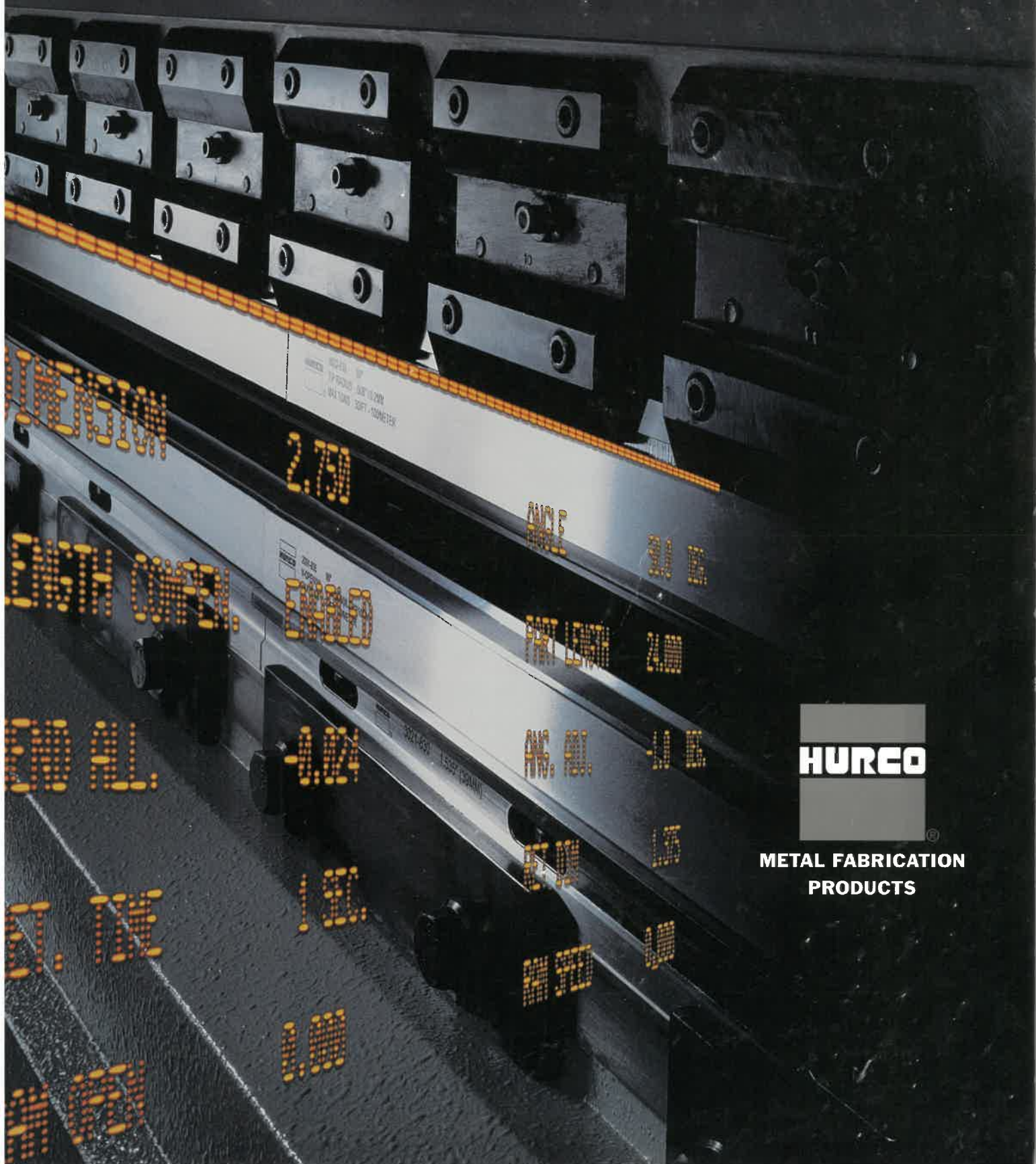


Hurco® Press Brake Systems  
Featuring Autobend® Controls



**HURCO**

**METAL FABRICATION  
PRODUCTS**

RADIUS

PUNCH LIBRARY

HEIGHT

ANGLE

OFFSET

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

0.000

2.634

2.624

2.624

88.9

88.9

88.9

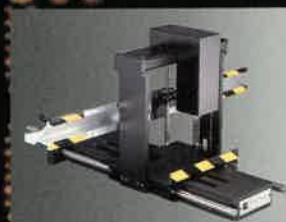
0.000

0.000

0.000



CONTROLS: Featuring the Autobend® 7



BACKGAUGES: The S Series with R-Axis



TOOLING: European style, precision ground

Hurco's computer control systems and

backgauges are proven to increase productivity

and improve accuracy. They come with

unbeatable support services and warranties.

Now, we've paired our reliable controls with

the world-renowned PH Series press brakes and

European-style precision-ground tooling to

provide you with an Integrated Systems Solution.



# Hurco's Smart Integrated Systems Solution

This is the answer to increased metal parts production and greater profitability. Hurco's Autobend® interactive programming system is simple to learn and easy to use. When combined with a broad range of 33- to 132-ton precision press brakes, you get a system that ensures accurate parts the first time for a variety of forming requirements.



## HURCO PRESS BRAKE SYSTEMS

- ACCURATE
- EASY TO OPERATE
- RELIABLE
- DESIGNED FOR SAFETY
- PRODUCTIVE
- BACKED BY HURCO'S TECHNICAL SUPPORT

*PH 65-25 up-stroking press brake with Autobend 7 control and Hurco precision-ground tooling.*

# Hurco® PH Series Up-Stroking Precision Press Brake Systems

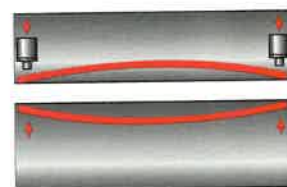
Known for its accuracy, proven design, simple operation, safety and support, the Hurco PH Series press brake provides the performance and value for your metal fabrication needs.



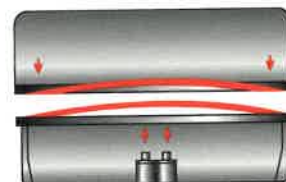
*Autobend 7:  
Simple and  
easy to use.*

## ACCURACY, REPEATABILITY AND SIMPLE OPERATION

- Moving lower beam achieves precise positioning ( $\pm 0.00039$ " / 0.01mm) with hydraulic depth stop valve for final slow-bend positioning.
- Moving beam is guided front-to-back with a system of maintenance-free alignment bearings positioned to keep the beam in perfect vertical alignment.
- The full-length treadle bar activates and controls the movement of the lower beam. Lower beam moves in proportion to the pressure exerted on the treadle bar. The operator can stop the machine at any point in the stroke by simply releasing the treadle bar and letting gravity safely return the lower beam to the down position.
- Minor deflection adjustments can be made easily through punch holders with the adjustable wedge.
- True hydraulic press brake means 1) full-rated, adjustable tonnage throughout the entire stroke; 2) stroke is manually adjustable for greater productivity and easier part removal; 3) operator-adjustable, high-low speed control over approaching ram speed.



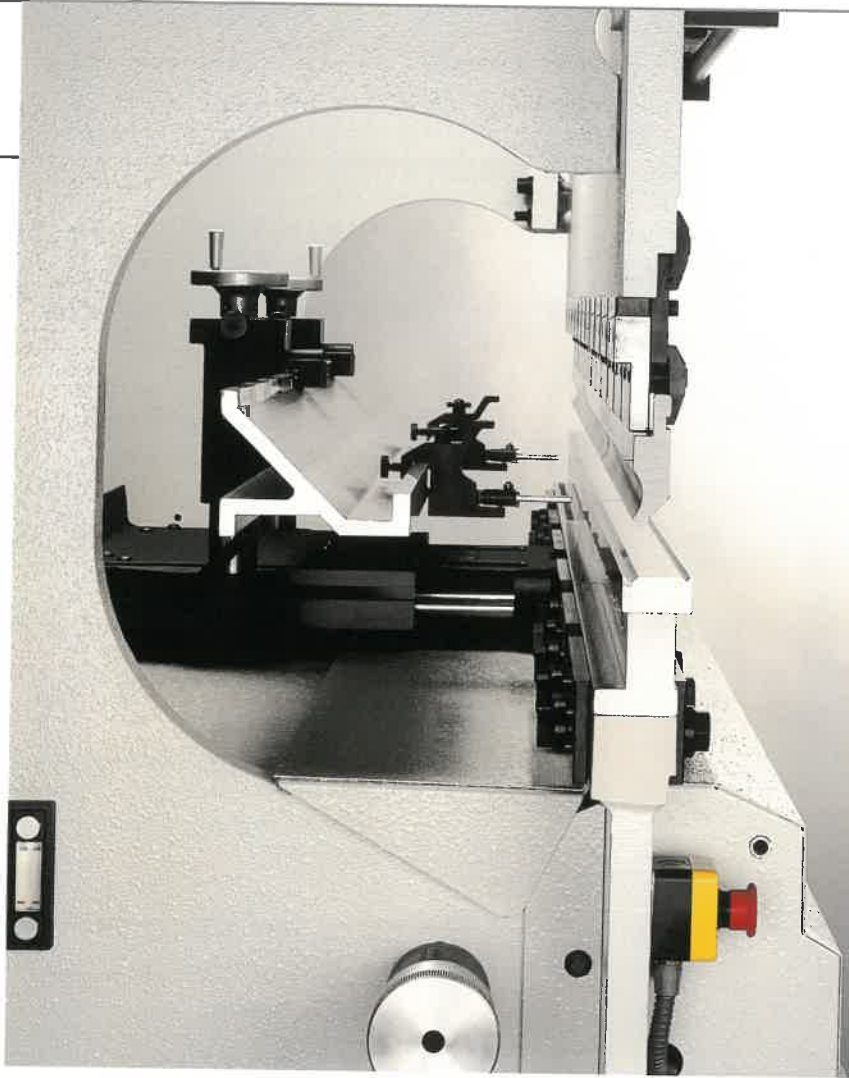
*In conventional down-stroking press brakes, the movable ram and fixed lower bed deflect in opposite directions.*



*The Hurco up-stroking press brakes use Central Thrust Technology to combat the forces of deflection. Consistent cylinder force at the center causes the upper and lower beams to deflect in the same direction reducing set-up time and increasing accuracy on first-time bends.*



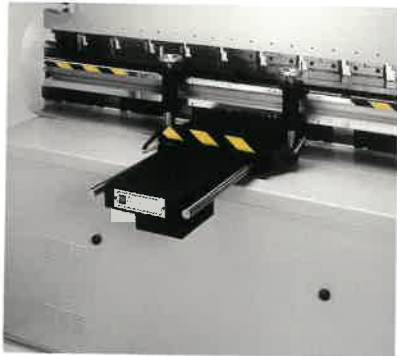
*Precision beam parallelism is maintained throughout the stroke with four pairs of heavy duty sector arms (two front and two rear) riding on a hardened sector guide block.*



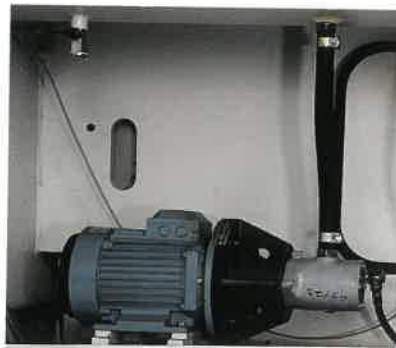
*Deep side housing up to 15.75"/400mm gap allows longer parts and greater flange clearance for bending.*

## **PROVEN DESIGN**

- Cylinder(s) are used for lower beam movement and mount to the inner and outer frame supports. The two-stage cylinder design allows fast approach and controlled slow bending speeds for greater part accuracy and control.
- Side housings, inner frame plate and base plate are high-quality, stress-relieved steel plate for maximum durability.
- Punch and die centerline alignment is consistent with the upper and lower beam centerline, allowing easier tooling set ups and more consistently formed parts, as well as greater tool life.
- Self-contained efficient hydraulic system is located in the back of the press brake.



*Unobstructed upper beam means large panels may be formed, unobstructed by top-mounted hydraulic components.*



*Motor/pump combination is isolated by shock-absorbing mounts to minimize noise and vibration.*

# Hurco® Press Brake Systems: Flexible, Accurate, Safe

Hurco's up-stroking press brake is designed for precision forming and safety. Add Hurco's interactive Autobend® control and precision tooling supported by Hurco service, and you have one smart system.



*Autobend® 6:  
For simple  
forming  
applications.*

*PH 30-12 up-stroking  
press brake with  
Autobend 6 control  
and Hurco precision-  
ground tooling.*

## **OPERATOR-FRIENDLY SAFETY FEATURES**

- Conveniently located emergency safety stop buttons.
- A control treadle bar safety lock provided during machine idle and operator setup.
- A safety limit switch stops the motor, preventing injury to the operator and damage to the machine in an unbalanced condition away from the center of the beam.
- Full-length upper-beam safety handrail provided.
- Full-length treadle safety shroud prevents accidental lower-beam activation and operator foot protection.

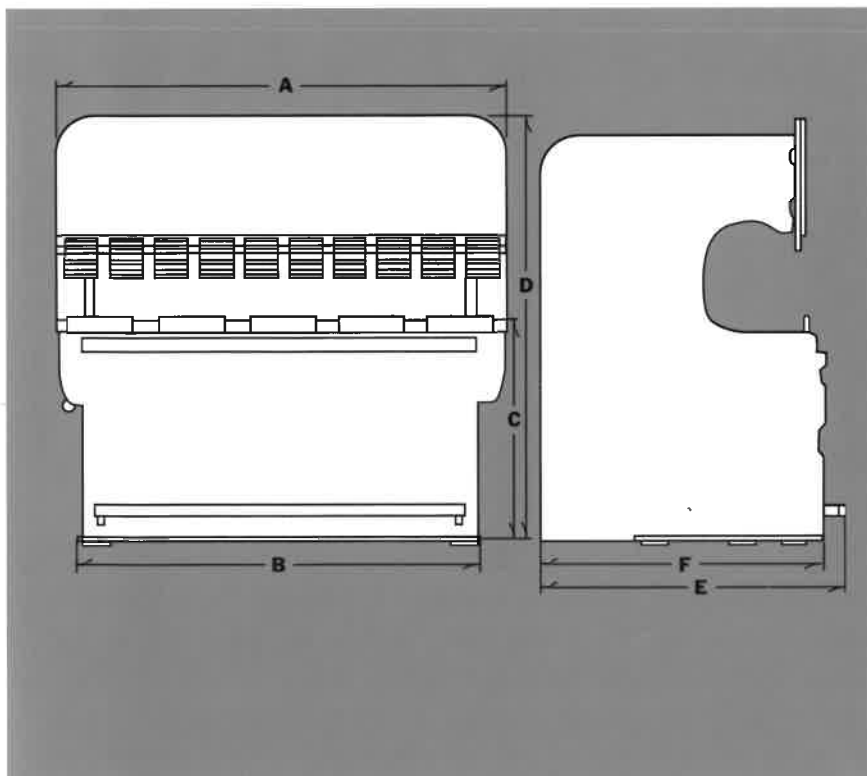
## **SUPPORT AND SERVICE**

- Hurco Service Engineers available for field support.
- Hurco-Certified distributor service field support.
- Inside Application Engineering support.
- Inside Technical Support for service and parts.

# Hurco® Press Brake Systems Specifications

Specifications	PH 30-12	PH 40-20	PH 65-25	PH 90-30	PH 123	PH 124
Capacity (U.S. Tons/Metric Tons)	33 / 30	44 / 40	71 / 65	99 / 90	132 / 120	132 / 120
Bend Capacity (Mild Steel)	4' / 14GA	6' / 16GA	8' / 14GA	10' / 10GA	10' / 7GA	12' / 11GA
Bed Length (in/m)	49 / 1.2	82 / 2.0	100 / 2.5	122 / 3.0	122 / 3.0	161 / 4.0
Distance Between Side Frames (in/m)	40 / 1.0	66 / 1.6	85 / 2.1	105 / 2.6	102 / 2.5	146 / 3.7
Stroke Length (in/mm)	3.94 / 100	3.94 / 100	3.94 / 100	3.94 / 100	3.94 / 100	3.94 / 100
Open Height (in/mm)	11.81 / 300	11.81 / 300	11.81 / 300	11.81 / 300	11.81 / 300	11.81 / 300
	14.60 / 370	14.60 / 370	14.60 / 370	14.60 / 370	14.60 / 370	14.60 / 370
Throat Depth (in/mm)	7.87 / 200	7.87 / 200	15.75 / 400	15.75 / 400	15.75 / 400	15.75 / 400
Rapid Advance (IPM)	106	106	106	106	92	92
Bending (IPM)	40	40	17	17	21	21
Return (IPM)	189	189	142	189	166	189
Cylinders	1	1	2	2	3	3
Motor (HP)	4.0	5.5	4.0	5.5	12	12
Weight (lbs/metric tons)	3,100 / 14	5,300 / 24	8,400 / 3.8	11,250 / 5.1	13,670 / 6.2	20,290/9.2

Dimensions	PH 30-12	PH 40-20	PH 65-25	PH 90-30	PH 123	PH 124
LxWxH (in)	49 x 40 x 70	82 x 43 x 78	100 x 56 x 81	122 x 64 x 88	122 x 70 x 88	161 x 70 x 100
LxWxH (meters)	1.2 x 1 x 1.8	2.1 x 1.1 x 2	2.5 x 1.4 x 2.1	3.1 x 1.6 x 2.2	3.1 x 1.8 x 2.2	4.1 x 1.8 x 2.5
Dimension A (in/m)	47.24 / 1.2	78.74 / 2.0	98.43 / 2.5	120.07 / 3.0	120.07 / 3.0	159.47 / 4.0
Dimension B (in/mm)	45.67 / 1,160	72.44 / 1,840	92.13 / 2,340	111.82 / 2,840	109.45 / 2,780	152.76 / 3,880
Dimension C (in/mm)	37 / 939	40 / 1,000	40 / 1,000	40 / 1,030	37 / 939	40 / 1,030
Dimension D (in/m)	69.48 / 1.7	77.40 / 1.9	80.91 / 2.0	87.99 / 2.2	88.39 / 2.2	99.81 / 2.5
Dimension E (in/m)	43.31 / 1.1	42.71 / 1.0	55.91 / 1.4	73.77 / 1.8	70.07 / 1.7	70.07 / 1.7
Dimension F (in/mm)	35.82 / 909	38.78 / 985	51.97 / 1,320	59.84 / 1,519	66.14 / 1,680	66.14 / 1,680



## LIMITED WARRANTY:

- One-year parts and labor warranty.
- The warranty begins at time of installation.



# Autobend® Interactive Control Systems: It's Smart To Be In Control

Sophisticated, high-tech controls need not be complicated to use, and these controls prove it. They're easy to learn and simple to operate. Interactive control technology is ideal for a broad range of retrofit and new press brake applications.



*Autobend 7 and Autobend 6 interactive controls reduce set-up and programming time.*



## AUTOBEND PC

- Upload and download all parts programs from the AB7 controls

## AUTOBEND 7 SPECIFICATIONS

- Stores 600 jobs or 2400 bends
- Tool Library: 45 punches, 45 dies
- 0.001" (0.03mm) dimension resolutions
- 0.1° angle resolution (two-axis programming)

## FEATURES

- Programmable retract at pinch point
- Fast setup - Data carry forward minimized keystrokes, allows quick edit and correction
- Automatically calculates bend allowance - adjustable for each station
- "Simple job" mode for quick bends
- Diagnostic capability in conversational English format
- Permanent data storage
- Programmable R-Axis Ready
- CRT-9" Amber Display
- Bend-length compensation



## AUTOBEND 6 SPECIFICATIONS

- Stores 150 jobs or 600 bends
- 0.001" (0.03mm) dimension resolutions
- 0.1° angle resolution (two-axis programming)

## FEATURES

- Automatic bend allowance
- Angle programming with second axis option
- Jog/teach mode
- Automatic prompting guides operator through programming process
- Quick bend
- Single-line LED Display

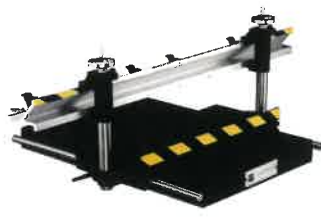


# Autobend® Gauging Systems: Simple, Quick, Reliable and Smart

Hurco's wide range of backgauges suits a variety of applications for up-stroking and down-stroking press brakes. The Autobend® three-axis system results in a 40% reduction in setup time when compared to a two-axis system. It also reduces run time and material handling while increasing daily capacity.



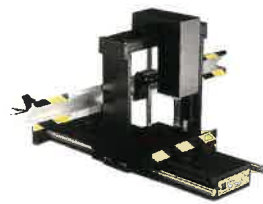
S6



S7



S8



R Axis



LP11



LP21 / LP22



LP22-54

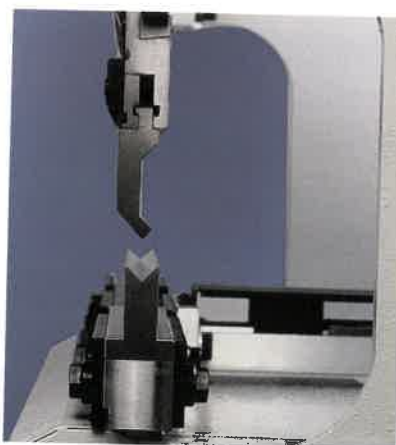
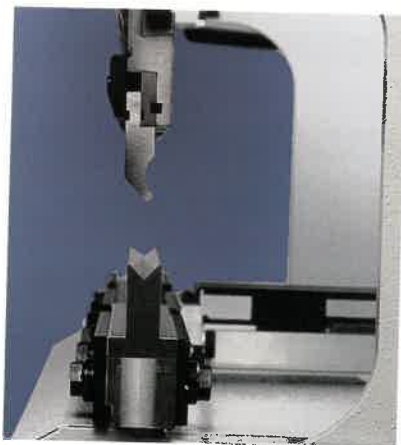
Specifications	S6	S7	S8	R Axis	LP11	LP21 / LP22	LP22-54
<b>Gauge bar length</b>							
Feet/Inches	up to 7' 6"	up to 11' 6"	up to 14'		up to 6'	up to 14'	up to 14'
Metric	2.29m	3.5m	4.26m		1.82m	4.26m	4.26m
<b>Gauge travel</b>							
Feet/Inches	24"	24"	24"		24"	24"	54"
Metric	610mm	610mm	610mm		610mm	610mm	1370mm
<b>Vertical adjustment</b>							
Feet/Inches	10"	10"	10"	4" / 10"	10"	10"	10"
Metric	254mm	254mm	254mm	254mm	254mm	254mm	254mm
<b>Horizontal adjustment</b>							
Feet/Inches	9"	9"	9"		9"	9"	9"
Metric	229mm	229mm	229mm		229mm	229mm	229mm
<b>Gauge speed</b>							
Inches per minute	800	800	800	250	800	800	650
Centimeters per minute	2032	2032	2032	6.35	2032	2032	1651
<b>Gauge repeatability</b>							
Feet/Inches	±0.002"	±0.002"	±0.002"	±0.001"	±0.002"	±0.002"	±0.005"
Metric	±0.05mm	±0.05mm	±0.05mm	±0.025mm	±0.05mm	±0.05mm	±0.127mm
<b>Gauge holding force</b>							
Pounds	200 lbs	200 lbs	400 lbs		200 lbs	400 lbs	300 lbs
Kilograms	91 kg	91 kg	182 kg		91 kg	182 kg	136 kg
<b>Casting weight</b>							
Pounds	200 lbs	230 lbs	400 lbs		95 lbs	160 lbs	225 lbs
Kilograms	91 kg	105 kg	182 kg		43 kg	73 kg	102 kg

# Optimize Performance With Hurco® Precision-Ground Tooling

Using true, precision-ground tooling is the key to this integrated system. This complete line of European-style, precision-ground tooling is available with the Hurco press brake system to optimize machine performance.



- $\pm 0.00039$ " (0.01mm) tolerance on all critical surface dimensions.
- Tooling is manufactured from SAE 4140 tool steel, through hardened to HRC 45-49.
- All tools are available in standard lengths of 32.875" (835mm), and 16.339" (415mm). In addition, sectionalized versions are available on most punches and dies.
- A complete line of precision die holders for standard tooling, sectionalized tooling or quick-change tooling.
- Individual tools are marked with easy-to-read laser markings for easy dimension recognition and part numbering.
- Special (custom) tooling is available upon request.
- All stock is available FOB Indianapolis.
- Call 1-800-742-1896 for a new catalog, or to place an order.

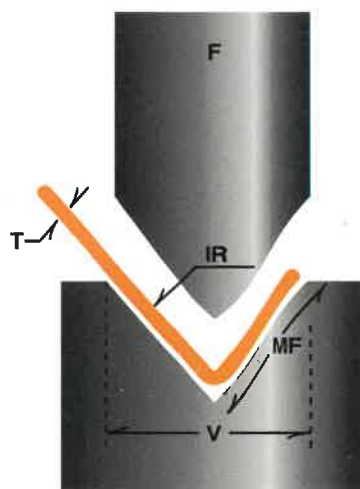


*All Hurco press brakes come standard with European punch holders. Optional universal punch holders for both European and American tooling are available.*

# Air Bending Tonnage Specifications

Tonnage required to bend mild steel with air bend dies (per linear foot, measured in U.S. tons).

		V(inch)	0.157	0.236	0.276	0.315	0.394	0.472	0.551	0.630	0.709	0.787	0.984	1.260	1.575	1.969	2.480	3.150	3.937	4.921	6.299
		V(mm)	4	6	7	8	10	12	14	16	18	20	25	32	40	50	63	80	100	125	160
		MF	0.110	0.165	0.193	0.220	0.276	0.331	0.397	0.454	0.510	0.567	0.709	0.945	1.181	1.476	1.860	2.362	2.953	3.789	4.850
		IR	0.026	0.039	0.046	0.052	0.066	0.079	0.092	0.105	0.118	0.131	0.164	0.210	0.262	0.328	0.430	0.525	0.656	0.820	1.050
GAUGE	DECIMAL																				
20	.036		5.4	<b>3.6</b>	3.0	2.5	2.0	1.7													
18	.048			6.8	5.8	<b>4.8</b>	3.7	2.7	2.4	2.0											
16	.060					7.8	<b>6.2</b>	5.0	4.2	3.5	3.1	2.7									
14	.075						11.0	<b>8.2</b>	7.0	5.5	4.8	4.1	3.1								
12	.105							15.0	13.0	<b>11.0</b>	9.4	7.4	5.5	4.0							
11	.120									16.0	13.0	10.0	<b>7.3</b>	5.0	3.8						
10	.135											12.0	<b>9.0</b>	6.2	4.7	3.5					
3/16	.188												24.0	15.0	<b>11.0</b>	7.5	5.7				
1/4	.250													30.0	20.0	<b>14.0</b>	10.5	8.5			
5/16	.313														36.0	25.0	<b>18.0</b>	13.0	10.0		
3/8	.375																38.0	28.0	20.0	<b>15.0</b>	11.0
1/2	.500																	52.0	39.0	30.0	<b>22.0</b> 16.0



Material Thickness(T)	
< .105"	= T x 6
.120" - .313"	= T x 8
.375" - .500"	= T x 10
.625" - >	= T x 12

Material Thickness(T)	
Aluminum "O" Temper	Tons per foot x 50%
Aluminum "H" Temper	Tons per foot x 100%
Stainless Steel	Tons per foot x 150%

- The bending force (tonnage) figures listed above are based on mild steel with a tensile strength of 60,000 psi. To calculate the approximate bending force (tonnage), use the multipliers listed.
- For reasons of insufficient machine tonnage, small flanges, or unavailability of recommended tooling, select a V-Die opening either to the left or right of the recommended size, per your requirements.



## The Hurco® Global Advantage



Hurco sells and services products in the major European, Asian and North and South American markets, maintaining rigid quality standards across a broad range of applications. We are dedicated to combining world-class control design expertise with the best computerized machine system designs in the world. Our complete integrated solutions deliver value and performance to our 20,000-plus worldwide customers. Hurco also has a network of more than 200 direct sales and service organizations in more than 30 countries. Through this unique organization, Hurco is able to provide the most cost-effective solutions to meet your parts production needs.

***Hurco. We make machines smarter.***

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