

**SCHRÖDER**  
GROUP



**NEW**  
at EuroBlech

FOLDING MACHINE  
**PowerBend Industrial**

# Our exhibition highlight

## PowerBend Industrial 3200/6.0

The PowerBend Industrial is our new professional solution for reliable and efficient operation in heavy production industrial shops. This powerful, motorized folding machine expands the portfolio of the PowerBend-series.



PowerBend Industrial in operation - signaled by a green LED-signal lamp.  
Touchscreen for operating from the rear - movable alongside the total machine length on a traverse.



Operation from the front with  
2nd touch panel.



Just as the PowerBend-series, the folding machine PowerBend Industrial was engineered using finite element analysis as well as latest computer simulations. Decades of experience in industrial folding result in a rigid frame that provides a base from which the PowerBend Industrial achieves unmatched precision and operational efficiency.

At the EuroBlech show, we showcase this machine at a working length of 3,200 mm for bending steel sheets up to 6.0 mm thick. In future this machine can also be acquired at a working length of 4,000 mm for steel sheets up to 5.0 mm thick.

### Highlights

- Unique robustness, reliability and repeat accuracy
- Production of single pieces and prototypes
- Patented, hydraulic Up-and-Down system
- Clamping beam stroke of 650 mm
- Tool positioning display alongside the clamping beam
- Bilateral drives on the clamping- and the folding beam achieve extremely fast clamping and folding speeds
- Two touch-panels for easy operation from the front and the rear side of the machine

## Equipment exhibition machine EuroBlech 2016



Equipment exhibition machine	
Working length x sheet thickness: 3,200 mm x 6.0 mm (at 400 N/mm <sup>2</sup> )	
Software control	<ul style="list-style-type: none"> <li>- POS 2000 Professional PC based graphic control integrated into the casing with 19" touchscreen mounted on swivelling arm (Windows 7 technology)</li> </ul>
Clamping beam	<ul style="list-style-type: none"> <li>- Dual drive: 2 x 3.0 kW (converter-controlled, 85 mm/s)</li> <li>- Stroke: 650 mm</li> <li>- Clamping beam geometry: 180°</li> <li>- Tool clamping device, hydraulic (WZS 2000)</li> <li>- Safety prestop of clamping beam at 15 mm</li> </ul>
Folding beam	<ul style="list-style-type: none"> <li>- Dual drive: 2 x 5.5 kW (converter-controlled, 100°/s)</li> <li>- Tool clamping device, hydraulic</li> <li>- Adjustment, motorized: 160 mm</li> <li>- Folding center adjustment, motorized: +80/-15 mm</li> <li>- Central crowning device, motorized</li> </ul>
Gauge	<ul style="list-style-type: none"> <li>- 2 fixed square arms (left + right)</li> <li>- 2 pneumatic pop up square arms assembled aisle side, program-controlled</li> <li>- Suction plates in a gauge table, 4 suction units, program-controlled incl. positioning against the folding beam (only with Up and Down)</li> </ul>
Technology package „Up and Down“	<ul style="list-style-type: none"> <li>- Operation from the front and the rear</li> <li>- When operating from the front: only up-bends possible</li> <li>- Motorized crowning device</li> <li>- Remote maintenance and external programming</li> <li>- Axis inclination of clamping beam</li> <li>- Up-and-Down function</li> <li>- Folding beam adjustment 160 mm</li> <li>- U-gauge 1600 mm (2 sectors), balls in table</li> <li>- Protection from the front via light barrier</li> <li>- 2nd foot switch on rail for lateral movement</li> <li>- 2nd monitor on swivelling arm for operation from the rear</li> </ul>
Others	<ul style="list-style-type: none"> <li>- Radius-Step-Bending function</li> <li>- Footswitch</li> <li>- Tool positioning display alongside the clamping beam</li> <li>- Anchor plates incl. dowels</li> <li>- Tool equipment, please see page 5</li> </ul>

# Dimensions and technical data

PowerBend Industrial*	3,200 x 6.0
Working length (a)	3,240 mm
Sheet thickness 400 N/mm <sup>2</sup>	6.0 mm
Machine length (b)	5,078 mm
Machine height maximal	2,604 mm
Machine width with back gauge (c)	
1 600 mm closed table	2,953 mm
U-1600	2,953 mm
U or rather J-3200	4,410 mm
Weight of basic machine (ca.)	12,600 kg
<b>Clamping beam</b>	
Geometry	180°
Stroke	650 mm
Drive power	2 x 3.0 kW
Speed	85 mm/s
<b>Folding beam</b>	
Drive power	2 x 5.5 kW
Speed	100°/s
Folding beam adjustment, motor.	160 mm
Folding center adjustment	+80/-15 mm



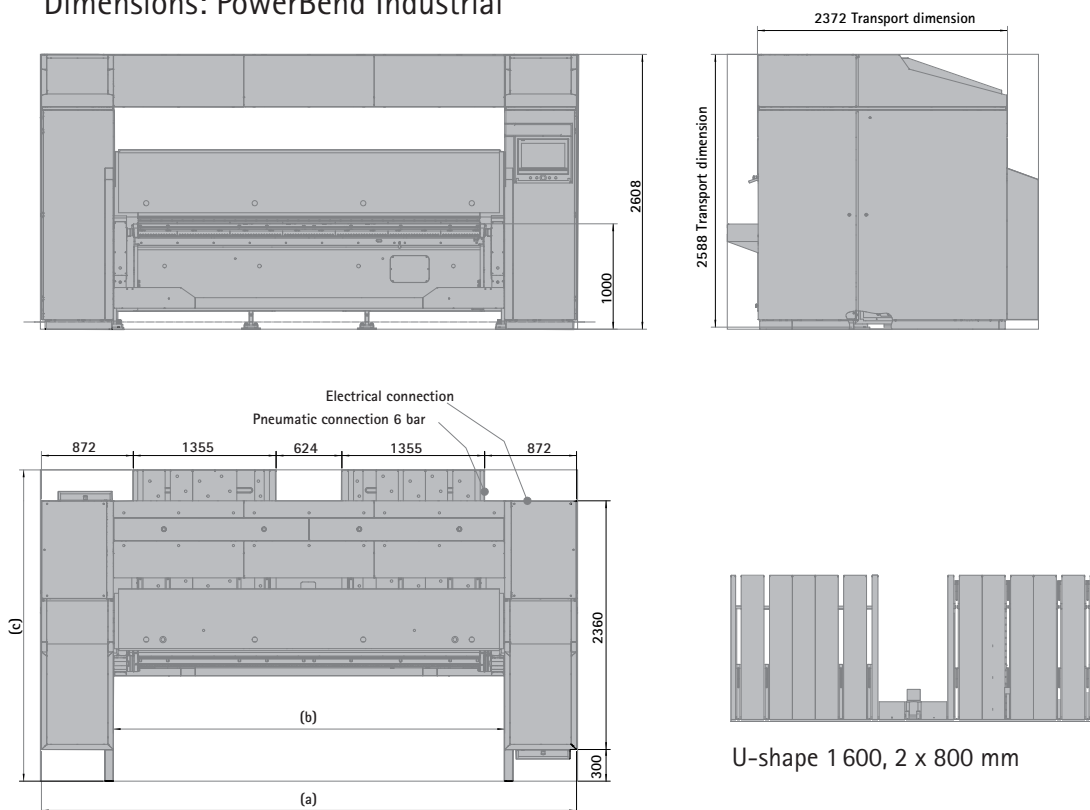
Segmented goat's foot blade, hydraulic tool clamping.



Clamping beam stroke 650 mm leaves room for tall work pieces.

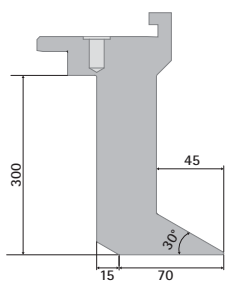
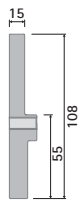
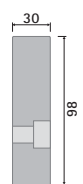
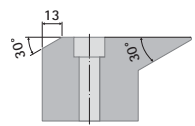
All specifications are considered as guidelines and may be subject to changes at any times.  
\*In future the PowerBend Industrial will also be available at a working length of 4,000 mm x 5.0 mm.

## Dimensions: PowerBend Industrial



## Tool equipment exhibition machine EuroBlech 2016



Tool equipment exhibition machine	
Clamping beam tools	<p>WZS 2000, hardened, ca. 1100 N/mm<sup>2</sup>, goat's foot blade „C“ 30°, R 1,5, 300 mm high, foot width 85 mm, clearance 45 mm</p> <p>No 1 - L = 2 x (25,30,35,40,45,50) = 450 mm</p> <p>No 2 - L = 26 x 100 mm</p> <p>No 3 - L = 2 x 100 = 200 mm (corner parts)</p> <p>Total length 3,250 mm</p> 
Folding beam tools	<ul style="list-style-type: none"> <li> <p>WZS 15100, hardened, ca. 1100 N/mm<sup>2</sup>, segmented blade, 108 mm high, 15 mm wide</p> <p>No 1 - L = 25/25/30/35/40/45/50 = 250 mm</p> <p>No 2 - L = 15 x 200 mm</p> <p>Total length 3,250 mm</p>  </li> <li> <p>WZS 15200, hardened, ca. 1100 N/mm<sup>2</sup>, segmented blade, 98 mm high, 30 mm wide</p> <p>No. 1 - L = 25/25/30/35/40/45/50 = 250 mm</p> <p>No. 2 - L = 15 x 200 mm</p> <p>Total length 3,250 mm</p>  </li> </ul> <p>Locking plates for folding blades: With the Up-and-Down bi-directional bending for every folding blade width, one set of locking plates is required.</p>
Bottom beam tools	<ul style="list-style-type: none"> <li> <p>WZS 16000, hardened, ca. 1100 N/mm<sup>2</sup>, Up-and-Down bottom beam blade one-piece with finger grooves x = 20 mm, 30°, R 1.5, 55 mm high, clearance on the rear 45 mm, clearance on the front 35 mm</p>  </li> </ul>

### Great variety of tools

Thanks to various tools the PowerBend Industrial is able to handle most complex folding tasks. For every product we can offer you the suitable tool for the clamping-, bottom- and the folding beam. Should you require a particular geometry, just let us know. We will work out a customized solution for you.

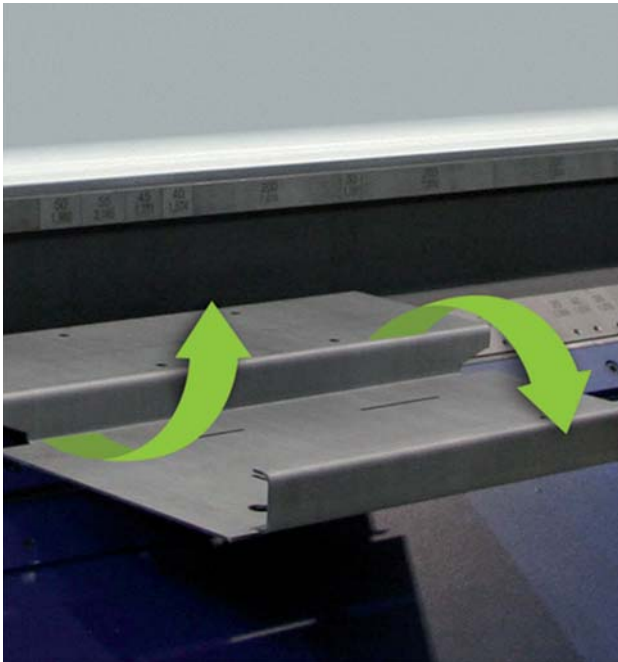
### Highlight: Tool positioning display

A special feature of this machine: The correct positioning of the clamping beam tools is visualized by an integrated LED bar over the total length of the clamping beam.

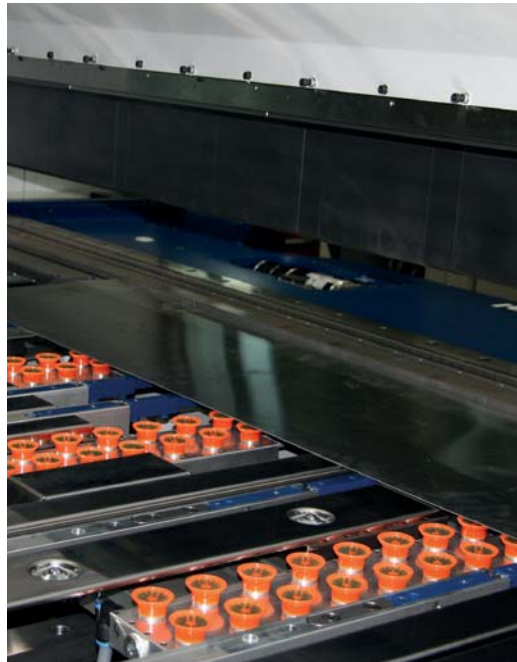
All dimensions in mm; Standard colour: RAL 7035 light grey, RAL 5003 saphirre blue.  
Special painting at an extra charge.

# Intelligent options for more efficiency

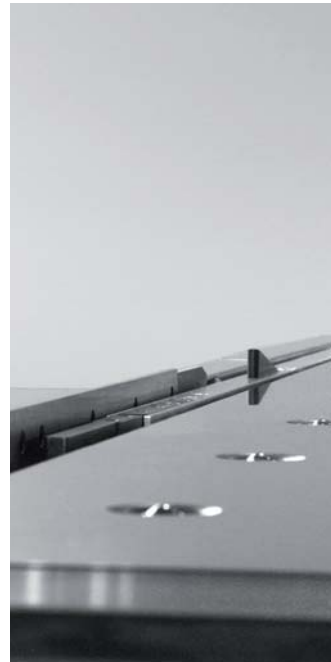
The PowerBend Industrial is already a productivity gain in its standard equipment. In order to add even more production efficiencies additional options are available.



Up-and-Down function:  
counter folds without having to turn around the sheet



With the suction gauge all bends on one side can be handled with one simple move by the operator.



Pneumatic pop-up square arms assembled aisle side and gauge fingers ensure a precise positioning of the sheet.

## Patented Up-and-Down system

This option makes the machine much more versatile. The Up-and-Down folding beam allows counterfolds in one processing step, e.g. boxes with Z-bends. With the Up-and-Down function the folding beam is able to move around the work piece, being able to bend from below and from above. Bending from both directions extends the variety of possible products enormously. Additionally sheets do not need to be turned over. Especially for big sheets this means: less helping hands, less muscle power, lower level of risk for material surfaces. In short: better ergonomics, safety and productivity.

Thanks to further improvements of our proven, patented Up-and-Down system this machine is even more dynamic and efficient.

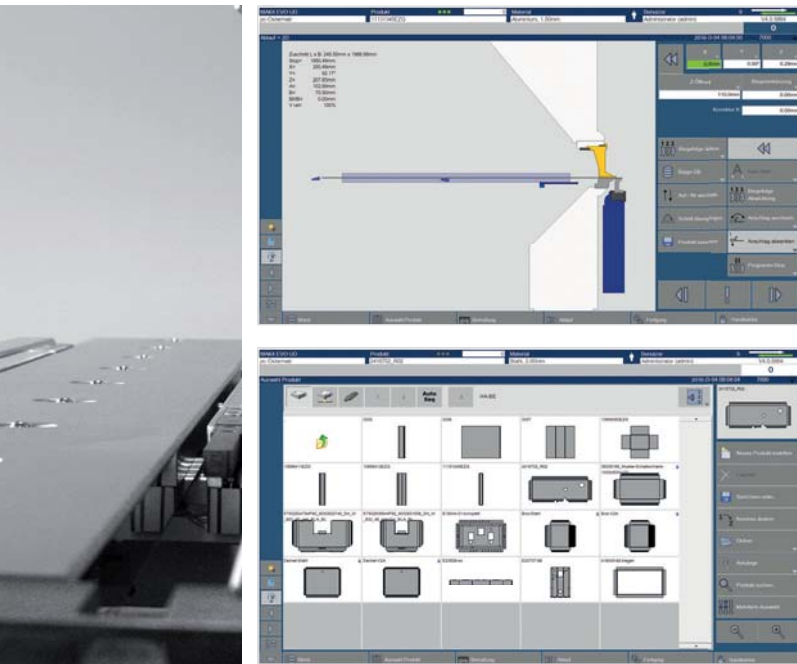
## Back gauge

At EuroBlech, the PowerBend Industrial will be showcased with a sheet support system that allows to gauge from 20 to 1600 mm. The motorized gauge ensures highest precision: It uses high precision ball screws at an accuracy of  $\pm 0,1$  mm. On request, the folding beam can also be used as a front gauge feature. This provides you with additional benefits when processing small sheets and profiles.

In order to minimize the operators interface with the bending process, we are offering a pneumatic fixing of sheets as an integral part of the back gauge system: a suction gauge table. This option can be seen on our exhibition machine. Four suction units ensure pneumatic fixing of the sheet so that it cannot shift during the folding process.

# Graphic control: POS 2000 Professional

Intelligent graphic control for efficient sheet metal processing.



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

The PowerBend Industrial owes its high processing speed, precision and efficiency to the powerful software control POS 2000 Professional with touchscreen mounted on a swivelling arm. This software is known in the industry as „the“ software control for folding machines - proven and fully developed .

The POS 2000 Professional visualizes every processing step - through it, the folding machine, work piece and tools are schematically shown. The product is confirmed in a virtual mode prior to putting the sheet on the back gauge table, so the operator can form the part with 100% confidence. All necessary actions such as turning a sheet are displayed in separate steps.

In short: Whether programming, running a simulation for a feasibility check or time study, or manipulating a part on the machine, the POS 2000 Professional supports your operation like no other can.



## Highlights

- Windows 7 operating system
- Unlimited profile storage
- Automatic cut length calculation
- Unlimited tool storage and materials library
- Accurately scaled virtual bending simulation
- Zoom function
- Speed of CNC-axes infinitely variable

## Options

- Radius-Step-Bending function
- External programming (POS 2000 Professional PC version)
- Remote maintenance
- Positioning against the folding beam



## Schröder Group

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

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. Overall, the Schröder Group currently employs more than 240 people at various locations at home and abroad.

All information provided as a guide only  
and subject to change at all times.  
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