# Folding machine EVO Center

The best premise for your top performance – A Schröder EVO Center is your industrial solution to achieve high volume as well as flexible serial production with extreme repeatability.



Based on our technology, our hardware and our software we have developed a folding machine that is able to process sheet metal in almost fully-automatic operation. The central core of the Schröder EVO Center is based on our long-term experience we have gained with our modern folding machines of the Evolution series. Thanks to an intelligent set-up technique, the Schröder EVO Center can be used efficiently for serial production as well as for order-related production with fast changing small batches. A fully automatic tool changer equips the clamping beam quickly and accurately with tools. The tool changer and the handling system are driven by our intelligent software control POS 3000.



Standard equipment			
Software control	<ul> <li>POS 3000 3-D graphic control with 22" TFT touch-screen colour display movable via guide rail</li> <li>Radius function</li> <li>Remote maintenance</li> <li>External programming (PC-Version 1st licence)</li> </ul>		
Clamping beam	<ul> <li>Z-axis drive max. axis speed: 120 mm/sec</li> <li>Clamping beam geometry: 180°</li> <li>Clamping beam stroke: 850 mm</li> <li>Hydraulic tool clamping device (WZS 6000)</li> <li>Fully automatic tool changer for clamping beam tools for max. tool height 400 mm, 2 asynchronously movable tool changers with one gripper unit each</li> </ul>		
Folding beam	<ul> <li>Up'n Down folding beam, program-controlled</li> <li>Pneumatic tool clamping device (WZS 7000)</li> <li>Motorized folding beam adjustment: 200 mm</li> <li>Motorized central crowning device</li> <li>Motorized center point adjustment, converter-controlled drive</li> </ul>		
Back gauge	<ul> <li>Gauge table 1700 mm as U-shape, divided support plates with steel balls</li> <li>Lateral angle gauge right and left side 1500 mm (outside)</li> <li>Suction plates in gauge table, controlled via POS 3000</li> <li>2 pneumatic pop-up square arms assembled aisle side, program-controlled</li> <li>Gauge axis in front</li> </ul>		
Drive	<ul> <li>Servoconverter-controlled drives for clamping beam, folding beam, B-Axis, D-Axis and back gauge</li> </ul>		
Safety	<ul> <li>Protection via light curtain controlled by safety-PLC for operation from the rear</li> <li>Safety at the front via double-leaf sliding door</li> </ul>		
Others	<ul> <li>Air conditioner on both switch cabinets</li> <li>Foot switch with two pedals incl. protection cover</li> <li>Anchor plates incl. dowels</li> <li>Standard machine without tools</li> </ul>		

Special equipment		
Back gauge	<ul> <li>Side table left or right, support table closed with ball rollers. Technical data, see page 11</li> <li>Pneumatically lowerable gauge fingers (2 sectors 850/1700 mm)</li> <li>Various back gauge extensions right and/or left with pneumatically lowerable gauge fingers (balls in table), combinable with side table</li> </ul>	
Others	– Voltage transformer 18 kVA – Tool options see p. 28–29	



## Dimensions and technical data



EVO Center	3,200 x 4.0	4,000 x 3.0		
Working length (a)	3,240 mm	4,040 mm		
Sheet thickness (400 N/mm²)	4.0 mm	3.0 mm		
Machine length (b)	9,406 mm	10,206 mm		
Back gauge (c)				
U-1700	3,362 mm	3,362 mm		
U- or rather J-3400	5,145 mm	-		
U- or rather J-4250	-	5,995 mm		
Weight with back gauge U-1700 (ca.)	14,000 kg	16,380 kg		
Clamping beam				
Geometry	180°	180°		
Stroke	850 mm	850 mm		
Drive power	2 x 6.69 kW	2 x 6.69 kW		
Speed	120 mm/sec	120 mm/sec		
Folding beam				
Adjustment, motorized	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			



Bottom beam blade with finger grooves and folding blades



### Back gauge system

We supply you with back gauge and table options that fit your requirements. Sheet support tables with balls make handling easy and gentle on the material. The pneumatically lowerable angle gauges on the left and right of the aisle are suitable for folding long, thin sheets at exactly the right angle.



#### Suction gauge controlled via POS 3000

Suction plates in the back gauge table enable pneumatic fixation of the workpiece. The suction gauge grips where gauge fingers cannot find a reliable hold, because the workpiece has curves or recesses on the gauge side, for example.



Flexibility through automatic tool change

The fully automatic tool changer of the EVO Center equips the clamping beam quickly and precisely with tools for a maximum clamping beam tool height of 400 mm.



**Fully automatic folding beam tool change** Optionally, there is an automatic tool changer for folding beam tools available. The tools are clamped pneumatically here.

Drives, tools, gauges - quality shows in every detail

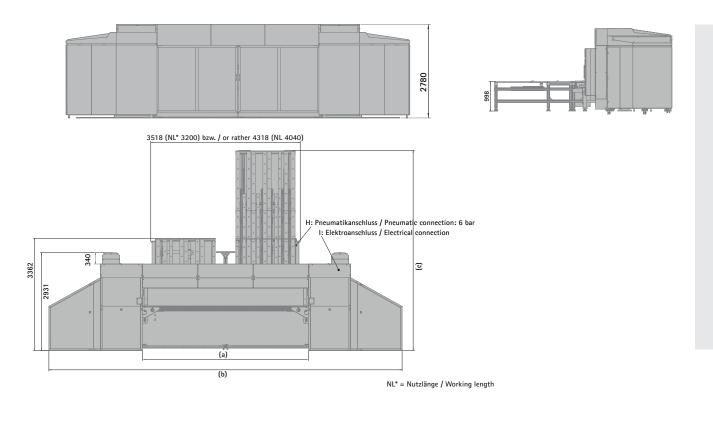


## Highlights

- 3D graphic control including a schematic depiction of the machine, tool, and work pieces
- Intuitive, visual touchscreen programming
- 3D bending simulator for visual program inspection
- Mount programming and control of the automatic tool changer
- Cycle time calculator
- PC-Version, CAM connection, ERP/ PPS interfaces, and DXF converter available

Option: Software "SCHRÖDER Unfold"

## Dimensions: EVO Center



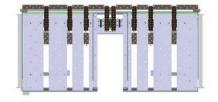
## Special back gauge extensions

Back gauge extension right and/or left with pneumatically lowerable gauge fi ngers (balls in table), combinable with side table:

Extension left 3400, 4 x 850 mm Extension left 4250, 5 x 850 mm Extension right 3400, 4 x 850 mm Extension right 4250, 5 x 850 mm









Dimension side table (wxd): NL 3200: 1,336 x 1,864 mm NL 4000: 1,716 x 2,614 mm