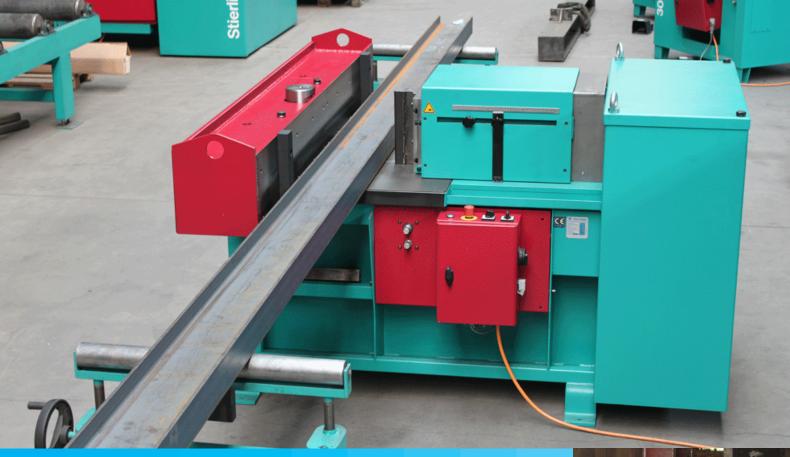


# SOLUTIONS # FOR STEEL FABRICATORS



Straightening machines / Bending press / Rotator 360° - turning device





# UNIVERSAL BENDING - AND STRAIGHTENING MACHINES

**BENDING AND STRAIGHTENING WITH THE SAME MACHINE** 



101 T-Profil straightening

## ROBUST AND PROVEN FOR DECADES IN TOUGH CONDITIONS

The Stierli bending and straightening press is perfect to bend, straighten or camber beam profiles, plates or weldments. This world-class machine is sturdy and has proven over the decades to perform in a wide variety of applications.

MACHINE MODEL	420 HE	820 HE	1300 HE
	420 CNC	820 CNC	1300 CNC
Working force	42 tons	82 tons	130 tons
	420 kN	820 kN	1300 kN
Tooling height	200 mm	300 mm	300 mm
Straightening / cambering Capacity (420 N/mm²)	HEA 180	HEA 280	HEB 300
Flat steel bending	200 x 20	300 x 20	300 x 30
Capacity (420 N/mm²)	mm	mm	mm
Pipe bending	2" (60.3mm)	3" (88.9mm)	3" (88.9mm)



103 Flat steel bending



### THE STIERLI-BENDER IS A GREAT MULTI-TALENT

- Horizontal bending
- Straightening
- Cambering
- Forming tools
- Press bending
- Special tools



102 Pipe bending



## **CAMBERING- AND STRAIGHTENING PRESS**





104 Round bar straightening e.q ø300mm



105 Beam cambering or straightening



106 L-/T-/ U- profiles straightening



107 Beam straightening or bending in upright position

MACHINE MODELS	1300 RP 1300 NC+	2200 RP 2200 NC+ 2200 CNC	3300 RP 3300 NC+ 3300 CNC	4400 RP 4400 NC+ 4400 CNC	6000 RP 6000 NC+	8800 RP 8800 NC+
Working force	130 tons 1300 kN	220 tons 2200 kN	330 tons 3300 kN	440 tons 4400 kN	600 tons 6000 kN	880 tons 8800 kN
Tooling height	300 mm	600 mm	850 mm	1050 mm	1050 mm	1200 mm
Straightening / cambering Capacity (420 N/mm²)	<b>HEB 300</b> (Wx=1890 cm <sup>3</sup> )	<b>HEB 600</b> (Wx=5700 cm <sup>3</sup> )	<b>HEB 1000</b> (Wx=12890 cm <sup>3</sup> )	<b>HEM 1000</b> (Wx=14330 cm <sup>3</sup> )	on request	on request



109 Bend angle steel kink



110 Straightening after thermal cutting



111 Pipe bending up to ø400mm



108 Integrated in beam line



112 Add beam stiffener with the Stierli press



# CONTROL SYSTEMS & ACCESSORIES

#### Manual control:

- •Simple and easy setting of the cylinder advance and return position with the proven Stierli switch-off system with Nonius scale and 0 mark.
- •Precise bending and straightening with fine stroke adjustment. 3 bending and straightening programs support the bending and straightening process.
- •Continuous speed regulation from 0 to 0.6 m/min.

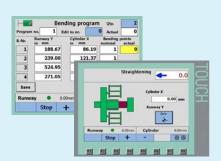
#### NC+ control:

- Digital setting of the cylinder advance and return position with "teach-in" button. The fine stroke adjustment with the +/- 0.1mm correction buttons for the cylinder stroke allows precise bending and straightening.
- Possibility to work in manual mode as well as in automatic mode to run complete bending or straightening programs, including integration of the roller conveyor into the bending program.
- •Display of deformation using advanced, modern STIERLI laser system (optional)

#### CNC- control:

- •All functionalities such as NC+ control.
- Laser controlled cnc-control system, which supports the process of beam cambering in the best possible way. The operator can numerically enter the cambering height. The hydraulic horizontal press automatically controls the cylinder stroke and the feed of the driven roller conveyor.







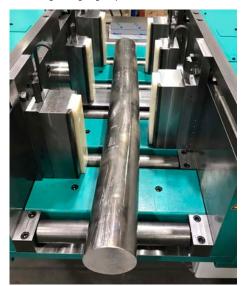




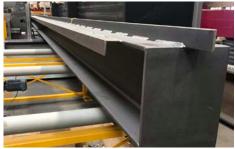
114 Straightening press with several straightening pins for bulky welded constructions



120 Straightening large L-profiles 300x300x30mm



124 2-cylinder straightening machine



128 Crane beam straightening (instead of flame straightening)



115 600 tons straightening press combined with ROTATOR for fast and safely turning of beams within the machine.



116 Driven roller directly at the machine



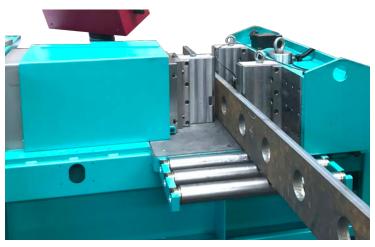
117 Cross conveyor system



118 Torsion (twist) bending or straightening



119 Turning device 90°



121 Automatic straightening, optionally also with automatic feeding system



122 Double straightening press (Bending in both directions without turning



125 Beam straightening or cambering (bending) for steel fabricators or steel service centers





126 Heavy bending works e.q 400x60 mm 127 Bending of thick sheet metal



129 4x90° turning device



130 Turning device can be combined with roller conveyor



131 Laser measurement along the entire profile length, incl. creation of a report



132 880 to press with 2x30m roller conveyor



The Stierli Rotator is developed for turning quickly and safely heavy and bulky loads such as beams and welded constructions without a crane. This will save a lot of working time and increase productivity.

## ROTATOR 360° Turning device





301 Lower the beam



302 Arms closes automaticly



303 Start!

319 Easy positioning with pallet truck, crane or optional rollers.

#### **FAST FACTS:**

- √ 360° Fast turning and rotating without a crane
- ✓ Welding and dressing in sag curve
- No waiting for the crane, turning at any time
- ✓ Working in every position
- ✓ 2 turning directions and adjustable height
- Very easy and fast to use
- Mobile system, with pallet truck or crane
- ✓ Distance between the 2 stands: mobile, freely adjustable, standard cable length 15m
- Durable chain for safety when turning (no belts)
- ✓ Very robust construction for long life



Welding in flat position increase the productivity

MACHINE MODEL	ROTATOR 600	ROTATOR 1000	ROTATOR 1500	ROTATOR 2000	ROTATOR 2500	ROTATOR 3000
Loading capacity (per pair) *	6000 kg or 12000 kg *	6000 kg or 12000 kg *	6000 kg or 12000 kg *	6000 kg or 12000 kg *	6000 kg or 12000 kg *	6000 kg or 12000 kg *
Inserting clearance	600 mm (z.B HEB 600)	1000 mm (z.B HEB 1000)	1500 mm	2000 mm	2500 mm	3000 mm
Distance between stands	0 - 15 m	0 - 15 m	0 - 15 m	0 - 15 m	0 - 15 m	0 - 15 m

<sup>\*</sup> optional 17000 kg or 30000 kg



313 Adjustable height and 2 turning directions



316 ROTATOR in combination with welding robot



314 Several Rotators for very long parts



317 ROTATOR increase your safety



315 ROTATOR integrated in a roller conveyor (e.q beam welding line)



318 Durable chain for safety when turning



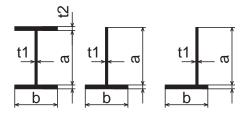
The machine can easily straighten flanges of welded H and T beams.

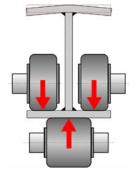
The robust construction of the flange straightening machine guarantees reliable operation, accurate straightening results and a long service life, while requiring a minimum of maintenance. The horizontal design of the machine allows even the largest beams to be handled with ease.

The machine features a heavy duty, powerful hydraulic system and automatic operation. The workpiece can be easily loaded into the machine by overhead crane. A roller conveyor is needed to ease the movement of the beam and allow an automatic operation. The extremely sturdy lower roll is adjustable and the web and flange rolls keep the profile properly positioned.

MACHINE MODEL	FRM-15	FRM-20	FRM-30	FRM-40	FRM-50
Max. flange thickness t2	15 mm	20 mm	30 mm	40 mm	50 mm
Max. beam height a	2000 mm				
Max. width H-/T- profil <b>b</b>	200-500* mm	200-500* mm	200-500* mm	200-500* mm	200-500* mm

<sup>\* 800</sup>mm flange width on request





## FLANGE STRAIGHTENING MACHINE





403 With driven roller conveyor

STIERLI - BIEGER AG

Schellenrain 1 CH – 6210 Sursee Switzerland Tel: +41 41 920 20 55 Fax: +41 41 920 24 55

mail: sales@stierli-bieger.com web: www.stierli-bieger.com

