

563-391-7700



TUBE, PIPE AND PROFILE

**BENDING & METALWORKING
MACHINERY**



Setting the Curve!

Manufacturer of

Tube, Pipe and Profile

Bending and Metalworking Machinery



Welcome to CML USA, Inc., North American supplier of Ercolina® tube, pipe and profile bending machinery. We are pleased to offer our customers the highest quality tube and pipe benders and related metal fabrication equipment available today. Ercolina's affordable tubing benders and fabricating machinery are designed to reliably and accurately produce your applications – increasing profit, improving product quality and finish.

Our product line is always expanding to include more manual, automatic and CNC pipe and tube bending machines, mandrel benders, NC

swaging equipment and metalforming machinery. Ercolina's experienced sales, service and support staff is always ready to offer positive application solutions for today's fabricator.

Company Profile:

CML USA, Inc. consistently leads the industry providing quality metal fabricating equipment to commercial and professional metal fabricators in the United States, Canada, Mexico and South America. Our product line includes rotary draw tube and pipe bending machine equipment, NC and CNC mandrel benders, angle rolls, section benders and tube and pipe notchers, ornamental metalworking

machinery and much more. Ercolina® is recognized worldwide as one of the largest and most respected manufacturers of tube and pipe benders and metal fabricating machines.

We invite you to tour our websites and see for yourself why Ercolina® continues to lead the industry in high quality bending equipment. Call our trained and knowledgeable product support representatives today at (563) 391-7700 to discuss your next bending application, speak with your regional Ercolina® representative or arrange a demonstration of Ercolina® products.

ercolina-usa.com

ROTARY DRAW BENDERS

ROTARY DRAW BENDERS





SB48 Plus Super Bender

Tube & Pipe Bending Machine

Additional Savings when Purchasing Tooling Kit with Machine

SB48 with Pipe Kit Part# SB48PLUSP

Pipe Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
1/2"	1.8	.109	153R046P0500	155P0500
3/4"	2.2	.113	153R056P0750	155P0750
1"	2.6	.133	153R067P1000	155P1000
1 1/4"	3.5	.140	153R090P1250	155P1250
1 1/2"	3.9	.145	153R100P1500	155P1500

Pipe Kit only Part# PIPEKIT2

SB48 with "Small Radius" Tube Kit Part# SB48PLUSTSR

Tube Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
3/4"	2.6	.035	153R067T0750	154T0750
7/8"	2.2	.065	153R056T0875	154T0875
1"	2.6	.065	153R067T1000	154T1000
1 1/4"	3.2	.083	153R082T1250	154T1250
1 1/2"	3.9	.083	153R100T1500	154T1500

"Small Radius" Tube Kit only Part# TUBEKIT2SR

SB48 with "Large Radius" Tube Kit Part# SB48PLUST

Tube Size	CLR	Min. Wall	Center Former Part#	Counterbend Die Part#
3/4"	2.6	.035	153R067T0750	154T0750
7/8"	2.6	.035	153R067T0875	154T0875
1"	3.2	.035	153R082T1000	154T1000
1 1/4"	4.4	.035	153R112T1250	154T1250
1 1/2"	5.9	.049	153R150T1500	154T1500
1 3/4"	6.7	.065	153R170T1750	154T1750

"Large Radius" Tube Kit only Part# TUBEKIT2



Part# SB48 Plus machine only



Practical One-Touch Control

FEATURES

- Ideal for producing consistent quality bends in pipe, tube, squares, solids and other profiles
- Easy one touch control allows any operator to program and automatically store bend angle
- Large easy to read color coded control displays all current information in real time
- Separate display of material spring back for greater accuracy on a variety of materials
- Bend any angle to 180° with independent material springback compensation for each bend
- Single bending speed
- Initiate bend cycle from the control panel or included foot pedal
- Quick-change tooling system with multiple radii available
- Swing away counterbending die vise for easy material handling
- Accepts Ercolina's A40-P two axis positioning table for multiple and sequential bends
- Classic Ercolina Top Bender design reduces floor space requirement and easily stores to save shop floor space
- Operates from single phase 220 volts for greater convenience and efficiency
- No hydraulic components
- Individual tooling available on pages 22-28

SB48 Plus Capacities & Specifications

Tube (Min.)	1/4"
(Max.)	2"
Pipe (Max.)	1 1/2" Sch. 40
Centerline Radius (Min.)	2 x Ø
(Max.)	8 7/8"
Degree of Bend	0-210°
Bending Speed	2 RPM
Programming	One touch bend angle control with springback
Material Positioning Table	Available (see page 30)
Voltage	220V 1ph
Length, Width, Height	22 1/2" x 16 1/4" x 39 1/2"
Weight	300 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity. Consult supplier for material specifications.

POPULAR ACCESSORIES



Tube & Pipe Tooling Kits



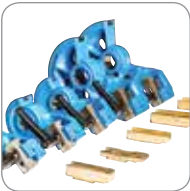
Spray Lubricant



Two Axis Positioner



Easy Part Layout Software



Square Tooling

Tooling Kits [Page 21](#)

Tooling and Accessories [Pages 22-29](#)

Model Comparison Guide [Page 32](#)

◀ Ercolina Bending Application

Product Demonstrations Available on Website

NEED ADDITIONAL HELP? CONTACT ERCOLINA:

563.391.7700

info@ercolina-usa.com



SB48 Super Bender

Tube & Pipe Bending Machine

 **Fabricators Favorite**



Part# SB48
machine only

*Additional Savings when Purchasing
Tooling Kit with Machine*

SB48 with Pipe Kit Part# SB48P

Pipe Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
1/2"	1.8	.109	153R046P0500	155P0500
3/4"	2.2	.113	153R056P0750	155P0750
1"	2.6	.133	153R067P1000	155P1000
1 1/4"	3.5	.140	153R090P1250	155P1250
1 1/2"	3.9	.145	153R100P1500	155P1500

Pipe Kit only Part# PIPEKIT2

**SB48 with "Small Radius" Tube Kit
Part# SB48TSR**

Tube Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
3/4"	2.6	.035	153R067T0750	154T0750
7/8"	2.2	.065	153R056T0875	154T0875
1"	2.6	.065	153R067T1000	154T1000
1 1/4"	3.2	.083	153R082T1250	154T1250
1 1/2"	3.9	.083	153R100T1500	154T1500

"Small Radius" Tube Kit only Part# TUBEKIT2SR

**SB48 with "Large Radius" Tube Kit
Part# SB48T**

Tube Size	CLR	Min. Wall	Center Former Part#	Counterbend Die Part#
3/4"	2.6	.035	153R067T0750	154T0750
7/8"	2.6	.035	153R067T0875	154T0875
1"	3.2	.035	153R082T1000	154T1000
1 1/4"	4.4	.035	153R112T1250	154T1250
1 1/2"	5.9	.049	153R150T1500	154T1500
1 3/4"	6.7	.065	153R170T1750	154T1750

"Large Radius" Tube Kit only Part# TUBEKIT2

Portable 120V Powerhouse

FEATURES

- Ideal for producing consistent quality bends in pipe, tube, squares, solids and other profiles
- Touch screen programming of bend angle with system diagnostics in multiple languages
- Quick-change tooling system with multiple radii available
- Digital display of bend angle
- Bend any angle to 180° with independent material springback compensation for each bend
- Foot pedal control for hands-free operation
- Swing away counterbending die vise for easy material handling
- Counterbending die position monitored electronically for accuracy and repeatability
- Accepts Ercolina'sA40-P two axis positioning table for multiple and sequential bends
- Compact design with base wheels and lift handle
- No hydraulic components
- Individual tooling available on pages 22-28

SB48 Capacities & Specifications

Tube (Min.)	1/4"
(Max.)	2"
Pipe (Max.)	1 1/2" Sch. 40
Centerline Radius (Min.)	2 x Ø
(Max.)	8 7/8"
Degree of Bend	0-210°
Bending Speed	2 RPM
Programming	NC with Touchpad (30) programs (9) bends per program
Material Positioning Table	Available (see page 30)
Voltage	120V 1ph (3ph available)
Length, Width, Height	22 1/2" x 16 1/4" x 39 1/2"
Weight	300 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity.
Consult supplier for material specifications.

POPULAR ACCESSORIES



Tube & Pipe Tooling Kits



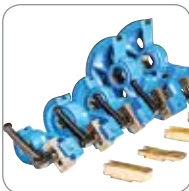
Spray Lubricant



Two Axis Positioner



Easy Part Layout Software



Square Tooling

Tooling Kits [Page 21](#)

Tooling and
Accessories [Pages 22-29](#)

Model Comparison
Guide [Page 32](#)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com

ercolina-usa.com



Top Bender 050 Plus

Tube & Pipe Bending Machine

Additional Savings when Purchasing Tooling Kit with Machine

050PLUS with Pipe Kit • Part# 050PLUSP

Pipe Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
½"	1.8	.109	153R046P0500	155P0500
¾"	2.2	.113	153R056P0750	155P0750
1"	2.6	.133	153R067P1000	155P1000
1¼"	3.5	.140	153R090P1250	155P1250
1½"	3.9	.145	153R100P1500	155P1500
2"	5.9	.109	153R150P2000	155P2000

Pipe Kit only Part# PIPEKIT1

**050PLUS with "Small Radius" Tube Kit
Part# 050PLUSTSR**

Tube Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
¾"	2.6	.035	153R067T0750	154T0750
7⁄8"	2.2	.065	153R056T0875	154T0875
1"	2.6	.065	153R067T1000	154T1000
1¼"	3.2	.083	153R082T1250	154T1250
1½"	3.9	.083	153R100T1500	154T1500
2"	5.9	.095	153R150T2000	154T2000

"Small Radius" Tube Kit only Part# TUBEKIT1SR

**050PLUS with "Large Radius" Tube Kit
Part# 050PLUST**

Tube Size	CLR	Min. Wall	Center Former Part#	Counterbend Die Part#
¾"	2.6	.035	153R067T0750	154T0750
7⁄8"	2.6	.035	153R067T0875	154T0875
1"	3.2	.035	153R082T1000	154T1000
1¼"	4.4	.035	153R112T1250	154T1250
1½"	5.9	.049	153R150T1500	154T1500
1¾"	6.7	.065	153R170T1750	154T1750
2"	7.5	.065	153R190T2000	154T2000

"Large Radius" Tube Kit only Part# TUBEKIT1



Part# 050PLUS
machine only

Economical Easy Operation

FEATURES

- Ideal for producing consistent quality bends in pipe, tube, squares, solids and other profiles
- Easy one touch control allows any operator to program and automatically store bend angle
- Large easy to read color coded control displays all current information in real time
- Separate display of material spring back for greater accuracy on a variety of materials
- Bend any angle to 180° with independent material springback compensation for each bend
- Single bending speed
- Initiate bend cycle from the control panel or included foot pedal
- Quick-change tooling system with multiple radii available
- Swing away counterbending die vise for easy material handling
- Accepts Ercolina's A40-P two axis positioning table for multiple and sequential bends
- Classic Ercolina Top Bender design reduces floor space requirement and easily stores to save shop floor space
- Operates from single phase 220 volts for greater convenience and efficiency
- No hydraulic components
- Individual tooling available on pages 22-28

Top Bender 050 Plus Capacities & Specifications

Tube (Min.)	1/4"
(Max.)	2 1/2"
Pipe (Max.)	2" Sch. 40
Centerline Radius (Min.)	2 x Ø
(Max.)	11 7/8"
Degree of Bend	0-210°
Bending Speed	1.2 RPM
Programming	One touch bend angle control with springback
Material Positioning Table	Available (see page 30)
Voltage	220V 1ph
Length, Width, Height	27" x 20" x 39"
Weight	430 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity. Consult supplier for material specifications.

POPULAR ACCESSORIES



Tube & Pipe Tooling Kits



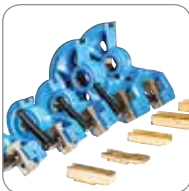
Spray Lubricant



Two Axis Positioner



Easy Part Layout Software



Square Tooling

Tooling Kits [Page 21](#)

Tooling and Accessories [Pages 22-29](#)

Model Comparison Guide [Page 32](#)

◀ Ercolina Bending Application

Product Demonstrations Available on Website

NEED ADDITIONAL HELP? CONTACT ERCOLINA:

563.391.7700

info@ercolina-usa.com

ercolina-usa.com



TB60 Top Bender

Tube & Pipe Bending Machine

 **Fabricators Favorite**

*Additional Savings when Purchasing
Tooling Kit with Machine*

TB60 with Pipe Kit • Part# TB60P

Pipe Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
½"	1.8	.109	153R046P0500	155P0500
¾"	2.2	.113	153R056P0750	155P0750
1"	2.6	.133	153R067P1000	155P1000
1¼"	3.5	.140	153R090P1250	155P1250
1½"	3.9	.145	153R100P1500	155P1500
2"	5.9	.109	153R150P2000	155P2000

Pipe Kit only Part# PIPEKIT1

**TB60 with "Small Radius" Tube Kit
Part# TB60TSR**

Tube Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
¾"	2.6	.035	153R067T0750	154T0750
⅞"	2.2	.065	153R056T0875	154T0875
1"	2.6	.065	153R067T1000	154T1000
1¼"	3.2	.083	153R082T1250	154T1250
1½"	3.9	.083	153R100T1500	154T1500
2"	5.9	.095	153R150T2000	154T2000

"Small Radius" Tube Kit only Part# TUBEKIT1SR

**TB60 with "Large Radius" Tube Kit
Part# TB60T**

Tube Size	CLR	Min. Wall	Center Former Part#	Counterbend Die Part#
¾"	2.6	.035	153R067T0750	154T0750
⅞"	2.6	.035	153R067T0875	154T0875
1"	3.2	.035	153R082T1000	154T1000
1¼"	4.4	.035	153R112T1250	154T1250
1½"	5.9	.049	153R150T1500	154T1500
1¾"	6.7	.065	153R170T1750	154T1750
2"	7.5	.065	153R190T2000	154T2000

"Large Radius" Tube Kit only Part# TUBEKIT1



Part# TB60
machine only

Ercolina's Most Popular Workhorse

FEATURES

- Ideal for producing consistent quality bends in pipe, tube, squares, solids and other profiles
- Touch screen programming of bend angle with system diagnostics in multiple languages
- Quick-change tooling system with multiple radii available
- Digital display of bend angle
- Bend any angle to 180° with independent material springback compensation for each bend
- Two bend speeds
- Foot pedal control for hands-free operation
- Swing away counterbending die vise for easy material handling
- Counterbending die position monitored electronically for accuracy and repeatability
- Accepts Ercolina's A40-P two axis positioning table for multiple and sequential bends
- Compact design with base wheels and lift handle
- No hydraulic components
- Individual tooling available on pages 22-28

TB60 Capacities & Specifications

Tube (Min.)	1/4"
(Max.)	2 1/2"
Pipe (Max.)	2" Sch. 40
Centerline Radius (Min.)	2 x Ø
(Max.)	15"
Degree of Bend	0-210°
Bending Speed	1.7 or 3.4 RPM
Programming	NC with Touchpad (30) programs (9) bends per program
Material Positioning Table	Available (see page 30)
Voltage	220V or 440V 3ph
Length, Width, Height	27" x 15" x 36"
Weight	430 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity. Consult supplier for material specifications.

POPULAR ACCESSORIES



Tube & Pipe Tooling Kits



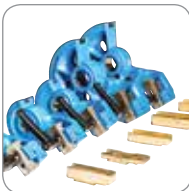
Spray Lubricant



Two Axis Positioner



Easy Part Layout Software



Square Tooling

Tooling Kits [Page 21](#)

Tooling and Accessories [Pages 22-29](#)

Model Comparison Guide [Page 32](#)



◀ Ercolina Bending Application

Product Demonstrations Available on Website

NEED ADDITIONAL HELP? CONTACT ERCOLINA:

563.391.7700

info@ercolina-usa.com



030 Mega Bender

Tube & Pipe Bending Machine

Additional Savings when Purchasing Tooling Kit with Machine

030 with Pipe Kit • Part# 030P

Pipe Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
½"	1.8	.109	153R046P0500	155P0500
¾"	2.2	.113	153R056P0750	155P0750
1"	2.6	.133	153R067P1000	155P1000
1¼"	3.5	.140	153R090P1250	155P1250
1½"	3.9	.145	153R100P1500	155P1500
2"	5.9	.109	153R150P2000	155P2000

Pipe Kit only Part# PIPEKIT1

030 with "Small Radius" Tube Kit Part# 030TSR

Tube Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
¾"	2.6	.035	153R067T0750	154T0750
7/8"	2.2	.065	153R056T0875	154T0875
1"	2.6	.065	153R067T1000	154T1000
1¼"	3.2	.083	153R082T1250	154T1250
1½"	3.9	.083	153R100T1500	154T1500
2"	5.9	.095	153R150T2000	154T2000

"Small Radius" Tube Kit only Part# TUBEKIT1SR

030 with "Large Radius" Tube Kit Part# 030T

Tube Size	CLR	Min. Wall	Center Former Part#	Counterbend Die Part#
¾"	2.6	.035	153R067T0750	154T0750
7/8"	2.6	.035	153R067T0875	154T0875
1"	3.2	.035	153R082T1000	154T1000
1¼"	4.4	.035	153R112T1250	154T1250
1½"	5.9	.049	153R150T1500	154T1500
1¾"	6.7	.065	153R170T1750	154T1750
2"	7.5	.065	153R190T2000	154T2000

"Large Radius" Tube Kit only Part# TUBEKIT1



Part# 030 machine only



Mandrel Upgrade Available!

FEATURES

- Ideal for producing consistent quality bends in large diameter pipe, tube, squares, rectangular, solids and other profiles
- Touch screen programming of bend angle with system diagnostics in multiple languages
- Quick-change tooling system with multiple radii available
- Digital display of bend angle
- Bend any angle to 180° with independent material springback compensation for each bend
- Foot pedal control for hands-free operation
- Swing away counterbending die vise for easy material handling
- Counterbending die vise position monitored electronically for accuracy and repeatability
- Accepts Ercolina's A40-P two axis positioning table for multiple and sequential bends
- 030 machine mandrel ready; optional 5', 10' or 20' tables available
- Compact design with base wheels and lift handle
- Heavy-duty gear case
- No hydraulic components
- Available in single or three phase
- Individual tooling available on pages 22-28

030 Capacities & Specifications

Tube (Min.)	1/4"
(Max.)	3" - .065 wall
Pipe (Max.)	2 1/2" Sch. 10
Centerline Radius (Min.)	2 x Ø
(Max.)	15"
Degree of Bend	0-210°
Bending Speed	Variable .6 to 2.2 RPM
Programming	NC with Touchpad (30) programs (9) bends per program
Material Positioning Table	Available (see page 30)
Voltage	220V or 440V 3ph
Length, Width, Height	27" x 15" x 36"
Weight	480 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity.
Consult supplier for material specifications.

POPULAR ACCESSORIES



Tube & Pipe Tooling Kits



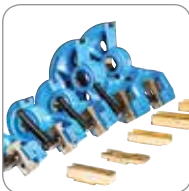
Spray Lubricant



Two Axis Positioner



Easy Part Layout Software



Square Tooling

Tooling Kits [Page 21](#)

Tooling and
Accessories [Pages 22-29](#)

Model Comparison
Guide [Page 32](#)



030 Mandrel
Upgrade Available

Product
Demonstrations
Available on Website

NEED ADDITIONAL HELP?
CONTACT ERCOLINA:

563.391.7700

info@ercolina-usa.com



TB100 Top Bender

Tube & Pipe Bending Machine

Additional Savings when Purchasing Tooling Kit with Machine

TB100 with Pipe Kit • Part# TB100P

Pipe Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
1¼"	3.5	.140	153R090P1250	155P1250
1½"	3.9	.145	153R100P1500	155P1500
2"	5.9	.109	153R150P2000	155P2000
2½"	11.8	.203	157R300P2500-80	155P2500
3"	11.8	.216	157R300P3000-80	155P3000

Pipe Kit only Part# PIPEKIT4

TB100 with "Small Radius" Tube Kit Part# TB100TSR

Tube Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
¾"	2.6	.035	153R067T0750	154T0750
⅞"	2.2	.065	153R056T0875	154T0875
1"	2.6	.065	153R067T1000	154T1000
1¼"	3.2	.083	153R082T1250	154T1250
1½"	3.9	.083	153R100T1500	154T1500
2"	5.9	.095	153R150T2000	154T2000

"Small Radius" Tube Kit only Part# TUBEKIT1SR

TB100 with "Large Radius" Tube Kit Part# TB100TLR

Tube Size	CLR	Min. Wall	Center Former Part#	Counterbend Die Part#
¾"	2.6	.035	153R067T0750	154T0750
⅞"	2.6	.035	153R067T0875	154T0875
1"	3.2	.035	153R082T1000	154T1000
1¼"	4.4	.035	153R112T1250	154T1250
1½"	5.9	.049	153R150T1500	154T1500
1¾"	6.7	.065	153R170T1750	154T1750
2"	7.5	.065	153R190T2000	154T2000

"Large Radius" Tube Kit only Part# TUBEKIT1



Part# TB100
machine only

Accurately Bend Heavy Profiles

FEATURES

- Ideal for producing consistent quality bends in large pipe, tube, squares, solids and other profiles
- Touch screen control offers easy access to auto and manual operating modes, programming (inch or metric), system diagnostics and multiple language capability
- Quick-change tooling system with multiple radii available
- Digital display of bend angle
- Bend any angle to 180° with independent material springback compensation for each bend
- Hand-held control of bend, return and emergency stop functions
- Swing away counterbending die vise for easy material handling
- Counterbending die vise position monitored electronically for accuracy and repeatability
- Two axis positioning table for multiple and sequential bends available on special request
- Heavy-duty steel gear case
- No hydraulic components
- Individual tooling available on pages 22-28

TB100 Capacities & Specifications

Tube (Min.)	1/4"
(Max.)	4"
Pipe (Max.)	3" Sch. 40
Centerline Radius (Min.)	2 x Ø
(Max.)	17"
Degree of Bend	0-210°
Bending Speed	Variable to 1.3 RPM
Programming	Touch screen Unlimited storage with USB (12) bends per program
Material Positioning Table	Consult factory
Voltage	220V or 440V 3ph
Length, Width, Height	20" x 34" x 47"
Weight	1,030 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity.
Consult supplier for material specifications.

POPULAR ACCESSORIES



Tube & Pipe Tooling Kits



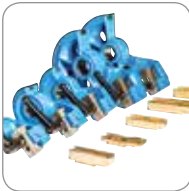
Spray Lubricant



Easy Part Layout Software



Roller Counterbending Die



Large Square Tooling

Tooling Kits [Page 21](#)

Tooling and
Accessories [Pages 22-29](#)

Model Comparison
Guide [Page 32](#)



Kondor83/Bigstock.com

◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com

ercolina-usa.com



TB130 Top Bender

Tube & Pipe Bending Machine

Additional Savings when Purchasing Tooling Kit with Machine

TB130 with Pipe Kit • Part# TB130P

Pipe Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
1¼"	3.5	.140	153R090P1250	155P1250
1½"	3.9	.145	153R100P1500	155P1500
2"	5.9	.109	153R150P2000	155P2000
2½"	11.8	.203	157R300P2500-80	155P2500
3"	11.8	.216	157R300P3000-80	155P3000

Pipe Kit only Part# PIPEKIT4

TB130 with "Small Radius" Tube Kit Part# TB130TSR

Tube Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
¾"	2.6	.035	153R067T0750	154T0750
⅞"	2.2	.065	153R056T0875	154T0875
1"	2.6	.065	153R067T1000	154T1000
1¼"	3.2	.083	153R082T1250	154T1250
1½"	3.9	.083	153R100T1500	154T1500
2"	5.9	.095	153R150T2000	154T2000

"Small Radius" Tube Kit only Part# TUBEKIT1SR

TB130 with "Large Radius" Tube Kit Part# TB130TLR

Tube Size	CLR	Min. Wall	Center Former Part#	Counterbend Die Part#
¾"	2.6	.035	153R067T0750	154T0750
⅞"	2.6	.035	153R067T0875	154T0875
1"	3.2	.035	153R082T1000	154T1000
1¼"	4.4	.035	153R112T1250	154T1250
1½"	5.9	.049	153R150T1500	154T1500
1¾"	6.7	.065	153R170T1750	154T1750
2"	7.5	.065	153R190T2000	154T2000

"Large Radius" Tube Kit only Part# TUBEKIT1



Part# TB130
machine only



Reliable Repeatable Bends

FEATURES

- Ideal for producing consistent quality bends in large pipe, tube, squares, solids and other profiles
- Touch screen control offers easy access to auto and manual operating modes, programming (inch or metric), system diagnostics and multiple language capability
- Quick-change tooling system with multiple radii available
- Digital display of bend angle
- Bend any angle to 180° with independent material springback compensation for each bend
- Hand-held control of bend, return and emergency stop functions
- Swing away counterbending die vise for easy material handling
- Counterbending die vise position monitored electronically for accuracy and repeatability
- Two axis positioning table for multiple and sequential bends available on special request
- Heavy-duty steel gear case
- No hydraulic components
- Individual tooling available on pages 22-28

TB130 Capacities & Specifications

Tube (Min.)	1/4"
(Max.)	5"
Pipe (Max.)	4" Sch. 40
Centerline Radius (Min.)	2 x Ø
(Max.)	27½"
Degree of Bend	0-210°
Bending Speed	Variable to .75 RPM
Programming	Touch screen Unlimited storage with USB (12) bends per program
Material Positioning Table	Consult factory
Voltage	220V or 440V 3ph
Length, Width, Height	34" x 34" x 47"
Weight	1,330 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity.
Consult supplier for material specifications.

POPULAR ACCESSORIES



Tube & Pipe Tooling Kits



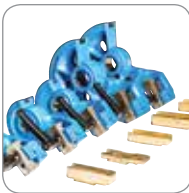
Spray Lubricant



Easy Part Layout Software



Roller Counterbending Die



Large Square Tooling

Tooling Kits [Page 21](#)

Tooling and
Accessories [Pages 22-29](#)

Model Comparison
Guide [Page 32](#)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com



TB180 Top Bender

Tube & Pipe Bending Machine



Part# TB180
machine only



Easy touch screen
bend angle programming.

Bending Power For Large Profiles!

FEATURES

- Ideal for producing consistent quality bends in large pipe, tube, squares, solids and other profiles
- Touch screen control offers easy access to auto and manual operating modes, programming (inch or metric), system diagnostics and multiple language capability
- Quick-change tooling system with multiple radii available
- Digital display of bend angle
- Bend any angle to 180° with independent material springback compensation for each bend
- Hand-held control of bend, return and emergency stop functions
- Hydraulically operated counterbending die vise to control material springback
- Swing away counterbending die vise for easy material handling
- Counterbending die vise position monitored electronically for accuracy and repeatability
- Heavy-duty steel gear case
- Individual tooling available on pages 22-28

TB180 Capacities & Specifications

Tube (Min.)	1¼"
(Max.)	6" - .120 wall
Pipe (Max.)	6" Sch. 10
Centerline Radius (Min.)	3 x Ø
(Max.)	39¼"
Degree of Bend	0-210°
Bending Speed	Variable to 1 RPM
Programming	Touch screen Unlimited storage with USB (12) bends per program
Material Positioning Table	Not available
Voltage	440V 3ph
Length, Width, Height	75" x 40" x 59"
Weight	6,000 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity.
Consult supplier for material specifications.

POPULAR ACCESSORIES



Tube & Pipe Tooling Kits



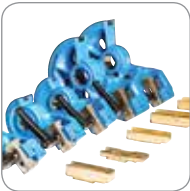
Spray Lubricant



Easy Part Layout Software



Roller Counterbending Die



Large Square Tooling

Tooling Kits [Page 21](#)

Tooling and
Accessories [Pages 22-29](#)

Model Comparison
Guide [Page 32](#)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

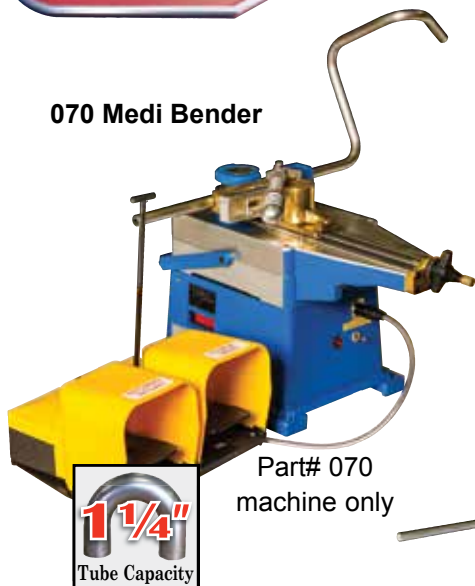
info@ercolina-usa.com



Benchtop Models

Tube & Pipe Bending Machines

070 Medi Bender



Part# 070
machine only

- Quick-change tooling system with multiple radii available
- Foot pedal control for hands-free operation
- Swing away counterbending die vise for easy material handling
- No hydraulic components

MB42B Bender



Part# MB42B
machine only

Tooling Kits [Page 21](#)

Tooling and
Accessories [Pages 22-29](#)

Application & Model
Selection Guide [Page 32](#)



Bending... Made Simple

070 FEATURES

- Portable machine ideal for fabricators and contractors with job site bending applications
- Rotary dial setting for bend angle and springback
- Ships with carrying case and tool kit
- Individual tooling available on pages 22-28

MB42B FEATURES

- Ideal for electricians and plumbers bending pipe, hydraulic tube, conduit, copper and other materials
- Touch screen programming of bend angle with system diagnostics in multiple languages
- Counterbending die position monitored electronically for accuracy and repeatability
- Single bending speed
- Individual tooling available on pages 22-28



Spray Lubricant



Tube & Pipe Tooling Kits

070 & MB42B Capacities & Specifications

070 Medi Bender	
Tube (Min.)	¼"
(Max.)	1¼" - .065 wall
Pipe (Max.)	1" Sch. 10
Centerline Radius (Min.)	2 x Ø
(Max.)	6⅞"
Degree of Bend	0-210°
Bending Speed	2.2 RPM
Programming	Rotary Dial with LED
Voltage	120V 1ph (220V available)
Length, Width, Height	10" x 13" x 18"
Weight	60 lbs.

Additional Savings when Purchasing Tooling Kit with Machine

Medi Bender 070 with Pipe Kit • Part# OK70
 MB42B with Pipe Kit • Part# MB42BP

Pipe Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
½"	1.8	.109	153R046P0500	155P0500
¾"	2.2	.113	153R056P0750	155P0750
1"	2.6	.133	153R067P1000	155P1000

Pipe Kit only Part# PIPEKIT3

Medi Bender 070 with Tube Kit Part# OK70T
 MB42B with Tube Kit Part# MB42BTSR

Tube Size	CLR	Min. Wall	Center Former Part #	Counterbend Die Part #
½"	1.4	.035	153R036T0500	154T0500
¾"	2.6	.035	153R067T0750	154T0750
1"	2.6	.065	153R067T1000	154T1000

Tube Kit only Part# TUBEKIT3

MB42B	
Tube (Min.)	¼"
(Max.)	1½"
Pipe (Max.)	1" Sch. 10
Centerline Radius (Min.)	2 x Ø
(Max.)	7½"
Degree of Bend	0-210°
Bending Speed	2 RPM
Programming	NC with Touchpad (30) programs (9) bends per program
Voltage	120V 1ph (220V 3ph available)
Length, Width, Height	25" x 15" x 21"
Weight	145 lbs.

All capacities based on A53 grade A 48,000 psi tensile materials; heavy wall and high tensile materials reduce machine capacity.
 Consult supplier for material specifications.



Ercolina Bending Application

Product Demonstrations Available on Website

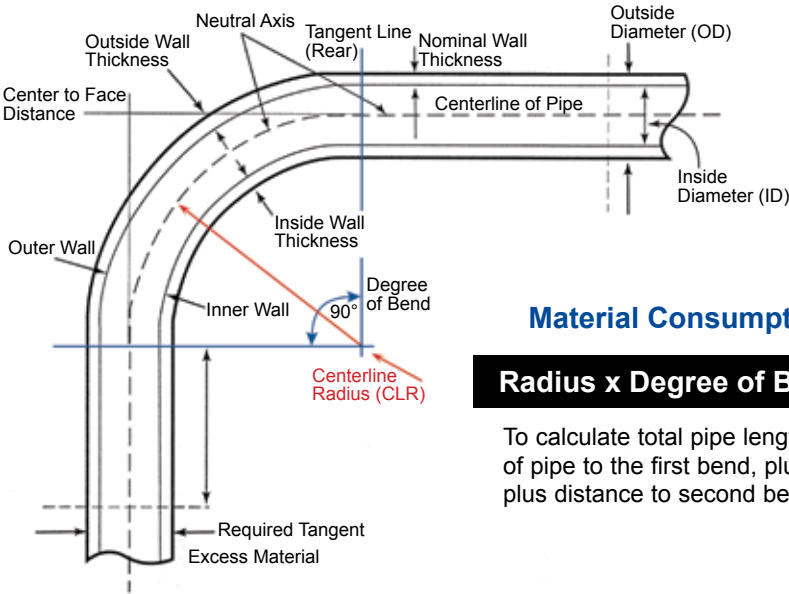
NEED ADDITIONAL HELP?
 CONTACT ERCOLINA:

563.391.7700

info@ercolina-usa.com



Bend Formula & Terminology



Material Consumption for Bend Angle

Radius x Degree of Bend x .0175 = Length

To calculate total pipe length, add distance from end of pipe to the first bend, plus first bend arc length, plus distance to second bend.

Rotary Draw Bend Reference Information

The following information should be used as a guideline only, exact material consumption may vary.

Material Required for Rotary Draw Bends in Pipe

Angle of Bend	Pipe Size and Centerline Radius					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
	1.8	2.2	2.6	3.5	3.9	5.9
	Material Consumption Guideline					
15	.47	.58	.68	.92	1.0	1.5
30	.97	1.1	1.3	1.8	2.0	3.1
45	1.4	1.7	2.0	2.7	3.0	4.6
60	1.8	2.3	2.7	3.6	4.0	6.2
75	2.3	2.8	3.4	4.5	5.1	7.7
90	2.8	3.4	4.0	5.5	6.1	9.3
120	3.7	4.6	5.4	7.3	8.1	12.4
140	4.4	5.3	6.3	8.5	9.5	14.5
160	5.0	6.1	7.2	9.7	10.8	16.5
180	5.6	6.9	8.1	11.0	12.2	18.6

Minimum Distance Between Bends for Standard Non-Mandrel Tooling

Inches	Former Radius	Min. Distance Between Bends
	Millimeters	
1.4	36	2.3
1.8	46	3.1
2.2	56	3.7
2.6	67	3.9
3.2	82	3.9
3.5	90	4.3
3.9	100	4.3
4.1	105	4.3
4.4	112	4.3
4.7	120	5.5
5.1	130	5.5
5.9	145	5.9
6.7	170	5.9
7.5	190	5.9
8.9	225	5.9
10.2	260	6.2
11.8	300	6.2

Consult factory for special tooling request.

Save with Pipe & Tube Tooling Kits

(Additional Savings when Purchased with Machine)

Description	Material Size	Centerline Radius - Inches -	Min. Wall	Center Former Part#	Counterbend Die Part#	Available with Ercolina machines
PIPEKIT1	½	1.8	.109	153R046P0500	155P0500	050PLUS TB60 030 Mega Bender
	¾	2.2	.113	153R056P0750	155P0750	
	1	2.6	.133	153R067P1000	155P1000	
	1¼	3.5	.140	153R090P1250	155P1250	
	1½	3.9	.145	153R100P1500	155P1500	
	2	5.9	.109	153R150P2000	155P2000	
PIPEKIT2	½	1.8	.109	153R046P0500	155P0500	SB48PLUS SB48
	¾	2.2	.113	153R056P0750	155P0750	
	1	2.6	.133	153R067P1000	155P1000	
	1¼	3.5	.140	153R090P1250	155P1250	
	1½	3.9	.145	153R100P1500	155P1500	
PIPEKIT3	½	1.8	.109	153R046P0500	155P0500	MB42B 070 Medi Bender
	¾	2.2	.113	153R056P0750	155P0750	
	1	2.6	.133	153R067P1000	155P1000	
Handrail Pipe Kit	1¼	3.5	.140	153R090P1250	155P1250	SB48PLUS, SB48 050PLUS, TB60 030 Mega Bender
	1½	3.9	.145	153R100P1500	155P1500	
PIPEKIT4	1¼	3.5	.140	153R090P1250	155P1250	TB100, TB130
	1½	3.9	.145	153R100P1500	155P1500	
	2	5.9	.109	153R150P2000	155P2000	
	2½	11.8	.203	157R300P2500-80	155P2500	
	3	11.8	.216	157R300P3000-80	155P3000	
Small Radius Tube Kit TUBEKIT1SR	¾	2.6	.035	153R067T0750	154T0750	050PLUS TB60 030 Mega Bender TB100, TB130
	⅞	2.2	.065	153R056T0875	154T0875	
	1	2.6	.065	153R067T1000	154T1000	
	1¼	3.2	.083	153R082T1250	154T1250	
	1½	3.9	.083	153R100T1500	154T1500	
	2	5.9	.095	153R150T2000	154T2000	
Small Radius Tube Kit TUBEKIT2SR	¾	2.6	.035	153R067T0750	154T0750	SB48PLUS SB48
	⅞	2.2	.065	153R056T0875	154T0875	
	1	2.6	.065	153R067T1000	154T1000	
	1¼	3.2	.083	153R082T1250	154T1250	
	1½	3.9	.083	153R100T1500	154T1500	
Large Radius Tube Kit TUBEKIT1	¾	2.6	.035	153R067T0750	154T0750	050PLUS TB60 030 Mega Bender TB100, TB130
	⅞	2.6	.035	153R067T0875	154T0875	
	1	3.2	.035	153R082T1000	154T1000	
	1¼	4.4	.035	153R112T1250	154T1250	
	1½	5.9	.049	153R150T1500	154T1500	
	1¾	6.7	.065	153R170T1750	154T1750	
	2	7.5	.065	153R190T2000	154T2000	
Large Radius Tube Kit TUBEKIT2	¾	2.6	.035	153R067T0750	154T0750	SB48PLUS SB48
	⅞	2.6	.035	153R067T0875	154T0875	
	1	3.2	.035	153R082T1000	154T1000	
	1¼	4.4	.035	153R112T1250	154T1250	
	1½	5.9	.049	153R150T1500	154T1500	
	1¾	6.7	.065	153R170T1750	154T1750	
TUBEKIT3	½	1.4	.035	153R036T0500	154T0500	MB42B 070 Medi Bender
	¾	2.6	.035	153R067T0750	154T0750	
	1	2.6	.065	153R067T1000	154T1000	

Refer to machine specifications for individual capacities.



Pipe Information



Pipe dimensions are based on I.D. of material (2" sch. 40 pipe measures 2.375" O.D.).

Commercial Pipe and Wall Thickness							
Nominal Size	O.D.	Schedule					XX Strong
		5	10	40	80	160	
1/4"	.540		.065	.088	.119		
3/8"	.675		.065	.091	.126		
1/2"	.840	.065	.083	.109	.147	.188	.294
3/4"	1.050	.065	.083	.113	.154	.219	.308
1"	1.315	.065	.109	.133	.179	.250	.358
1 1/4"	1.660	.065	.109	.140	.191	.250	.382
1 1/2"	1.900	.065	.109	.145	.200	.281	.400
2"	2.375	.065	.109	.154	.218	.343	.436
2 1/2"	2.875	.083	.120	.203	.276	.375	.552
3"	3.500	.083	.120	.216	.300	.438	.600
3 1/2"	4.000	.083	.120	.226	.318		.636
4"	4.500	.083	.120	.237	.337	.531	.674

Steel & Polymer Pipe Counterbending Dies

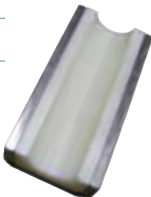
STEEL

Pipe Size	Outside Diameter	Counterbend Die Part#
3/8	.675	155AP0375
1/2	.840	155AP0500
3/4	1.050	155AP0750
1	1.315	155AP1000
1 1/4	1.660	155AP1250
1 1/2	1.900	155AP1500
2	2.375	155AP2000

Steel used for heavy wall or abrasive application.

POLYMER

Pipe Size	Outside Diameter	Counterbend Die Part#
3/8	.675	155NP0375
1/2	.840	155NP0500
3/4	1.050	155NP0750
1	1.315	155NP1000



Consult factory for tooling sizes not shown.

STEEL SUPPORT WITH REPLACEABLE POLYMER INSERT

1 1/4	1.660	155SP1250
1 1/2	1.900	155SP1500
2	2.375	155SP2000

Polymer recommended for materials with a polished finish such as stainless and aluminum.

REPLACEABLE POLYMER INSERTS

1 1/4	1.660	155P1250INS
1 1/2	1.900	155P1500INS
2	2.375	155P2000INS

Tooling for Pipe

Pipe Size	Outside Diameter	Wall Thickness Sch. / Inches	Minimum CLR Inches / Millimeter	Drive Diameter	Center Former Part#	Counterband Die Part#
¼"	.540	40 .088	1.4 36	↑	153R036P0250	155P0250
⅜"	.675	40 .091	1.4 36		153R036P0375	155P0375
		10 .065	2.2 56		153R056P0375	
½"	.840	40 .109	1.8 46		153R046P0500	155P0500
		10 .083	2.2 56		153R056P0500	
		5 .065	2.6 67		153R067P0500	
¾"	1.050	40 .113	2.2 56	40mm	153R056P0750	155P0750
		10 .083	2.6 67		153R067P0750	
		5 .065	3.2 82		153R082P0750	
1"	1.315	40 .133	2.6 67		153R067P1000	155P1000
		10 .109	3.2 82		153R082P1000	
		5 .065	4.4 112		153R112P1000	
1¼"	1.660	40 .140	3.5 90	↑	153R090P1250	155P1250
		40 .140	3.9 100		153R100P1250	
		10 .109	5.1 130		153R130P1250	
		5 .065	5.9 150		153R150P1250	
		5 .065	7.5 190		153R190P1250	
1½"	1.900	40 .145	3.9 100	50mm	153R100P1500	155P1500
		40 .145	5.1 130		153R130P1500	
		40 .145	5.9 150		153R150P1500	
		10 .109	6.7 170		153R170P1500	
		5 .065	7.5 190		153R190P1500	
2"	2.375	40 .154	5.1 130	↓	153R130P2000	155P2000
		10 .109	5.9 150		153R150P2000	
		5 .065	7.5 190		153R190P2000	
		5 .065	8.9 225		157R225P2000	
		5 .065	10.2 260		157R260P2000	
		5 .065	11.8 300		157R300P2000	
2"	2.375	5 .065	10.2 260	80mm	157R260P2000-80	155P2000
		5 .065	11.8 300	80mm	157R300P2000-80	
2½"	2.875	40 .203	9.8 250	↑	157R250P2500*	155P2500
		10 .120	10.2 260	50mm	157R260P2500*	
		5 .083	11.8 300	↓	157R300P2500*	
2½"	2.875	40 .203	10.2 260	↑	157R260P2500-80	155P2500
			11.8 300	80mm	157R300P2500-80	
			13.8 350	↓	157R350P2500-80	
3"	3.500	40 .216	11.8 300	80mm	157R300P3000-80	155P3000
			13.8 350	110mm	157R300P300-110	
4"	4.500	40 .237	13.8 350	80mm	157R350P3000-80	152BP4000
				110mm	157R350P400-110	

80mm and 110mm drive diameters available for TB100 / TB130 / TB180

All standard Ercolina counterbending dies are provided in bronze.

*Part# 050E required when bending radii 225mm and larger. (Not required for TB100/TB130/TB180.)



- Continued on next page -

Tooling for Round Tube

- Continued from previous page -

Tube Size	Outside Diameter	Wall Thickness	Minimum CLR Inches / Millimeter		Drive Diameter	Center Former Part#	Counterbend Die Part#
1¾"	1.750	.065	6.7	170		153R170T1750	154T1750
		.035	7.5	190		156R190T1750	
1⅞"	1.875	.109	3.9	100		153R100T1875	154T1875
		.095	5.1	130		153R130T1875	
		.083	5.9	150		156R150T1875	
		.065	6.7	170		153R170T1875	
		.035	7.5	190		153R190T1875	
2"	2.000	.109	4.7	120		153R120T2000	154T2000
		.109	5.1	130		156R130T2000	
		.095	5.9	150		153R150T2000	
		.083	6.7	170		156R170T2000	
		.065	7.5	190		153R190T2000	
2⅛"	2.125	.134	4.7	120		153R120T2125	154T2125
		.109	5.1	130		153R130T2125	
		.083	5.9	150		153R150T2125	
		.083	6.7	170		156R170T2125	
		.065	7.5	190		153R190T2125	
2¼"	2.250	.109	5.1	130		153R130T2250	154T2250
		.095	5.9	150		153R150T2250	
		.083	6.7	170		156R170T2250	
		.083	7.5	190		153R190T2250	
2⅜"	2.375	.109	5.1	130		153R130T2375	154T2375
		.095	5.9	150		153R150T2375	
		.083	6.7	170		156R170T2375	
		.083	7.5	190		153R190T2375	
2½"	2.500	.083	8.9	225		157R225T2500*	154T2500
		.083	9.8	250		157R250T2500*	
		.065	10.2	260		157R260T2500*	
		.065	11.8	300		157R300T2500*	
3"	3.000	.156	9.8	250		157R250T3000*	154T3000
		.156	10.2	260		157R260T3000*	
		.120	11.8	300		157R300T3000*	
3"	3.000	.156	10.2	260		157R260T3000-80	154T3000
		.216	11.8	300		157R300T3000-80	
3¼"	3.250	.216	11.8	300	80mm	157R300T3250-80	152BT3250
3½"	3.500	.216	11.8	300		157R300P3000-80	155P3000
			13.8	350		157R350P3000-80	
4"	4.000	.216	13.8	350	110mm	157R350T400-110	152BT4000

80mm and 110mm drive diameters available for TB100 / TB130 / TB180

*Part# 050E required when bending radii 225mm and larger. (Not required for TB100/TB130/TB180.)



Round Tube Information

Minimum Achievable “Centerline Radius” with Standard Tooling

Tube Size	Wall Thickness							
	.035 20 Ga.	.049 18 Ga.	.065 16 Ga.	.083 14 Ga.	.095 13 Ga.	.109 12 Ga.	.120 11 Ga.	.134 10 Ga.
¼"	1.4	1.4	1.4	1.4	1.4	1.4	.78	.78
⅜"	1.4	1.4	.78	.78	.78	.78	.78	.78
½"	1.4	1.4	1	1	1	1	1	1
⅝"	1.8	1.8	1.8	1.4	1.4	1.4	1.4	1.4
¾"	2.6	2.6	2.6	1.8	1.8	1.8	1.8	1.8
⅞"	2.6	2.6	2.2	1.8	1.8	1.8	1.8	1.8
1"	3.2	3.2	2.6	2.2	2.2	2.2	2.2	2.2
1⅛"	3.2	3.2	3.2	2.6	2.2	2.2	2.2	2.2
1¼"	4.4	4.4	4.4	3.2	2.6	2.6	2.6	2.6
1⅜"	4.4	4.4	4.4	3.2	3.2	3.2	3.2	3.2
1½"	7.5	5.9	5.1	3.9	3.9	3.5	3.5	3.5
1⅝"	7.5	5.9	5.1	3.9	3.9	3.5	3.5	3.5
1¾"			6.7	6.7	5.1	3.9	3.9	3.9
1⅞"			7.5	5.9	5.1	3.9	3.9	3.9
2"			7.5	7.5	5.9	4.7	4.7	4.7
2⅛"			7.5	7.5	5.9	5.1	5.1	4.7
2¼"				7.5	5.9	5.1	5.1	5.1
2⅜"				7.5	5.9	5.1	5.1	5.1
2½"					11.8	10.2	9.8	
3"					11.8	10.2	9.8	



Tube dimensions are based on O.D. of material (2" tube measures 2.00" O.D.).

All standard Ercolina counterbending dies are provided in bronze.

*Polished tooling for round tube recommended for materials with a polished finish such as stainless and aluminum.

Optional polymer counterbending dies available on request. Consult factory for more information.

Steel & Polymer Tube Counterbending Dies

STEEL

Tube Size	Outside Diameter	Counterbend Die Part#
¾	.750	154AT0750
⅞	.875	154AT0875
1	1.000	154AT1000
1¼	1.250	154AT1250
1⅜	1.375	154AT1375
1½	1.500	154AT1500
1¾	1.750	154AT1750
1⅞	1.875	154AT1875
2	2.000	154AT2000
2¼	2.250	154AT2250
2½	2.500	154AT2500

STEEL SUPPORT WITH REPLACEABLE POLYMER INSERT

1½	1.500	154ST1500
2	2.000	154ST2000

Polymer recommended for materials with a polished finish such as stainless and aluminum.

POLYMER

Tube Size	Outside Diameter	Counterbend Die Part#
¾	.750	154NT0750
⅞	.875	154NT0875
1	1.000	154NT1000
1¼	1.250	154NT1250
1⅜	1.375	154NT1375
1½	1.500	154NT1500
1¾	1.750	154NT1750
1⅞	1.875	154NT1875
2	2.000	154NT2000

Consult factory for tooling sizes not shown.

REPLACEABLE POLYMER INSERT

1½	1.500	154ST1500INS
2	2.000	154ST2000INS



Rotary Draw Accessories



Spray Bending Lubricant

Part# 810

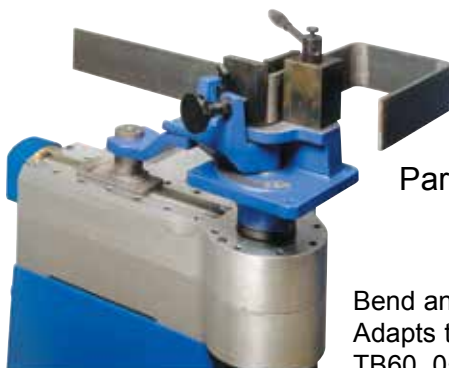
One (1) 12 oz. can

Part# 811

Case of Nine (9) 12 oz. cans



Profile Folding - Bending Attachment

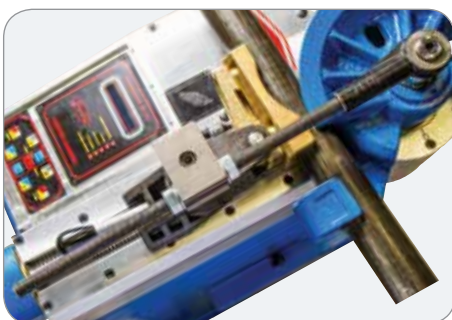


Part# 051

Material Capacities

Material	Maximum
Round solids	5/8"
Rectangular flat solids	3/16" x 4"
Solid square	5/8" x 5/8"
Angle Iron	2" x 5/16"

Bend and shape solid plate, bar stock and rod to tight radii. Adapts to Ercolina rotary draw benders: 030 Mega Bender, TB60, 050PLUS, SB48 and SB48PLUS.



Tie Bar Accessory

Part# 030TIEBAR

For use on 030 Mega Bender, TB60, 050PLUS, SB48 and SB48PLUS.

Tie bar accessory should always be used when bending heavy wall profiles and solid materials.

Roller Counterbending Dies



Part# 050I
from 3/8" to 2 3/8"

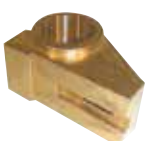
Part# 050J
from 2 1/2" to 3"

**MUST SPECIFY
MATERIAL DIAMETER
WHEN ORDERING**

Available for round and square profiles, roller dies are recommended when bending high tensile materials, solids and heavy wall profiles.

Note: Roller dies must be positioned a minimum of 2 1/2" from face of center former; failure to do so will cause machine damage. Not suitable for bends beyond 130°.

Counterbending Die Support

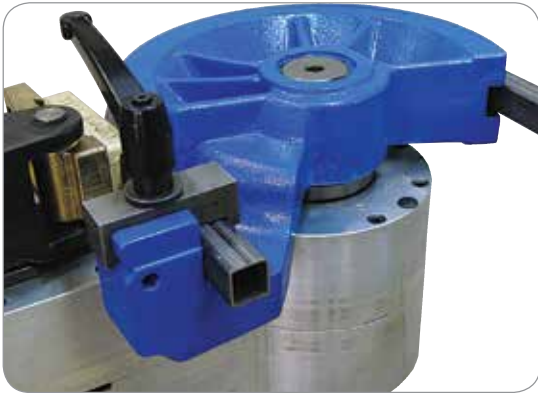


Part# 050E
(replaces standard vise)

Required when bending radii 225mm and larger.
(Not required for TB100/TB130/TB180.)



Tooling for Square Tube



Tube Size	Outside Diameter	Wall Thickness	Minimum CLR Inches / Millimeter		Drive Diameter	Center Former Part#	Counterbend Die Part#
½"	.500	.065	1.4	36	40mm	1582AR0360500	1591A0500
		.049	1.8	46		1582AR0460500	
¾"	.750	.120	1.8	46		1582AR0460750	1591A0750
		.065	2.6	67		1583AR0670750	
1"	1.000	.120	3.0	76	50mm	1583AR0761000	1591A1000
1"	1.000	.083	3.9	100		1585AR1001000	1591A1000
		.065	5.1	130		1587AR1301000	
		.049	5.9	150		1588AR1501000	
1¼"	1.250	.120	5.1	130		1587AR1301250	1591A1250
		.095	6.6	170		1589AR1701250	
1½"	1.500	.120	5.9	150	80mm	1588AR1501500	1591A1500
		.095	7.4	190		15810AR1901500	
2"	2.000	.120	5.9	150		1588AR1502000	1591A2000
		.095	7.4	190		15810AR1902000	
2½"	2.500	.125	11.8	300		15813AR30025-80	1591A2500
3"	3.000	.187	13.8	350	80mm	15814AR35030-80	1591A3000

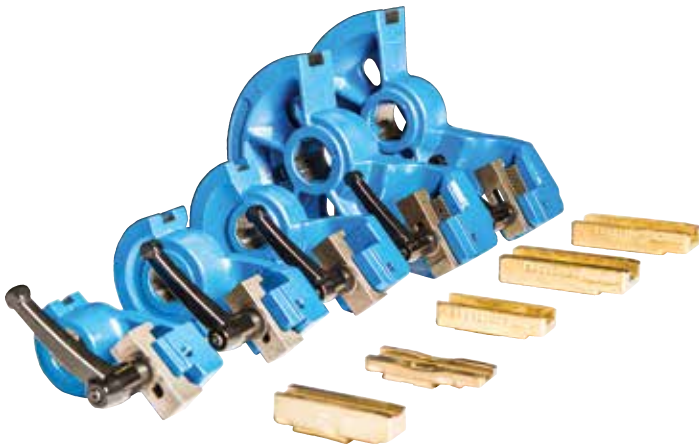
80mm drive diameter available for TB100 / TB130 / TB180



Large materials may slip slightly during bend cycle.

Consult factory for tooling sizes not shown.

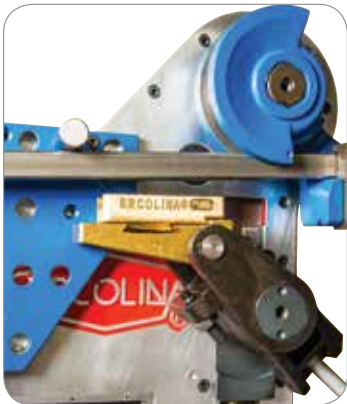
Tooling for Square Tube



Square Tube Tooling Kits

Description	Material Size	CLR -Inches-	Min. Wall	Center Former Part#	Counterbend Die Part#	Available with Ercolina machines
TUBEKITSQ1	½"	1.8	.049	1582AR0460500	1591A0500	SB48 PLUS SB48, 050 PLUS TB60 030 Mega Bender TB100, TB130
	¾"	2.6	.065	1583AR0670750	1591A0750	
	1"	3.0	.120	1583AR0761000	1591A1000	
	1¼"	5.1	.120	1587AR1301250	1591A1250	
	1½"	5.9	.120	1588AR1501500	1591A1500	
TUBEKITSQ2	½"	1.8	.049	1582AR0460500	1591A0500	SB48 PLUS SB48, 050PLUS TB60 030 Mega Bender TB100, TB130
	¾"	2.6	.065	1583AR0670750	1591A0750	
	1"	3.0	.120	1583AR0761000	1591A1000	
	1¼"	5.1	.120	1587AR1301250	1591A1250	
	1½"	5.9	.120	1588AR1501500	1591A1500	
	2"	5.9	.120	1588AR1502000	1591A2000	

Material Extraction Device for Square Tube



Part# **FP500P1**

Extractor plate assists in square material extraction for profiles, solid and hollow.

For use on 030 Mega Bender, TB60, 050PLUS, SB48PLUS and SB48 models.



A40/P Two Axis Positioner

**Ideal for repetitive parts
and left & right mirror images**

Part# **A40-P**

Accommodates parts
to 10' length



Capacities & Specifications

Height	43"
Length	110"
Width	32"
Material Capacity	$\frac{1}{2}" - 2\frac{3}{8}"$
Through Spindle (Max.)	1" O.D.
Chuck Rotation	360°
Weight	180 lbs.

**Consistency
Repeatability
Increased Profitability**

FEATURES

- Manually controls accurate linear (Y) advancement and rotational (B) plane of bend
- Reduces operating handling and labor costs
- Helps eliminates unnecessary material scrap
- Previous layout and design experience not required
- Adapts to Ercolina 030 Mega Bender, TB60, 050PLUS, SB48 and SB48Plus machines
- Pneumatic work holding chuck secures material and rotates 0-360°
- Chuck activation valve conveniently positioned near operator and machine controls
- Includes: four (4) sets of chuck jaws for material $\frac{1}{2}"$ to $2\frac{3}{8}"$, six (6) adjustable linear and rotary stops
- Optional digital readout of linear and rotational bends

Note: **Positioner not intended for solid profiles**

Bending Software

Quickly layout and produce drawings for bending applications!

Ideal for use with A40-P two axis positioner.



Part# BENSX-SUPER

Reduce layout cost

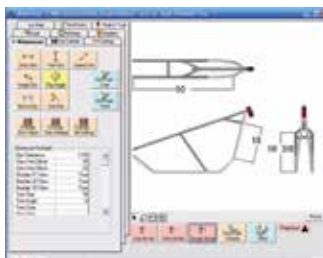
FEATURES

- Eliminate unnecessary material scrap
- Previous layout and design experience not required
- Mouse pick points allow dimension placement
- Dimension with decimals or fractions
- Save part program files for later use
- Information material data base included
- CLR or inside radius (adjustable for each bend)
- Create printable dimensioned model, shaded model, flat layout & title block
- Flat layout of cut length & bending locations
- Can be dimensioned from start of bend, end of bend & center of bend, or either direction
- Provides springback bend angle
- Print includes bending data such as bend angles, CLR or inside radius, rotation angle & bend order
- Preferences: color, text size & arrow size are saved in user definable data bases
- Verifies sufficient material is available for bending process
- Extra checking tools provided to verify part validity
- Allows multiple dies to be used on the same part
- Graphical layout interface provided

- Advanced LRA "Length, Rotation & Angle" design interface
- Powerful reverse engineering feature
- Inch to metric conversion
- CD-ROM Windows XP or higher required

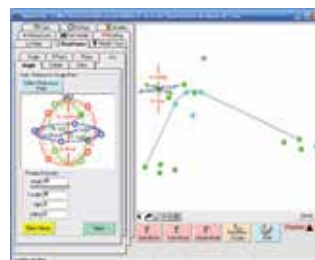
MODULES INCLUDED:

- **LRA Module:** transfers any part into XYZ data when entering LRA information into Custom Part interface; XYZ data available
- **Railing Module:** includes hand railing template and a chord window for large radius bending
- **Import Module:** Cad Import/Export Module allows .dxf and .dwg 3D files to be imported and will export files via .dxf
- **Estimating Module:** Helps define project cost



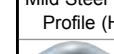
Assembly Drawing

XYZ



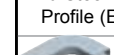
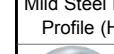


GENERAL PRODUCTION MODELS

Profile Description	SB48Plus & SB48	050PLUS	TB60	030 Mega Bender
 Mild Steel Pipe	1½" Sch. 40	2" Sch. 40	2" Sch. 40	2½" Sch. 10
 Stainless Steel Pipe	1¼" Sch. 10	1½" Sch. 40	1½" Sch. 40	2" Sch. 10
 Mild Steel Square Profile	1½" x 1½" x ⅛"	2" x 2" x ⅛"	2" x 2" x ⅛"	2" x 2" x ⅛"
 Mild Steel Rectangular Profile (Easy Way)	¾" x 1½" x .120"	1" x 2" x .120"	1" x 2" x .120"	1¼" x 2" x .120"
 Mild Steel Rectangular Profile (Hard Way)	1½" x ¾" x .120"	2" x 1" x .120"	2" x 1" x .120"	2½" x 1" x .120"
 Mild Steel Solid Rod	1⅛"	1¼"	1¼"	1½"

HEAVY-DUTY
INDUSTRIAL MODELS

PORTABLE MODELS

Profile Description	TB100	TB130	TB180	070	MB42B
 Mild Steel Pipe	3" Sch. 40	4" Sch. 40	6" Sch. 10	1" Sch. 10	1" Sch. 40
 Stainless Steel Pipe	2½" Sch. 40	3" Sch. 80	4" Sch. 80	¾" Sch. 10	1" Sch. 10
 Mild Steel Square Profile	3½" x 3½" x ⅛"	4" x 4" x ⅛"	4" x 4" x ¼"	¾" x ¾" x ⅛"	1¼" x 1¼" x ⅛"
 Mild Steel Rectangular Profile (Easy Way)	2" x 4" x .187"	2" x 4" x .250"	2" x 4" x .250"	½" x ¾" x .120"	¾" x 1¼" x .120"
 Mild Steel Rectangular Profile (Hard Way)	4" x 2" x .120"	4" x 2" x .187"	4" x 2" x .250"	¾" x ½" x .120"	1¼" x ¾" x .120"
 Mild Steel Solid Rod	2"	2½"	3"	¾"	1"

All capacities based on A53 grade A 48,000 psi tensile materials;
heavy wall and high tensile materials reduce machine capacity.

Consult supplier for material specifications.

NC & CNC MANDREL BENDERS

MANDREL BENDERS





030 Mandrel Bender

Semi-Automatic Rotary Draw Mandrel Bender



Patented hydraulic finger (FST) clamp system minimizes distance between bends.



Mega Bender 030-A3/H76

(10' table displayed – 5' table not available with base enclosure)



Operator-friendly control pad. Step-by-step programming with multi-language capability.

Prototype or Small Production Applications

FEATURES

- Variable bending speed
- Ideal for bending handrail, thin wall mild steel, stainless steel, bend grade aluminum and other materials
- Programmable bend sequencing and mandrel retraction
- Independent clamp and pressure die adjustment
- Reinforced tool mounting shaft with heavy duty swing arm for maximum rigidity
- Micrometer wiper die adjustment
- Secondary hydraulic pressure die stabilization system
- Quick-change tooling reduces setup time
- Tables available in 5', 10' or 20' lengths; standard with pneumatic material clamping and DRO system for linear and rotational positioning
- Bending software available for part layout guideline
- Base machine converts to accept Ercolina non-mandrel tooling
- Reference display of Y & B axis to assist set-up
- Y - Feeding manual with adjustable stops
- B - Feeding manual with adjustable stops
- C - NC programmable bend angle

030 Mandrel Capacities & Specifications

Max. Tube Capacity – Mild Steel	2½" (.083 wall)
Stainless	2½" (.065 wall)
Square Tube	2" (.065 wall)
Max. Pipe Capacity	1½" Sch. 40
Max. Bending Radius	7⅞"
Min. Bending Radius	1.5 x Ø
Max. Shaft Rotation	210°
Max. Bending Angle	180°
Max. Tailstock Capacity	2⅜"
Max. Material Length – 5' table	59"
10' table	118"
20' table	240"
Mandrel Table (available in 5'-10'-20' lengths)	165"
Number of Programs	(30) Standard
Precision of Bend Angle	+/- 1°
3ph Motor	220V or 480V
Dimensions (Height x Width x Length)	44" x 32" x 83"-260"
Weight	1,600 lbs.

Contact CML USA for complete technical specifications.

All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.



Mega Bender 030 with Mandrel System

Part#	Description
030-A15/H76	Mega Bender 030 with 5' table*
030-A3/H76	Mega Bender 030 with 10' table*
030-A6/H76	Mega Bender 030 with 20' table*
A15/H76	(5') mandrel table only
A3/H76	(10') mandrel table only
A6/H76	(20') mandrel table only

*5' table does not have base enclosure; 10' and 20' tables have base enclosure.



◀ Ercolina Bending Application

Product
Demonstrations
Available on Website

NEED ADDITIONAL HELP?
CONTACT ERCOLINA:

563.391.7700

info@ercolinacnc.com



TM76 Mandrel Bender

Semi-Automatic Rotary Draw Mandrel Bender



Touch screen display mounted to tailstock synchronizes with main control display.



Patented finger style (FST) clamping system minimizes clamping area.



Independent clamp and pressure die adjustments.

Ideal for Prototype or Daily Production

FEATURES

- Control offers easy access to manual and auto operating modes, system diagnostics and multiple languages
- USB for unlimited storage of bend programs, material library and job information
- Touch screen displays absolute (ABS) or incremental (INC) positioning with inch or metric readout
- Programmable C axis with manual Y and B positioning
- Variable bending speed to 4 RPM with overload protection
- Programmable bend angle 0 to 180°
- Individual material springback setting for every bend angle
- Anticipated mandrel retraction, clamping, pressure die and boost die movements
- Pressure die with auto recapture minimizes distance between bends
- Heavy duty tailstock carriage with hydraulic clamping of work piece
- Tailstock Y and B position display resets to zero after each bend for easy setup while maintaining absolute position

TM76 Capacities & Specifications

Max. Tube Capacity – Mild Steel	3" (.083 wall)
Stainless	3" (.065 wall)
Square Tube	2½" (.065 wall)
Max. Pipe Capacity	2" Sch. 40
Max. Bending Radius	10"
Min. Bending Radius	1.5 x Ø
Max. Shaft Rotation	210°
Max. Bending Angle	180°
Max. Tailstock Capacity	3"
Max. Tailstock Through Capacity	2⅝"
Max. Material Length – 10' table	113"
20' table	231"
Program Storage	Unlimited with USB
Precision of Bend Angle	+/- .1°
3ph Motor	220V or 480V
Dimensions (Height x Width x Length)	61" x 36" x 168" or 286"
Weight (10' / 20')	3,300 lbs. / 3,800 lbs.

Contact CML USA for complete technical specifications.

All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.



- Bending head adjusts horizontally to maintain centerline radius of former allowing table to remain stationary
- Patented finger style (FST) clamping system minimizes distance between bends
- Hand-held remote control certified class three safety
- Direct drive electro-mechanical bending axis
- Precision encoders on all axes for greater repeatability
- Heavy one-piece steel structure improves rigidity and minimizes vibration
- Externally mounted gauges for adjustment of system and clamping pressure
- Accepts standard 030 mandrel tooling
- Electrical components UL, CSA and CE approved
- Programmable internal lubrication available
- Y - Feeding manual with adjustable stops
- B - Feeding manual with adjustable stops
- C - NC programmable bend angle



ERCOLINA® HANDRAIL FABRICATION SYSTEM

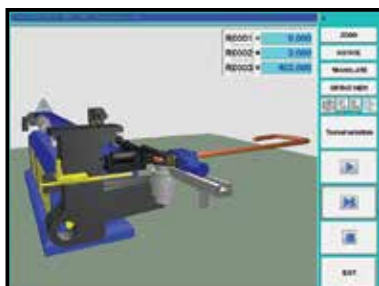
Ercolina's handrail professional series package includes:

- ☒ Erco76 three axis CNC automatic bending machine
- ☒ 1-1/4" pipe schedule 40 set complete
- ☒ 1-1/2" pipe schedule 40 set complete
- ☒ 1-1/2" tube for .120 wall set complete
- ☒ Auto mandrel lubrication pump
- ☒ Bendtech software for external computer
- ☒ Machine training onsite



- Produce handrail to design in minutes
- Dramatically reduce operator handling and shop labor cost
- Improve quality to your customers providing mandrel quality bends in steel, stainless and aluminum
- Eliminate additional cost of weld elbows, material waste, weld, grind and finish operations
- Control your production time and process
- Quickly store and recall previous handrail programs
- Ercolina's tool set data files maintain machine start position enabling the operator to quickly change to the next job
- CNC control imports engineering files from CAD style software, or create your own data with included Bend-Tech software
- Professional on-site machine training included

Interactive Touch Screen Control



GRAPHIC SIMULATION



PART LAYOUT



TOUCH SCREEN PROGRAMMING



MAIN SCREEN



BEND ANGLE & SPRINGBACK



STORE ALL TOOL SET INFORMATION



STORE MATERIAL INFORMATION

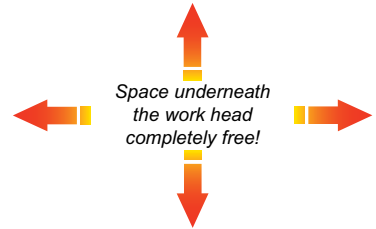
Interactive CNC Control Available on these Models:

- ▶ Erco Bender 65
- ▶ Erco Bender 76
- ▶ GB90 Giga Bender
- ▶ GB100 Giga Bender
- ▶ GB130 Giga Bender
- ▶ GB180 Giga Bender
- ▶ GB200 Giga Bender



EB65 & EB76 Erco Bender

Automatic 3 Axis Mandrel Machines



Y & B Servo
Positioning



Fully Automatic – Cost Effective

FEATURES

- Extended bending head capable of bending complex shapes and profiles
- Automatic or manual bend sequencing
- Independent pressure and clamp die adjustment
- Programmable carriage movement for tight radii
- Interactive touch screen with auto and manual operating modes, system diagnostics and multiple language capability
- Standard right hand bending direction
- Programmable material springback settings for each bend angle
- Programmable auto mandrel positioning allows operator to optimize extraction for improved bend quality
- Programmable tail stock interference zone monitors position and eliminates workhead collision
- USB for unlimited program memory storage and communication
- Hand-held remote bending control, certified class 3 safety and all electrical components UL, CSA and CE approved
- Graphic bend simulation software included

EB65 & EB76 Capacities & Specifications

Model	EB65	EB76
Max. Tube Capacity – Mild Steel	2½" (.083 wall)	3" (.083 wall)
Stainless	2½" (.065 wall)	3" (.065 wall)
Square Tube		2" (.065 wall)
Max. Pipe Capacity	1½" Sch. 40	2" Sch. 40
Max. Bending Radius	9.8"	11.8"
Min. Bending Radius	1.5 x Ø	1.5 x Ø
Max. Shaft Rotation	210°	210°
Max. Bending Angle	185°	185°
Max. Tailstock Capacity	2½"	3"
Interactive Touch Screen Control	10" color screen	10" color screen
Max. Material Length – Standard table	13'	13'
Optional table	21'	21'
Minimum Underhead Swing Clearance	12"	12"
Length of Bending Head	59"	59"
Nominal Hydraulic Pressure	150 bar	150 bar
Maximum Carriage Travel	125"	125"
Number of Programs	Unlimited with USB	Unlimited with USB
Precision of Bend Angle	+/- .5°	+/- .5°
Bending Speed	Programmable	Programmable
Motor 480V 3ph at 50/60 Hz		
Dimensions (Height x Width x Length)	52" x 44" x 205"	52" x 44" x 205"
Weight	7,200 lbs.	7,400 lbs.

Contact CML USA for complete technical specifications.

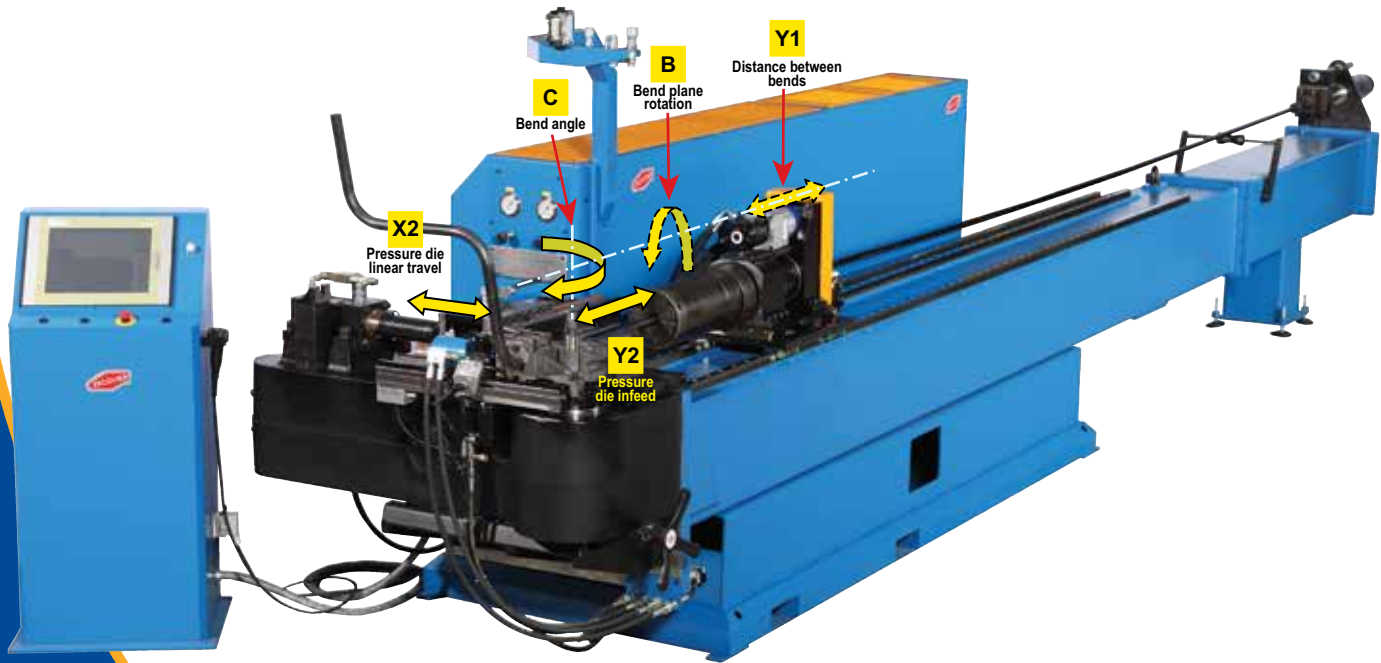
All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.

- Programmable internal mandrel lubrication (3 settings)
- High capacity with auxiliary hydraulic oil cooling
- Quick-change tooling system
- Standard 13' table, extension available
- Tail stock with through spindle accepts longer material
- Displays absolute (ABS) or incremental (INC) positioning with inch or metric readout
- Accepts YBC and XYZ input values
- Y - Feeding Electric Servo
- B - Rotation Electric Servo
- C - Bending Hydraulic CNC



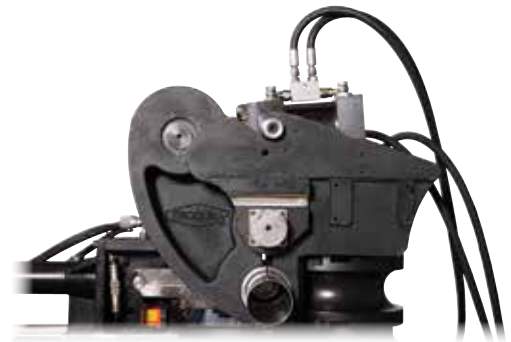
GB90/GB100 CNC Giga Bender

CNC Mandrel Machines
(NC Models Available)



Giga Bender 90SCNC

GB90 standard hydraulic ports accept Ercolina patented (KST) clam shell or (FST) finger clamp systems



GB100 standard hydraulic ports accept Ercolina patented (KST) clam shell clamp systems

Heavy Steel Structure Provides Rigid Platform and Minimizes Vibration

FEATURES

- PLC touch screen offers easy access to auto and manual operating modes, system diagnostics and multiple language capability
- Ideal for industrial bending of tube, pipe, square and rectangular profiles to center line radius as small as 1.5D
- Programmable bend angles with independent material springback setting for each bend
- Programmable auto mandrel positioning allows operator to optimize extraction for improved bend quality
- Adjustable clamping, pressure die and boost movements with manual override
- Digital encoders on each axis
- Programmable tail stock interference zone monitors position and avoids workhead collision
- Large capacity hydraulic reservoir with automatic cooling system
- GB90 standard hydraulic ports accept Ercolina patented (KST) clam shell or (FST) finger clamp systems

GB90/GB100 CNC Capacities & Specifications

Model	Giga Bender 90SCNC	Giga Bender 100SCNC
Max. Tube Capacity – Mild Steel	3½" (.187 wall)	4¾" (.187 wall)
Stainless	3" (.150 wall)	4¾" (.150 wall)
Square Tube	3½" (.138 wall)	4" (.138 wall)
Min. Tube Capacity	½"	1"
Max. Pipe Capacity – A36	2½" Sch. 40	3" Sch. 40
Max. Bending Radius	12"	16"
Min. Bending Radius	1.5 x Ø	1.5 x Ø
Max. Material Length – Standard table	13'	13'
Optional table	20'	20'
Hydraulic Clamping (specify when ordering)	(FST) Finger or (KST) Clam Shell	(KST) Clam Shell
(C Axis) Rotation / Bend Angle	CCW / 0° to 180°	CCW / 0° to 180°
(B Axis) Bend Plane Rotation (Y1 Axis) Distance Between Bends	Auto positioning with digital display	
(X2) Pressure Die Linear Travel (Y2) Pressure Die In-feed	Programmable with digital readout	
Program Storage	Unlimited with USB	Unlimited with USB
Hydraulic Reservoir	40 gal.	40 gal.
Motor (horse power @ 480V)	30	30
Dimensions (Height x Width x Length)	55" x 51" x 298"	55" x 51" x 298"
Weight (Dry)	6,800 lbs.	7,200 lbs.

Contact CML USA for complete technical specifications.
 All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.

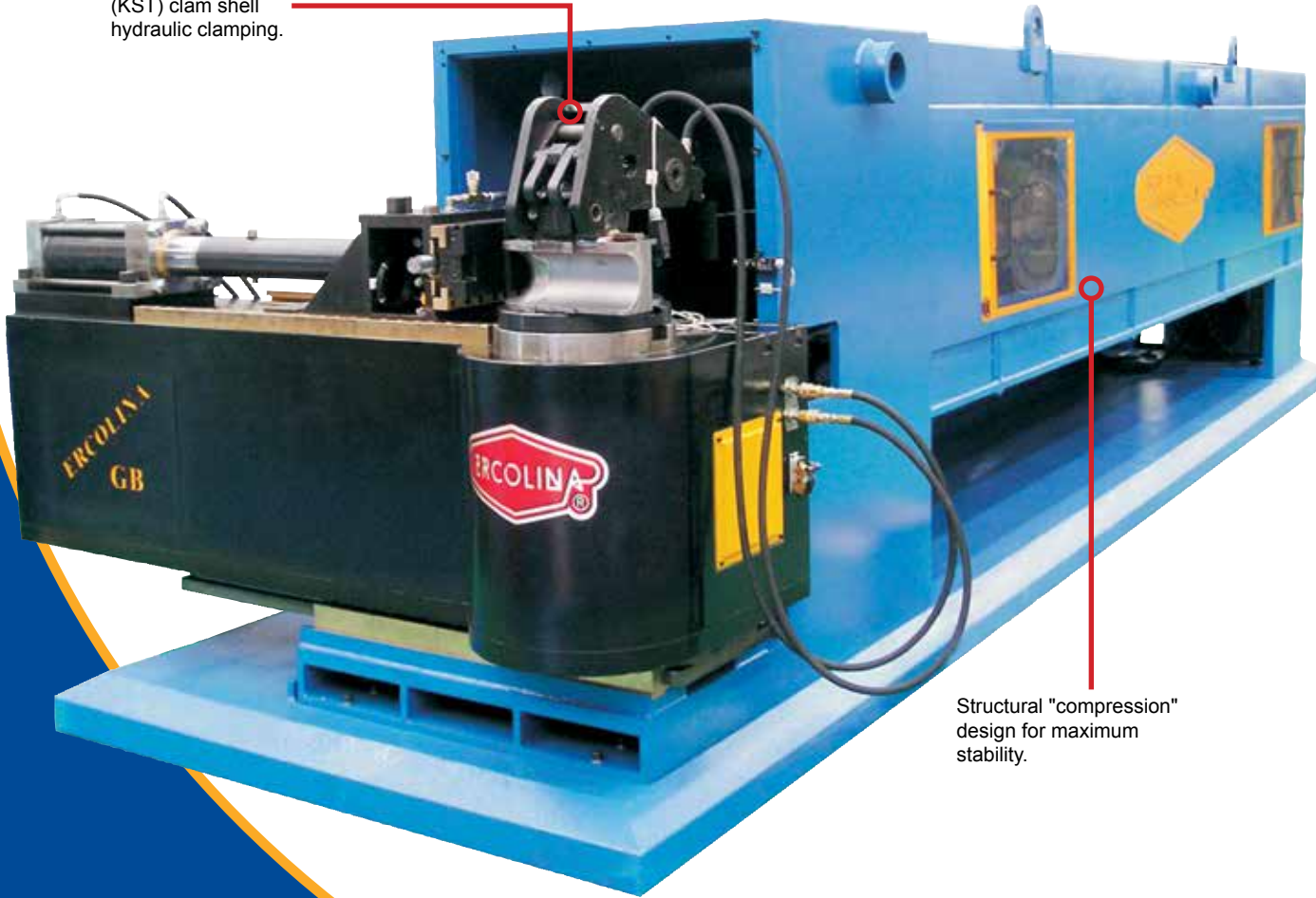
- GB100 standard hydraulic ports accept Ercolina patented (KST) clam shell clamp systems
 - Hand-held remote bending control, certified class 3 safety electrical components UL, CSA and CE approved
 - Standard programmable internal mandrel lubrication
 - Super Bend-Tech SE for Ercolina software included
 - Accepts YBC and XYZ input values
- Y - Feeding Hydraulic
 - B - Feeding Hydraulic
 - C - Bending Hydraulic CNC



GB130/GB180/GB200 Giga Bender

Fully Automated CNC Mandrel Machines

Ercolina's patented (KST) clam shell hydraulic clamping.



Structural "compression" design for maximum stability.

Giga Bender 180CNC

Heavy Steel Structure Provides Rigid Platform and Minimizes Vibration

FEATURES

- Interactive PLC touch screen offers easy access to auto and manual operating modes, system diagnostics and multiple language capability
- Programmable bend angles with independent material springback setting for each bend
- Programmable auto mandrel positioning allows operator to optimize extraction for improved bend quality
- Programmable clamping, pressure die and boost movements with manual override
- Precision encoders on each axis
- Programmable tail stock interference zone monitors position and eliminates workhead collision
- High capacity hydraulic reservoir with automatic cooling system
- Hand-held remote bending control, certified class 3 safety and all electrical components UL, CSA and CE approved
- Standard programmable internal mandrel lubrication

GB130/GB180/GB200 Capacities & Specifications

Model	Giga Bender 130	Giga Bender 180	Giga Bender 200
Max. Tube Capacity – Mild Steel	5" (.196 wall)	6½" (.187 wall)	Information
Stainless	5" (.150 wall)	6" (.187 wall)	upon
Square Tube	4" (.160 wall)	4" (.187 wall)	request
Min. Tube Capacity	1½"	1½"	
Max. Pipe Capacity	4" Sch. 40	5" Sch. 40	
Max. Bending Radius	18"	20"	
Min. Bending Radius	3.125"	4.7"	
Max. Tube Inside Carriage	5"	6½"	
Max. Length Through Carriage	236"	236"	
Max. Length in Carriage	177"	177"	
Interactive Control	10" touch screen color	10" touch screen color	
Number of Programs	Unlimited w/USB	Unlimited w/USB	
Bend Direction	CCW	CCW	
"Y" Axis Speed (ft/min)	164	118	
"B" Rotation Speed (RPM)	30	20	
"C" Bend Speed (RPM)	2	.6	
Repeatability "Y" Axis	± .2mm	± .2mm	
"C" Axis	± .5mm	± .5mm	
Motor (horse power @ 480V)	47	47	
Dimensions (Height x Width x Length)	71" x 75" x 319"	77" x 91" x 339"	
Weight (Dry)	18,000 lbs.	30,000 lbs.	

Contact CML USA for complete technical specifications.

All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.

- Super Bend-Tech SE for Ercolina software included
- Accepts YBC and XYZ input values
- Y - Feeding Hydraulic
- B - Feeding Hydraulic
- C - Bending Hydraulic CNC



Mandrel Tooling Information

Ercolina mandrel systems incorporate five (5) individual tooling components to effectively support the profile during bending process. These components; **Center former**, **pressure die**, **clamp die**, **wiper die** and **flexible mandrel** are specific to material type and dimension.

The following must be supplied when ordering mandrel tooling:

Profile shape, interior and exterior dimensions, wall thickness, material type, minimum distance between bends and number of bends per day required. It is highly recommended dimensional drawings of finished product be supplied with mandrel tooling orders. All mandrel tooling is special order and requires **non refundable** advanced payment.

When is a Mandrel Necessary?

When a tube is bent the outside wall collapses and thins out, and the inside compresses. When bending thin thin wall tube to tight radius a mandrel and wiper die are necessary. Use of a mandrel minimizes the amount of ovality occurring during bending.

COMPONENTS OF MANDREL BENDING



Center Former/Bend Die: The primary tool which determines bend radius. Manufactured from tool steel or alloy steel and heat treated depending on requirements. Clamp face is serrated to assist grip strength.



Clamp Die: Matches center former clamp surface. The clamp die's primary function is to hold tube securely to the center former.



Pressure Die: Maintains constant pressure on tube at tangent where the bend occurs, providing reactionary force to make the bend. Length of the pressure die depends on the degree of bend (DOB) of part being bent and the machine design.



Wiper Die: Manufactured to match center former radius. Mounts into the groove of the center former with tip positioned near tangent point of bend. Primary function is to prevent wrinkling on the inside radius of the tube. Wiper dies are typically manufactured from AMPCO® bronze.



Mandrels: Generally made from the same material as the wiper die. Primary function of the mandrel is to prevent inside diameter of the tube from collapsing. Choosing the correct mandrel is very important in determining the quality of bend. Three basic styles of mandrels are:

1. **Plug mandrel** used for heavier walled tube or large CLR bending.
2. **Standard open pitch mandrel** is most widely used because it covers the widest range of bending applications. Standard mandrels are made with one to three balls. Open pitch mandrel is the most durable of the three flexible mandrel configurations because it uses the largest size links possible.
3. **Thin wall mandrel (close pitch mandrel)** used mostly for thin wall tubing. Thin wall style mandrels use the same style linkage as standard mandrels except the link size is the next size smaller than it would be on a standard mandrel. For example, where a standard style mandrel would use a #10 size link, a thin wall style mandrel would use a #9 size link. The ball segments are now closer together and provide more support needed for thin walled tube bending. Strength is sacrificed for more support.



2" Stainless Steel
.065wall – 3" CLR
Cutaway to show mandrel



Collet: The collet is mounted in the tailstock of machine and holds material securely in carriage. Collets are size-specific and must match the tooling mounted on machine.

Lubrication: Comes in several different forms such as oil, grease, and paste. The kind of lubrication used will depend on material to be bent. A generous amount of lubrication may be applied to mandrel and

inside of tube, however precautions should be taken to avoid getting lubrication on center former and clamp die. Proper lubrication is important to making good bends.



Model Comparison Guide

Model	030 Mandrel Bender	TM76	Erco Bender 76	GB Series CNC or NC
OPERATOR CONTROL				
LCD with PLC touchpad	✓			
Touch screen		✓		
Color touch screen			✓	✓
Independent control of Clamp, Mandrel Functions	✓			
Manual override control of Clamp, Pressure Die, Boost, Mandrel, Clamp release function		✓	✓	✓
Inch or Metric display	✓			
Inch and Metric programming and display		✓	✓	✓
Manual or Semi Auto mode	✓	✓		
Manual, Semi Auto and Auto modes			✓	✓
PROGRAMMING				
(30) programs - up to (9) bend angle and springback settings per program	✓			
Unlimited program storage with USB		✓	✓	✓
BENDING SOFTWARE				
Bend-Tech for Ercolina designs part creates print with complete bend dimensions. Can manually output to XYZ values.	✓	✓	✓	✓
MACHINE DESIGN				
C axis electro mechanical operation with gear reduction. Main frame aluminum case.	✓			
C axis electro mechanical operation with planetary reduction. Main frame GS500 cast steel case.		✓		
C axis hydraulic operation with rack and pinion. Main frame GS500 cast steel case.			✓	
C axis chain driven hydraulic operation. Main frame GS500 cast steel case.				✓
Analog encoders for C axis, Counter Die Axis display position on control. LED on table to monitor length and rotation from original bend plane (YB).	✓			
Digital encoders for three axis with digital display of absolute or incremental position on touch screen.		✓	✓	✓
Tailstock pneumatic clamping with four interchangeable jaw sets. 2½" capacity.	✓			
Tailstock hydraulic clamping with segment collet. 2" through spindle capacity, 3" material capacity with collet.		✓		
Tailstock hydraulic clamping with segment collet. 2½" through spindle capacity, 3" material capacity with collet.			✓	
Tailstock hydraulic clamping with segment collet. Large through spindle capacity, Material capacity to 8" pipe dependent on model.				✓
Programmable mandrel extraction	✓	✓	✓	✓

Factory on-site training available.

Contact CML USA for complete technical specifications.

All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.

ANGLE ROLLS SECTION BENDERS

ANGLE ROLL - SECTION BENDERS





CE35 Angle Roll

Manual Angle Roll • Section Bender



Universal Tooling Set Included for Multiple Profiles



1 1/2"
Sch. 40
Pipe Capacity

1 Year
Limited
WARRANTY

Vertical or Horizontal
Operating Position



Convenient Single Phase Power

FEATURES

- 40mm roll shaft diameter
- Universal tooling set included with each machine
- Forged roll shafts precision ground and fitted for maximum performance and minimal deflection
- Heavy duty structure and rigid components for high section modulus ratings
- Reinforced engineered mainframe design proven to outperform competitive models
- Heavy duty gearbox drives lower roll shafts
- Threaded roll shafts with micrometric flange adjustment helps eliminate spacer usage
- Control tower with foot pedal operation of roll movement
- Optional anti-twist correction system required for angle iron "Leg In" applications

CE35 Capacities & Specifications

Pipe (Max.)	1½" Sch. 40
Angle (Max.)	1½" x 1½" x ¼"
Tube (Max.)	2" – .156 wall
Roll Shaft Diameter	40mm
Center Roll Positioning	Manual
Degree of Bend	0-210°
Shaft Speed	6 or 12 RPM
Universal Tooling (Included)	6⅝" O.D.
Programming	Not available
Distance between Shafts	11⅜"
Operating Voltage	220V 1ph
Length, Width, Height	27½" x 25½" x 59"
Weight	480 lbs.

All capacities based on mild grade materials;
heavy wall and high tensile materials reduce machine capacity.

POPULAR ACCESSORIES



Spray Lubricant



Pipe & Tube Tooling



Anti-Twist Device



Small Radius Tooling



Radius & Degree Measuring Kit

Tooling Sets [Page 60-62](#)

Tooling and
Accessories [Pages 62-64](#)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com

ercolina-usa.com

51



CE40 Angle Roll

Manual or Hydraulic Angle Roll • Section Bender



Fabricators Favorite



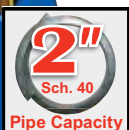
Hydraulic center roll positioning



Universal Tooling Set Included for Multiple Profiles



Manual center roll positioning



Vertical or Horizontal Operating Position

Manual or Hydraulic Models Available

FEATURES

- Universal tooling set included with each machine
- Forged roll shafts precision ground and fitted for maximum performance and minimal deflection
- Heavy duty structure and rigid components for high section modulus ratings
- Reinforced engineered mainframe design proven to outperform competitive models
- In-line direct drive roll shaft system
- Threaded roll shafts with micrometric flange adjustment helps eliminate spacer usage
- Touchpad controls with digital center roll positioning
- Control tower with low voltage controls and foot pedal
- CE40H3 hydraulic machine with memory storage has eight (8) individual programs and unlimited passes
- Patented by Ercolina, simultaneous downfeed and roll movement minimizes deformation on CE40H3
- Optional anti-twist correction system required for angle iron "Leg In" applications

CE40 Capacities & Specifications

Model	Manual CE40MR3	Hydraulic CE40H3
Pipe (Max.)	2" Sch. 40	2" Sch. 40
Angle (Max.)	2" x 2" x 1/4"	2" x 2" x 1/4"
Tube (Max.)	2 1/2" - .125 wall	2 1/2" - .125 wall
Roll Shaft Diameter	40mm	40mm
Center Roll Positioning	Manual with patented torque multiplier	Hydraulic 10 Tons
Shaft Speed	10 RPM	10 RPM
Universal Tooling (Included)	6 5/8" O.D.	6 5/8" O.D.
Programming	Not available	NC - Touchpad
Distance between Shafts	10 5/8"	10 5/8"
Operating Voltage	220V or 440V 3ph	220V or 440V 3ph
Length, Width, Height	39" x 26" x 59"	39" x 26" x 59"
Weight	763 lbs.	850 lbs.

All capacities based on mild steel with machine in "Low bending speed".

POPULAR ACCESSORIES



Spray Lubricant



Pipe & Tube Tooling



Anti-Twist Device



Small Radius Tooling



Radius & Degree Measuring Kit

Tooling Sets [Page 60-62](#)

Tooling and
Accessories [Pages 62-64](#)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com

ercolina-usa.com



CE50H3 Angle Roll

Hydraulic Angle Roll • Section Bender



Fabricators Favorite



2 1/2"
Sch. 40
Pipe Capacity

1 Year
Limited
WARRANTY

Vertical or Horizontal
Operating Position



Universal Tooling Set Included for Multiple Profiles



Shown with optional
Large Radius Spiral
Bending Accessory

Hydraulic Downfeed Improves Productivity

FEATURES

- Universal tooling set included with each machine
- Forged roll shafts precision ground and fitted for maximum performance and minimal deflection
- Heavy duty structure and rigid components for high section modulus ratings
- Reinforced engineered mainframe design proven to outperform competitive models
- In-line direct drive roll shaft system
- Threaded roll shafts with micrometric flange adjustment helps eliminate spacer usage
- Touchpad controls with digital center roll positioning
- Control tower with low voltage controls and foot pedal
- Hydraulic machine with memory storage has eight (8) individual programs and unlimited passes
- Patented by Ercolina, simultaneous downfeed and roll movement minimizes deformation
- Optional anti-twist correction system required for angle iron "Leg In" applications

CE50H3 Capacities & Specifications

Pipe (Max.)	2½" Sch. 40
Angle (Max.)	2⅜" x 2⅜" x ¼"
Tube (Max.)	3" – .095 wall
Roll Shaft Diameter	50mm
Center Roll Positioning	Hydraulic 10 Tons
Shaft Speed	9 RPM
Universal Tooling (Included)	7" O.D.
Programming	NC - Touchpad
Number of Programs	8
Distance between Shafts	11⅞"
Operating Voltage	220V or 440V 3ph
Length, Width, Height	45" x 29" x 52"
Weight	1,100 lbs.

All capacities based on mild steel with machine in "Low bending speed".

POPULAR ACCESSORIES



Spray Lubricant



Pipe & Tube Tooling



Anti-Twist Device



Small Radius Tooling



Radius & Degree Measuring Kit

Tooling Sets [Page 60-62](#)

Tooling and
Accessories [Pages 62-64](#)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com



CE70 Angle Roll

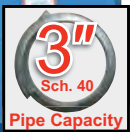
Hydraulic Angle Roll • Section Bender



CE70H3 w/Manual
3 Axis Twist



Universal Tooling Set Included for Multiple Profiles



Vertical or Horizontal
Operating Position



CE70H3-RLI w/Hydraulic 3 Axis Twist

Heavy Duty Structure for High Section Modulus Rating

FEATURES

- Universal tooling set included with each machine
- Forged roll shafts precision ground and fitted for maximum performance and minimal deflection
- Heavy duty structure and rigid components for high section modulus ratings
- Reinforced engineered mainframe design proven to outperform competitive models
- In-line direct drive roll shaft system with motor and brake on each shaft
- Threaded roll shafts with micrometric flange adjustment helps eliminate spacer usage
- Touchpad controls with digital center roll positioning
- Control tower with low voltage controls and foot pedal
- Memory storage has eight (8) individual programs and unlimited passes
- Three axis hydraulic twist system for angle iron "Leg-in" applications

CE70 Capacities & Specifications

Model	CE70H3 w/Manual 3 Axis Twist	CE70H3-RLI w/Hydraulic 3 Axis Twist
Pipe (Max.)	3" Sch. 40	3" Sch. 40
Angle (Max.)	3" x 3" x $\frac{3}{8}$ "	3" x 3" x $\frac{3}{8}$ "
Tube (Max.)	3½" – .216 wall	3½" – .216 wall
Roll Shaft Diameter	70mm	70mm
Center Roll Positioning	Hydraulic 16 Tons	Hydraulic 16 Tons
Shaft Speed	8 RPM	8 RPM
Universal Tooling (Included)	9½" O.D.	9½" O.D.
Programming	NC - Touchpad	NC - Touchpad
Number of Programs	8	8
Distance between Shafts	15"	15"
Section Modulus	35 cm ³	35 cm ³
Operating Voltage	220V or 440V 3ph	220V or 440V 3ph
Length, Width, Height	54" x 43" x 57"	54" x 43" x 57"
Weight	2,860 lbs.	3,100 lbs.

All capacities based on mild steel with machine in "Low bending speed".

POPULAR ACCESSORIES



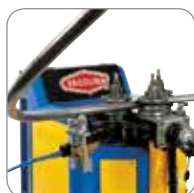
Spray Lubricant



Pipe & Tube Tooling



Modular Tooling Set



Large Spiral Accessory



Radius & Degree Measuring Kit

Tooling Sets [Page 60-62](#)

Tooling and
Accessories [Pages 62-64](#)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com



CE100H3-RLI Angle Roll

Hydraulic Angle Roll • Section Bender



Universal Tooling Set Included for Multiple Profiles



Vertical or Horizontal
Operating Position



Maximum Performance and Minimal Deflection

FEATURES

- Universal tooling set included with each machine
- Forged roll shafts precision ground and fitted for maximum performance and minimal deflection
- Heavy duty structure and rigid components for high section modulus ratings
- Reinforced engineered mainframe design proven to outperform competitive models
- In-line direct drive roll shaft system with motor and brake on each shaft
- Threaded roll shafts with micrometric flange adjustment helps eliminate spacer usage
- Touchpad controls with digital center roll positioning
- Control tower with low voltage controls and foot pedal
- Memory storage has eight (8) individual programs and unlimited passes
- Three axis hydraulic twist system for angle iron "Leg-in" applications

CE100H3-RLI Capacities & Specifications

Pipe (Max.)	4" Sch. 40
Angle (Max.)	4" x 4" x ½"
Tube (Max.)	4½" – .237 wall
Roll Shaft Diameter	100mm
Center Roll Positioning	Hydraulic 30 Tons
Shaft Speed	6 RPM
Universal Tooling Included	12⅝" O.D.
Programming	NC - Touchpad
Number of Programs	8
Distance between Shafts	19¼"
Section Modulus	90 cm³
Operating Voltage	220V-440V 3ph
Length, Width, Height	66" x 58" x 83"
Weight	5,550 lbs.

All capacities based on mild steel with machine in "Low bending speed".

POPULAR ACCESSORIES



Spray Lubricant



Pipe & Tube Tooling



Modular Tooling Set



Polymer Tooling



Radius & Degree Measuring Kit

Tooling Sets [Page 60-62](#)

Tooling and
Accessories [Pages 62-64](#)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com

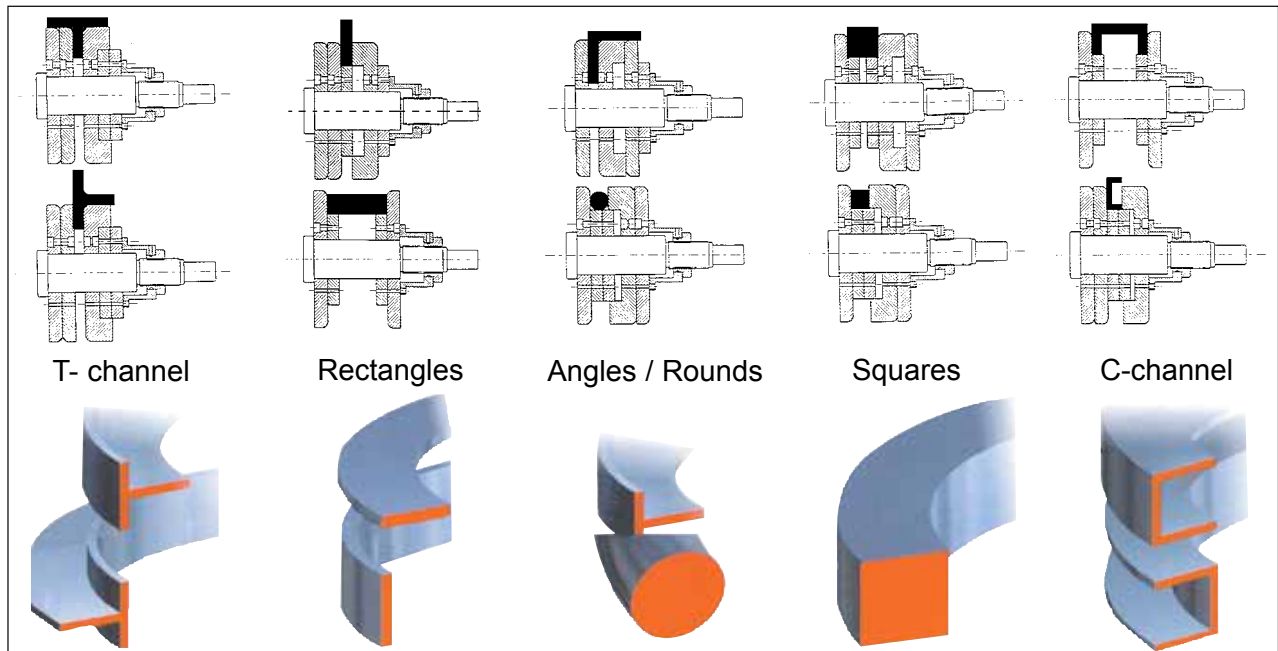
ercolina-usa.com

59



Universal Tooling Sets

All Ercolina angle roll-section bending machines **include** universal tooling sets.
Universal tooling adjusts easily to bend the following profiles:



Part#	Description
C4ST	CE40 – Universal tooling set
C5ST	CE50 – Universal tooling set
C7ST	CE70 – Universal tooling set
C100ST	CE100 – Universal tooling set



Universal tooling set in Polymer available:
CE40 (C4STPOLY) and CE50 (C5STPOLY)

Modular Tooling Sets

Modular tooling sets support profiles,
maintain smooth radius edges and
reduce sharp knife-like edges.



Part#	Description
C4RC	CE35-CE40 – 6 flanges and 6 spacers
C5RC	CE50 – 6 flanges and 9 spacers
C70RC	CE70 – 6 flanges and 15 spacers
C100RC	CE100 – 6 flanges and 12 spacers

Angle Roll-Section Bender Pipe Tooling Sets



Size	O.D.	CE35 - CE40	CE50	CE70	CE100
1/4"	.540	C401P0250	C501P0250	NA	NA
3/8"	.675	C401P0375	C501P0375	*	*
1/2"	.840	C4SPD2**	C5SPD2**	*	*
3/4"	1.050	C4SPD1**	C5SPD1**	*	*
1"	1.315	C4SPD1**	C5SPD1**	C70P1000	C100P1000
1 1/4"	1.660	C4SPD2**	C5SPD2**	C70P1250	C100P1250
1 1/2"	1.900	C401P1500	C501P1500	C70P1500	C100P1500
2"	2.375	C401P2000 (CE40 only)	C501P2000	C70P2000	C100P2000
2 1/2"	2.875	NA	C501P2500	C70P2500	C100P2500
3"	3.500	NA	NA	C70P3000	C100P3000
3 1/2"	4.000	NA	NA	NA	C100P3500
4"	4.500	NA	NA	NA	C100P4000

* Special order - consult factory for delivery

** Combination Twin Tool Sets

Consult factory for tooling sizes not shown.

Angle Roll-Section Bender Tube Tooling Sets

Size	O.D.	CE35 - CE40	CE50	CE70	CE100
1/4"	.250	C401T0250	C501T0250	NA	NA
3/8"	.375	C401T0375	C501T0375	NA	NA
1/2"	.500	C401T0500	C501T0500	NA	NA
5/8"	.625	C401T0625	C501T0625	NA	NA
3/4"	.750	C401T0750	C501T0750	NA	NA
7/8"	.875	C401T0875	C501T0875	NA	NA
1"	1.000	C401T1000	C501T1000	NS*	NS*
1 1/8"	1.125	C401T1125	C501T1125	NS*	NS*
1 1/4"	1.250	C401T1250	C501T1250	NS*	NS*
1 3/8"	1.375	C401T1375	C501T1375	NS*	NS*
1 1/2"	1.500	C401T1500	C501T1500	NS*	NS*
1 5/8"	1.625	C401T1625	C501T1625	NS*	NS*
1 3/4"	1.750	C401T1750	C501T1750	NS*	NS*
1 7/8"	1.875	C401T1875	C501T1875	NS*	NS*
2"	2.000	C401T2000	C501T2000	C70T2000	C100T2000
2 1/8"	2.125	C401T2125 (CE40 only)	C501T2125	NS*	NS*
2 1/4"	2.250	C401T2250 (CE40 only)	C501T2250	NS*	NS*
2 3/8"	2.375	C401T2375 (CE40 only)	C501T2375	C70P2000	C100P2000
2 1/2"	2.500	C401T2500 (CE40 only)	C501T2500	C70T2500	C100T2500
2 3/4"	2.750	NA	C501T2750	NS*	NS*
3"	3.000	NA	C501T3000	C70T3000	C100T3000
3 1/2"	3.500	NA	NA	C70T3500	C100T3500
4"	4.000	NA	NA	NA	C100T4000

* Not stocked. Special order - consult factory for delivery.



Polymer Roll Tooling Sets



Polymer tooling maintains material appearance reducing scratching and blemishes.

Polymer Pipe Tooling

Size	O.D.	CE35 - CE40	CE50
1"	1.315	C401NP1000	C501NP1000
1¼"	1.660	C401NP1250	C501NP1250
1½"	1.900	C401NP1500	C501NP1500
2"	2.375	C401NP2000 (CE40 only)	C501NP2000
2½"	2.875	NA	C501NP2500

Polymer Tube Tooling

Size	O.D.	CE35 - CE40	CE50
1"	1.000	C401NT1000	C501NT1000
1¼"	1.250	C401NT1250	C501NT1250
1½"	1.500	C401NT1500	C501NT1500
1¾"	1.750	C401NT1750	C501NT1750
2"	2.000	C401NT2000	C501NT2000
2½"	2.500	C401NT2500 (CE40 only)	C501NT2500

Small Radius Tooling

Small Radius Tooling

Adjustable tooling set for small radius bending applications.

Tooling Material Capacities

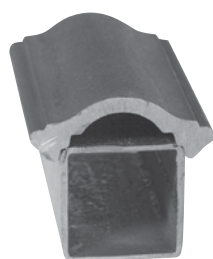
Profile	Maximum
Square solids	⅝" x ⅝"
Rectangular solids	¾" x ¼"
Rounds	⅝"
T Stock	¾" x ¾"

Part# **C4RR** fits CE35 - CE40
Part# **C5RR** fits CE50



Cap Rail & Profile Tooling

Available by special order for angle roll machines.
Consult CML USA with specific profile and dimensions.



Ornamental Metalworking Accessories

Bar Twisting Device

Part# **CT4/2300** fits CE40

Part# **CT5/2300** fits CE50



Tooling included
for Bar Twisting
and
Bending Small
Spiral Tight Radius
Rings and Hoops

- Quickly adapts to CE40 and CE50 angle rolls to create custom components for ornamental gates, railing and more
- Twists balusters up to 1" square
- Heavy duty construction with over (7') of workable table length
- Electromechanical interface provided to control rotation and repeatability
- Self aligning chuck and quick release tailstock system for easy material changeover

Scroll Curling Device

Part# **CR4A8** fits CE40

Part# **CR5A8** fits CE50



Ships standard with
Medium Scroll Chain

- Quickly adapts to CE40 and CE50 ring rolls to produce ornamental scrollwork
- Curls up to 1/4" x 2" mild steel
- Electromechanical interface provided to control exact rotation and repeatability
- Patented scroll pattern chain with removable links allows operator to select desired scroll pattern



Scroll Chain Radius Chart

								
	Min	Max	Min	Max	Min	Max	L	Standard No. of Spirals
 SMALL Chain Part # CERCP	3/8" X 3/8"	1/4" X 3/4"	3/8" X 3/8"	1/4" X 1/4"	3/8"	1/4"	4 3/8"	2
MEDIUM Chain Part # CERCM	3/8" X 3/8"	3/8" X 1 1/2"	3/8" X 3/8"	3/8" X 3/8"	3/8"	3/8"	4 3/8"	3
LARGE Chain Part # CERCG	1/4" X 3/8"	3/8" X 1 1/2"	1/4" X 1/4"	5/8" X 5/8"	1/4"	5/8"	9 7/8"	2

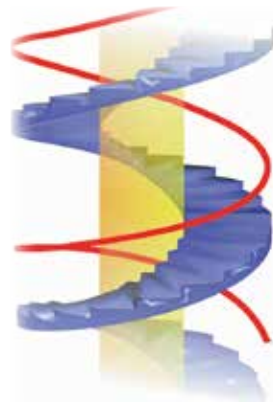


Angle Roll-Section Bender Accessories

Large Spiral Bending Accessory

Ideal for large pitch spiral bending applications. Material capacity 2" outside diameter.

Part# **CS5A11** fits CE40 and CE50 • Part# **CS7A11** fits CE70



Tie Bar Accessory

Recommended when bending large profiles or heavy wall material. Increases roll shaft rigidity and radii accuracy.

Part# **C5A2** fits CE40 and CE50

Part# **CE70A2** fits CE70

Part# **CE100A2** fits CE100



Anti-Twist Device

Required for Angle iron "Leg In" applications.

Part# **CEA4-ECO40** fits CE35

Part# **C5A4** fits CE40 and CE50

Fabricator's Measuring Set

Radius & Degree Measuring Kit

Part# **KARC**



Part#	Description of Kit Contents
ARC-160	Chord Gauge 160 mm
ARC-350	Chord Gauge 350 mm
FWOC-001	Digital Radius Gauge
FXC-025	Digital Angle Degree Protractor

METALWORKING MACHINERY

METALWORKING MACHINERY





EN100

Universal Pipe & Tube Notcher / Grinder



Patented quick-change roller system



Replace Outdated Notching Methods

FEATURES

- Quickly create perfect professional notches at any angle to 60°
- One handle moves pipe or tube in and across abrasive belt simultaneously - extending belt life and reducing heat (patented by Ercolina)
- Ideal for hand railing, chassis and roll cages, fences and gates, furniture frames, marine rails and arches, tubing and plumbing for restaurant and dairy
- Replaces outdated notching methods of using hole saws, end mills, grinding wheels and flame cutting
- Uses premium abrasive belts for a wide range of materials including; carbon steel, stainless steel, Inconel, chrome moly, aluminum and titanium
- Graduated vise 0-60° with vertical adjustment for offset angles
- Patented quick-change roller system
- Converts to abrasive belt grinder with optional accessory
- Top mounted deburring surface
- Over 25 notcher rollers available
- Tool free belt changeover

EN100 Capacities & Specifications

Minimum Diameter	1"
Maximum Diameter	3" *
Angle Range	0-60° at 2 $\frac{3}{8}$ " O.D.
Belt Size	4" x 76 $\frac{3}{4}$ "
Belt Speed	100 FPS
Dust Extraction	Conventional
Voltage Requirement	220V or 440V 3ph
Motor	5 $\frac{1}{2}$ hp 50-60Hz
Motor RPM	3650
Contact Wheel	NA
Length, Width, Height	52" x 22" x 43"
Shipping Weight	425 lbs.

* (Consult factory for application information at maximum capacity.)



Notch angles to 60° in pipe or tube up to 3" in seconds, to a gap free fit ready for welding.

EN100 Grinding Belts

Part#	Description
EN100BLT-76	40 grit – 4" x 76 $\frac{3}{4}$ " Aluminum Zirconium fits EN100
EN100BLTCR-76	36 grit – 4" x 76 $\frac{3}{4}$ " Heavy-Duty Ceramic fits EN100
For Serial No. 1006046 & Older:	
EN100BLT	40 grit – 4" x 79" Aluminum Zirconium fits EN100
EN100BLTCR	36 grit – 4" x 79" Heavy-Duty Ceramic fits EN100

Belts sold in 10 piece sets

EN100 Notcher Rollers for Pipe

Pipe Size	Roller Part#
$\frac{3}{4}$ "	EN100RP0750
1"	EN100RP1000
1 $\frac{1}{4}$ "	EN100RP1250
1 $\frac{1}{2}$ "	EN100RP1500
2"	EN100RP2000
2 $\frac{1}{2}$ "	EN100RP2500

EN100 Notcher Rollers for Tube

Tube Size	Roller Part#
1"	EN100RT1000
1 $\frac{1}{8}$ "	EN100RT1125
1 $\frac{1}{4}$ "	EN100RT1250
1 $\frac{3}{8}$ "	EN100RT1375
1 $\frac{1}{2}$ "	EN100RT1500
1 $\frac{5}{8}$ "	EN100RT1625
1 $\frac{3}{4}$ "	EN100RT1750
2"	EN100RT2000
2 $\frac{1}{4}$ "	EN100RT2250
2 $\frac{1}{2}$ "	EN100RT2500
2 $\frac{3}{4}$ "	EN100RT2750
3"	EN100RT3000



Top Deburring Surface

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com



EN180

Universal Pipe & Tube Notcher / Grinder



Patented quick-change roller system

4 1/2"
Notching
Capacity

1 Year
Limited
Warranty



Premium Abrasive Belts Handle a Wide Variety of Materials

FEATURES

- Quickly create perfect professional notches at any angle to 60°
- One handle moves pipe or tube in and across abrasive belt simultaneously - extending belt life and reducing heat (Patented by Ercolina)
- Ideal for hand railing, chassis and roll cages, fences and gates, furniture frames, marine rails and arches, tubing and plumbing for restaurant and dairy
- Replaces outdated notching methods of using hole saws, end mills, grinding wheels and flame cutting
- Uses premium abrasive belts for a wide range of materials including; carbon steel, stainless steel, Inconel, chrome moly, aluminum and titanium
- Graduated vise 0-60° with vertical adjustment for offset angles
- Patented quick-change roller system
- Converts to abrasive belt grinder with optional accessory
- Top mounted deburring surface
- Over 25 notcher rollers available
- Tool free belt changeover

EN180 Capacities & Specifications

Minimum Diameter	1"
Maximum Diameter	4½" *
Angle Range	0-60° at 3" O.D.
Belt Size	7" x 79"
Belt Speed	100 FPS
Dust Extraction	Powered
Voltage Requirement	220V or 440V 3ph
Motor	5½ hp 50-60Hz
Motor RPM	3650
Contact Wheel	5¼" optional
Length, Width, Height	60" x 24" x 57"
Shipping Weight	680 lbs.

* (Consult factory for application information at maximum capacity.)



Notch angles to 60° in pipe or tube up to 4½" in seconds, to a gap free fit ready for welding.

EN180 Grinding Belts

Part#	Description
EN180NZ	40 grit – 7" x 79" Aluminum Zirconium fits EN180
EN180C	36 grit – 7" x 79" Heavy-Duty Ceramic fits EN180

Belts sold in 10 piece sets

EN180 Notcher Rollers for Pipe

Pipe Size	Roller Part#
¾"	EN180RP0750
1"	EN180RP1000
1¼"	EN180RP1250
1½"	EN180RP1500
2"	EN180RP2000
2½"	EN180RP2500
3"	EN180RP3000
3½"	EN180RP3500
4"	EN180RP4000

EN180 Notcher Rollers for Tube

Tube Size	Roller Part#
1"	EN180RT1000
1⅝"	EN180RT1125
1¼"	EN180RT1250
1⅜"	EN180RT1375
1½"	EN180RT1500
1⅝"	EN180RT1625
1¾"	EN180RT1750
2"	EN180RT2000
2¼"	EN180RT2250
2½"	EN180RT2500
2¾"	EN180RT2750
3"	EN180RT3000
3½"	EN180RT3500
4"	EN180RT4000



Simultaneous feed and side movement



Top Deburring Surface

Product Demonstrations Available on Website

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com



Era Press 25H2-V2

Horizontal Hydraulic Press



Tube Flanging

Swaging and Metalworking Machine

FEATURES

- Expands and reduces tube and pipe ends
- Performs metalworking press operations
- Tooling available for tube flaring & flanging
- Square and rectangular tooling available
- Programmable touchpad control with back-lit LCD display
- Heavy duty structure and rigid components
- Adjustable working speed and hydraulic force
- Quick-change modular tooling
- Remote pendant with low voltage controls
- Programmable cylinder positioning
- Hydraulic material clamping system

EP 25H2-V2 Capacities & Specifications

Tube Diameter Max. Expansion / Reduction	3½" x .120
Folding Capacity - Steel Flat Bar	5" x ½"
Working Speed	½" – 1" sec.
Programming	Touchpad
Hydraulic Force	25 Tons
Horizontal Press	Yes
Maximum Stroke of Cylinder	6¾"
Maximum Swage Depth	6" *
Voltage Requirement	220V/440V 3ph
Motor	3½ hp 50-60Hz
Motor Speed	3650 RPM
Length, Width, Height	41" x 29½" x 48"
Shipping Weight	1,550 lbs.

* Swage depth greater than 4½" requires special tooling. Must be specified at time of order.

Contact CML USA for complete technical specifications.

All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.



Tube & Pipe Reducing and Expanding



Metalworking Press
(Tooling sets sold separately)



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com

ercolina-usa.com

71



Era Press EP60

Horizontal Hydraulic Press



Powerful Swaging and Metalworking Press

FEATURES

- Expands and reduces tube and pipe ends
- Performs metalworking press operations
- Tooling available for tube flaring & flanging
- Square and rectangular tooling available
- Programmable touchpad control with back-lit LCD display
- Heavy duty structure and rigid components
- Adjustable working speed and hydraulic force
- Quick-change modular tooling
- Remote pendant with low voltage controls
- Programmable cylinder positioning
- Hydraulic material clamping system
- Hand-held remote control certified class three safety
- LCD touch screen control
- Unlimited program storage with USB
- Punch or finger-style swage tooling
- Energy saving motor shuts off when not in use
- Optional side shift feature reduces tooling changeover

EP60 Capacities & Specifications

Tube Diameter Max. Expansion / Reduction	3½" - 4½" x .120 (Tooling Dependent)
Square Tube	2½"
Folding Capacity - Steel Flat Bar	7⅞" x ¾"
Working Speed	Variable programmable
Programming	LCD touch screen
Hydraulic Force	50 Tons
Horizontal Press	Yes
Maximum Stroke of Cylinder	11½"
Maximum Swage Depth	8" *
Voltage Requirement	440V 3ph
Motor	8 hp 50-60Hz
Motor Speed	3650 RPM
Length, Width, Height	48" x 26" x 44"
Shipping Weight	1,800 lbs.

* Swage depth dependent on finger-style tools or standard reduction style. Must be specified at time of order.
Contact CML USA for complete technical specifications.

All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.



Tube Beading



Tube & Pipe Reducing and Expanding



Metalworking Press



◀ Ercolina Bending Application

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com

ercolina-usa.com

73



Era Form ET32/2000

Ornamental Metalworking Machine



Versatile Ornamental Metalworking Machine

FEATURES

- Bar twisting
- Decorative scrollwork
- Metalworking press operations
- Tube and pipe bending
- Programmable touchpad control panel with back-lit display
- Ideal for custom or production applications
- Quick-change modular tooling components
- Two speed motor with electronic braking for maximum repeatability and production
- Adjustable hydraulic force
- Low voltage controls
- Through spindle capability
- Heavy duty structure and rigid components
- Optional tube and pipe bending accessory



ET32/2000 Capacities & Specifications

Rotation Speed RPM	4.3 / 8.6
Programming	Touchpad
Hydraulic Force	5 Tons
Horizontal Press	Yes
Maximum Radius	7 $\frac{7}{8}$ "
Voltage Requirement	220V or 440V 3ph
Motor	3 hp 50-60Hz
Motor Speed	3650 RPM
Length, Width, Height	41" x 29 $\frac{1}{2}$ " x 48"
Shipping Weight	1,100 lbs.



* Contact CML USA for complete technical specifications.

All capacities based on mild grade materials; heavy wall and high tensile materials reduce machine capacity.

Working Capacities

Bar Twisting

Square Bar	1 $\frac{3}{8}$ " x 1 $\frac{3}{8}$ "
Square Bar Cluster	1" x 1"
Rectangular Solids	1 $\frac{1}{2}$ " x $\frac{3}{8}$ "

Metalworking Press

Square Bar	$\frac{3}{4}$ " x $\frac{3}{4}$ "
Solid Rounds	$\frac{3}{4}$ "
Rectangular Solids	1 $\frac{1}{2}$ " x $\frac{3}{8}$ "

Scrolling

Square Bar	$\frac{3}{4}$ " x $\frac{3}{4}$ "
Solid Rounds	$\frac{3}{4}$ "
Rectangular Solids	1 $\frac{1}{2}$ " x $\frac{3}{8}$ "

Tube & Pipe Bending

Square Bar	$\frac{3}{4}$ " x $\frac{3}{4}$ "
Solid Rounds	$\frac{3}{4}$ "
Pipe or Tube .120 wall	1 $\frac{5}{16}$ "

Ships Standard with Medium Scroll Chain

Scroll Chain Radius Chart								
								
	Min	Max	Min	Max	Min	Max	L	Standard No. of Spirals
SMALL Chain Part # EF35CP	$\frac{3}{16}$ " x $\frac{3}{8}$ "	$\frac{1}{4}$ " x $\frac{3}{4}$ "	$\frac{3}{16}$ " x $\frac{3}{16}$ "	$\frac{1}{4}$ " x $\frac{1}{4}$ "	$\frac{3}{16}$ "	$\frac{1}{4}$ "	4 $\frac{3}{8}$ "	2
MEDIUM Chain Part # EF35CM	$\frac{3}{16}$ " x $\frac{3}{8}$ "	$\frac{3}{8}$ " x 1 $\frac{1}{2}$ "	$\frac{3}{16}$ " x $\frac{3}{16}$ "	$\frac{3}{8}$ " x $\frac{3}{8}$ "	$\frac{3}{16}$ "	$\frac{3}{8}$ "	4 $\frac{3}{8}$ "	3
LARGE Chain Part # EF35CG	$\frac{1}{4}$ " x $\frac{3}{8}$ "	$\frac{3}{8}$ " x 1 $\frac{1}{2}$ "	$\frac{1}{4}$ " x $\frac{1}{4}$ "	$\frac{3}{4}$ " x $\frac{3}{4}$ "	$\frac{1}{4}$ "	$\frac{3}{4}$ "	9 $\frac{7}{8}$ "	2

**Product
Demonstrations
Available on Website**

**NEED ADDITIONAL HELP?
CONTACT ERCOLINA:**

563.391.7700

info@ercolina-usa.com

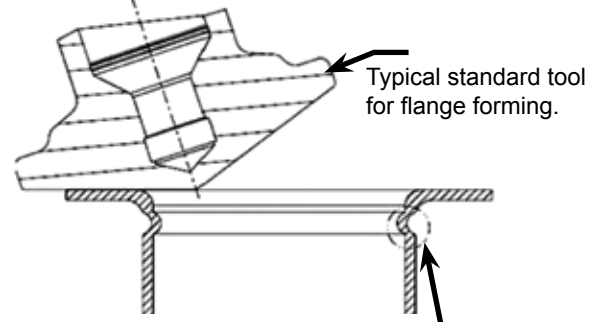


Erco Flange EFB220

Flanging Machine

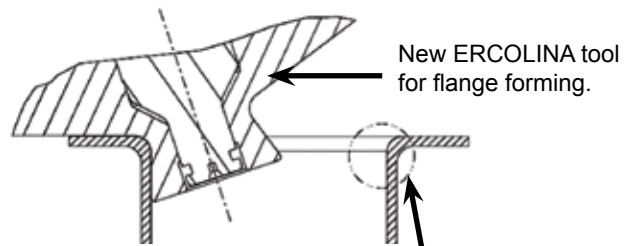


TRADITIONAL FORMING SYSTEM MOST USED BY COMPETITORS



Main defect: collapsing of material around flange collar. Reduced tube diameter results in flow restriction.

ERCOLINA INNOVATIVE FORMING SYSTEM



Thickness of material in area of flange radius may be increased. Gain in material at flange radius improves structural integrity.



Three types of tools for capacity from 20 mm and 219.1 mm

Innovative Design Solves Flange Issues

FEATURES

- 37° and 90° flanges
- 201 mm – 8" gas max capacity
- PLC control, 5.7" touch screen
- Extremely easy setup
- Quick-change tooling
- Efficient: 30% cost reduction
- Heavy duty cast iron structure
- Double conical tools avoid swelling and deformation
- Consistent quality results

Ercolina's EFB uniformly cold forms a variety of materials including stainless, steel, copper and aluminum to 90° flanges in tubes 20 to 220 millimeter diameter with maximum wall thickness of 5 mm thick.

The innovative forming process uses a series of double conical tools to avoid swelling and deforming the flange.

Greater accuracy with minimum deformation results in less post-forming operations and higher productivity.

The EFB is equipped with a PLC control with 5.7" touch screen to easily control settings and machine operation.



Setting the Curve!



Application Review



Demonstration / Training Facility



Service After the Sale



Hands-on Training



Quality Repeatable Bends with Ercolina®



About This Catalog:

We have tried to make this catalog comprehensive and factual. CML USA, Inc. reserves the right to make changes at any time without notice to price, color, material, equipment, specifications, models, machine operation, tooling requirements and availability. Catalog may have been updated since the time of printing.

ercolina-usa.com



Call TODAY for a quote!

Leasing Options Available



CML USA Inc. Ercolina®

"Excellence in Quality, Support and Service"

3100 Research Parkway • Davenport, IA 52806
Ph. 563-391-7700 • info@ercolina-usa.com

ercolina-usa.com