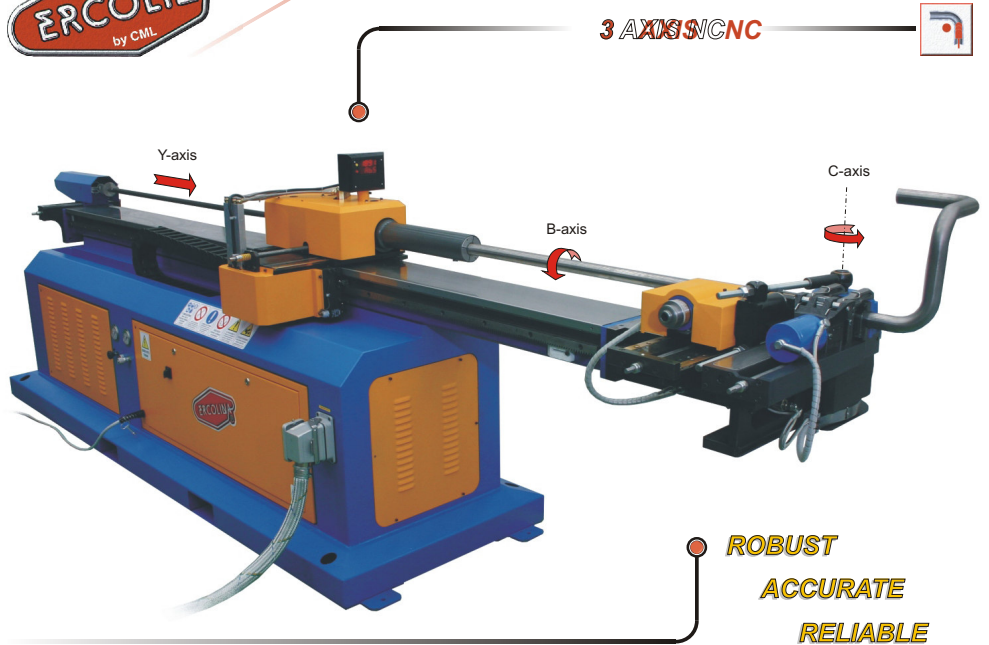




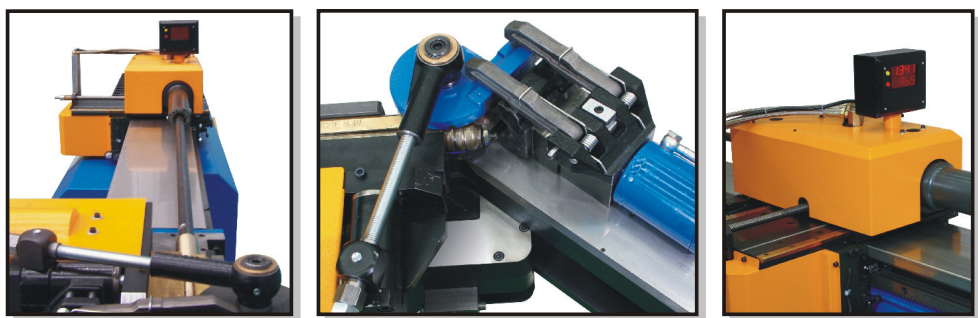
ERCOBENDER - MANDREL BENDING MACHINE



ERCOBENDER, Ercolina's 3 axis NC mandrel bender, achieves accurate repeatable bends, ideal for production or prototype applications.

User-friendly control accepts operator program information quickly. Machine completes programmed bend cycle automatically.

High bend capacity and axes motion accuracy are the result of over 30 years of experience in bending and cold metalworking sectors.



Linear rotary motion control of carriage and mandrel (B-axis) are fully automatic. Programmable spray lubrication system lubricates inside of tube, reducing friction and thinning effect on tube wall and allows tight radius applications. Forward motion of linear and rotary axes is fully automatic. Digital display of linear and rotary axes position. "Booster" greatly reduces wear of mandrel.

In accordance with CE Machinery Directive and 392/89 safety regulation

Your Partner for Life



ADVANTAGES

- Unbeatable bend quality at competitive pricing;
- Robust structure in carbon steel;
- Limited maintenance;
- Proven electric over hydraulic design with adjustable controls and gauges;
- Highly accurate axial positioning;
- Individually controlled axis feedrate;
- Unlimited number of programs storage with smart card;
- Programmable axial forward powered motion of (Booster) from mandrel carriage;
- Programmable spray mist lubrication system;
- Pivoting work head minimizes internal distance between bends under working area;
- Automatic anticipated mandrel extraction;
- Standard hydraulic cooling system with temperature control.

MATERIAL APPLICATIONS

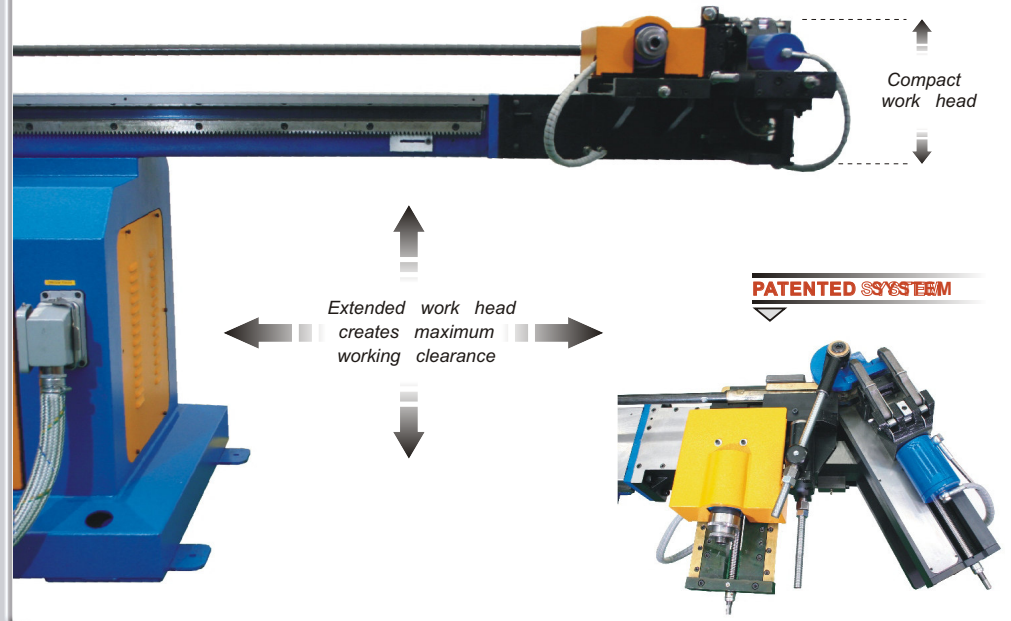
Mild steel, stainless, aluminized steel, chrome moly, aluminum, copper, copper nickel, brass, titanium others.

SECTOR APPLICATIONS

Mandrel tube and pipe bending, Non mandrel pipe bending, Custom automotive and motorcycle exhaust, Race Sport custom chassis, Roll cages, Hand rail, Sign furniture, Food processing dairy, Copper plumbing Marine, Refinery petro chemical, HVAC Heat exchanger, Refrigeration, Automotive aftermarket accessories Ornamental.

MODELS

| Ref. | Description |
|---------------|-------------------------------------|
| EB45 4RF NC3 | rBender Ø mandrel/1.77" - 3 Axis NC |
| EB65 4RF NC3 | rBender Ø mandrel/2.56" - 3 Axis NC |
| EB76 4RF NC3 | rBender Ø mandrel/3" - 3 Axis NC |
| EB127 4RF NC3 | rBender Ø mandrel/5" - 3 Axis NC |



CAPACITY

| ERCOBENDER | EB45 4RF NC3 | EB65 4RF NC3 | EB76 4RF NC3 | EB127 4RF |
|---|--|--|---|--|
| MAX BEND CAPACITY σ Fe* (with resistance of material R=42kg/mm2) | \emptyset 45 x 4 mm / 1.77" x 0.157 2" 1/2 PIPE A53 (min \emptyset 6 mm / 0.236") | \emptyset 65 x 4 mm / 2.56" x 0.157 2" 1/2 PIPE A53 (min \emptyset 6 mm / 0.236") | \emptyset 76 x 6 mm / 3" x 0.236" (min \emptyset 6 mm / 0.236") | \emptyset 127 x 5 mm / 5" x 0.236" (min \emptyset 25 mm / 1") |
| MAX BEND CAPACITY σ STAINLESS STEEL* (with resistance of material R=64kg/mm2) | \emptyset 45 x 2 mm / 1.77" x 0.0785" (min \emptyset 6 mm / 0.236") | \emptyset 65 x 2 mm / 2.56" x 0.0785" (min \emptyset 6 mm / 0.236") | \emptyset 76 x 4 mm / 3" x 0.0785" (min \emptyset 6 mm / 0.236") | \emptyset 127 x 3 mm / 5" x 0.0785" (min \emptyset 25 mm) |

TECHNICAL SPECIFICATIONS

| ERCOBENDER | EB45 4RF NC3 | EB65 4RF NC3 | EB76 4RF NC3 | EB127 4RF |
|--|---|---|---|---|
| MAX BENDING RADIUS* | 300 mm / 11.8" | 300 mm / 11.8" | 300 mm / 11.8" | 400 mm |
| MIN BENDING RADIUS* (with standard mandrel) | 1,5 x \emptyset | 1,5 x \emptyset | 1,5 x \emptyset | 1,5 x \emptyset |
| MIN BENDING RADIUS* (with special mandrel) | 1 x \emptyset | 1 x \emptyset | 1 x \emptyset | 1 x \emptyset |
| MAX SHAFT ROTATION | 210° | 210° | 210° | 210° |
| MAX BENDING ANGLE | 185° | 185° | 185° | 185° |
| DIAMETER OF THROUGH HOLE OF TUBE HOLDER CHUCK | \emptyset 46 mm / 1.8" | \emptyset 66 mm / 2.6" | \emptyset 81 mm / 3.2" | \emptyset 123 |
| LENGTH OF COMPACT PIVOTING HEAD | 1500 mm / 59" | 1500 mm / 59" | 1500 mm / 59" | 1500 |
| MIN INTERNAL DISTANCE BETWEEN BENDS AND WORK HEAD | 260 mm / 10.2" | 260 mm / 10.2" | 310 mm / 12.2" | 390 mm / 15.4" |
| MAX HYDRAULIC PRESSURE | 150 bar | 150 bar | 150 bar | 150 bar |
| MAX HIGH BENDING AND RETURN SPEED | 12/14 rpm | 12/14 rpm | 6/8 rpm | 4/6 rpm |
| MAX LOW BENDING AND RETURN SPEED | 6/14 rpm | 3/14 rpm | 1/6 rpm | 0,75/4 rpm |
| MANDREL TABLE (standard length of tube to be bent) | 4200 mm / 165.5" | 4200 mm / 165.5" | 4200 mm / 165.5" | 6200 mm |
| STROKE OF CHUCK of one mandrel recapture | 3200 mm / 126" | 3200 mm / 126" | 3200 mm / 126" | 5000 mm |
| 3 AXIS NUMERIC CONTROL: bending (C), linear feed (Y), rotation (B) | C=11/4 rpm Y=400 mm (15.7") /sec B=5/10 rpm | C=12/3 rpm Y=400 mm (15.7") /sec B=5/10 rpm | C=6/1 rpm Y=400 mm (15.7") / sec B=5/10 rpm | C=4 rpm Y=400 mm (15.7") /sec B=5 rpm |
| CYCLE TIME (90° bend-to-bend) | 6 sec | 6 sec | 10 sec | 13 sec |
| DATA INPUT THROUGH POLAR SYSTEM (y - b - c) | yes | yes | yes | yes |
| NUMBER OF PROGRAMS | Unlimited (with use of Smart Card) | Unlimited (with use of Smart Card) | Unlimited (with use of Smart Card) | Unlimited (with use of Smart Card) |
| ACCURACY OF BEND ANGLE | +/- 0.1° | +/- 0.1° | +/- 0.1° | +/- 0.1° |
| ACCURACY OF CHUCK ROTARY MOTION | +/- 0.1° | +/- 0.1° | +/- 0.1° | +/- 0.1° |
| ACCURACY OF CARRIAGE LINEAR MOTION | +/- 0.1° mm | +/- 0.1° mm | +/- 0.1° mm | +/- 0.1° mm |
| THREE-PHASE MOTOR 400V/440V at 50/60 Hz (other voltages on request) | 20 Kw (total) | 20 Kw (total) | 20 Kw (total) | 40 Kw (total) |
| DIMENSIONS (Length - Width - Height) | 5200x1100x1300 mm 17.1x3.6x4.3 ft | 5200x1100x1300 mm 17.1x3.6x4.3 ft | 5200x1100x1300 mm 17.1x3.6x4.3 ft | 6000x1300x1300 mm 19.7x4.3x4.3 ft |
| WEIGHT | 1900 Kg / 4190 lb | 1900 Kg / 4190 lb | 2200 Kg / 4850 lb | 4600 Kg |

* Depending on diameter, wall thickness and type of material
** With special accessories

CML International S.p.A. reserves the right to change above mentioned specifications without notice