



# **КАТАЛОГ ОБОРУДОВАНИЯ**

# Ercolina® Model Selection Guide



**TM76**



**Mega Bender with Mandrel Table**

## Operator Control

Dual interactive touch screens.

Three axis position digital display with auto sync feature between screens. Absolute and Incremental readout value.

Manual override control of Clamp, Pressure Die, Boost, Mandrel, Clamp release function.

Inch and Metric programming and display.

Manual or Semi Auto mode.

LCD with PLC touch pad.

Single axis position display with additional two axis LED readout of plane rotation and linear distance between bends.

Independent control of Clamp, Mandrel functions.

Inch or Metric display.

Manual or Semi Auto mode.

## Programming

Unlimited program storage with USB memorizes up to twelve bend angle, springback settings per program. Specific former radius, material size and wall thickness.

Thirty program storage memorizes up to nine bend angle and springback settings per program.

## Bending Software

Bend-Tech for Ercolina® designs part creates print with complete bend dimensions. Can manually output to XYZ values.

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 planetary reduction. Main frame GS500 cast steel case.

C axis electro mechanical operation with gear reduction. Main frame aluminum case.

Digital encoders for three axis with digital display of absolute or incremental position on touch screen.

Analog encoders for C axis, Counter Die Axis display position on control. Pick up encoders with LED on table, monitor length and rotation from original bend plane (YB).

Tailstock hydraulic clamping with collet. 2" through spindle capacity, 3" material capacity with collet.

Tailstock pneumatic clamping with four interchangeable jaw sets. 2<sup>3</sup>/<sub>8</sub>" capacity.

Manual positioning of rotation and linear distance with mechanical stops. Digital display of position. Side mounted slide rack keeps tailstock close to table bed for strength.

Rotation and linear distance with slide stops. Digital display of position. Top mounted slide rack for tail stock.

Programmable pressure die with linear travel to 180 degree bends with adjustable speed. Integrated boost and pressure die assembly hydraulic assisted.

Mechanical pressure die travel with spring assist.

Programmable mandrel extraction.

Programmable mandrel extraction.

Internal mandrel lubrication. Machine pre-wired for optional internal lubrication system.

Manual.

Factory onsite training available.

\*

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

# Ercolina® Model Selection Guide



**Erco Bender 65/76**



**GB Series NC or CNC**

## Operator Control

Interactive color touch screen.

Six axis position display Absolute and Incremental readout value.

Manual override control of Clamp, Pressure Die, Boost, Mandrel, Clamp release function.

Inch and Metric programming and display.

Manual, Semi Auto and Auto modes.

Interactive color touch screen.

Six axis position display Absolute and Incremental readout value.

Manual override control of Clamp, Pressure Die, Boost, Mandrel, Clamp release function.

Inch and Metric programming and display.

Manual, Semi Auto and Auto modes (with CNC).

## Programming

Unlimited program storage with USB. Each program memorizes up to twelve bend angle and springback settings. Specific former radius, material size wall thickness, material grade and section modulus requirement, distance between bends and rotation.

Unlimited program storage with USB. Each program memorizes up to twelve bend angle and springback settings. Specific former radius, material size wall thickness, material grade and section modulus requirement, distance between bends and rotation.

## Bending Software

Bend-Tech for Ercolina® designs part creates print with complete bend dimensions. Can manually output to XYZ values.

Bend-Tech for Ercolina® designs part creates print with complete bend dimensions. Can output to XYZ values.

## Machine Design

C axis hydraulic operation with planetary reduction. Main frame GS500 cast steel case.

C axis chain driven hydraulic operation. Main frame GS500 cast steel case.

Digital encoders for three axis with digital display of absolute or incremental position on touch screen.

Digital encoders for five axis with digital display of absolute or incremental position on touch screen.

Tailstock hydraulic clamping with segment collet. 2 $\frac{3}{8}$ " 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.

Automatic positioning of rotation and linear distance with mechanical stops. Digital display of position.

(NC) Manual positioning of rotation and linear distance with mechanical stops. Digital display of position.  
(CNC) Automatic positioning of rotation and linear distance with mechanical stops. Digital display of position.

Programmable pressure die with linear travel to 180 degree bends with adjustable speed. Integrated boost and pressure die assembly hydraulic assisted.

Programmable pressure die with linear travel to 180 degree bends with adjustable speed. Integrated boost and pressure die assembly hydraulic assisted.

Programmable mandrel extraction.

Programmable mandrel extraction.

Internal mandrel lubrication. Machine pre-wired for optional internal lubrication system.

Internal mandrel lubrication. Machine pre-wired for optional internal lubrication system.

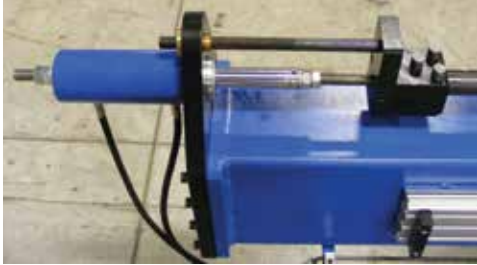
Factory onsite training available.

\*

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

# MANDREL BENDER TM76

ROTARY DRAW MANDREL TUBE & PIPE BENDING MACHINES



Programmable mandrel extraction cylinder.

Touch screen with USB unlimited program storage.

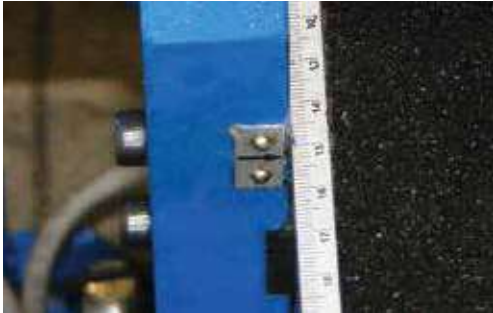




# MANDREL BENDER

# TM76

ROTARY DRAW MANDREL TUBE & PIPE BENDING MACHINES



Workhead centerline adjustment keeps table stationary.



Standard booster die cylinder.



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

# MANDREL BENDER TM76

ROTARY DRAW MANDREL TUBE & PIPE BENDING MACHINES



## Bending Capacities

Model	TM76
Max. Tube Capacity - Mild Steel	3" (.125 wall)
Stainless	3" (.095 wall)
Square Tube	2½" (.065 wall)
Max. Pipe Capacity	2" Sch. 40
Max. Bending Radius	10"
Min. Bending Radius	1.3 x Ø
Max. Shaft Rotation	210°
Max. Bending Angle	180°
Max. Tailstock Capacity	3"
Max. Tailstock Through Capacity	2⅜"

## Specifications

Max. Material Length - 10' table	113"
20' table	231"
Minimum Distance Between Bends	Consult Factory
Nominal Hydraulic Pressure	150 bar
Maximum Carriage Travel	Consult Factory
Number of Programs	Unlimited with USB
Precision of Bend Angle	+/- .1°
Bending Speed	Variable to 25° per second
Motor 220V or 440V 3ph at 50/60 Hz	2.2 kW 16 Amp @ 220V
Dimensions (Height x Width x Length)	61" x 36" x 168" or 286"
Weight (10' / 20')	3300 lbs. / 3800 lbs.



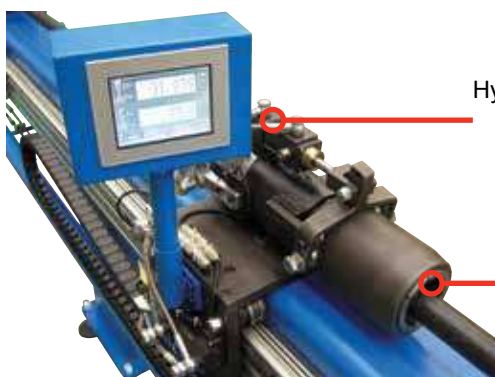


# MANDREL BENDER TM76

ROTARY DRAW MANDREL TUBE & PIPE BENDING MACHINES

## Ideal for prototype or daily production

- ▶ 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
- ▶ Interactive 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 auto work sensing
- ▶ Programmable bend angle 0 to 180°
- ▶ Individual material springback setting for every bend angle
- ▶ Programmable mandrel positioning with 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
- ▶ 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



Hydraulically controlled material clamping.

Quick change material collets.

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



Independent clamp and pressure die adjustments.

# MANDREL BENDER

# 030

ROTARY DRAW MANDREL TUBE & PIPE BENDING MACHINES



Tube Capacity



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



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

## Mega Bender® 030-A3/H76

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

### 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

\*10' table displayed – 5' table not available with base enclosure





# ERCO BENDER

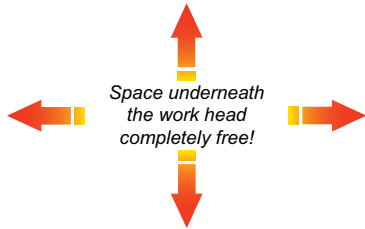
# EB65

3 AXIS CNC MANDREL MACHINE



**2 1/2"**  
Tube Capacity

**1 Year**  
Limited  
WARRANTY

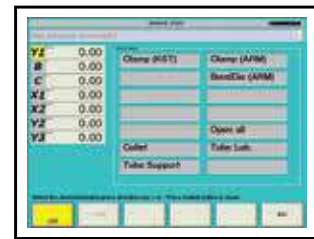


## Bending Capacities

Model	EB65 CNC CV1
Max. Tube Capacity - Mild Steel	2 1/2" (.083 wall)
Stainless	2" (.083 wall)
Max. Pipe Capacity	1 1/2" Sch. 40
Max. Bending Radius	9.8"
Min. Bending Radius	1.5 x Ø
Max. Shaft Rotation	210°
Max. Bending Angle	185°
Max. Tailstock Capacity	3"

## Specifications

Interactive Touch Screen Control	17" color screen
Max. Material Length - Standard table	13'
Optional table	21'
Minimum Underhead Swing Clearance	12"
Length of Bending Head	59"
Nominal Hydraulic Pressure	150 bar
Maximum Carriage Travel	125"
Number of Programs	Unlimited with USB
Precision of Bend Angle	+/- .5°
Bending Speed	Programmable
Motor 480V 3ph at 50/60 Hz	
Dimensions (Height x Width x Length)	52" x 44" x 205"
Weight	7200 lbs.



### Interactive touch screen

Unlimited program storage with USB



### Class 3 safety hand-held remote

Controls bend, return & emergency stop functions

# ERCO BENDER EB65

3 AXIS CNC MANDREL MACHINE

## Fully automatic – Cost effective

- ▶ 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
- ▶ Standard right hand bending direction
- ▶ Interactive touch screen with auto and manual operating modes, system diagnostics and multiple language capability
- ▶ Programmable material springback settings for each bend angle
- ▶ Programmable auto mandrel positioning allows operator to optimize extraction for improved bend quality
- ▶ USB for unlimited program memory storage and communication
- ▶ Displays absolute (ABS) or incremental (INC) positioning with inch or metric readout
- ▶ Programmable tail stock interference zone monitors position and eliminates workhead collision
- ▶ Hand-held remote bending control, certified class 3 safety and all electrical components UL, CSA and CE approved
- ▶ Graphic bend simulation software included
- ▶ 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
- ▶ Programs YBC or XYZ
- ▶ Y - Feeding Electric Servo
- ▶ B - Rotation Electric Servo
- ▶ C - Bending Hydraulic CNC



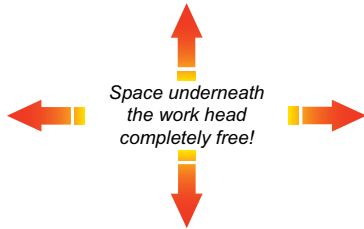
Y & B Servo Positioning



# ERCO BENDER

# EB76

3 AXIS CNC MANDREL MACHINE



## Bending Capacities

Model	EB76
Max. Tube Capacity - Mild Steel	3" (.079 wall)
Stainless	3" (.065 wall)
Square Tube	2" (.065 wall)
Max. Pipe Capacity	2" Sch. 40
Max. Bending Radius	11.8"
Min. Bending Radius	1.5 x Ø
Max. Shaft Rotation	210°
Max. Bending Angle	185°
Max. Tailstock Capacity	3"

## Specifications

Interactive Touch Screen Control	17" color screen
Max. Material Length - Standard table	13'
Optional table	21'
Minimum Underhead Swing Clearance	12"
Length of Bending Head	59"
Nominal Hydraulic Pressure	150 bar
Maximum Carriage Travel	125"
Number of Programs	Unlimited with USB
Precision of Bend Angle	+/- .5°
Bending Speed	Programmable
Motor 480V 3ph at 50/60 Hz	
Dimensions (Height x Width x Length)	52" x 44" x 205"
Weight	7400 lbs.



### Interactive touch screen

Unlimited program storage with USB



### Class 3 safety hand-held remote

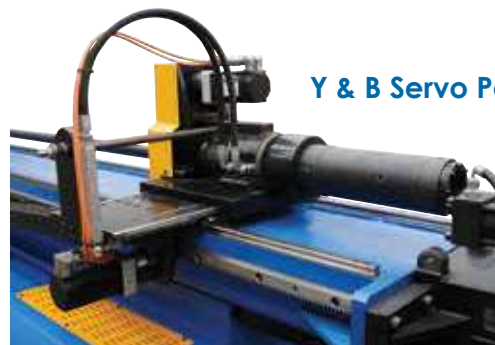
Controls bend, return & emergency stop functions

# ERCO BENDER EB76

3 AXIS CNC MANDREL MACHINE

## Fully automatic – Cost effective

- ▶ 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
- ▶ Standard right hand bending direction
- ▶ Interactive touch screen with auto and manual operating modes, system diagnostics and multiple language capability
- ▶ Programmable material springback settings for each bend angle
- ▶ Programmable auto mandrel positioning allows operator to optimize extraction for improved bend quality
- ▶ USB for unlimited program memory storage and communication
- ▶ Displays absolute (ABS) or incremental (INC) positioning with inch or metric readout
- ▶ Programmable tail stock interference zone monitors 3 position and eliminates workhead collision
- ▶ Hand-held remote bending control, certified class 3 safety and all electrical components UL, CSA and CE approved
- ▶ Graphic bend simulation software included
- ▶ 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
- ▶ Programs YBC or XYZ
- ▶ Y - Feeding Electric Servo
- ▶ B - Rotation Electric Servo
- ▶ C - Bending Hydraulic CNC



Y & B Servo Positioning



# GIGA BENDER GB90/GB100 NC

SEMI-AUTOMATIC MANDREL MACHINE

**HEAVY STEEL  
STRUCTURE**



**Giga Bender 90SCNC**

Shown with optional  
FST Clamping System

KST Clam Shell Clamping System  
shown on Model GB100

## Bending Capacities

NC Models	Giga Bender 90NC	Giga Bender 100NC
Pipe Capacity (Max.) - A36	2½" Sch. 40	3" Sch. 40
Tube Capacity (Max.) - Mild Steel	3½" (.187 wall)	4¾" (.187 wall)
Stainless	3" (.150 wall)	4¾" (.150 wall)
Square Tube	3½" (.138 wall)	4" x 4" (.138 wall)
Tube Capacity (Min.)	½"	1"
Bend Radius (Max.   Min.)	12"   1.5D	16"   1.5D
Material Length (Max.)	13' optional 20' table	13' optional 20' table

## Specifications

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	Manual positioning with digital display	
(Y1 Axis) Distance Between Bends	Programmable with digital readout	
(X2) Pressure Die Linear Travel		
(Y2) Pressure Die Infeed		
Program Storage	Unlimited with USB	Unlimited with USB
Hydraulic Reservoir	40 gal.	40 gal.
Motor (horse power @ 480V)	7.8	7.8
Dimensions (Length x Width x Height)	298" x 51" x 55"	298" x 51" x 55"
Weight (Dry - Lbs.)	6,800	7,200



# GIGA BENDER GB90/GB100 CNC

CNC MANDREL MACHINE



## Heavy steel structure provides rigid platform and minimizes vibration

- ▶ Interactive 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 1.3D
- ▶ 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
- ▶ Programs in YBC or XYZ input value
- ▶ Programmable tail stock interference zone monitors position and eliminates workhead collision
- ▶ High capacity hydraulic reservoir with automatic cooling system
- ▶ 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
- ▶ Hand-held remote bending control, certified class 3 safety and all electrical components UL, CSA and CE approved
- ▶ Standard programmable internal mandrel lubrication
- ▶ Super Bend-Tech SE for Ercolina® software included

### Bending Capacities

CNC Models	Giga Bender 90SCNC6	Giga Bender 100SCNC6
Pipe Capacity (Max.) - A36	2½" Sch. 40	3" Sch. 40
Tube Capacity (Max.) - Mild Steel	3½" (.187 wall)	4¾" (.187 wall)
Stainless	3" (.150 wall)	4¾" (.150 wall)
Square Tube	3½" (.138 wall)	4" x 4" (.156 wall)
Tube Capacity (Min.)	½"	1"
Bend Radius (Max.   Min.)	12"   1.5D	16"   1.5D
Material Length (Max.)	13' optional 20' table	13' optional 20' table

### Specifications

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	Auto positioning with digital display	
(Y1 Axis) Distance Between Bends	Programmable with digital readout	
(X2) Pressure Die Linear Travel		
(Y2) Pressure Die Infeed		
Program Storage	Unlimited with USB	Unlimited with USB
Hydraulic Reservoir	40 gal.	40 gal.
Motor (horse power @ 480V)	7.8	7.8
Dimensions (Length x Width x Height)	298" x 51" x 55"	298" x 51" x 55"
Weight (Dry - Lbs.)	6,800	7,200

\*

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

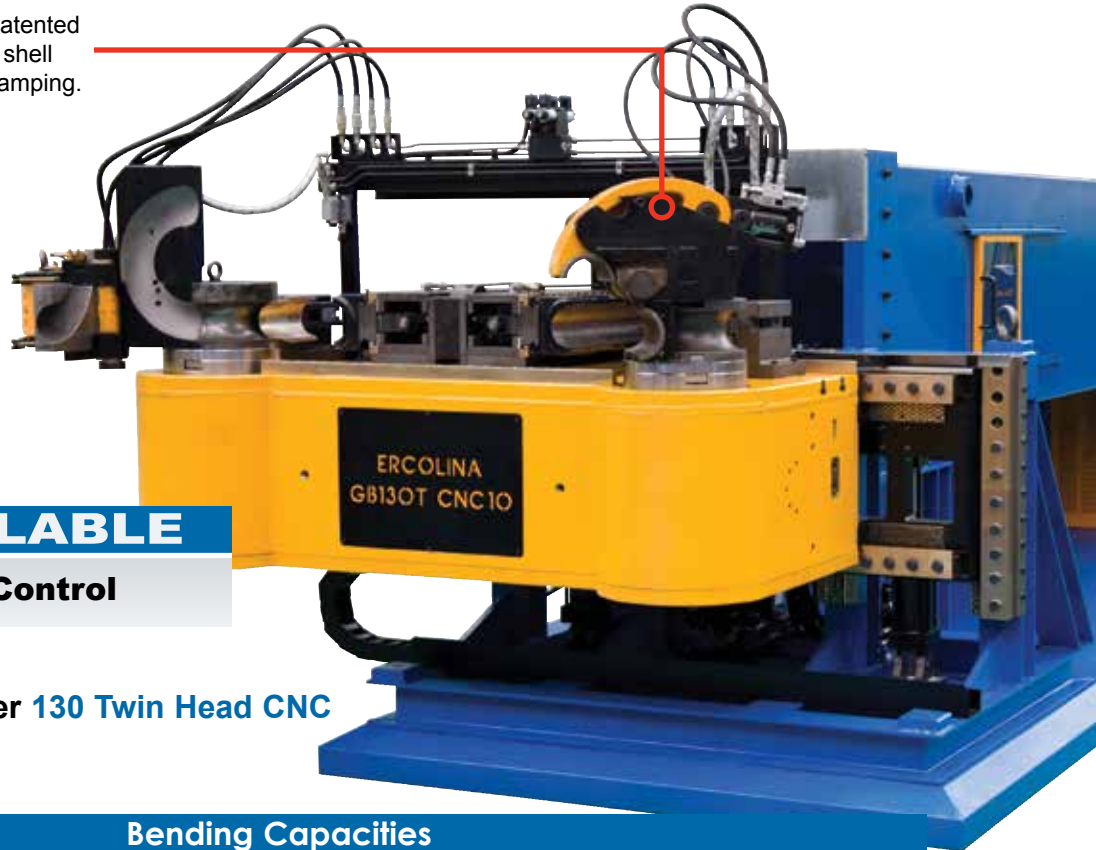
# ERCOLINA® GB130/GB180/GB250

FULLY AUTOMATED CNC GIGA BENDERS



Interactive 10" Color  
Touch Screen  
with Unlimited USB Storage

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



## MODELS AVAILABLE

Up to 10 Axis CNC Control

### Giga Bender 130 Twin Head CNC

#### Bending Capacities

Model	Giga Bender 130	Giga Bender 180	Giga Bender 250
Tube Capacity (Max.) - Mild Steel	5" (.196 wall)	6½" (.187 wall)	Information upon Request
Stainless	5" (.150 wall)	6" (.187 wall)	
Square Tube	4" (.160 wall)	4" (.187 wall)	
Tube Capacity (Min.)	1½"	2"	
Pipe Capacity (Max.)	4" Sch. 40	5" Sch. 40	
Bend Radius (Max.)	18"	20"	
Bend Radius (Min.)	3⅝"	4.7"	
Tube Inside Carriage (Max.)	5"	6½"	
Mat'l Length Through Carriage (Max.)	236"	236"	
Mat'l Length in Carriage (Max.)	177"	177"	

#### Specifications

Interactive Control	10" touch screen-color	10" touch screen-color	
Number of Programs	Unlimited - USB	Unlimited - 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 (Length x Width x Height)	319" x 75" x 71"	339" x 91" x 77"	
Weight (Dry - Lbs.)	18,000	30,000	



**ERCOLINA®**

# GB130/GB180/GB250

FULLY AUTOMATED CNC GIGA BENDERS

## Machines available up to (10) axis control

- ▶ Bending capacity 8" Schedule 40 Pipe A53 depending on model
- ▶ Ideal for industrial bending of tube, pipe, square and rectangular profiles to center line radius as small as 1.3D
- ▶ Programmable control with bend angles 0° to 180°
- ▶ Programs in YBC or XYZ input value
- ▶ Adjustable material springback setting for each bend
- ▶ USB for unlimited program memory storage and communication
- ▶ Quick change tooling for improved productivity
- ▶ Operator friendly control offers easy to use access to auto and manual operating modes, system diagnostics and multiple language capability
- ▶ Programmable mandrel positioning, clamping, pressure die and boost die movements
- ▶ Heavy steel structure improves rigidity and minimizes vibration
- ▶ Standard with Ercolina's patented (KST) clam shell hydraulic clamping
- ▶ Electrical components UL, CSA and CE approved
- ▶ Hand-held remote bending control, certified class 3 safety



Structural "compression" design for maximum stability.

**Giga Bender 180 CNC**



