

# Folding machine SPB Evolution UD

The SPB Evolution UD is our versatile industrial folding machine for the single piece and serial production that unifies power, speed and precision.



SPB Evolution UD

Work. length x Sheet thickn. (400 N/mm <sup>2</sup> )	3 240 x 4,0 mm	4 040 x 3,0 mm
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Up-and-Down function:  
counter folds without turning the sheet

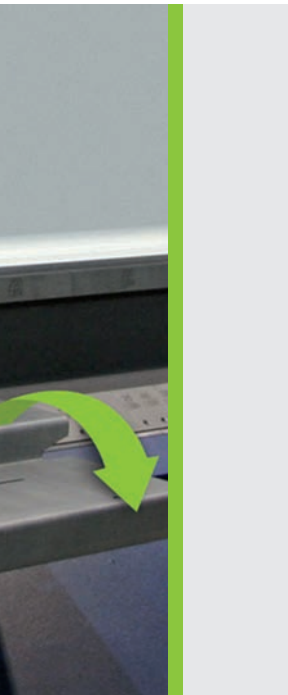
The SPB Evolution UD allows you to bend complex work pieces such as panels, boxes or cassettes and to achieve high productivity at the same time. The machine with the working length 3200x4,0 or 4000x3,0 is an extremely flexible Up-and-Down folding machine. In addition to precise linear drives and graphic programming, the rotating clamping beam or the suction gauge are the highlight functions of the machine. All these are possibilities to make your production faster, more efficient and more flexible.

Multi-shift operation, industrial series production, complex processing of stable metal sheets – the SPB Evolution UD provides the ability and robustness required for these challenges.

## Up-and-Down-Technology increases productivity

Minimize the costs of handling large metal sheets on the machine and take advantage of Schröder's Up-and-Down technology. More processing steps in shorter times. With conventional folding machines, the sheet needs to be turned. Even a simple Z-fold becomes a challenge if an operator needs to turn a four-meter long sheet upside down.

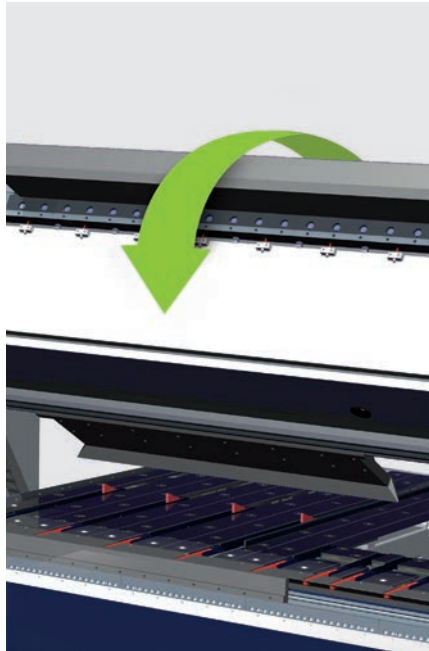
We provide the solution: The SPB Evolution UD bends up and down in one processing step. This saves numerous manual actions, simplifies the handling of unwieldy work pieces, shortens throughput times and lowers costs per unit.



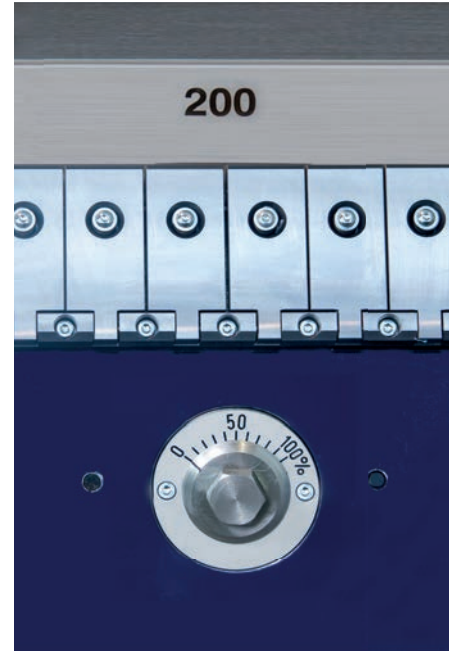
Standard equipment	
Software control	<ul style="list-style-type: none"> <li>- POS 3000 3-D graphic control with touchscreen on swivelling arm</li> <li>- Radius function</li> <li>- Remote maintenance</li> </ul>
Clamping beam	<ul style="list-style-type: none"> <li>- Clamping beam stroke: 650 mm</li> <li>- Rotating clamping beam as automatic tool changing system incl. hydraulic tool clamping device (WZS 2000)</li> </ul>
Folding beam	<ul style="list-style-type: none"> <li>- Up'n Down folding beam, automatically controlled</li> <li>- Pneumatic tool clamping device (WZS 7000)</li> <li>- Folding beam adjustment, motorized: 200 mm</li> <li>- Folding center adjustment, motorized: 80 mm</li> <li>- Motorized central crowning device</li> <li>- Center point adjustment, converter-controlled drive</li> </ul>
Back gauge	<ul style="list-style-type: none"> <li>- Positioning gauge 10 - 3,400 mm and 10 - 4,250 mm as U-shape with sectors, pneumatic pop-up gauge fingers, steel balls in sheet support table. Angle gauge 1500 mm left and right side.</li> <li>- Suction plates in gauge table, program-controlled incl. 2 pneumatic pop up square arms assembled aisle side. The sheet support plates can be removed to make room for downflange applications</li> </ul>
Safety	<ul style="list-style-type: none"> <li>- Protection via light barrier controlled by safety-PLC for operation from the rear</li> <li>- Safety package for operation from the front, incl. 2nd foot switch on rail for lateral movement</li> </ul>
Others	<ul style="list-style-type: none"> <li>- Standard machine without tools</li> <li>- Foot switch</li> <li>- Anchor plates incl. dowels</li> </ul>

Special equipment	
Software control	<ul style="list-style-type: none"> <li>- External programming (PC-Version)</li> <li>- Unfold software „SCHRÖDER Unfold“ (POS 3000 PC Version required)</li> </ul>
Safety	<ul style="list-style-type: none"> <li>- Additional equipment for 2-man-operation control in accordance with accident prevention rules required</li> </ul>
Others	<ul style="list-style-type: none"> <li>- Voltage transformer 18 kVA</li> <li>- Air conditioner on both switch cabinets</li> <li>- Tool options see p. 28-29</li> </ul>

# Dimensions and technical data



SPB EVOLUTION UD	3,200 x 4.0	4,000 x 3.0
Working length (a)	3,240 mm	4,040 mm
Sheet thickness (400 N/mm <sup>2</sup> )	4.0 mm	3.0 mm
Machine length (b)	6,332 mm	7,132 mm
Back gauge (c)		
U-3400	5,180 mm	-
U-4250	-	6,030 mm
Weight without back gauge	12,260 kg	13,350 kg
<b>Clamping beam</b>		
Geometry	180° / 45°	180° / 45°
Stroke	650 mm	650 mm
Drive power	2 x 6.69 kW	2 x 6.69 kW
Speed	120 mm/sec	120 mm/sec
<b>Folding beam</b>		
Adjustment	200 mm	200 mm
Drive power	2 x 7.0 kW	2 x 7.0 kW
Speed	150°/sec	150°/sec
Folding center adjustment	80 mm	80 mm



The rotating clamping beam holds a second set of tools.

Motorized crowning system



## Rotating clamping beam

Fast changing jobs or complex folding tasks with different folding tools – the SPB Evolution UD holds a second set of tools in the rotating clamping beam. Where other folding machines need to be re-equipped, the SPB Evolution UD simply continues to work. An additional advantage: The rotating clamping beam provides an alternative machine geometry with other clearances.



## Suction gauge controlled via POS 3000

Suction cups in the back gauge pneumatically fix the sheet: The suction gauge takes effect where the pop-up gauge fingers have no reliable grip if the work piece on the gauge side e.g. has cut-outs or roundings. The sheet gets pneumatically fixed and thanks to the intelligent software control all bends on one side can be carried out with one single manual action.



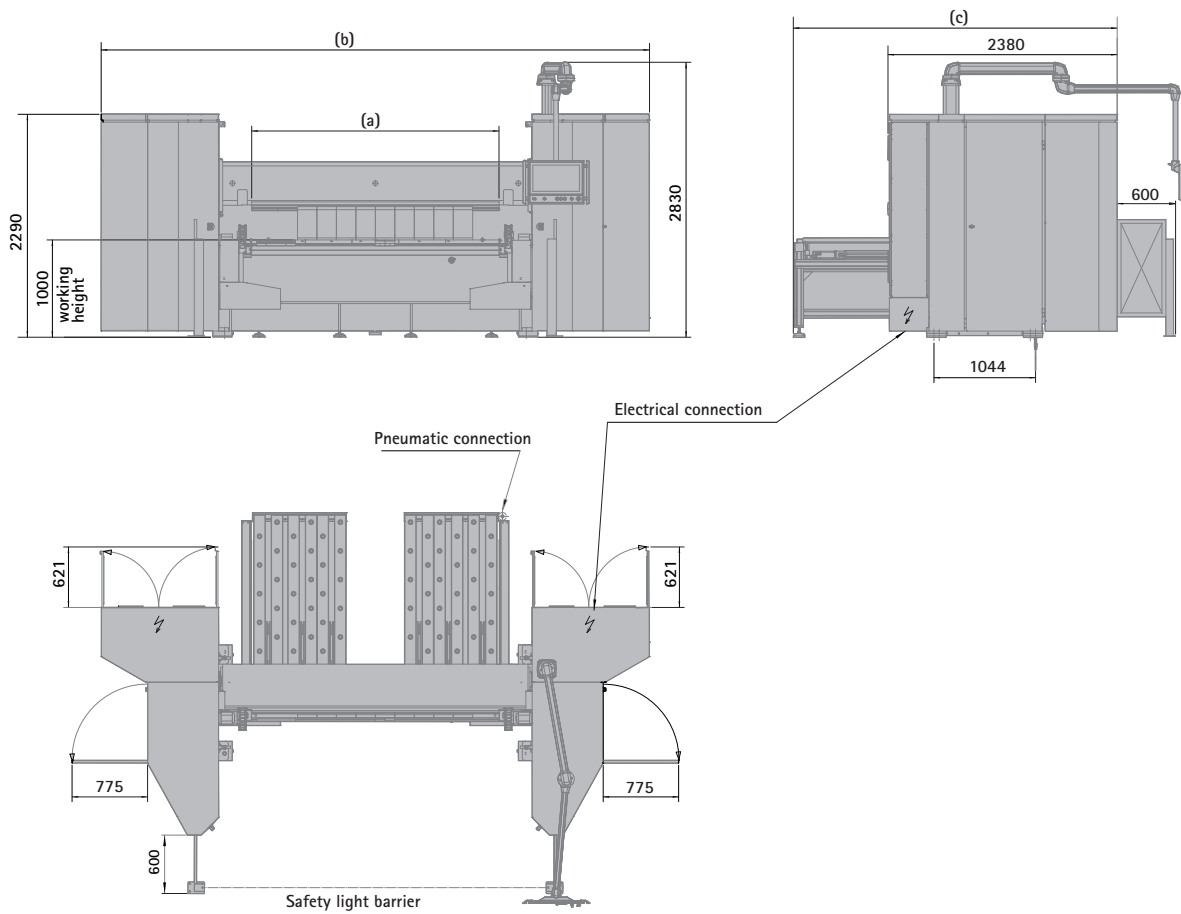
## Visualized quality with the POS 3000 3D graphic control

Sophisticated folding shapes can be produced easily thanks to the graphical user interface of the control software and the wide range of tools.



- 3D graphic control with schematic representation of machine, tool and workpiece
- Intuitive, visual touch-screen programming
- 3D bending simulator for visual program control
- Automatic setup programming and control of the tool changer
- Cycle time calculator
- CAM connection, ERP/PPS interfaces and DXF converter
- Options: PC-Version, Unfold software „SCHRÖDER Unfold“

### Dimensions: SPB Evolution UD



### Back gauge extensions

Positioning gauge 10-3,400 mm or rather 10-42,50 mm as U-shape with sectors incl. pneumatic lowering:

- U-shape 3,400 mm
- U-shape 4,250 mm

