

CARELL[®]

CORPORATION

FABRICATING MACHINERY



CARELL CORPORATION
SINCE
1993
SUPERIOR FABRICATING
MACHINES & SERVICE

Superior Precision through Innovative Engineering
www.carellcorp.com

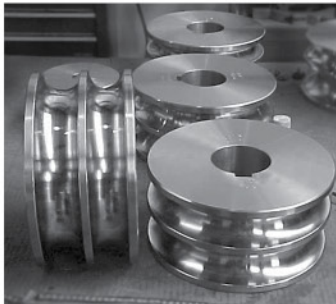


Our Philosophy... To offer the Best Machines...

True Quality & Value are Always Found in the Details...

Our company was founded to fill a need for tough, dependable machines capable of working day after day with minimum down time. This can only be achieved through comprehensive quality engineering toward all aspects of machine construction, even the hidden components. It's what sets Carell apart from everyone else

From the outset, when you have to Depend on a machine... Depend on... CARELL!



Carell proudly represents these leading global partners



CARELL CORPORATION
P.O. BOX 850, 34225 Hwy. 31
STAPLETON, AL 36578-0850, U.S.A.
TEL: 251-937-0948 / FAX: 251-937-0957

Proud supporters of:



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CARELL PRODUCTS

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EAGLE PRODUCTS

- 15 CP30 Series Section Benders
- 16 CP40 Series Section Benders
- 17 CP60 Section Benders
- 18 CPS Series Section Benders
- 19 BA Series CNC Section Benders
- 20 Z402 Series Section Benders

VALUE ADDED SERVICES by Carell Corporation

Demonstration & Showroom / Testing & Prototype Facility
Tooling Design & Manufacturing / Technical Assistance
Machine Diagnostics & Repair / Process Flow Design / Spare Parts
Dedicated Machine Applications / Extrusion Die Consulting

Some of our Satisfied Clients include:

*General Motors - General Electric - Boeing - Northrup Grumman - NASA - US NAVY
Titan Tanks - Offshore Inland - BP - General Mills - Mercury and many more!*

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TUBE and PIPE BENDERS

A wide range of affordable Mandreless and Mandrel Type Machines

ETM SERIES 40 PROGRAMS!

FEATURES



- All Steel Construction is Heavier for maximum versatility and safety. **NO Cast frames!**
- Adjustable Bend Angle and spring-back Preset Digital control with memory
- Manual - Automatic function allows Automatic bend & return with one command
- Bends up to 180° in one Step
- Quick Change Tooling
- Wide Range of Bending Radii:
 - From 2" to 10" ETM60
 - From 1/2" to 15" ETM76
 - From 2.5" to 19" ETM90
- Standard & Custom Formers Available

MAXIMUM ETM60 CAPACITY

Pipe	1-1/2" Sch. 40 Pipe
Tube	2.25" OD x 0.135" wall
Round Bar	1.25"
Square Tube	1.25"

MAXIMUM ETM76 CAPACITY

Pipe	2" Sch. 40 or up to 2-1/2" Sch. 10 Pipe
Tube	2.75" x 0.160" wall
Round Bar	1.75"
Square Tube	2 x 2 x 3/16"

MAXIMUM ETM90 CAPACITY

Pipe	2.5" Sch. 40 Pipe
Tube	3.50" OD x 0.160" wall
Round Bar	2"
Square Tube	2.5" x 0.25"

UNI SERIES



FEATURES

- Mandrel & Mandreless Models
- Heavy Duty Steel Frames and Compact Designs
- Digital Controls, 50 Programs w/ 9 Bends Each
- Efficient 2 Speed Drives
- Zero Pinch Safety Return Stroke
- Tooling / Formers Optional in Standard and Custom Sizes

SPECIFICATION CHARTS

Mandreless	UNI-70/C	UNI-76	UNI-89
Max. Pipe Size	2"	2-1/2"	3"
Max. Tube O.D.	2.375" x .140"	2.75" x .200"	3.5" x .200"
Max. Bend Angle	180°	180°	180°
Max. Bend Radius	9.5"	11.5"	14"
Speed	Dual	Dual	Dual
Positioning Table	Optional	-	-
Mandrel Table	Optional	-	-
Installed Power	3 HP	5.5 HP	6.5 HP
Weight, approx.	472 lbs	946 lbs	1,440 lbs

Mandrel	UNI-70/HC	UNI-80	UNI-90
Max. Pipe Size	1-1/2"	2"	2-1/2"
Max. Tube O.D.	2.375" x .120"	2.75" x .120"	3.5" x .120"
Max. Bend Angle	180°	180°	180°
Max. Bend Radius	9.5"	11.5"	14"
Speed	Dual	Dual	Dual
Positioning Table	Included	Included	Included
Mandrel Table	Included	Included	Included
Installed Power	3.5 HP	5.5 HP	6.5 HP
Weight, approx.	890 lbs	1,320 lbs	2,150 lbs

3000 SERIES

Double Pinch Angle Rolls

15 MODELS 1" TO 10" ANGLE

Lateral guides used for angle leg-in

FEATURES

- Three driven rolls, smooth surfaced for optimal profile traction and surface finish
- Double Pinch Geometry permits pre-bending without removal from the machine
- Dual LED Digital Displays / Emergency stop
- Monolithic single weldment frames heavily reinforced at load points.
- Detached mobile control stand, low voltage controls
- Horizontal/vertical operation on models 302 thru 309
- NiCrMo Bending rolls hardened for optimal performance
- Top roll drive incorporates overload protection which allows differing roll speeds when bending tall sections
- Variable speed hydraulic drive train 306 - 315 with direct coupled hydraulic motors and planetary speed reducers. Electro-mechanical drive on 302- 305
- Shafts journaled in dual self-aligning high dynamic load roller bearings

Material guides adjust tri-directionally

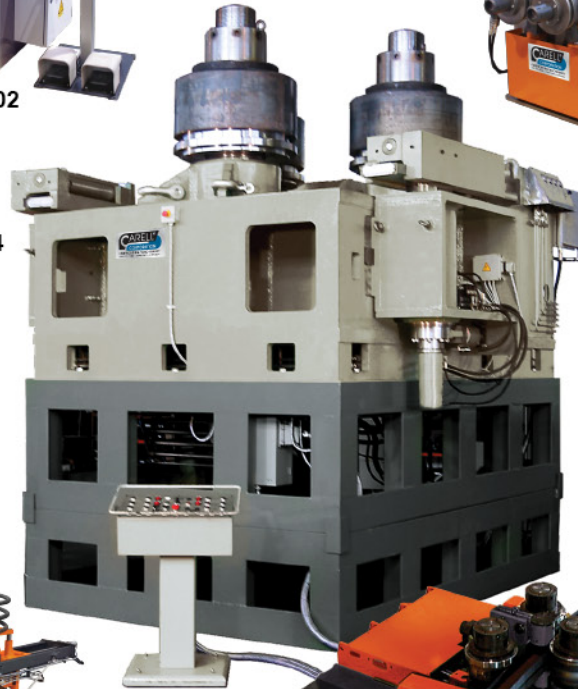
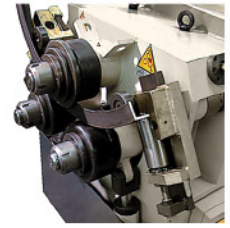
↔ in/out ↑↓ up/down ↻ cw/ccw (50-300)

STANDARD EQUIPMENT

- LED Digital Displays on all 3000 Series Angle Rolls
- Telescoping Modular Multi-Component roll set specifically designed to bend standard sections including angle Leg-In/Out and Square/Rectangular Tube as well as other shapes in a variety of material types
- Tri-Directional Lateral Guides with cam rollers for improved Angle Rolling Performance

OPTIONS

- Rolls for tubes, pipes and special profiles
- Tooling for production of half tubes
- Overhead supports for coil production
- Compression and tension tooling for C channel, & I beam hard way bending
- NC & CNC Controls with various automation levels for repetitive jobs and production of variable radius bends and parts with multiple bends
- Powered lateral material guides on models 308-315
- LED digital displays for lateral guide movements



Custom tooling for special sections made in-house for Rapid Turnaround



Standard rolls used to roll junior I beams EZ and Hard way



305HV with Coiling Attachment



312HV4

NOTES: Chart indicates minimum suggested inside diameter with maximum profile size, using mild steels rolling generally in multiple passes. • Data is approximate specified inches u.n.o. • Custom tooling for some profiles may be required for volume production and minimum rolling diameters are limited to level of acceptable deformation. • The manufacturer and Carell Corp. reserve the right to revise design, construction and specifications without prior notice. • Ratings based on material yield of 36KSI. • Machines with extended shafts or shortened shafts are available. • We build totally custom geometries and configurations for highly specific manufacturing requirements. • Call us if you have questions on applications or capacities.

Series 3000 machines are designed compliant with EEC norms and bear CE plates. Units are designed to comply with ANSI B11.12.1996 standards. The employer of the operator is responsible for providing and insuring the usage of point of operation guards and/or properly applied and adjusted point of operation safety devices are required to meet OSHA, state and local safety requirements.

SERIES 3000 DOUBLE PINCH HYDRAULIC ANGLE ROLLS CAPACITIES & SPECIFICATIONS

Series 3000 Model	302HV	303HV	304HV	305HV	306HV	307HV	308HV	309HV	310HV4	311HV4	312HV4	313HV4	314HV4
Flats, Hard	2 x 5/16 Ø16	2-3/8 x 3/8 Ø20	2-3/4 x 1/2 Ø28	3 x 5/8 Ø30	4 x 5/8 Ø42	4 x 1 Ø44	5-1/2 x 3/4 Ø60	6 x 1 Ø60	6 x 1-1/2 Ø60	8 x 1-1/4 Ø100	8 x 2 Ø100	10 x 2 Ø120	10 x 2-1/2 Ø120
Flats, Easy	2-3/8 x 5/8 Ø18	3 x 1/4 Ø18	4 x 1 Ø26	5 x 10 Ø26	6 x 1 Ø30	7 x 1-3/8 Ø32	8 x 2 Ø42	9 x 2 Ø48	10 x 2-1/2 Ø60	12 x 2-1/2 Ø60	16 x 2-1/2 Ø76	18 x 2-1/2 Ø80	20 x 3 Ø90
Square Bar	1 Ø12	1-1/4 Ø18	1-1/2 Ø20	1-3/4 Ø22	2 Ø26	2-1/2 Ø32	3 Ø36	3-3/8 Ø48	3-3/4 Ø60	4 Ø54	4-1/2 Ø66	5 Ø78	6 Ø90
Angle, L-Out	2 x 3/16 Ø24	2 x 1/4 Ø28	2-1/2 x 5/16 Ø30	3 x 3/8 Ø42	3-1/2 x 3/8 Ø48	4 x 1/2 Ø48	5 x 1/2 Ø60	5 x 5/8 Ø54	6 x 3/4 Ø72	6 x 1 Ø96	8 x 1 Ø120	8 x 1 Ø80	8 x 1-1/4 Ø80
Angle, L-In	1-1/2 x 3/16 Ø18	2 x 3/16 Ø28	2 x 5/16 Ø30	2-1/2 x 5/16 Ø42	3 x 3/8 Ø40	4 x 3/8 Ø50	4 x 1/2 Ø48	5 x 1/2 Ø60	5 x 5/8 Ø60	6 x 1 Ø120	8 x 3/4 Ø140	8 x 1 Ø100	8 x 1-1/8 Ø80
Tee, L-Out	2 x 1/4 Ø20	2-3/8 x 1/4 Ø24	2-1/2 x 5/16 Ø26	3 x 3/8 Ø34	3-1/2 x 3/8 Ø38	4 x 1/2 Ø54	4-1/2 x 1/2 Ø48	5 x 1/2 Ø60	6 x 1/2 Ø75	6 x 5/8 Ø96	7-1/2 x 5/8 Ø96	8 x 5/8 Ø96	10 x 3/4 Ø144
Tee, L-In	1-1/2 x 3/16 Ø20	2 x 3/16 Ø22	2 x 5/16 Ø26	3 x 5/16 Ø36	3-1/2 x 5/16 Ø38	4 x 3/8 Ø60	4 x 1/2 Ø50	4-1/2 x 1/2 Ø60	5 x 1/2 Ø75	6 x 1/2 Ø96	7-1/2 x 5/8 Ø96	8 x 5/8 Ø96	10 x 5/8 Ø144
C, Legs-out	2 x 1-1/2 Ø16	3 x 1-3/4 Ø24	4 x 1-1/4 Ø28	5 x 2 Ø28	6 x 2-1/2 Ø30	7 x 2-1/2 Ø36	8 x 3 Ø36	10 x 3 Ø48	12 x 3 Ø48	15 x 3-1/2 Ø48	16 x 4 Ø60	18 x 4 Ø60	20 x 4 Ø72
C, Legs-in	2x1 Ø20	2-1/2 x 1-5/8 Ø30	3 x 1-1/4 Ø28	4 x 2 Ø36	5 x 2-1/2 Ø40	7 x 2-1/2 Ø40	8 x 3 Ø48	10 x 3 Ø60	12 x 3 Ø60	15 x 3-1/2 Ø60	16 x 4 Ø60	18 x 4 Ø60	20 x 4 Ø72
Round Bar	1-3/16 Ø14	1-3/8 Ø16	1-1/2 Ø20	2 Ø22	2-1/2 Ø30	3 Ø30	3-3/8 Ø40	3-1/2 Ø40	4-1/2 Ø60	5 Ø60	5-1/2 Ø60	6 Ø72	7 Ø90
1 Pipe, Sch. 40	1-1/4 Ø20	1-1/2 Ø20	2 Ø24	2-1/2 Ø32	3 Ø42	4 Ø45	5 Ø70	6 Ø120	6.5 Ø80	8 Ø100	10 Ø160	12 Ø160	12 SCD80 Ø200
1 Round Tube	2 x 1/6Ga	2-3/8 x 1/4Ga	3 x 1/4Ga	3-1/2 x 1/4Ga	4-1/2 x 1/2Ga	5-1/2 x 10Ga	6-1/2 x 9Ga	7 x 3/16	8 x 3/16	10 x 3/16	12 x 3/16	14 x 3/16	14 x 5/16
2 Square Tube	1-1/2 x 1/4Ga	2 x 1/4Ga	2-1/4 x 1/4Ga	2-1/2 x 10Ga	3 x 3/16	3-1/2 x 1/4	4 x 5/16	5 x 5/16	5-1/2 x 5/16	6 x 3/8	7 x 3/8	8 x 1/2	10 x 7/16
2 Recl. Tube	1-1/2 x 3/4 x 1/3Ga	2 x 1-1/4 x 1/2Ga	2-1/2 x 1-1/4 x 1/2Ga	3 x 1-1/2 x 1/2Ga	4 x 1-1/2 x 3/16	5 x 2 x 3/16	5-1/2 x 2 x 5/16	6 x 3 x 1/4	7 x 3 x 5/16	8 x 3-1/2 x 3/8	8 x 4 x 3/8	10 x 4 x 1/2	10 x 6 x 1/2
1 Beam EZ	53 x 5.7 Ø24	54 x 7.7 Ø30	55 x 10 Ø32	55 x 10 Ø32	56 x 17 Ø36	57 x 20 Ø48	58 x 23 Ø48	510 x 35 Ø48	512 x 40 Ø48	515 x 50 Ø48	518 x 54 Ø72	518 x 70 Ø80	520 x 96 Ø86
H Beam EZ				M4x13 Ø72		W5 x 16 Ø60	W6 x 20 Ø60	W8 x 24 Ø72	W8 x 31 Ø72	W10 x 45 Ø108	W10 x 54 Ø120	W12 x 72 Ø96	W18 x 106 Ø120
3 C, On Edge						C3 x 6 Ø96	C5 x 9 Ø140	C6 x 13 Ø200	MC7 x 17 Ø250	CB x 18.75 Ø300	C10 x 25 Ø400	MC12 x 50 Ø450	C15 x 34 Ø600
3 I Beam HW						S5 x 15 Ø100	S6 x 17 Ø120	S7 x 20 Ø150	S8 x 23 Ø200	S8 x 23 Ø140	S10 x 35 Ø300	S12 x 50 Ø300	S15 x 50 Ø550
3 H Beam HW						W4 x 13 Ø100	W4 x 13 Ø100	W5 x 19 Ø100	W6 x 20 Ø180	W6 x 25 Ø120	W8 x 28 Ø300	W10 x 33 Ø400	W12 x 35 Ø500
Section Modulus	in ³	0.40	1.10	1.10	1.5-2.26	2.8-4.9	4.3-7.4	6.2-10	9-15	14-21	20-36	28-44	40-62
Rolling Speed	fpm	20	20	20	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0-23	0-23
Power Output	HP	3.8	4	4.7	6.5	15	20	24	30	40	55	90	120
Roll Diameters	in.	5.70	7.0	8.07	9.65	12.40	15.375	17	18.75	22	25.25	28.375	33
Shaft Diameters	in.	1.57	1.97	2.36	2.76	3.94	5.3/4.7	6.3/5.3	7.3/6.7	8.5/7.9	9.8/9.1	11.6/10.7	12.6/11.8
Approx. Weight	lbs.	1,200	1,720	2,420	3,450	5,725	10,000	15,180	20,500	28,800	41,000	54,500	99,000

LEGEND: (1) Set of 3 rolls required for each tube or pipe size, (2) Special rolls may improve results on these profiles, (3) Special Beam On-Edge Traction Device required



UNIVERSAL ROLL BENDERS G50HV & G80HVP

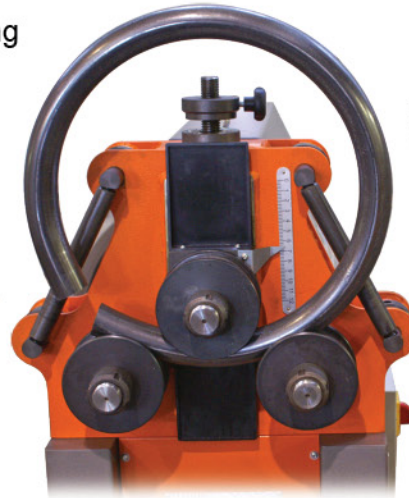


G50HV

**POWERFULL
GALILEO SERIES**
PYRAMID DESIGN WITH
HEAVY WELDMENT FRAMES
NO CASTINGS!

- Three Driven Shafts
- LED Readouts
- Push Button Controls
- Easy Operation
- Quick Set-up
Universal Tooling

G80HV

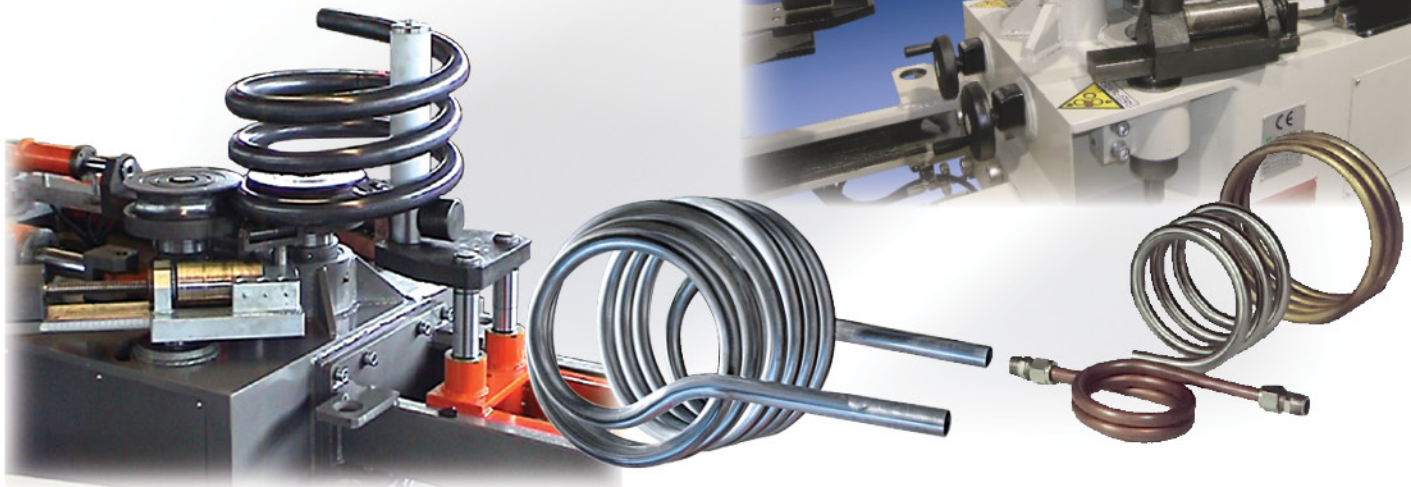
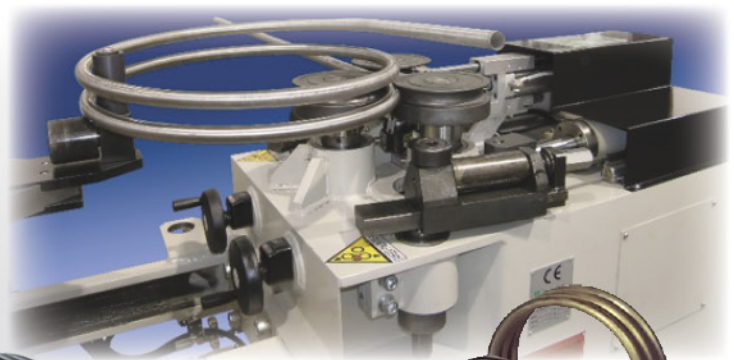


G Series work in Horizontal or Vertical mode

SECTION TYPE	G50HV MAXIMUM SECTION SIZE	G80HVP MAXIMUM SECTION SIZE
	3" x 3/8"	4" x 5/8"
	4-1/2" x 3/4"	6" x 1"
	1-1/2"	2-1/4"
	1-3/4"	2-1/2"
	2-1/4" x 1/4"	3" x 3/8"
	2" x 1/4"	2-3/4" x 1/4"
	2-1/4" x 11GA	3" x 3/16"
	3"x1-1/2" x 11GA	3-3/4" x 2" x 10GA
	3" x 14GA	4" x 0.120"
	2" Scd.40	3" x Scd. 40
	2-3/8" x 2-3/8"	3" x 3/8"
	4" x 2"	6" x 2"

Coil Forming Machines for up to 6" Pipe

Carell's New Generation Coiling Machines produce coils for boilers, heaters, solar, geo-thermal, pharmaceutical, petrochemical and other applications. Coil 6" pipe down to 1/8" OD tubes or solid rod for springs and flat bars for repetitive ring forming. .

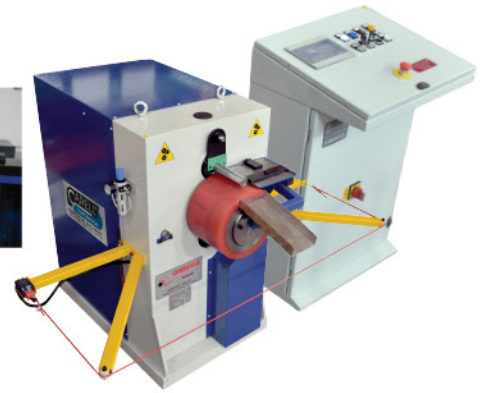
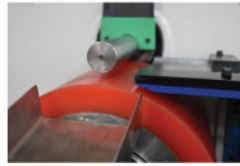


HIGH SPEED 2 ROLL PRECISION RING ROLLER

*Produce Precision Tubes & Rings
with ZERO Unbent Flats!*

Digitally programmable and uses a fixed interchangeable mandrel running against a Urethane lower roll

Mono-2R



CORRUGATED SHEET ROLLS



**ANY LENGTH
ANY PATTERN
ANY SHEET THICKNESS**

CARELL supplies 3 and 4 roll machines for rolling corrugated sheet of all lengths, thickness and corrugation patterns. Machines are available with standard and CNC controls. Feeding and stacking systems are optional"

3 ROLL TRANSLATING GEOMETRY

PARMIGIANI PCO Series

*Hydraulic 3-Roll Plate Bending Machines
State of the Art Translating
Geometry Technology*

Over 25 standard sizes to accommodate various production requirements, custom builds available.

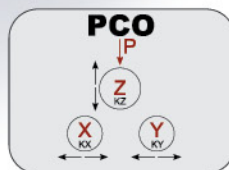
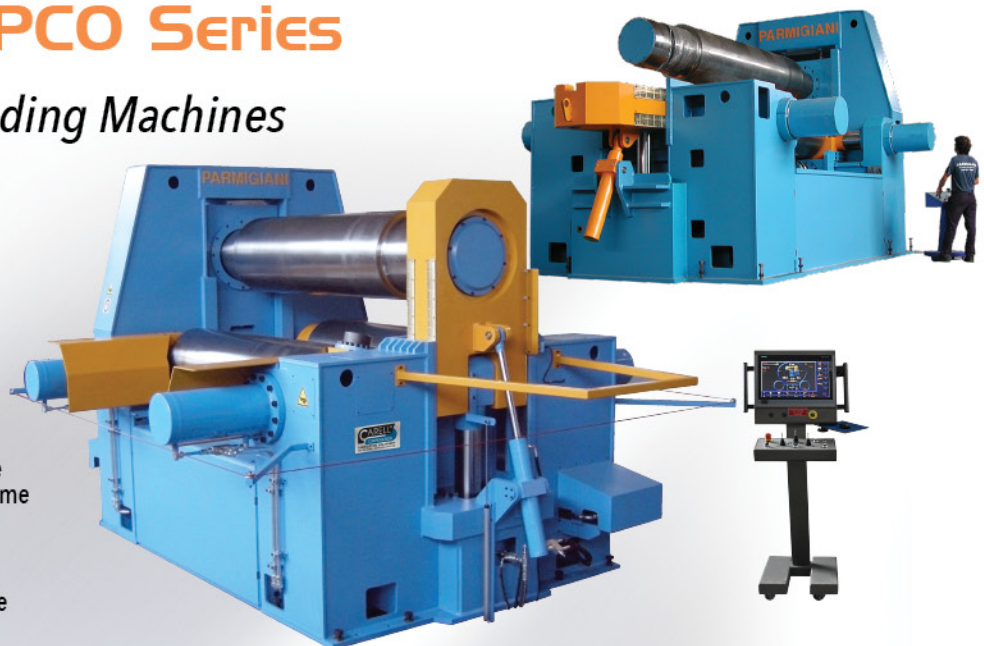
Proportional Balancing System (PPS)
PCO Rolls use a precision digital system for positioning and balancing within 0.004" (0.1mm).

Our PPS Hydrotronic System is virtually maintenance free using HMI and CPU/PLC to insure positive real time parallelism.

Controls include Active Extended Diagnostics on the Touch Panel for instant fault detection instead of time consuming troubleshooting.

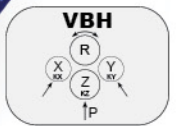
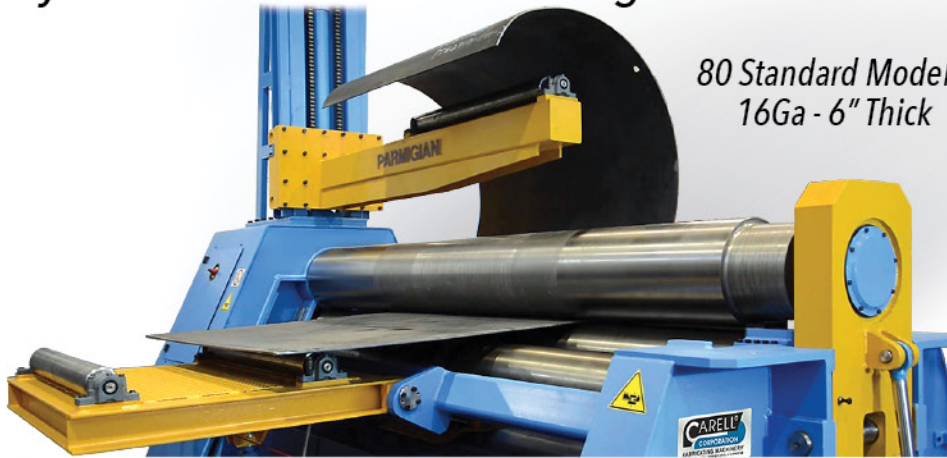
The Parmigiani FACILE advanced wiring system uses "plug & play" cables, connectors and distribution modules.

Optional Lateral Supports, Overhead Supports and Plate Centering Shifters are available in various configurations



Hydraulic 4-Roll Plate Bending Machines

80 Standard Models
16Ga - 6" Thick



Discover The Exclusive Features of The VBH Series!

- 1 - Full frame design for maximum rigidity and precision
- 2 - Machine frame with linear guides for roll sliding



- 7 - Rolls made of high resistance steel forgings, with large diameter and light cambering

- 8 - Heavy-duty and rigid frame design for maximum resistance for cone rolling

- 9 - Heavy-duty drop end yoke, with four anti deflection points for maximum rigidity

- 10 - Infinitely variable pinch pressure of the central lower roll with digital pressure gauge

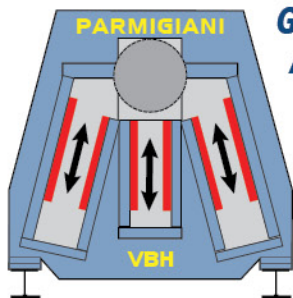
- 11 - Centralized control panel, light weight design for easy handling

- 12 - Wired with shielded cables against electromagnetic interference from welding

- 3 - Heavy-duty multi-bearing system with 4 spherical roller bearings for each roll
- 4 - Sliding support with high resistance anti-friction material, maintenance free
- 5 - Rigid frame construction without force transmitted to foundation
- 6 - Digital control of the rolls parallelism with proportional valves. Precision 0.004"

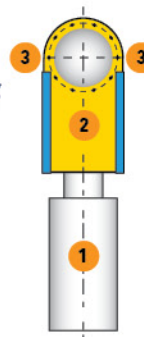
- 13 - Instantaneous brakes for rolls rotation for maximum rolling safety

- 14 - Fully hydraulic drive of top and lower rolls with automatic speed compensation



Get more with linear guides
ALG System Anti-friction Linear Guides

- No friction - Superior to swing-arms
- Thrust delivered directly to the plate
 - Shorter un-bent flats
 - Tighter bending diameters



The Powerful and Reliable Choice
Full Frame Extended Design

AST System Anti-friction sliding technology

Friction free - Maintenance free

Built For Heavy Work

HMB System-Heavy Multiple Bearings

VBH SERIES 4 ROLL PLATE ROLLS

VBH Controls: Easy to use, Easy to Program for Accuracy & Productivity



Shown with
"STRADIVARI"
19" Display

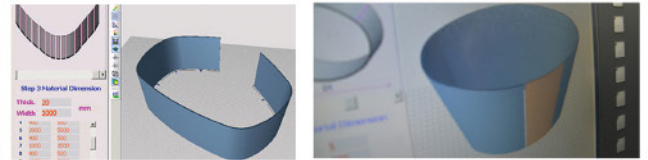
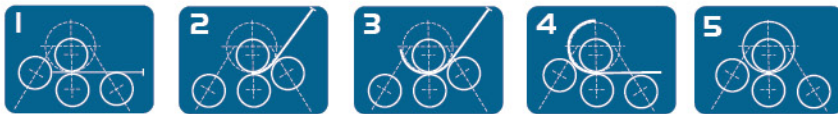
PARMIGIANI *The most advanced bending technology.*

Controls are an essential requirement for precision rolling production. Our controls function just like a tablet with touch-screens: navigating through the options is simplified via menus, shortcuts and with context-sensitive help. Select from the simple, compact DIGIMATIC control to the STRADIVARI 3D-CAD CNC, there's a PARMIGIANI control for every application.



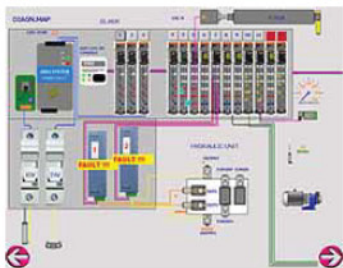
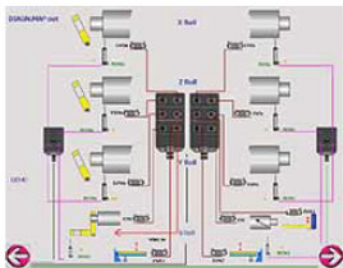
- "DIGIMATIC" 7" Color touch screen NC
- "SAVE&BEND" 10" Color touch screen NC
- "FAST" 15" Color touch screen CNC
- "STRADIVARI" 19" Color touch screen CNC with 3D CAD Graphics

RAPID 4 ROLL PLATE BENDING SEQUENCE



Instantaneous status display of the entire electrical / hydraulic systems and other components with on-screen schematics and real-time diagnostics.

Our CNC controls features are the result of continuous and technological improvements, including instant on-screen component monitoring, PM indications, "Plug & Play" Field Bus wiring harnesses, digital pressure controls and more that save time and money with increased productivity.



On-Screen Component Diagnostics & Schematics



"Plug & Play" connectors Using "Field Bus" technology

i-Diagnostic[®] ACTIVE EXTENDED DIAGNOSTIC
From the screen you control most all electrical connections around the machine; all PLC modules; all micro-switches and more....

PPS Hydrotronic[®] LIFETIME PRECISION
20 times faster than PLC-based electronic controls joined with the hydraulic proportional valves, provides a parallelism precision of about 0.004"

FACILE[®] ADVANCED WIRING SYSTEM
The FACILE System avoids wiring errors, shortens start-up time and allows quick swapping of cables during component replacement with reliable "Plug and Play" connections.

Hi-Tech Hydraulic[®] ADVANCED HYDRAULIC SYSTEM
With the infinitely variable pressure and the infinitely variable speed adjustment the operator has full control of the process in any bending application.

OPTIONS: Hardened Rolls • Cone Devices • Lateral Supports • Ejectors • Feed Tables
Custom Lengths • Inter-changeable Top Rolls • Overhead Supports

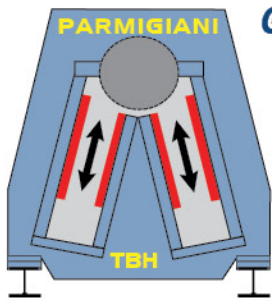
Hydraulic 3-Roll Plate Bending Machines



80 Standard Models
16Ga - 6" Thick

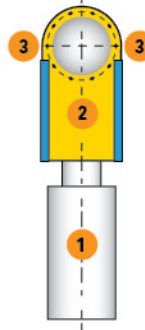


Explore The Superior Features of The TBH Series!



Get more with linear guides
ALG System Anti-friction Linear Guides

- No friction - Superior to swing-arms
- Thrust delivered directly to the plate
 - Shorter un-bent flats
 - Tighter bending diameters



The Powerful and Reliable Choice
Full Frame Extended Design

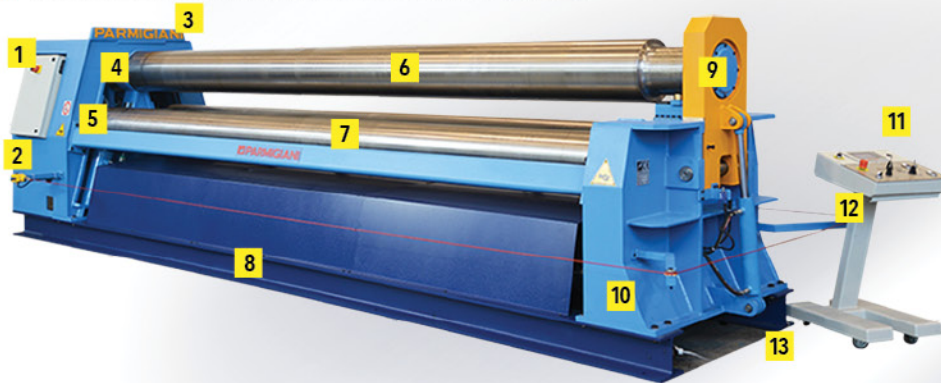
AST System Anti-friction sliding technology

Friction free - Maintenance free

Built For Heavy Work

HMB System-Heavy Multiple Bearings

- 1 - Hydraulic drive of top and lower rolls, 3 independent hydraulic motors
- 2 - Extended full frame design for maximum rigidity and precision
- 3 - Machine frame with linear guides for rolls translation



- 4 - Sliding support with high resistance anti-friction material maintenance free
- 5 - Heavy-duty multi-bearing system with 4 spherical roller bearings for each roll
- 6 - Rolls made of heat treated steel forgings, with large diameter and light cambering

- 7 - Digital control of the rolls parallelism with proportional valves. Precision 0.004"

- 8 - Rigid frame construction without force transmitted to foundation

- 9 - Heavy-duty drop end yoke, with four anti-deflection points for maximum rigidity

- 10 - Heavy-duty and rigid frame design for maximum resistance for cone rolling

- 11 - Infinitely variable rolls adjustment speed and touch screen panel

- 12 - Centralized control panel, light weight design for easy handling

- 13 - Wired with shielded cables against electromagnetic interference from welding

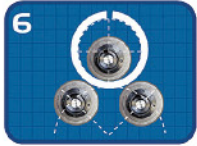
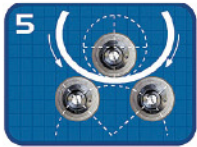
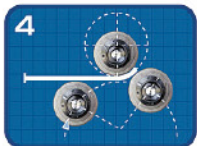
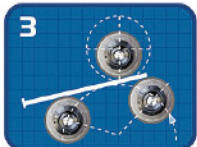
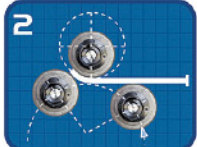
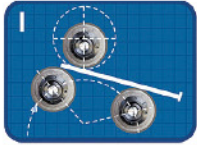
OPTIONS: *Hardened Rolls • Cone Devices • Lateral Supports • Ejectors • Feed Tables
Custom Lengths • Inter-changeable Top Rolls • Overhead Supports*

TBH SERIES 3 ROLL PLATE ROLLS

Superior Quality, Built Tough For Longer Machine Life

PARMIGIANI

3 Roll
Double Pinch
Pre-Bend
Sequence



The TBH Series Is Focused On Helping You Grow Your Bottom Line
By concentrating on four key areas of machine performance:

STRENGTH: Linear sliding guides and multiple bearing rolls support system.

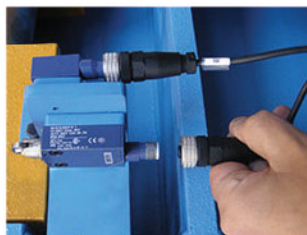
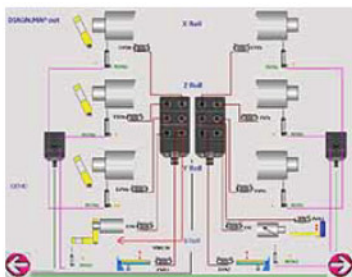
POWER: High torque reduction unit for reduced number of rolling passes.

PRECISION: Digital control of the roll parallelism with proportional valves.

CONTROLS: Infinitely variable roll adjustment speeds, Infinitely variable pressures, shell calibration working modes, extended i-diagnostic system... are only some of the features that you can control directly from the operator mobile panel.



Instantaneous status display of the entire electrical / hydraulic systems & other components with on-screen schematics and real-time diagnostics.



i-Diagnostic[®] ACTIVE EXTENDED DIAGNOSTIC

From the screen you control most all electrical connections around the machine; all PLC modules; all micro-switches and more...

PPS Hydrotronic[®] LIFETIME PRECISION

20 times faster than PLC-based electronic controls joined with the hydraulic proportional valves, provides a parallelism precision of about 0.004"

FACILE[®] ADVANCED WIRING SYSTEM

The FACILE System avoids wiring errors, shortens start-up time and allows quick swapping of cables during component replacement with reliable "Plug and Play" connections.

Hi-Tech Hydraulic ADVANCED HYDRAULIC SYSTEM

With the infinitely variable pressure and the infinitely variable speed adjustment the operator has full control of the process in any bending application.

On-Screen Component Diagnostics & Schematics

"Plug & Play" connectors
Using "Field Bus" technology

4 ROLL AUTOMATIC CYCLE PLATE ROLLS

Designed for manufacturing efficiency using an automated production cycle!

*Over 30
standard
sizes*

Our High Speed Auto Cycle double pinch plate rolls are available in both hydraulic and pneumatic actuated styles with standard, NC or CNC controls.

***Cylindrical, Radiused,
Segmental & Poly-Centric
Parts at the Touch
of the Start Button!***

***All can be tailored to your
specific production needs!***



Movements of both hydraulic and pneumatic versions are of the highest precision and incorporate leading edge technology in order to rapidly and accurately perform high volume production runs. They are engineered for high speed continuous production. Add auto loading & ejector systems and you have a powerful tool to increase production rates, reduce handling time.

Choose from our ISC, HDT5, QAP & QAI Series Automatic Cycle 4 Roll models groups



FEATURES

- Capacities from 15" to 96" long x 26 Ga to 3/16" thick plate
- Automated bending cycles
- Top roll and pinch rolls driven in rotation
- Hardened, heat treated alloy steel rolls
- High polished, non-marring roll surface finish
- High speed rolling velocity
- Automatic drop-end release at end of cycle
- Compact space-saving designs
- Top support/deflectors
- Sheet feed squaring arm and adjustable back stops

OPTIONAL EQUIPMENT

- Sheet-Loading systems from pallets or blank stacks
- Cylinder ejector systems
- Automated sheet alignment systems
- Multiple pallet blank shuttle systems
- Special machine configurations for dedicated needs
- A variety of CNC, NC or basic controls tailored to your requirements
- Finished part accumulators and take-away conveyors
- Lateral bending rolls powered also in rotation
- Urethane coated rolls
- Interchangeable top rolls

A31 SERIES

RUGGED, EFFICIENT, PRECISION COMPONENTS, HEAVY WELDMENT FRAMES, NO CASTINGS!

POWERED INITIAL PINCH PLATE ROLLS



Optional Factory Supplied LED Digital Readout w/ Auto-repeat (Includes larger console as shown)



Solid Stock Gears Heavy Duty Electro-Mechanical Drive



Manual Pinch Adj Top Roll Release Lock Pinch & Bend Roll w/ Position Scales



A31 Shown w/ Standard Push Button Console

MODEL	LENGTH	CAPACITY	ROLL Ø	HP.	WT.
A312-104	3'	9GA	4.5"	3.0	1,800
A311-105	3'	3/16"	4.7"	4.5	2,000
A313-106	3'	7/32"	5.1"	5.5	2,300
A314-107	3'	1/4"	5.9"	6.0	3,000
A312-153	5'	11GA	4.5"	3.0	2,100
A311-154	5'	9GA	4.7"	4.5	2,500
A313-155	5'	3/16"	5.1"	5.5	2,700
A314-156	5'	7/32"	5.9"	6.0	3,700
A314-156.5	5'	1/4"	6.7"	8.5	4,200
A315-157	5'	9/32"	7.0"	10.5	4,400
A312-202	6'	14GA	4.5"	3.0	2,700
A313-203	6'	11GA	5.1"	5.5	3,200
A314-204	6'	9GA	5.9"	6.0	4,000
A315-205	6'	3/16"	6.7"	8.5	5,200
A316-206.5	6'	1/4"	7.9"	10.5	8,400
A313-252	8'	14GA	5.5"	5.5	4,000
A314-253	8'	11GA	6.3"	6.0	4,500
A315-254	8'	9GA	7.1"	8.5	6,500
A316-255	8'	3/16"	7.5"	10.5	9,500
A314-302	10'	14GA	6.3"	6.0	5,720

Data is Approximate and subject to change

A31 STANDARD FEATURES

- Powered Rotation on Top & Pinch Rolls
- Bending Roll Powered Adjust Up/Down
- Push Button Controls on Detached Console
- Forward Release Top Roll w/ Safety Lock
- Emergency Palm Stop & Safety Trip Wire
- Keyed Safety Lockout on Control Stand
- Precision Pinch Adjustment, Manual
- Linear Scales for Precise Positioning
- Bend-Pinch Rolls Incline for Cones
- Controls in 24VAC Low Volta

A31 OPTIONAL FEATURES

- Induction Hardened Rolls 54-56 HRC
- LED Readout w/ Position Repeat
- Extended Shafts & Section Dies
- Alignment and/or Rod Grooves
- Powered Bend Roll Rotation
- Foot Pedal Rotation Control
- Cone Rolling Device
- Custom Machines

4 ROLL Q41 SERIES MODELS AVAILABLE IN IDENTICAL CAPACITIES



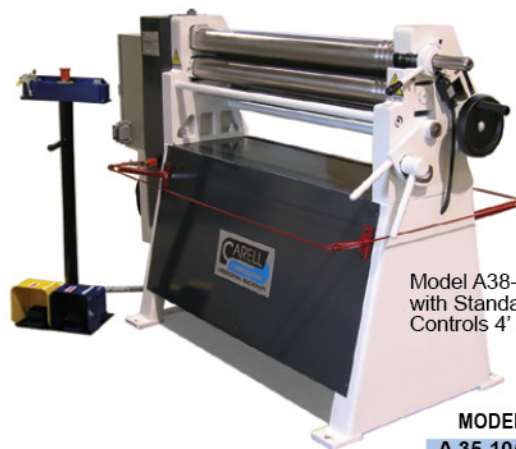
LS SERIES

POWERED INITIAL PINCH PLATE ROLLS

Our I.P. Light Gauge Rolls employ a Time-Tested Design & Excellent Safety Features with a Low Initial Investment for MAXIMUM VALUE

LS FEATURES

- Top & Pinch Rolls Power Driven
- Foot Pedal Control on Rotation
- Manual Bend & Pinch Roll Adjust
- Top Roll Forward Opening
- Bending Roll Inclines for Cones
- 3 Rod Rolling Grooves
- 24VAC Controls, E-Stop & Trip Wire
- Linear Scales for Positioning
- Induction Hardened Rolls
- Cone Rolling Devices
- Power Bend Roll UP/DN
- Power Bend Roll Rotation
- LED Readouts
- Custom Configurations



Model A38-13/1.5 with Standard Controls 4' x16 Ga.



4 Roll Versions Available, Call for Specifications

MODEL	LENGTH	CAPACITY	ROLL Ø	HP.	WT.
A 35-10/1.2	3'	18GA	2.4"	0.75	870
A 38-10/2	3'	14GA	3.0"	1.0	950
A 39-10/3	3'	12GA	3.5"	1.5	1,200
A 38-13/1.5	4'	16GA	3.0"	1.0	1,000
A 39-13/2.5	4'	12GA	3.5"	1.5	1,300
A 38-15/1.3	5'	18GA	3.0"	1.0	1,200
A 39-15/2	5'	14GA	3.5"	1.5	1,400
A 38-20/1	6'	20GA	3.0"	1.0	1,300
A 39-20/1.5	6'	16GA	3.94"	1.5	1,600
A 310-20/2	6'	14GA	4.5"	2.0	2,550

Data is Approximate and subject to change

VERTICAL PLATE ROLLS

Significantly Reduce Tank Production Costs!

COMPARE for YOURSELF and discover the key economical advantages of Vertical Rolls for Tank Production offered by Carell



4 Roll-V NC Controlled



3 Roll-V w/ LED Readouts



3 Roll-V Initial Pinch

THE EVOLUTION OF VERTICAL ROLLING TECHNOLOGY

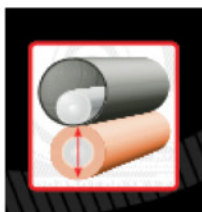
Vertical Plate and Sheet Rolls can be built to suit your production needs. Vertical format rolls with no open end yoke have the drive train located at the top. If an open end yoke for material removal is required, the drive train is located at the base of the machine and a pit is generally required so working height is close to the shop floor.

Vertical geometries are available in 3 or 4 Roll Double Pinch as well as 3 Roll Initial Pinch as needs dictate. For specific needs, machines can be built that operate in both the vertical and horizontal positions.

CONE ROLLING SYSTEMS

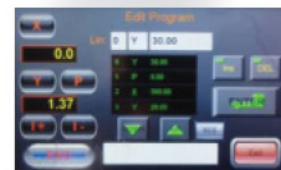
No finish deterioration of part surface

The High Durometer Urethane coated lower roll allows perfect rolling of polished aluminum alloy, stainless steel or mirror finished materials without surface marring or contamination. Reduce / Eliminate unbent flats and produce perfectly aligned seams with maximum pressure between the top and pinch rolls, perfectly parallel seams are achieved with virtually no unbent flats.



Automatic Cycle Cone Former

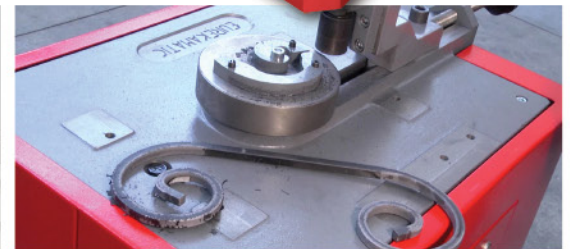
HT-2 Roll



EMATIC CE/CN *World's Most Versatile Economical Bender*

1,000's of Uses. Designed for Fast High Production Custom Manufacturing Applications and lighter Ornamental / Decorative Work.

The Carell E-MATIC CE/CN incorporates a rotary bending head, a wide stable base and programmable controls into a unique versatile package. Rugged drive train w/4.5 HP motor+oil bath reducer. Bend to 15" radius. Tooling Sold Separately: Scrolling, Bar Folding, Circle/Curve, Tube Bender, Custom Accessories are all easily available from our warehouse and in-house custom fabricating shop!



MANUAL BENDING MACHINES

Eureka Base 4 Tools in One! *Simply Add the Tooling Option You Desire*



**Powerful
Simple & Easy
Ultra Versatile**



"S" SCROLLS
Shown with Optional Bar Brake / Folding Tool



"C" CIRCLES & CURVES



"P" BAR FOLDING



"T" TUBE BENDING

TOOLING OPTION CAPACITIES

	7/8"	7/8"	1/4" x 4"
P Bar Brake / Folding Tool	7/8"	7/8"	1/2" x 4"
C Circle, Curve, Radius Tool	7/8"	7/8"	3/4" x 1-3/16"
S/3 Scroll Tool w/3 Formers	7/8"	7/8"	1 x OD 0.098" wall
T Tube Bending Tool	7/8"	7/8"	

REBAR BENDERS and SHEARS

Mobility - Rugged Frames - Low Maintenance - Safety Protection Standard

REBAR BENDERS



Reaction Pins, Bar Stop & 5 Arbor sizes

P SERIES BENDERS

MODEL	BEND GRADE60
P 32	#7
P 36	#8
P 42	#10
P 52	#11
P 55	#12
P 62	#14

STANDARD COMBI BENDER & SHEAR

Automatic Cycle,
Bend-Reverse-Return
Safety Shields
Foot Pedal & Push
Button Controls
Pins/Formers Kit

OPTIONAL
Length Stop
Stirrup Bending Tool
Spiral/Hoop Attachment
Programmable
IO Bend Controls



Heavy Cast Shear Body w/Rapid Cycle

COMBI BENDER/SHEAR

MODEL	BEND GRADE60	SHEAR GRADE60
30/35	#8	#7
38/45	#10	#19



STIRRUP ACCESSORIES
Optional, stirrup bending tool & adjustable length stop



HEAVY DUTY SPIRAL DEVICE OPTIONAL
Use with up to #6 Bar



LEFT/RIGHT STANDARD
Produce Double Bends and bend from Left to Right

YARD SHEARS



Portable and Economical!

CORNER NOTCHERS

Patented Self Regulating Gap Adjustment Permits Perfect Shearing Thick & Thin!

Carell Hydraulic Corner Notching Machines have heavy precision machined GS500 cast alloy work beds and precision ground dual vertical stroke guides on massive cast machine head.

Units come with blades, sheet squares, stroke limit control, waste chute and a foot pedal actuator. Models from 3/16" to 5/16" with Fixed and Variable Angle and with a Punching Station option

AF Fixed Angle
AV Variable Angle
AFP Fixed w/ Punch
AVP Variable w/ Punch



HORIZONTAL PRESSES

Versatile Hydraulic Bulldozer Presses

Carell Hydraulic Horizontal "Bulldozer" Presses can bend, form, straighten, punch, & shear. The work bed is 100% usable for complex shapes. The thrust ram is located under the machine bed allowing 360 deg. unencumbered bending. High strength hardened punches and dies mount to receivers with a massive cross slotted dove tail key. Available in 22 up to 100 Ton Capacities. High Speed Digitally Controlled Options • 100's of Tooling Options Available For Specific Production Needs.



CP30 SERIES

STANDARD FEATURES ALL UNITS

- LED Digital Readout*
- Three Roll Universal Benders
- 25% Heavier Main Frames in Solid Steel w/limited lifetime warranty
- High Strength Hardened Steel Shafts
- TEFC Electric Motors, CE Certified
- Lower Shafts Driven, Top Shaft Idle
- Universal Roll Set, Hardened, 24 pieces
- Lower Rolls Knurled, Top Roll Smooth
- Thermal Overload Protection & E-stops
- Lateral Material Guides w/ bearings, variable rake angle, & recessed hex adjustment. These features not on 'look-alike' machines
- Flush Faced Frame and Electrical Cabinet
- Dual, High Dynamic Load Bearings on shafts
- Top Roll Journal on Adjustable Guides & Ways
- Illustrated User Manual & Tool Kit

OPTIONS / ACCESSORIES

- Tube & Pipe Rolls
- Wide Flat & Tight Diameter Rolls
- Rolls & Guides for Angle In/Out
- Bar Twist & Scroll Tooling
- CAP RAIL ROLLS
- Rolls for Extrusions/Other Shapes

MODEL LEGEND

- M 1 Speed, 220V Single Phase
- 2V 2 Speed, 220V, Three Phase
- P Foot Pedal Rotation Control
- R Rotating Horizontal/Vertical
- E* 1 Speed, w/out LED

SPECIFICATIONS

- Shaft OD : 1-3/16" (30 mm)
- Roll OD : 5" Nominal (128 mm)
- Power : 1.15 HP 220V-3-60Hz
- Power : 1.50 HP 220V-1-60Hz
- Weight : 550 Lbs, approx.



CP30R2V



CP30R2V
Shown in horizontal position

CP30-E-PR

















Large Bright LED Readouts for Precision Repeat



Easy Ratchet Lateral Guide Adjustment

CP30 CAPACITIES

SHAPE	MAX SIZE	MIN ID	NOTES
	2 x 3/8"	16"	STANDARD ROLLS
	3 x 5/8"	16"	STANDARD ROLLS
	1-1/8"	24"	STANDARD ROLLS
	1-1/2 x 3/16"	16"	*OPTIONAL ROLLS
	1-1/2 x 3/16"	22"	OPTIONAL TOOLING
	2"	16"	STANDARD ROLLS
	2"	20"	STANDARD ROLLS
	2"x 1"	12"	STANDARD ROLLS
	2"x 1"	16"	STANDARD ROLLS
	1-1/4"	24"	OPTIONAL ROLLS
	1-1/2" Sch. 40	20"	OPTIONAL ROLLS
	2-3/8 x 16GA	40"	OPTIONAL ROLLS
	1-1/2 x 11GA	40"	*STANDARD ROLLS
	2 x 1 x 11GA	48"	*STANDARD ROLLS

* On some sections for limited quantities it may be possible to use standard rolls. For optimum results or if production runs are required, it is necessary to use optional rolls and or optional accessories.

5 Versions to Fit Your Budget

CP30-PR2V & CP30-PRM
Foot Pedal Controls, Rotating Head, horizontal/vertical operation
LED Readout

CP30-MS
Short Base version for use on trailer, tail gate, work bench
LED Readout

* **CP30E-PR & CP30E-RPM**
Foot Pedal Controls, Rotary Head w/out LED



HELIX

Disclaimer: Roll bending machines distributed by Eagle Bending Machines, Inc. are all designed with Emergency Stops and Thermal Overloads. The employer of the operator is responsible for providing and insuring the usage of point of operation guards and/or properly applied and adjusted point of operation devices as required to meet OSHA, state and local safety requirements.



CP40H-H2-M SERIES

CP40 FEATURES AND BENEFITS

- 3 Roll Pyramid Universal Roll Bender
- MPR40 LED Readout, 400 Auto Repeat Memory (H/H2), LED Readout (M)
- Powerful Easy to use Pyramid Style
- High Strength Hardened Shafts
- 25% Heavier Main Frames in Solid Steel with Limited Lifetime Warranty
- Universal Bending Roll Set 18 pcs.
- All Dual Bearings, No Bushings
- Flush Electrical Panels, NEMA Type
- Detached Mobile Operator Consoles
- Dual Pedal Controlled Rotation
- Dual E-Stop Buttons
- Lateral Guides with Bearings, Variable Angle, Heavy Duty with Easy, Hex Ratchet Adjustments on Thrust
- TEFC Motors, Overload Protected
- Illustrated Instruction Manual & Tool Kit

OPTIONS/ACCESSORIES

- Tube & Pipe Rolls
- Wide Flat & Tight Diameter Rolls
- Rolls & Guides for Angle In/Out
- Bar Twisting & Scrolling Tools
- Rolls for Extrusions & Other Shapes
- CAP RAIL ROLLS

NO CASTINGS in our Machines!

SPECIFICATIONS

Shaft OD 1.575" (40 mm)
 Roll OD 6.375" (162 mm)
 Power: 3.6 HP (H & H2)
 Weight: H-H2 1,300 Lbs
 Weight: M 1,050 Lbs

Disclaimer: Roll bending machines distributed by Eagle Bending Machines, Inc. are all designed with Emergency Stops and Thermal Overloads. The employer of the operator is responsible for providing and insuring the usage of point of operation guards and/or properly applied and adjusted point of operation devices as required to meet OSHA, state and local safety requirements.



CP40H














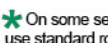


CP40M



CP40H (shown horizontal)

CP40 CAPACITIES

SHAPE	MAX SIZE MIN ID	NOTES
	2-1/4" x 3/8" Ø20"	STANDARD ROLLS
	4" x 5/8" Ø16"	STANDARD ROLLS
	1-3/8" Ø20"	STANDARD ROLLS
	2" x 1/4" Ø24"	SPECIAL ROLLS
	2" x 1/4" Ø28"	OPTIONAL TOOLING
	2-1/2"x1/4" Ø24"	*STANDARD ROLLS
	2"x1/4" Ø24"	STANDARD ROLLS
	3"x1-3/4" Ø24"	STANDARD ROLLS
	3"x1-3/4" Ø24"	STANDARD ROLLS
	1-3/8" Ø20"	*OPTIONAL ROLLS
	2"Scd.40 Ø40"	TUBE/PIPE ROLLS
	2-3/4 x 16GA Ø48"	TUBE/PIPE ROLLS
	2"x11GA Ø48"	*STANDARD ROLLS
	2-1/4"x1-1/2"x11 GA Ø48"	*STANDARD ROLLS

* On some sections for limited quantities it may be possible to use standard rolls. For optimum results or if production runs are required, it is necessary to use optional rolls and or optional accessories.

4 Versions Fit Your Budget!

CP40H - Hydraulic Adjustment

3 Driven Rolls, Smooth, Auto Repeat Positioning/LED

CP40H-REV - Hydraulic Adjustment

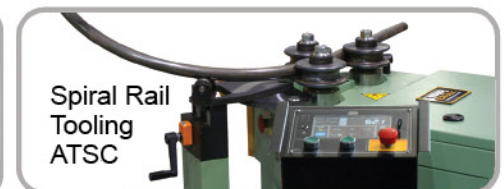
CP40H including Variable Speed Drive Via Digital Motor Inverter

CP40H2 - Hydraulic Adjustment

2 Driven Rolls, Lower Rolls Knurled for Traction, Top Roll Smooth with Auto Repeat Positioning/LED

CP40M - Manual Adjustment

2 Driven Rolls, Lower Rolls Knurled for Traction, Top Roll Smooth with LED Readout for positioning



Spiral Rail Tooling ATSC

CP60-H

CP60 FEATURES AND BENEFITS

- 2 Roll Pyramid Universal Roll Bender
- MPR40 LED Readout, 400 Auto Repeat Memory
- Powerful Easy to use Pyramid Style
- High Strength Hardened Shafts
- 25% Heavier Main Frames in Solid Steel w/ Limited Lifetime Warranty
- Universal Bending Roll Set 18 pcs.
- All Dual Bearings, No Bushings
- Flush Electrical Panels, NEMA Type
- Detached Mobile Operator Consoles
- Dual Pedal Controlled Rotation
- Dual E-Stop Buttons
- Lateral Guides w/ Bearings, Variable Angle, Heavy Duty with Easy, Hex Ratchet Adjustments on Thrust
- TEFC Motors, Overload Protected
- Illustrated Instruction Manual & Tool Kit



2 Versatile Versions















(H & REV) allow you to Roll with Renowned Eagle Quality and choose the best fit to your budget. Eagle CP60H Universal Section Benders offer unmatched features such as 400 Position Auto-Repeat Controls, LED Readouts, Concealed Oil Lines, Flush Electrical Cabinets, Limited Lifetime Frame Warranties and more! Make the Best Decision for your Shop!

CP60H / CP60H-Rev SPECIFICATIONS

Shaft OD	2-3/8" (60 mm)
Roll OD	8.85" Nominal
Drive	3.4 HP 220V/60Hz
Pump	2.0 HP 220V/60Hz
Repeat	Automatic + LED.
Powered Rolls	2 Lower Rolls Driven
Dimensions	37" x 51" x 63" h
Ship Weight	2,425 Lbs, approx.

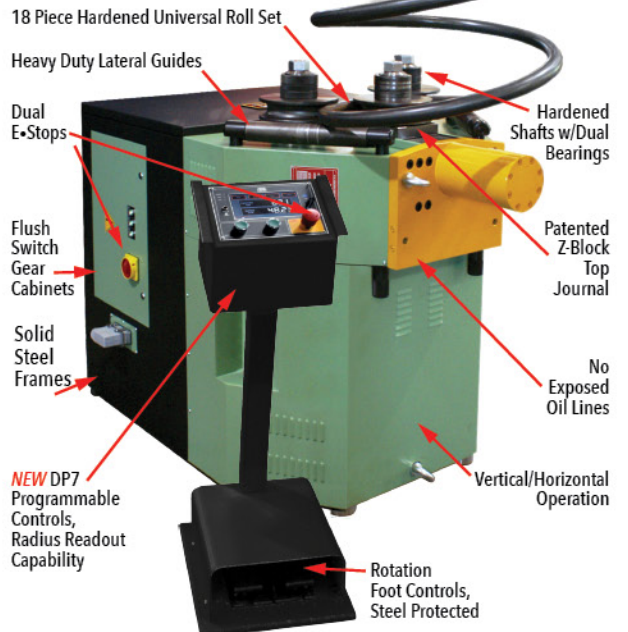


CP60-H CAPACITIES

SHAPE	MAX SIZE	MIN DIA	NOTES
	3-1/2" x 5/8"	36"	STANDARD ROLLS
	5 x 1"	26"	STANDARD ROLLS
	2"	30"	STANDARD ROLLS
	3" x 1/4"	48"	SPECIAL TOOLING
	2-1/2" x 5/16"	32"	OPTIONAL TOOLING
	3" x 5/16"	32"	SPECIAL TOOLING
	3" x 5/16"	40"	STANDARD ROLLS
	5" x 2"	32"	*STANDARD ROLLS
	5" x 2"	36"	*STANDARD ROLLS
	2"	28"	ROD ROLLS
	2-1/2" x Sch40 Pipe	36"	TUBE/PIPE ROLLS
	3-1/2" x 12GA Tube	60"	OPTIONAL ROLLS
	2-3/4" x 11ga	48"	*STANDARD ROLLS
	3" x 1-1/2" x 1/8"	40"	STANDARD ROLLS

* On some sections for limited quantities it may be possible to use standard rolls. For optimum results or if production runs are required, it is necessary to use optional rolls and or optional accessories.

Eagle Quality is in the Details...



CPS SERIES



CPS50

FEATURES

- Three Driven Rolls Universal Profile Bender Initial Pinch Geometry for Serial Production
- Hydraulic Up / Down Movement on Forming Roll
- High Strength Hardened Shafts w/Roller Bearings
- Universal Bending Rolls, Smooth, Induction Hardened
- Horizontal & Vertical Working Position (BNCPS 35 &)
- Push Button Controls, Detached Console
- Dual Pedal Controlled Rotation
- Dual E-Stop Buttons
- LED Readout, Large High Brightness, 24VAC Controls
- 400 Memory Automatic Position Repeat "APR" System
- Flush Mount Switch Gear Panel with Safety Lamps
- Bending Roll Moving on Adjustable, Hardened Gibbs
- Adjustable Lateral Material Guide
- Service Tools and Illustrated Manual

VERSIONS 20 - 35 - 50

CPS (Standard)

Models 20, 35 & 50 with Single Rolling Speed and all Features as listed to the left

CPS-REV (Variable Rolling Speed)

CPS Version + Step-less variable speed, digital inverter and potentiometer for precision bending aluminum extrusions and extreme tight diameters















CPS-AUT (Automatic Bend Execution)

REV Version + Programmable Control and Proximity Sensors to execute a bend in a production environment

CPS CAPACITIES

Based on Mild Steels

Maximum Size & Minimum I.D.

SHAPE	20	35	50
	1 x 1/4 Ø8"	2 x 3/8 Ø14"	2-3/4 x 1/2 Ø20"
	1-3/4 x 3/8 Ø12"	3-1/2 x 5/8 Ø16"	4x5/8 Ø14"*
	1/2 Ø5"	1-1/4 Ø16"	1-1/2 Ø24"
	3/4 x 3/16 Ø8"	1-1/2x 1/4 Ø16"	2-1/4x1/4 Ø30"*
	3/4 x 3/16 Ø10"	1-1/2 x 1/4 Ø22"	2-1/4x1/4 Ø 38"
	1 Ø6"	2 Ø14"	2-1/2 Ø20"
	1 Ø6"	2 Ø16"	2-1/2 Ø20"
	1-1/4 Ø8"	2-1/2 Ø18"	3-3/4 Ø 26"*
	1-1/4 Ø10"	2-1/2 Ø20"	3-3/4 Ø 30"*
	1/2 Ø4"	1-1/4 Ø16"	1-1/2 Ø 24"
	1/2 Ø12"	1-1/2 Ø20"	2 Ø36"
	1-1/4 x 1/16 Ø16"	2-1/2 x 1/16 Ø30"	2-1/2x10ga Ø34"
	3/4 x 1/16 Ø12"	1-1/2x1/8 Ø40"	2-1/4x1/8 Ø50"*
	1-1/4 x 3/8 x 1/16	2x 1-1/4 x 1/8	2-3/4 x 1-1/2 x 1/8*

* On some sections for limited quantities it may be possible to use standard rolls. For optimum results or if production runs are required, it is necessary to use optional rolls and or optional accessories.

Driven Rolls	3	3	3
Rolling Speed fpm	10	13	16
Working Plane	Vertical	Vert./Horiz.	Vert./Horiz.
Repeat Control	Auto-Repeat	Auto-Repeat	Auto-Repeat

Chart indicates minimum suggested inside bending diameters at maximum section size using mild steel - Specifications subject to change/modification without prior notice - Data is approximate - Contact your authorized dealer for specific tooling capabilities/requirements on shapes and sizes to be bent. Special rolls and/or tooling may be required for some angle, channel rolling and/or for serial production on some sections - Bending ID's may be limited by predicted material distortion



CPS20

CPS35

BA SERIES CNC



BA50

FEATURES

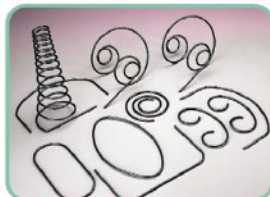
- (Full PC/Windows Based CNC Controls)
- Exclusive BPR Direct Radius "PRO-Bending" Program
- Direct Radius Input & On-Board CAD Graphics allow the operator to visualize and edit shapes on screen
- Automatic Interpolation-Blending between bends speeds up and simplifies programming
- Standard Shape program Archive of most common shapes
- Servo Controlled Bending Roll Movement offers Industries Highest Level of Material Variance Control & Bending Precision
- Large Full Color Graphic Screen Interface
- Unlimited Program Memory, Hard Drive + USB Port
- RS-232 Serial Port enables use of external Lap-Top
- Automatic Interpolation/Blending & Mirror Imaging Functions
- Variable Speed Rotation & Rise/Decent of Bending Roll
- Air Oil Heat Exchanger Maintains Oil at Constant Temp.
Note: BA Units Require Dedicated Rolls (Optional)

OPTIONS/ACCESSORIES

- Rolls for Tube-Pipe, Round and Square
- Custom Rolls for Extrusions & Special Sections
- Special Voltages Upon Request

STANDARD EQUIPMENT

- Adjustable Lateral Material Guides
- Service Tools + Illustrated Manual



BA20














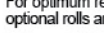


BA35

CPS CAPACITIES

Based on Mild Steels

Maximum Size & Minimum I.D.

SHAPE	20	35	50
	1 x 1/4 Ø8"	2 x 3/8 Ø14"	2-3/4 x 1/2 Ø20*
	1-3/4 x 3/8 Ø12"	3-1/2 x 5/8 Ø16"	4x5/8 Ø14**
	1/2 Ø5"	1-1/4 Ø16"	1-1/2 Ø24"
	3/4 x 3/16 Ø8"	1-1/2 x 1/4 Ø16"	2-1/4x1/4 Ø30**
	3/4 x 3/16 Ø10"	1-1/2 x 1/4 Ø22"	2-1/4x1/4 Ø38"
	1 Ø6"	2 Ø14"	2-1/2 Ø20"
	1 Ø6"	2 Ø16"	2-1/2 Ø20"
	1-1/4 Ø8"	2-1/2 Ø18"	3-3/4 Ø26**
	1-1/4 Ø10"	2-1/2 Ø20"	3-3/4 Ø30**
	1/2 Ø4"	1-1/4 Ø16"	1-1/2 Ø24"
	1/2 Ø12"	1-1/2 Ø20"	2 Ø36"
	1-1/4 x 1/16 Ø16"	2-1/2 x 1/16 Ø30"	2-1/2x10ga Ø34"
	3/4 x 1/16 Ø12"	1-1/2x1/8 Ø40"	2-1/4x1/8 Ø50**
	1-1/4 x 3/8 x 1/16	2x 1-1/4 x 1/8	2-3/4 x 1-1/2 x 1/8**

* On some sections for limited quantities it may be possible to use standard rolls. For optimum results or if production runs are required, it is necessary to use optional rolls and/or optional accessories.

Driven Rolls	3	3	3
Rolling Speed fpm	10	13	16
Working Plane	Vertical	Vert./Horiz.	Vert./Horiz.
Repeat Control	Auto-Repeat	Auto-Repeat	Auto-Repeat

Chart indicates minimum suggested inside bending diameters at maximum section size using mild steel - Specifications subject to change/modification without prior notice - Data is approximate - Contact your authorized dealer for specific tooling capabilities/requirements on shapes and sizes to be bent. Special rolls and/or tooling may be required for some angle, channel rolling and/or for serial production on some sections - Bending ID's may be limited by predicted material distortion

Z402 SERIES

ZM402 & ZH402 are three roll, pyramid type Universal Roll Bending Machines with manually or hydraulically adjusted forming roll. Our units roll standard/special sections and tube/pipe in a variety of material types.















These machines are Superior In Every Aspect with a Solid Steel MAIN Frame! We use no castings in our machines unlike many other look-a likes.

Our Efficient Pyramid Design uses a wide lower inter-axis and extended forming roll vertical travel to maximize bending power.

Compare our Superior Warranty to other brands and discover the Eagle difference!



ZH402 CAPACITIES

SHAPE	MAX SIZE MIN ID	NOTES
	2-1/4" x 3/8" Ø24"	STANDARD ROLLS
	4" x 9/16" Ø16"	STANDARD ROLLS
	1-3/8" Ø26"	STANDARD ROLLS
	2" x 2" x 3/16" Ø28"	* SPECIAL ROLLS
	2" x 2" x 3/16" Ø32"	OPTIONAL TOOLING
	2" x 1/4" Ø28"	STANDARD ROLLS
	2" x 1/4" Ø28"	STANDARD ROLLS
	3" x 1-1/4" Ø30"	STANDARD ROLLS
	3" x 1-1/4" Ø30"	STANDARD ROLLS
	1-3/8" Ø24"	* OPTIONAL ROLLS
	2" Sch. 10 Pipe Ø60"	TUBE/PIPE ROLLS
	2-1/2" x 16GA Ø40"	TUBE/PIPE ROLLS
	2" x 2" x 11GA Ø60"	STANDARD ROLLS
	2-1/2" x 1-1/2" x 11GA Ø60"	* STANDARD ROLLS

* On some sections for limited quantities it may be possible to use standard rolls. For optimum results or if production runs are required, it is necessary to use optional rolls and/or optional accessories.

CHARACTERISTICS

- 3 Roll Universal Benders w/ Dual Working Positions
- Lower Rolls Powered & Knurled for Optimal Traction
- Top Roll Idle, Adjustable Up/Dn for Bending Radius
- LED Digital Readout monitors top roll position
- Operate Both in Horizontal & Vertical Positions
- Rugged Solid Steel Frames, NO CASTINGS
- All Shafts Rotate on Dual Bearings, NO BUSHINGS
- Top Journal Hardened Guides/Ways - ADJUSTABLE
- Dual Pedal Controlled Rotation
- Dual E-Stop Buttons
- Heavy Duty Adjustable Lateral Guides w/ Bearings
- Compact, Robust, Low Maintenance Pyramid Design

STANDARD EQUIPMENT

- Universal Rolls, 18 pcs • Palm E-Stop • 24V Controls
- 3 Way Adjustable Lateral Material Guides & LED Readout
- Motor Overload Protection & Magnetic Cut-out

OPTIONS/ACCESSORIES

- Rolls for round tube/pipe, Cap Rail, Angles, Wide Flats
- Tight Diam. Rolls • Twist & Scroll Tools • Custom Tooling

SPECIFICATIONS

Positioning	Hyd. / Man.
Repeat Ref.	LED Readout
Shaft Dia.	1.57"
Roll Dia.	6.38"
Speed	14.5 fpm
Power	H 2.65/ M 1.75
Dimensions	32"x54"x57"
Weight	950/890lbs

2 VERSIONS w/ Horizontal/Vertical Operation

ZH402 - Pedal Controls, LED Readout, Hydr. Adjust.

ZM402 - Pedal Controls, LED Readout, Man. Adjust.





VALUE ADDED SERVICES

- Demonstration / Showroom
- Testing / Prototype Facility
- Extrusion Die Consulting
- Diagnostics and Repair
- Tooling Design & Manufacture
- Extrusion Die Consulting
- Diagnostics and Repair
- Spare Parts / Service Dept.

Our Reputation is based upon Solid Customer Satisfaction. Over 4,000 Professional Quality Benders placed in North American Shops since 1993 is a Testament to this Fact.

The Difference is Truly in the Details!

Eagle Bending Machines, Inc. leads the Roll Bending Industry with our Innovative, Professional Grade Section Bending Machines. Regardless of your shop size, Eagle will provide a bender to match your needs and fit your budget.

For over 30 Years, Our Benders have always been built to Superior Performance Standards for Precision, Versatility, and Longevity. Many additional thousands of CP Series Benders have been placed in shops around the globe. The Eagle brand is renowned worldwide.

Our Factory Trained Sales and Service Personnel, Application Engineers, Tooling Designers and support staff form a team with over 100 years of experience for your benefit. Eagle's Testing Facility and CNC Machine Shop produce Custom Rolls and Tooling to accomplish the most demanding roll bending applications. We are Solution Oriented and have an extensive stock of machines- tooling-parts ready to ship.

Eagle machines are rated highest in overall customer value and satisfaction with features and benefits that outperform any other. Units are tested 2 or more times at our facility to insure the highest level of quality control. We supply tooling, accessories and parts for machines placed in service over 30 years ago.

Eagle provides the highest level of Value to Cost and Long Term Return on Investment. Our Products are backed by an UNMATCHED Warranty and Professional Customer Service.

Tour our web site to discover for yourself how our unique features and Attention to Details become added benefits to your business!

www.eaglebendingmachines.com / sales@eaglebendingmachines.com

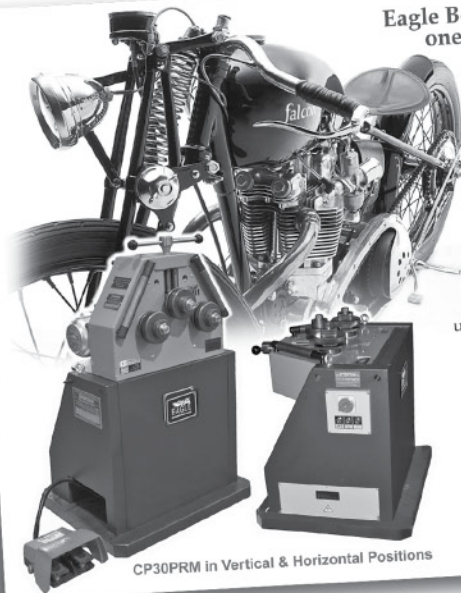


"I only use the best tools I can get, not cheap knockoffs"

"We use your machine every day and it really saves us a lot of time. Thanks again!"

Eddie Paul
President & CEO
Proto-Tech Machine
Engineering Customs by Eddie Paul.

Eagle Bending Machines is proud to have one of our roll benders chosen for the Falcon custom fabrication shop



Ian Barry's Falcon Motorcycles has skyrocketed to the top of the bike building scene and this is just the beginning!

Falcon builds high end custom bikes so it stands to reason they would choose the best built, longest lasting, and best selling section bender in the world: our Eagle model CP30 roll bender as the newest piece of fabricating equipment for their shop.

Even in tough economic times Eagle Bending Machines rises to the top. Thanks to our loyal customers we've been able to maintain our unprecedented run as THE premier supplier of job shop roll benders in North America for over a decade. Check back soon for exciting updates

Our high quality machines, in house tooling production, research and development team, and knowledgeable sales staff have also helped to keep us on top.

Call Eagle today for assistance with your roll bending applications. We have nearly every machine model in stock and ready for delivery with the tooling of your choice.

CP30PRM in Vertical & Horizontal Positions

"We pride ourselves on high quality work created by true craftsmen and artisans. It only makes sense that we buy the highest quality equipment on the market. This led us to a purchase that has paid for itself numerous times. Now, 6 years later our Eagle Bending Machines CP40H has become one of the most important pieces of equipment in our shop. Eagle has continued to be there for all of our application questions and tooling needs over the years since our purchase. Any shop that is considering a roll bender purchase can't afford NOT to buy Eagle!"

James Moseley, Director, Iron Division / Heirloom Stair and Iron, Inc.



EAGLE

BENDING MACHINES



Superior Precision through Innovative Engineering
www.eaglebendingmachines.com