



Range of Supply

# Machines of Schröder Group Range of Supply



Better sheet metal working – we have dedicated ourselves to enabling highest quality standards and efficient processes in the production of sheet metal products. This brochure can only give you an initial overview of our range of supply – we are pleased to offer you our advice to selecting a suitable machine for your requirements.











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# Motorized folding machines

Decades of experience in keeping up with the highest quality standards and efficiency in sheet metal working culminates in high-performance machines that enable industrial solutions.

Folding machine

#### MAK 4 Evolution UD

Sheet metal working with highest efficiency

- Up-and-down function
- Industrial POS 3000 3D graphic control
- Option for fast set-up: fully automatic tool changer
- Option: Fully automatic sheet metal handling system "AHS" with suction cups

Folding machine

#### **EVO-CENTER**

Highly automated with completely new design

- Fully-automatic tool changer
- Up-and-Down function
- Industrial POS 3000 3D-graphic control
- Option: Rotating plate with suction cups Advanced Handling System (AHS)



#### MAK 4 Evolution UD

2.500 x 6.00

2.500 x 8.00

3.200 x 6.00

.

4,000 x 5.00

5,000 x 4.00

#### **EVO-CENTER**

3 200 x 4.00

4 000 x 3.00

#### Folding machine

#### SPB Evolution UD

Fast, strong, precise for serial production and single piece production

- Up-and-down function
- Rotating clamping beam
- Industrial POS 30003D graphic control
- Option for fast set-up: fully automatic tool changer

#### Folding machine

#### MAK 4

Efficient and powerful

- Graphic control POS 2000 Professional
- High precision folding machine for thick sheets
- Different gauge extensions for optimal handling



#### SPB Evolution UD

3,200 x 4.00

4,000 x 3.00

#### MAK 4

3,200 x 6.00

4,000 x 5.00

# Motorized folding machines

When muscle power is not enough these machines can offer you an easy entry into motorized processing – robust machines for continuous use or thick metal sheets.

Folding machine

#### PowerBend Industrial UD

Powerful package for sheet thickness up to 6 mm

- High-precision folding machine with 2 monitors
- Clamping beam stroke: 650 mm
- Up-and-down function
- Tool positioning display
- Option: production status indicator lights

Folding machine

#### PowerBend Professional

Robust and precise: the professional solution for thin metal applications

- Optimal rigidity and precise gauge
- POS 2000 Professional control
- Options: up-and-down function and rotating clamping beam



PowerBend Industrial UD

3,200 x 6.00

4,000 x 5.00

PowerBend Professional

3.200 x 3.00

4.000 x 2.50

#### Folding machine

#### PowerBend Universal

Workshop standard machine with numerous options

- Optimal rigidity and precise gauge
- Easy to handle with nano Touch control
- Options: motorized folding beam adjustment and crowning device

#### Folding machine

#### **MPB**

Allrounder for thin sheet metal working

- Graphic control POS 2000 Professional
- Shortened set-up times through a rotating clamping beam
- All motorized axes converter-controlled



#### PowerBend Universal

2,000 x 4.00

3,200 x 3.00

4,000 x 2.50

#### MPB

2,500 x 2.50

3,200 x 2.00

4,000 x 1.75

# Motorized / Hydraulic folding machines

Motorized folding machine

#### **MAKU**

Entry into motorized sheet metal working

- Fast, compact and flexible for serial- and single piece production
- Equipped with the alpha numeric control nano Touch or alternatively with the control POS 2000 Professional
- Huge clearances on the clamping and the bottom beam

Hydraulic folding machine

#### 225

A fast machine with high long-life accuracy

- Clamping beam generously dimensioned, maintenance-free guide, clamping beam stroke 350 mm (optionally 500 mm)
- Motorized adjustment of folding beam with hydraulic drive on both sides
- Motorized bottom beam adjustment



#### MAKU

2,500 x 2.00

3,200 x 1.50

225

2,000 x 6.00

2,500 x 5.00

3.200 x 6.00

4.000 x 3.00

#### Hydraulic folding machine

#### **EVO Heavy Duty**

The universal folding machine with a compact hydraulic drive

- High productivity thanks to easy handling of tools
- Clamping beam stroke 500 mm
- Compact hydraulic drive
- High flexibility and variability thanks to extensive equipment

#### Arcfolding machine

#### 720

#### Fast and precise

- Clamping beam as box form with clearance on the rear
- Operation from rear side of the machine
- Mechanic tool clamping device
- Hydraulic crowning system
- CFP 120 control



EVO Heavy Duty 3,200 x 16.00

**720** 3,200 x 2.00

# Manual folding machines

Machines from Schröder Group stand for precise work: robust, reliable and best accuracy.

#### Manual folding machine

#### AK

Workshop standard equipment – indestructible and easy to operate

- Excentric drive for fast opening and secure clamping of tools
- Option: Manual back gauge 10 750 mm, adjustable from the front with digital read out incl. sheet support table
- Ergonomic working height: 930 mm
- Clamping beam stroke: 110 mm

#### Manual folding machine

#### ASK 3

Manual folding machine of the 3rd generation

- Segmented tools at all three beams
- Quick clamping device with eccentric
- Multi-stage clamping beam drive for four different tool heights
- New: clamping beam with tool storage function and stand with depositing plate



#### ΑK

2,000 x 1.00

2,000 x 1.50

2,500 x 1.00

3,000 x 1.00

#### ASK 3

1,000 x 1.50

1,250 x 1.50

1,500 x 1.50

#### Segment folding machine

#### **ASK II**

Proven a thousand times in workshops

- Maximum versatility through segmented tools at all three beams
- Quick clamping device with eccentric
- Reinforced version and frame-guided clamping beam

#### Manual folding machine

#### 204

The small folder with features of a big one

- Essential for sample construction and repair shops
- Clamping beam with sufficient stroke for different tool geometries
- Folding beam adjustable for precise radius bending





ASK II

1,000 x 2.00

1,500 x 1.75

2,000 x 1.00

204

1,000 x 2.00

# Manual folding machines

Since more than 60 years we are supplying workshops with folding machines. We offer you reliable precision tools for the workshop and the construction site.

Manual folding machine

#### **BAM**

Proven a thousand times in workshops

- Additional clearance enables profiles such as narrow U-bendings
- Back gauge system incl. sheet support
- Option: cutting device incl. guide rail
- Rotating clamping beam at BAM 1000



BAM 1,000 x 0.80 2,000 x 0.75

#### Manual long folding machine

#### **MODULAR**

Long profiles, accurately bent

- In a few simple steps two or more folding machines can be connected to one long folding machine
- Option: a multifunctional tool cuts, beads and closes hem folds



2,000 x 0.80 3,000 x 0.80 Extension modul Extension modul

### Motorized shears

A precise cut is the first step from a metal sheet to the work piece. Our shears enable clear cuts for serial production without any difficulties.

Motorized shear

#### **MHSU**

Entry into motorized cutting

- Slideway guided motorized shear cuts fast and clear
- Hold-down device with hard rubber rail to protect polished sheets
- Adjustable angle gauge left and right with scale

Motorized shear

#### PDC / PDC-NC

Powerful and stable with "DUO-CUT-Drive" system

- Quiet, smooth operation through double motorization (from 2000 mm)
- Blade gap adjustment to minimize bur on material and to keep wearing on blades down to a minimum



MHSU		PDC	PDC-NC
1,000 x 3.00	2,000 x 3.00	1,000 x 4.50	3,200 x 3.00
1,000 x 4.00	2,500 x 2.00	1,500 x 4.50	4,000 x 2.50
1,250 x 3.00	2,500 x 2.50	2,000 x 4.00	
1,500 x 2.50	3,200 x 1.50	2,500 x 3.50	
1,500 x 4.00	3,200 x 2.00	3,200 x 3.00	
2,000 x 2.50		4,000 x 2.50	

#### Motorized shear

#### 527

#### The heavy-duty guillotine

- Manual blade gap adjustment on both sides
- Back gauge 10-600 mm
- Angle gauge with scale, 750 mm from blade edge
- Table extension750 mm from blade egde

- Protection of gear side of machine via protection guard system
- Hold-down device one-piece
- Flex table



#### 527

1,000 x 4.00

1,200 x 4.00

1,600 x 3.75

2,000 x 3.25

2,500 x 3.25

3.200 x 2.75

# Hydraulic shears

The industrial solution to cut large amounts of sheet metal at high speed.

#### Hydraulic shear

#### 528

#### Hydraulic shear for universal use

- Motorized back gauge 10-1000 mm
- Cutting edge illumination
- Automatic calculation of cutting angle
- Lateral angle gauge with scale, 1000 mm from blade edge
- Protection of rear guillotine side by potective light barrier

#### Hydraulic shear

#### PowerShear Professional/Universal/Basic

#### Ideal for continous operation

- Touchscreen control on swivel arm
- Robust machine construction
- Automatic calculation of blade gap adjustment
- Frequency controlled motorized back gauge 10 - 1000 mm
- "Return to Sender" function



#### 528

#### PowerShear Professional/Universal/Basic

3,000 x 6.00 4,000 x 6.00

### Manual shears

The manual shears will be used for nearly all cutting problems. Ridge-free, distortion-free and almost burr-free cuttings are typical characteristics of these shears.

#### Manual shear

#### HS

#### Effort-saving manual shear

- Cutting up to 2 mm thick metal sheets without any difficulties and free from burrs by hand
- Options:
  - sheet separator with stacking function
  - mechanical sheet support
  - Manual back gauge adjustable from the front with digital readout



#### HS

1,000 x 2.00

2,000 x 1.25

2,500 x 1.00

3,000 x 1.00

# Slip bending rolls

We offer you slip bending rolls for the use on construction sites and in workshops.

#### Manual slip bending roll

#### 102

The small slip bending roll for continous operation

- Rolls, ca. 700 N/mm<sup>2</sup>
- Top roll with pivotable bearing has a seam groove for seam tube production
- Lower roll and back roll with wire grooves. Adjustment of lower roll with lever, adjustment of back roll with handwheel and digital readout

#### Motorized slip bending roll

#### 125

The small slip bending roll with motorized drive

- Control FM 1R
- Rolls, ca. 700 N/mm<sup>2</sup>
- Motorized drive of upper roll and bottom roll: speed 6 m/min
- Double foot switch for clockwise and anti-clockwise rotation



102
1,000 x 1.00 (50)
1,000 x 1.25 (55)
1,000 x 1.50 (65)
1,200 x 1.00 (55)
1,200 x 1.25 (65)

100

125		
1,000 >	k 1.00	(50)
1,000 >	× 1.25	(55)
1,000 >	k 1.50	(65)
1,200 >	k 1.00	(55)
1,200 >	x 1.25	(65)

100

#### Motorized slip bending roll

#### 134 and 136

# Prerolling and final rolling in one machine

- Robust machine construction
- Rolls, ca. 700 N/mm<sup>2</sup>
- Motorized drive of upper roll and bottom roll
- Control FM 1R

 Manual back roll adjustment by handwheel with digital readout



134		136		
1,000 x 2.00 (80)	1,500 x 1.50 (80)	1,000 x 5.00 (130)	1,500 x 4.00 (130)	2,500 x 2.50 (140)
1,000 x 3.00 (100)	1,500 x 2.00 (100)	1,000 x 5.50 (140)	1,500 x 4.50 (140)	2,500 x 3.00 (150)
1,000 x 4.00 (110)	1,500 x 3.00 (110)	1,000 x 6.00 (150)	1,500 x 5.00 (150)	2,500 x 3.50 (160)
1,000 x 4.50 (120)	1,500 x 3.50 (120)	1,000 x 6.50 (160)	1,500 x 5.50 (160)	
1,200 x 1.75 (80)	2,000 x 1.00 (80)	1,200 x 4.50 (130)	2,000 x 3.00 (130)	
1,200 x 2.50 (100)	2,000 x 1.50 (100)	1,200 x 5.00 (140)	2,000 x 3.50 (140)	
1,200 x 3.50 (110)	2,000 x 2.00 (110)	1,200 x 5.50 (150)	2,000 x 4.00 (150)	
1,200 x 4.00 (120)	2,000 x 2.50 (120)	1,200 x 6.00 (160)	2,000 x 4.50 (160)	_

# Slip bending rolls

#### NC-controlled slip bending roll

#### 114

#### NC-controlled slip bending roll

- Motorized drive of upper roll and bottom roll
- Three roll drive
- Hydraulic prebending roll- and bottom roll adjustment
- Automatic opening of top roll
- CR80-control

#### Motorized slip bending roll

#### 145

# Reflector slip bending roll with servo drive

- Rolls hardened,
   hard-chromed and polished, all rolls with
   7 supporters for top roll
- Three roll drive
- Fine adjustment of upper roll via dial gauge
- Motor. upper-and bottom roll adjustment



#### 114

1,000 x 1.00 (68)

1,000 x 1.50 (80)

1,000 x 2.00 (90)

#### 145

1,800 x 0.75 (40)

Bending capacity at 180 N/mm<sup>2</sup> aluminium

# Swaging machines

Swaging machines of Schröder Group are designed reliably and stable.

#### Manual swaging machine

#### 401

The simple and reliable machine for manual operation

- Table execution without rolls and gauge
- Working height over table 250 or 315 mm
- High rigidity and low wear because of location of drive shaft in front of gravity

#### Motorized swaging machine

#### 431

Motor drive with two speeds

- Drive: High rigidity and low wear
- Electrical safety control
- Double foot switch: clockwise and anticlockwise rotation
- Optional: gauges and wheels





401

50 x 1.00

63 x 1.25

431

50 x 1.00

63 x 1.25

# Swaging machines

#### Motorized swaging machine

#### 416

The powerful machine with rigid frame design

- High rigidity and low wear by position of shaft drive in front of gravity point
- Frequency controlled drive: 3 15 m/min
- Electrical saftey control
- Double foot switch: clockwise and anticlockwise rotation

#### Motorized swaging machine

#### 417

Motor drive with two speeds

- High rigidity and low wear
- Hydraulic shaft adjustment
- Frequency controlled drive: 3 15 m/min
- Electrical safety control
- Double foot switch: clockwise and anticlockwise rotation / on-off function





416

63 x 1.50

100 x 2.00

417

63 x 1.50

100 x 2.00

125 x 3.00

## Modular automation systems

A Schröder bending center is your industrial solution to achieve large volume as well as flexible series production with utmost repeatable accuracy.

Modular automation systems

#### **Bending Center**

High performance machines

- Machine in operation: Evolution-Series
- Load and unload: Industrial roboter of leading manufacturers
- Software control: POS 3000

- Others:
  - Automatic tool changer
  - Handling systems
  - Tables
  - Gauging systems
  - Highly flexible manipulators for reliable tool positioning



#### Individual solutions

- 24// hours operation
- Large-volume series production
- Improved manufacturing process
- Utmost repeatable accuracy

# **Software**

The motorized machines from Schröder Group are characterized by electronic controls that are ideally adapted to the hardware and to your requirements – thanks to our own software development.

	POS 3000	POS 2000 Professional	Classic Bend	CFP 120	FM 1R
MAK 4 Evolution UD	•	-	-	-	-
SPB Evolution UD	•	-	-	-	-
MAK 4	-	•	-	-	-
PowerBend Industrial UD (PBI)	•	•	-	-	-
PowerBendProfessional (PBP)	•	•	-	-	-
PowerBend Universal (PBU)	-	•	•	-	-
MPB	-	•	-	-	-
MAKU	-	•	•	-	-
225	-	-	-	•	-
EVO Heavy Duty	•	•	-	-	-
720	-	-	-	•	-
MHSU	-	-	-	-	-
PDC	-	-	-	-	-
PDC-NC	-	-	-	-	-
527	-	-	-	-	-
528	-	-	-	-	-
PowerShear Basic	-	-	-	-	-
PowerShear Universal	-	-	-	-	-
PowerShear Professional	-	-	-	-	-
125	-	-	-	-	•
134	-	-	-	-	•
136	-	-	-	-	•
114	-	-	-	-	-
145	-	-	-	-	-

FM 2R	CR 80	CRP SPS	FM 1S	Clear Cut	CGS 80 SPS	FM 200 P
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
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-	-	-	-	-	-	-
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-	-	-	-	-	-	-
-	-	-	-	•	-	-
-	-	-	-	•	-	-
-	-	-	-	•	-	-
-	-	-	•	-	-	-
-	-	-	-	-	•	-
-	-	-	-	-	•	-
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-	•	-	-	-	-	-
-	-	•	-	-	-	-

# Fields of application

Working ▶ length heet thickn. ▼	1.000	1,250	1,500	2,000	2,500	3,000	3,200	4,000	5,000	6,000	9,000
					Folding	machine	S				
0.75				BAM							
0.80	BAM			MODULAR 2 000		MODULAR 3 000		MODULAR 2 000 (2x)	MODULAR 2 000 (1x) MODULAR 3 000 (1x)	MODULAR 2 000 (3x) MODULAR 3 000 (2x)	MODULAR 3 000 (3x)
1.00				AK / ASK II	AK	AK					
1.25											
1.50	ASK 3	ASK 3	ASK 3	AK			MAKU				
1.75			ASK II					MPB			
2.00	ASK II / 204				MAKU		MPB / 720				
2.50					MPB			PBP / PBU			
3.00							PBP/PBU	SPB Evolution UD / 225 / EVO-CENTER			
4.00				PBU			SPB Evolution UD / EVO-CENTER		MAK 4 Evo- lution UD		
5.00					SPB Evolution UD / 225			MAK 4 Evolution UD / PBI / MAK 4			
6.00				225	MAK 4 Evolution UD		MAK 4 Evolution UD / PBI / MAK 4 / 225				
8.00					MAK 4 Evolution UD						
10.00											
12.00											
16.00							EVO HD				

Center distance ► between wheels Sheet thickn. ▼		50	63	100	125
			Swaging ma	achine	
	1,00	401 / 431			
	1,25		401 / 431		
	1,50		416 / 417		
	2,00			416 / 417	
	3,00				417

Working	)
length	
Sheet thickn	. 1

1	1,000	1,250	1,500	1,600	1,800	2,000	2,500	3,000	3,200	4,000
thickn.▼	.,,555	.,200	1,000	.,,555	.,,555	2,000	2,000	0,000	0,200	.,,555
					Shear	S				
1,00							HS	HS		
1,25						HS				
1,50									MHSU	
2,00	HS						MHSU		MHSU	
2,50			MHSU			MHSU	MHSU			PDC
2,75									527	
3,00	MHSU	MHSU				MHSU			PDC	
3,25						527	527			
3,50							PDC			
3,75				527						
4,00	MHSU / 527	527	MHSU			PDC				
4,50	PDC		PDC							
6,00								Power Shear		Power Shear
10,00						528		528		528
13,00								528		528
16,00								528		528
20,00								528		

Working length Sheet thickn.	1.000	1,200	1,500	1,600	1,800	2,000	2,500	3,000	3,200	4,000
				SI	ip bendin	g rolls				
0.5/0.75					145					
1.00	102 / 114 /125	125				134				
1.25	102 / 125	102 / 125								
1.50	102 / 114 /125		134			134				
1.75		134								
2.00	114 / 134		134			134				
2.50		134				134	136			
3.00	134		134			136	136			
3.50		134	134			136	136			
4.00	134	134	136			136				
4.50	134	136	136			136				
5.00	136	136	136							
5.50	136	136	136							
6.00	136	136								
6.50	136									



### 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 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 subject to change at all times. HSM 220419EN

Hans Schröder Maschinenbau GmbH Feuchten 2 | 82405 Wessobrunn-Forst | Germany T +49 8809 9220-0 | F +49 8809 9220-700 E info@schroedergroup.eu www.schroedergroup.eu

