

EB 30 CNC  
EB 40 CNC  
EB 60 CNC



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# EHRT

Bending Machine  
Standard Line

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## EHRT Bending Machines Standard Line - Advantages

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**EHRT bending machines** are exceedingly powerful CNC bending machines which allow bending of single pieces and small batches just as accurately and efficiently as series-produced parts.

Due to a calculated spring-back compensation and the use of electronic tools, a bending accuracy of  $\pm 0.2^\circ$  is achieved beginning with the very first piece. A plug-in system enables a quick and easy change of tools.

### Modular Construction

The Standard Line was developed specifically to bring high flexibility to our customers. With CNC side stop, a work bench and Windows® Software the Standard Lines are suitable for serial productions. Its modular construction offers an affordable entry into the EHRT bending technology.

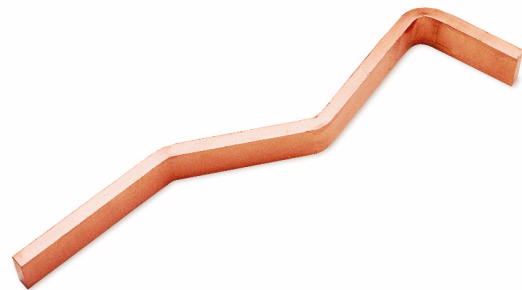


### Work Pieces

With a bending force of 300 to 600 kN, the EHRT Standard Lines are able to bend materials of up to 260 mm in width and up to 20 mm in thickness.

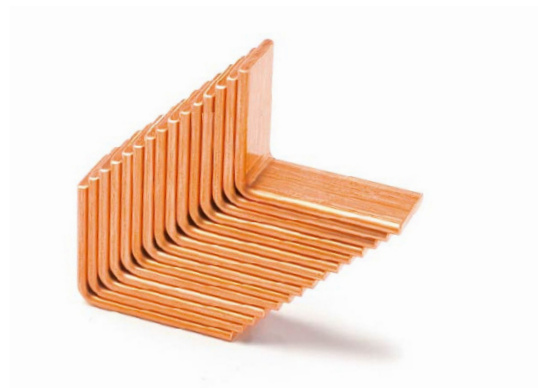
### CNC Stop

The bending machines of the Standard Line features a CNC stop with a traverse path up to approximately 2,000 mm. The bending software PowerBend accurately calculates the flat length as well as the stop position and transfers the results directly to the CNC control unit. High production accuracy is assured.



### On-Going Development

We incorporated many customer requests into the development of this line, as well as more than 50 years of experience in the bending machine industry. This machine is our most ergonomic machine to date.



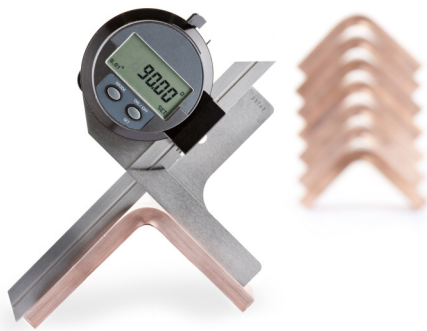
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## Bending Technology

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### Angular Measurement

Our measuring accuracy is  $0.1^\circ$ . This is achieved by using bending prisms with electronic angular measurement technology. The computer calculates the required final stroke. The spring-back of every bend is compensated, regardless of material type. Our high angle accuracy of  $\pm 0.2^\circ$  is achieved instantly with the first work piece. No adjustments are required. Material scrap amounts will drop considerably. Automatic adjustments are even made for inconsistencies within a single piece of material.



### Angle Specification by Stroke Curve

The stroke system also enables the user to specify an angle from which the stroke is calculated by using stored stroke functions. Bending accuracy in that case is dependent upon material properties such as thickness, hardness, etc. These properties may differ from one piece of material to another.

### U-Bending System

For tight and narrow U-bends, the bending tool can be turned around. The stroke movement is then performed by the bending prism. The material in this case moves toward the operator. Bends with openings from 40 mm and an accuracy of  $0.2^\circ$  are possible.



### Stroke Measurement

If the bending prisms with integrated angular measurement cannot be used due to their size, bending prisms without angular measurements can be used. For example, the distance between two bends is too short. In such cases the control unit can be switched from angular to stroke measurement.

This method allows the selection of the bending ram distance. Setting accuracy is  $\pm 0.1$  mm. A final stroke is not required.



### Offset Bending

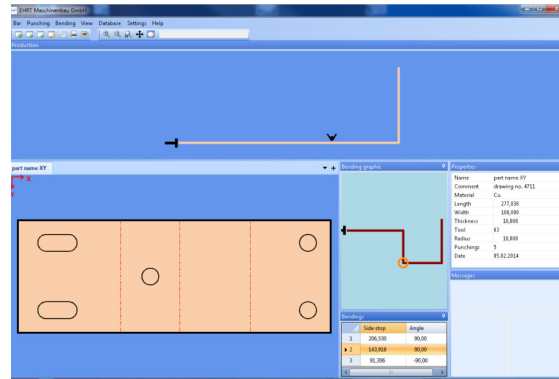
The offset bending tools allow very narrow bending distances. The special design means that work pieces are produced without marks. Even the programming is made very easy with the new software version of PowerBend.



# Bending-Software PowerBend

## Easy Handling

The Microsoft Windows® based software, PowerBend, is easy to learn. No CNC programming skills are required. All necessary inputs are prompted and displayed on the screen. Inputs can be corrected at any time and minimum distances are checked instantly to guard against incorrect inputs. The operator is allowed to use outside, inside, centre line, and radius dimensions. Software can be switched between mm and inches.



## Program Storage

The program for each work piece can be stored as alphanumeric names up to 24 digits. The database allows storage of more than 200,000 different parts which can be located easily using the search and sort options.

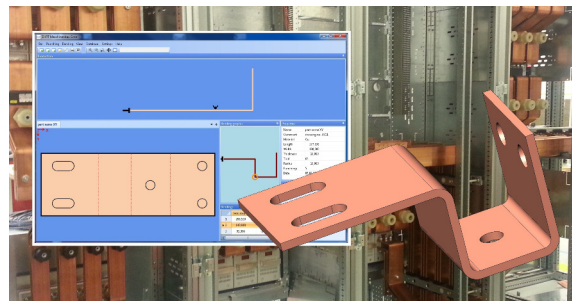
Code-Nr.	Bemerkung	Länge:	Breite:	Letzte Änd.	Flags
130	RHOMBUS_1	203,20	101,60	06.05.2002	OXOn
131	Rockwell1	814,95	38,10	11.12.2003	XOO
132	Rockwell2	810,95	38,10	11.12.2003	XOO
133	testM18_2	461,40	100,00	07.05.2002	XOO
134	Mechtronik	1275,72	100,00	10.02.2003	XOO
135	abcd 300-2	400,00	200,00	21.08.1999	OXO
136	abcd 300..	400,00	200,00	21.08.1999	OXO
137	ABE_glindow	287,90	100,00	17.02.2003	XOO
138	ABCD 12345a	250,00	100,00	27.12.1999	OXO
139	RA.torsion1	620,70	38,10	02.02.2004	XOO
140	RA.torsion2	620,32	38,10	02.02.2004	XOO
141	Rockwell2.1	830,73	6,35	02.02.2004	XOO
142	Rockwell2.2	646,51	6,35	11.12.2003	XOO
143	Rockwell2.3	749,45	6,35	02.02.2004	XOO
144	73296-104-02 DXF	76,20	183,13	15.04.2004	OXO
145	73296-105-07 DXF	496,37	127,00	29.04.2004	OXO

## Calculated Values

The PowerBend software automatically calculates the flat length of each part being bent and determines the exact position of the side-stop. Up to 15 bends can be calculated for one work piece.

## Programming

The software uses graphics for easy combination of the 6 different bending operations.



## Software Languages

German, English, Russian, French.  
Other languages on request.

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## Technical Data EHRT Bending Machines Standard Line

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	<b>EB 30 CNC</b>	<b>EB 40 CNC</b>	<b>EB 60 CNC</b>
Press Capacity	300 kN	400 kN	600 kN
Stroke max.	200 mm; 8,0 Inch		350 mm; 13,5 Inch
Work Pieces (e.g. Cu)			
flat	max. 160 x 20 mm	max. 200 x 20 mm	max. 260 x 20 mm
edgewise	max. 120 x 10 mm		max. 160 x 10 mm
torsion	max. 125 x 10 mm		max. 160 x 10 mm
Bending System	hydraulic		
Working Cylinder	underneath the table		above the table
Hydraulic Pressure	280 bar		
Bending Accuracy	0,2°		
Rapid Movement	10 mm/s; 0,4 Inch/s		
Inching	5 mm/s; 0,2 Inch/s		
Return Stroke	adjustable		
Working Height	900 mm, 35 Inch		
Electrical Standards	according to VDE		
Electrical Connected Load	3 kW		4 kW
Side Stop	fully CNC controlled		
Control Unit	industrial PC running Windows Windows 7		
Software	PowerBend; Calculation of the developed length for up to 15 bends; Storage for more than 200.000 parts		
Network-Compatible	Yes		
Finishing	RAL 5010 Gentian Blue; Doors and Coverings RAL 7035 Light Grey		
Safety Installations	CE standards (Cat 2)		

*Subject to change without prior notice*

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**EHRT Maschinenbau GmbH**  
 Im Kettelfeld 8  
 D- 53619 Rheinbreitbach

Tel: +49 (0)2224-9248-0  
 Fax: +49 (0)2224-9248-24

info@ehrt.de  
 www.ehrt.de

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