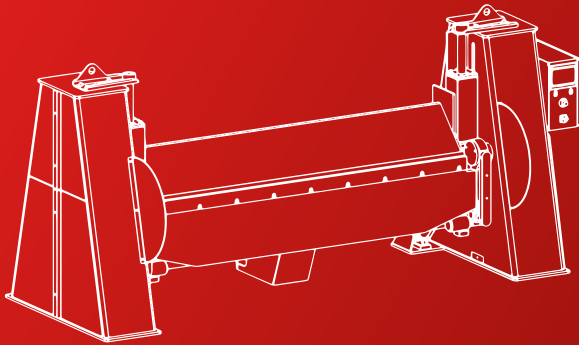


FULL HYDRAULIC BENDING MACHINE

The perfect machine for every demand



- › Machines built by one of the leading manufacturers of bending machines worldwide
- › Ideal price-performance ratio
- › Every machine is being engineered and manufactured in Germany

> CHOOSING US WILL PAY OFF

Good reasons for a successful partnership

Decades of experience

The industrial history of the Ennepe-Ruhr-Area is inextricably linked with the name Hochstrate as an entrepreneur and a supplier of machine components for coal mining.

Despite the fact that many companies went bankrupt after the decline of coal mining, Dr. Hochstrate group managed to deal with a completely altered market situation. We captured an important market segment in the sheet metal processing industry.

About 40 years ago, we developed a modern hydraulic driven bending machine. Some years later we increased our portfolio by developing a full hydraulic plate shear.

Since then we have improved our machines continuously. In collaboration with local universities and colleges we increased and optimized the range of functions as well as the precision of our machines.

Our machines are setting new standards!

An individual machine for your demands

We would be pleased to advise you choosing from 160 basic machines which can be equipped with more than 20 special features. Our established modular system allows us to offer you a machine perfectly fitting your demands.

We will gladly create an individual solution for your special requests. Using a basic machine you can already produce a large variety of products.

By choosing additional features you can equip your machine with every component that is required in your production.

By customizing a basic machine you get an ideal machine for a wide scope of application.

As our machines are being manufactured in serial production you get your machine at an excellent price-performance ratio.

German quality and satisfied customers worldwide

Every machine is being engineered, manufactured and tested in Germany. We believe this is the only way of reaching and sustaining a level of quality and reliability you expect from our machines.

Thanks to our efficient and lean serial production we are able to offer you every machine at the best price-performance ratio.

Satisfied customers worldwide prove us right.

Make your decision for a machine "Made in Germany"!



Dr. Hochstrate
delivers worldwide.

> INCREASE YOUR EFFICIENCY

Advantages of a Dr. Hochstrate bending machine

- > **Robust in use**
- > **Easy to handle**
- > **Extremely versatile**

Our bending machines are known for a sturdy and robust welding and bending construction. This leads to a reduction in weight compared to conventional machines.

The Dr. Hochstrate group made some significant improvements to conventional bending machines in consideration of the latest technology.

The result is an efficient and reliable bending machine, which is available at a significantly lower price than conventional bending machines because

of several technical innovations and a lean serial production. As company Dr. Hochstrate itself is engaged in metal business we focused on "Suitability for daily use" and "Ease of operation" as well as an optimal transmission of forces while bending.

Our machines are manufactured by using the bending method extensively. So our machines themselves not only demonstrate this method, but the hereby achieved cost advantage is being passed on to our customers.

The machines are a perfect example of how accurate metal sheets can be bent and of how versatile a bending machine is.

With our technically advanced machines a large variety of products can be manufactured.



> FOR SURE THE RIGHT CHOICE

What machines are available?

Technical specifications:

Capacity in width	500 to 8000 mm
Sheet thickness	1 bis to mm
Materials	Mild steel, Stainless steel, copper, lexan, molybdän, magnesium, aluminium, plastics



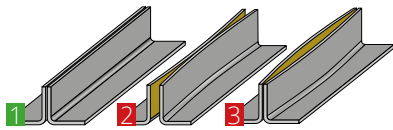
Extensive standard equipment:

- > Hydraulic operation of upper beam and bending beam
- > Upper beam has 45° face angle
- > Changeable tools for upper, bending and lower beam
- > Hydraulic oil included
- > Electronic positioning of bending beam
- > Control panel features:
 - Digital display of bending angle
 - Incremental control of bending angle
 - Independent controls for operating upper and bending beam
 - Switch for manual or automatic operation
- > Siemens PLC-Control
- > Foot-actuated switch for both manual and automatic operation
- > CE-certification
- > Upper beam safety stop at 25 mm clearance



> MAXIMUM FLEXIBILITY

Overview of optional accessories and equipment



Hydraulic dynamic camber

Image 1 demonstrates a perfectly even sheet, bent using the patented hydraulic dynamic camber. Images 2 and 3 demonstrate potential results bending with a not appropriate or without a camber



Adjustment of the bending beam



Touchscreen



Cone / Round bending

Extensive special equipment:

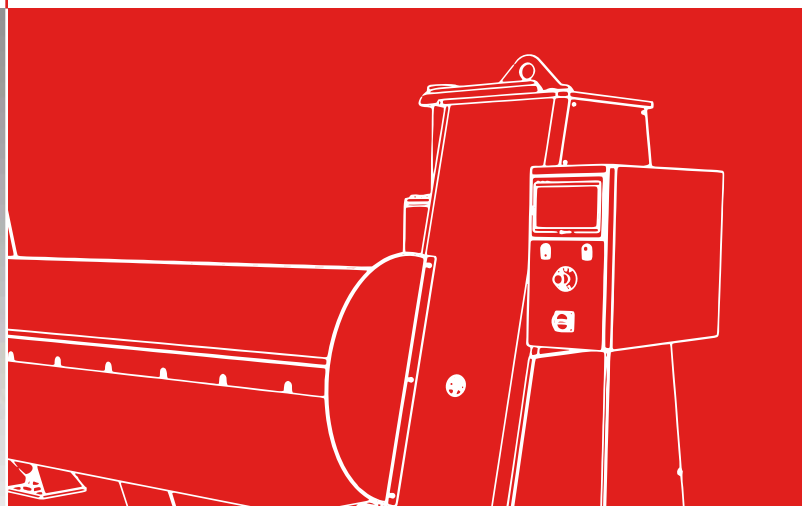
- > Hydraulic dynamic camber - **patented** -
- > Electronic adjustment of the bending beam (available with automatic sheet thickness detection)
- > Touchscreen – CNC control to store up to 999 programs with 8 back gauge positions and 8 bending angles each
- > Graphic touchscreen
- > Front gauges
- > Back gauges:
 - Manual
 - Electrical, with electronic position indication of the back gauge
 - HBack gauge up to 1000 mm or optional up to 8000 mm
- > Round bending function up to semi-circle (180°) or three quarter circle (270°) without tool changing
 - Round bending without tool change - cylindrical -
 - Round bending of U-profiles
- > Function extension “cone bending”
- > Tools:
 - Goat foot segments (sizes according to customer's requirements) - heights: 50 to 300 mm
 - Round bending for varying diameters
 - Segmented bending beam rail
 - Custom rails
- > Automatic clamping system available for
 - Upper beam tools
 - Bending beam tools
- > Stepless pressure regulation of upper beam
- > Increased lift of upper beam up to 1000 mm
- > Swiveling upper beam
- > Increased speed of bending beam
- > Extension of bending beam up to 150°
- > Additional accessories are available on demand

> THE BEST MACHINE FOR YOU

Overview of machines

Sheet thickness in mm ↓		Capacity in width in mm					
		500	1000	1500	2000	2500	3000
Bending machine in standard configuration	2	✓	✓	✓	✓	✓	✓
	3	✓	✓	✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓
	5	✓	✓	✓	✓	✓	✓
	6	✓	✓	✓	✓	✓	✓
	8	✓	✓	✓	✓	✓	✓
	10	✓	✓	✓	✓	✓	✓
	12	✓	✓	✓	✓	✓	✓
	15	✓	✓	✓	✓	✓	✓
	16	✓	✓	✓	✓	✓	✓
	18	✓	✓	✓	✓	✓	✓
	20	✓	✓	✓	✓	✓	✓
	25	✓	✓	✓	✓	✓	✓
Hydraulic dynamic camber (patented)		✓	✓	✓	✓	✓	✓
Manually adjustable back gauge		✓	✓	✓	✓	✓	✓
Motorized back gauge		✓	✓	✓	✓	✓	✓
Electronic adjustment of the bending beam							
→ with legible selection switch		✓	✓	✓	✓	✓	✓
→ with automatic sheet thickness detection		✓	✓	✓	✓	✓	✓
Touchscreen		✓	✓	✓	✓	✓	✓
Graphic touchscreen		✓	✓	✓	✓	✓	✓
Goat foot segments with collecting rail		✓	✓	✓	✓	✓	✓
Automatic clamping of the goat foot		✓	✓	✓	✓	✓	✓
Stepless pressure regulation of upper beam		✓	✓	✓	✓	✓	✓
Round bending function with initial round bending		✓	✓	✓	✓	✓	✓
Function extension "cone bending"		✓	✓	✓	✓	✓	✓
Segmented bending beam rail		✓	✓	✓	✓	✓	✓
Increased speed of bending beam		✓	✓	✓	✓	✓	✓
Increased lift of upper beam up to 1000 mm		✓	✓	✓	✓	✓	✓
Swiveling upper beam		✓	✓	✓	✓	✓	✓
Extension of bending beam up to 150°		✓	✓	✓	✓	✓	✓

Materials: Mild steel, Stainless steel, copper, lexan, molybdenum, magnesium, aluminium, plastics



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