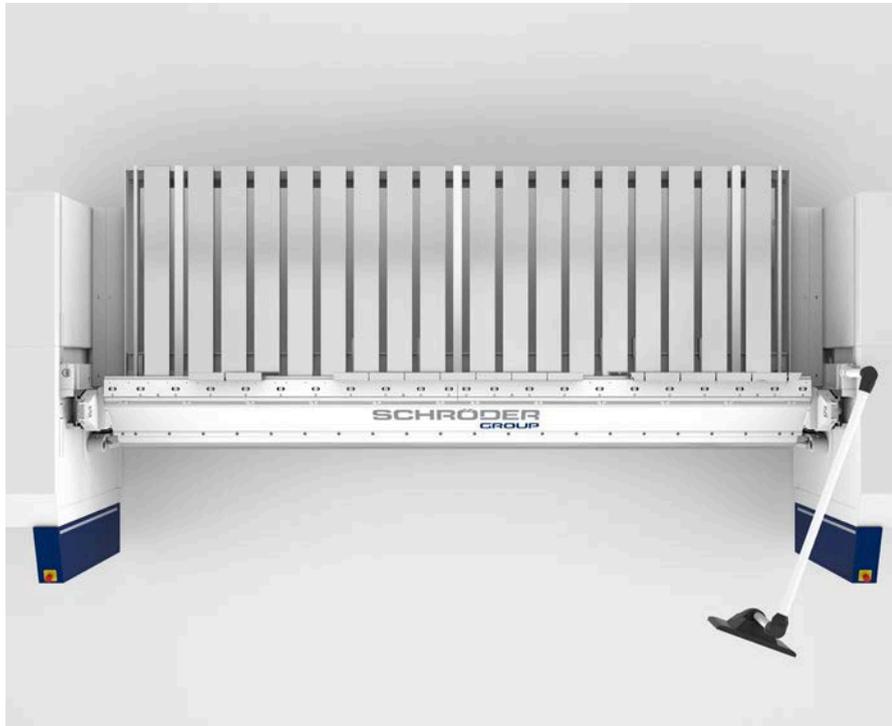


With the rotating clamping beam, the PBM has as second set of up to 170 mm high tools ready.

Standard equipment	
Software control	<ul style="list-style-type: none"> <li>- Graphic control POS 2000 Professional with touchscreen control on swivel arm based on Windows 10 operating system</li> <li>- Radius function</li> <li>- All motorized axis converter controlled</li> </ul>
Back gauge	<ul style="list-style-type: none"> <li>- Back gauge, motorized 5 - 1,000 mm</li> <li>- Recirculated ball screws (+/- 0.1)</li> <li>- 12 gauge fingers (for 2,500 mm or rather 3,200 mm)</li> <li>- 14 gauge fingers (for 4,000 mm)</li> <li>- Removable sheet support plates, retractable to 337 mm</li> </ul>
Clamping beam	<ul style="list-style-type: none"> <li>- Stroke: 160 mm</li> <li>- Geometry: 50°</li> <li>- Clamping beam tool WZS 061: Tinsmith blade, 20°, R 1/1.5 mm, directly screwed to clamping beam, hardened ca. 1100 N/mm<sup>2</sup></li> </ul>
Folding beam	<ul style="list-style-type: none"> <li>- Drive 2 x 2.2 kW (90°/sec)</li> <li>- Folding beam moved to the back</li> <li>- Manual folding beam adjustment 60 mm</li> <li>- Folding blades cranked 10 mm and 25 mm WZS 130 or WZS 131 (from working length 3,200 mm: 15 and 25 mm); ca. 700 N/mm<sup>2</sup></li> </ul>
Bottom beam	<ul style="list-style-type: none"> <li>- Bottom beam blade WZS 270, one-piece, ca. 700 N/mm<sup>2</sup>, from 30 mm: 8 mm lowered with or without finger grooves</li> </ul>
Others	<ul style="list-style-type: none"> <li>- Tool cabinet with shelves</li> <li>- Foot switch</li> </ul>
Special equipment	
Clamping beam	<ul style="list-style-type: none"> <li>- Rotating clamping beam as automatic tool changing system (necessary for goat's foot tools) incl. central, manual eccentric tool clamping (tool clamping only for goat's foot tools possible)</li> </ul>
Folding beam	<ul style="list-style-type: none"> <li>- Crowning device for folding beam, manual crowning</li> <li>- Folding beam adjustment: motorized 60 mm, program-controlled</li> </ul>
Back gauge	<ul style="list-style-type: none"> <li>- Back gauge conical bending</li> <li>- Sheet support table with ball rollers</li> <li>- Pneumatically lowerable gauge fingers</li> <li>- Back gauge 1 600 mm closed with two gauge sectors, pneumatically lowerable</li> <li>- U-gauge 1600 mm with two gauge sectors (1000/1600 mm) pneumatically lowerable and balls in table, additional operation from the rear, 2nd foot switch and access security in front via light barrier incl. button and switch on panel</li> </ul>
Safety and Others	<ul style="list-style-type: none"> <li>- Add. equipment for 2-man-operation control in accordance with accident prevention rules required</li> <li>- Foot switch on rail for lateral movement</li> <li>- Light barrier Package Plus: additional light barrier in front, vertically and horizontally</li> <li>- Light barrier aisle side for U-gauge 1,600 mm</li> <li>- Air conditioner, voltage transformer 12 kVA</li> <li>- Tools, see p. 7, software control, see p. 8-9</li> </ul>

# Folding in the fast lane

With the PBM folding machine, you can speed up your production. Significantly shorter processing times reduce your unit costs.



To suit your typical sheet metal formats, we offer various gauge systems with pneumatically lowerable gauge fingers and ball rollers for easy and gentle movement of the workpiece.



Option: Manual central crowning

The clamping beam drive clamps the sheet quickly and precisely. Two dynamic, powerful drive motors move the folding beam on both sides - precisely and torsion-free.

The machine operator can easily switch between different sheet thicknesses without manual intervention. And thanks to the easy adjustment of the folding beam (optionally motorized), processing times can also be shortened.

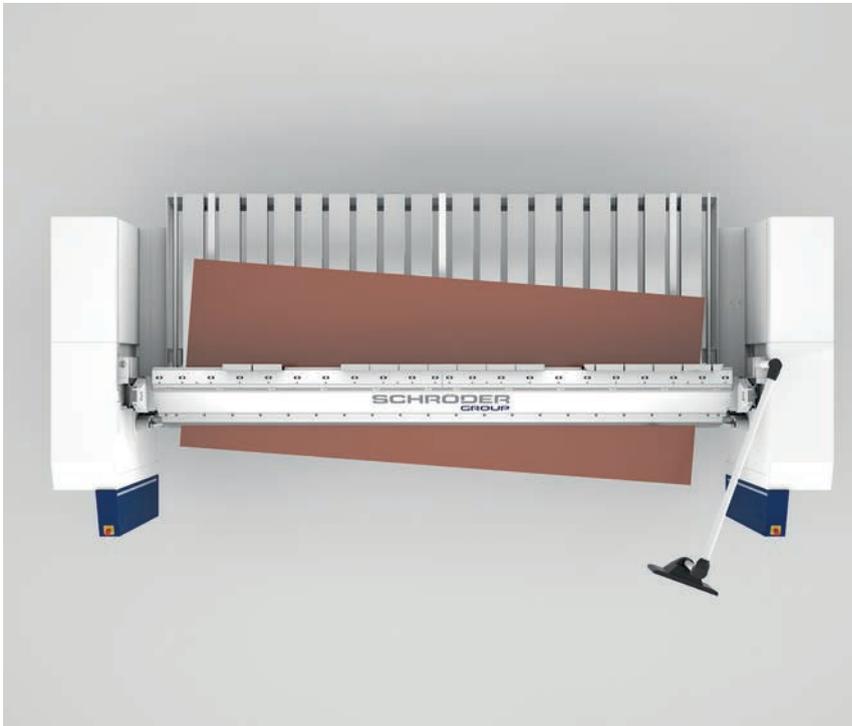
To achieve a consistent folding result over the entire working length, it is important to be able to adjust the folding beam. You can achieve this with the optionally available central crowning, which you can quickly adjust with just one movement.

## Small details, big effect

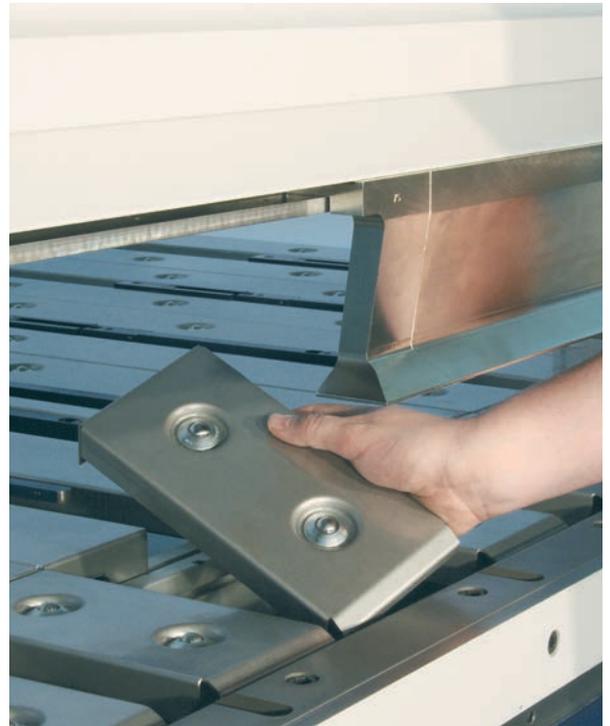
With the PowerBend Multi, the precise positioning of the workpiece is guaranteed by gauge sectors and pneumatically lowerable gauge fingers. The rotating clamping beam offers an alternative machine geometry with different clearances. The gauge table also makes room for you if required: Removable support plates (retractable to 337 mm) create space for counter-folds.

# Gauge options for optimum handling

The sheet metal formats are as different as the workpieces that can be produced on the PBM. We supply you with gauge and table options that suit your tasks.



Back gauge: optional with conical bending function.



Removable support plates, retractable to 337 mm.

The handling of the sheet metal part is ergonomically designed for the operator and gentle on the material. The PBM offers versatile application possibilities and our customers process a wide variety of sheet formats. Therefore, we offer a wide range of gauge options. The basis is the 1,000 mm closed back gauge. Building on this, we offer a back gauge 1,600 mm closed or as U-shape.

The pneumatically lowerable gauge fingers not only enable exact positioning of the sheet but also allow efficient sheet handling - optionally with the support of ball rollers in the sheet support table.

## Function conical bending

In contrast to the MPB, the new PowerBend Multi folding machine is equipped with the conical bending function. This means that pluggable profiles can be produced quickly, easily and with a high degree of precision. Plumbers will appreciate this new feature. Because parapet or wall copings, roof edge trims, verge sheets as well as claddings that have a slope are just a few examples of applications in which parts are required that do not run parallel.

# Tools

The right tool for every task - with the high-quality segmented Schröder tools you can fold highly precise radii.



Option: segmented goat's foot tools



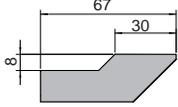
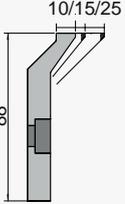
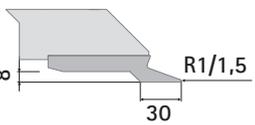
Option: Quick clamping device for a fast and precise tool change.

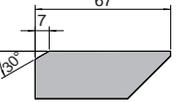
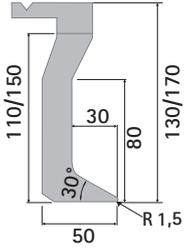
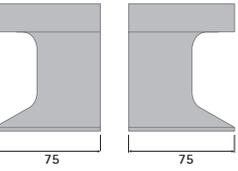
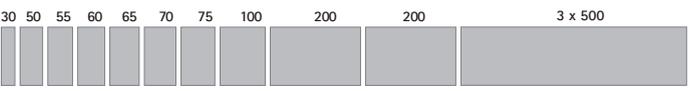
When it comes to folding, the right tools are essential – with the PBM you have loads of possibilities. For every folding requirement there is a suitable clamping beam tool available. If you still need a special geometry for your special requirements – let us know. We develop customized tool solutions for you.

The option of the rotating clamping beam allows using goat's foot tools for various tool heights incl. a central, manual quick clamping device.

Folding beam moved to the back

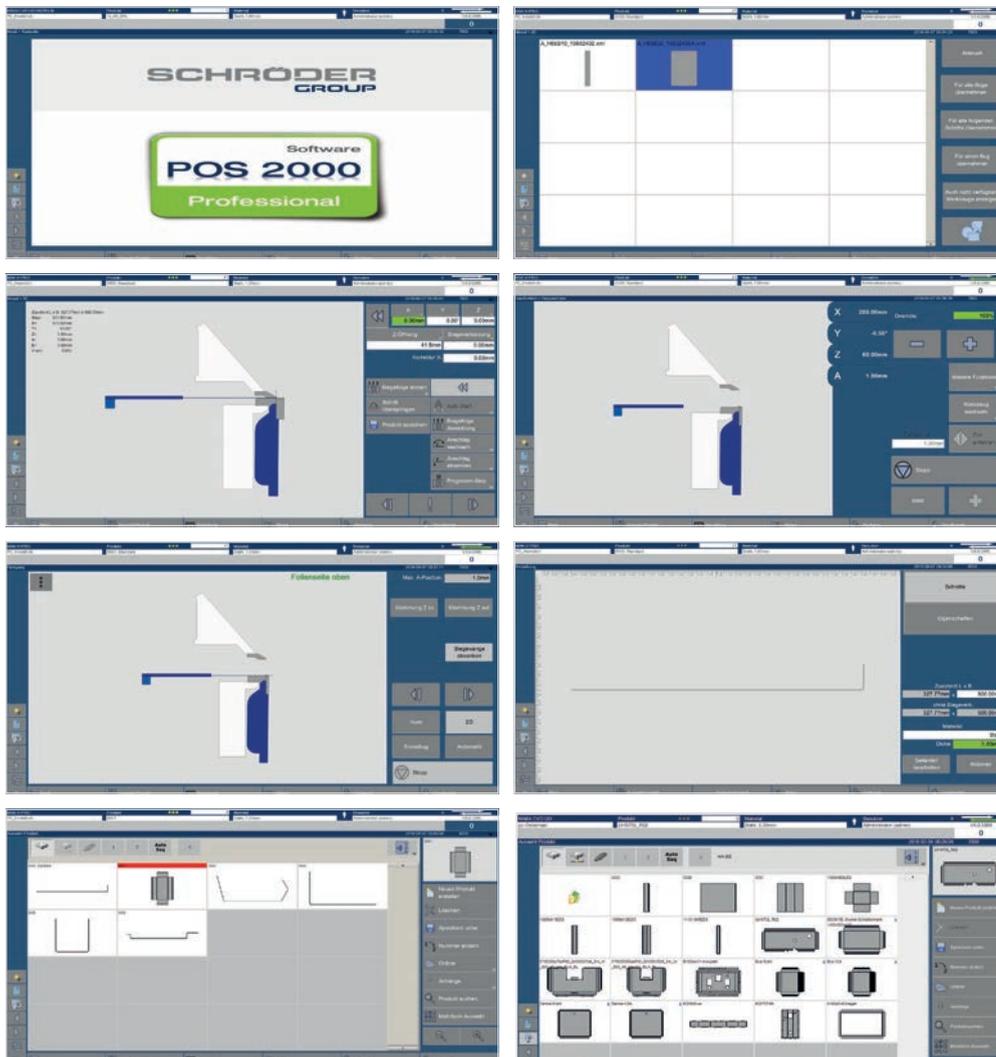
The recessed folding beam with a cranked folding blade opens up new possibilities. Hat profiles and profiles with standing seam are thus possible without any problems.

Standard equipment		
Bottom beam tools WZS* 270		Bottom beam blade, one-piece, ca. 700 N/mm <sup>2</sup> from 30 mm: Um 8 mm lowered - without finger grooves - with finger grooves
Folding beam tools WZS 130/131		Folding beam moved to the back, WZS 130 / 131 incl. cranked folding blades 10 and 25 mm, ca. 700 N/mm <sup>2</sup> (from working length 3200 mm: 15 und 25mm)
Clamping beam tools WZS 061		Tinsmith blade 20°, R 1/1.5, foot width 30 mm clearance 8 mm, directly screwed, hardened ca. 1 100 N/mm <sup>2</sup>

Special equipment			
Bottom beam tools WZS 270		Bottom beam blade without gradation, with finger grooves	Bottom beam blade without gradation, without finger grooves
Clamping beam tools		Goat's foot tool H = 130 mm, 30°, R 1.5 mm, clearance 30 mm, foot width 50 mm, free space 110 mm, segmented incl. corner parts,	Goat's foot tool H = 170 mm, 30°, R1/1.5 clearance 30 mm, foot width 50 mm, free space 150 mm, segmented incl. corner parts
		 <p>Example: segmentation of goat's foot blade at a working length of 2,520 mm.</p>	
	Corner parts		

\* WZS = Tool system

# POS 2000 Professional – intelligent graphic control for efficient processing



Motorized folding beam adjustment, 80 mm

Graphic control POS 2000 Professional: the result is always in front of your eyes – from the first steps to simulation

The folding machine PowerBend Multi owes its high speed and efficiency to its control that can be operated easily on a touch display mounted on a swivel arm. The POS 2000 Professional used for this machines is very well known in the industry – proven and well-developed.



Thanks to the graphical interphase of our software control and the multiplicity of tools it is also possible to produce sophisticated bending shapes without any difficulties.

The POS 2000 Professional is able to visualize every processing step – this can be done through a schematic representation of the folding machine, workpieces and tools. Even before the first metal sheet is placed on the machine, a folding simulation can be conducted in order to test the folding program. What makes our software control so unique and user-friendly for the operator: Every necessary action of the user such as turning over the sheet, is shown per every single folding step.

In short: Whether programming, simulation, tests or mass production is needed, your employees will be ideally supported by the POS 2000 Professional control.

## POS 2000 Professional

- Windows 10 operating system
- Extensive profile catalogue, unlimited expansion
- Automatic cutting calculation
- Material and tool library
- True-to-size bending simulation
- Zoom function
- Speed of the CNC-axis adjustable
- Radius function

## Options

- External programming (PC-Version)
- Remote maintenance

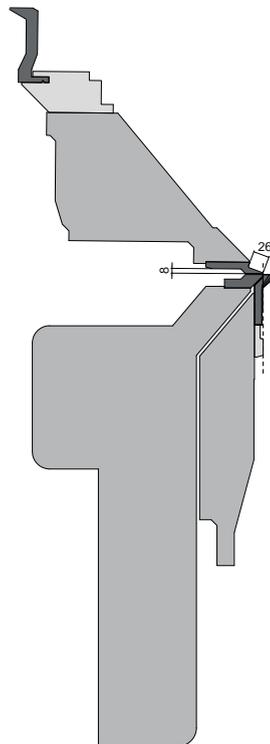
# Dimensions and technical data



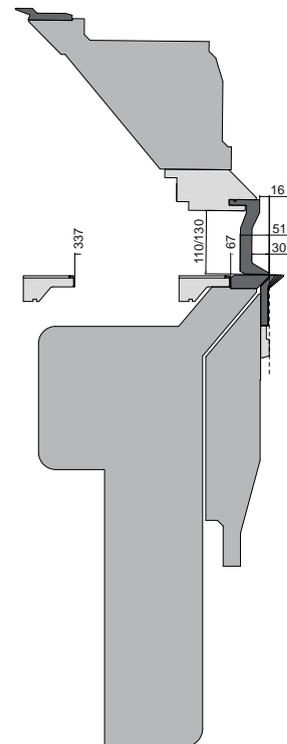
Rear view: 1600 mm back gauge, closed table.

PowerBend Multi	2,500 x 2.5	3,200 x 2.0	4,000 x 1.75
Working length (a)	2,520 mm	3,220 mm	4,020 mm
Sheet thickness (400 N/mm <sup>2</sup> )	2.5 mm	2.0 mm	1.75 mm
Machine length (b)	3,881 mm	4,581 mm	5,381 mm
Machine depth with table	2,454 mm		
Machine height (f)	2,109 mm		
Working height (g)	900-1,000 mm		
Weight, ca.	5,100 kg	5,760 kg	6,720 kg
<b>Clamping beam</b>			
Stroke	160 mm	160 mm	160 mm
Drive power	1.1 kW	1.1 kW	1.1 kW
<b>Folding beam</b>			
Adjustment, motorized	80 mm	80 mm	80 mm
Drive power	2 x 2.2 kW	2 x 2.2 kW	2 x 2.2 kW
Speed	90°/sec	90°/sec	90°/sec

All specifications are considered as guidelines and may be subject to change at any time.

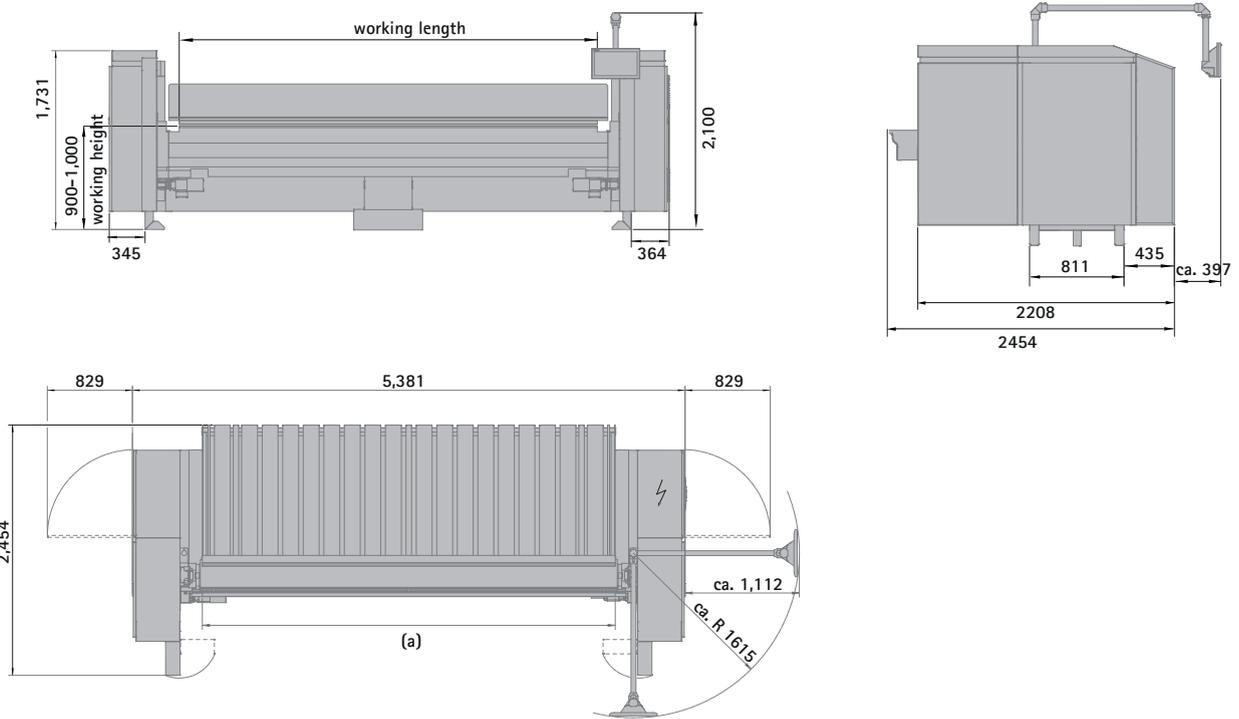


Cross section tool:  
Tinsmith blade 20°, R 1/1.5,  
directly screwed,  
cranked folding blade

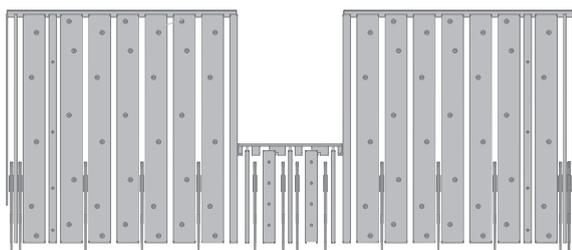


Cross section tool:  
Goat's foot blade: 110 mm or rather 130 mm

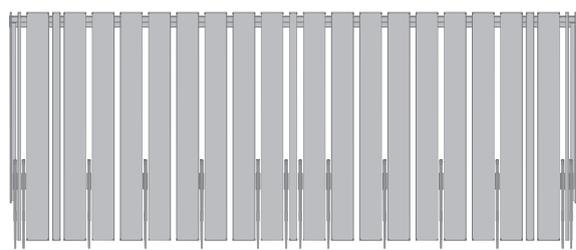
## Dimensions: PowerBend Multi



## Special back gauge options



U-shaped table 1,600, 2 x 800 mm



Closed table 1,600 mm

All dimensions in mm

Standard colour: RAL 7035 light grey, RAL 5003 sapphire blue. Special painting at an extra charge.



## Schröder Group

The Schröder Group consists of Hans Schröder Maschinenbau GmbH, which is located in Wessobrunn, Germany, SCHRÖDER-FASTI Technologie GmbH, located in Wermelskirchen, Germany and the SMU GmbH, located in Leinburg-Weißenbrunn.

Founded in 1949, Hans Schröder Maschinenbau GmbH unifies traditional and modern approaches in machine building: Successfully managed as a quality and customer-oriented, family-owned company, Hans Schröder Maschinenbau is specialized in the development of modern machine concepts for bending and cutting sheet metal.

The successful integration of the Fasti Company in 2006 and its worldwide presence make the Schröder Group one of today's leading providers of machines for bending, cutting, beading, flanging, and circular bending all types of sheet metal. The company's precision machines range from proven solutions for craftsmen to innovative, high-performance machines for automatic industrial production processes. 2021 the Schröder Group was expanded by the tool manufacturer SMU GmbH. Overall, the Schröder Group currently employs more than 300 people at various locations at home and abroad.

All information provided as a guide only and are subject to change at all times.  
HSM 220819EN

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