



# VLB GROUP

## TUBE BENDING MACHINES



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# VLB GROUP



## COMMITMENT

People are in fact the most essential factor in a company. The working group that supports VLB has been set up to merge highly specialized professionals. All of them have proven experience in the field of machine tools, in particular in pipe and tube bending and sheet processing.

One of the most important commitments, which underpins the VLB brand, is the development and manufacture of innovative and highly effective solutions for pipe and sheet processing. This is a commitment assumed by all the elements that make up the team.

VLB is the immediate answer to the needs of this market, not only with equipment of the highest quality and technology but also with a superior level of after-sales service and technical support. From the moment you buy a VLB product, you have the whole team at your side, always.

## TOP LEVEL ENGINEERING

The search for excellence is in the company's DNA. We have scouted and incorporated experienced professionals, in all aspects of the process: research and development, the manufacturing process, software development, automation, and so on.

In addition to the constant dialogue with our customers, we actively cooperate with universities and scientific institutes in order to develop new solutions. This mentality enables us to always stay one step ahead in responding to current needs, especially to be prepared for the challenges in the current industrial environment.

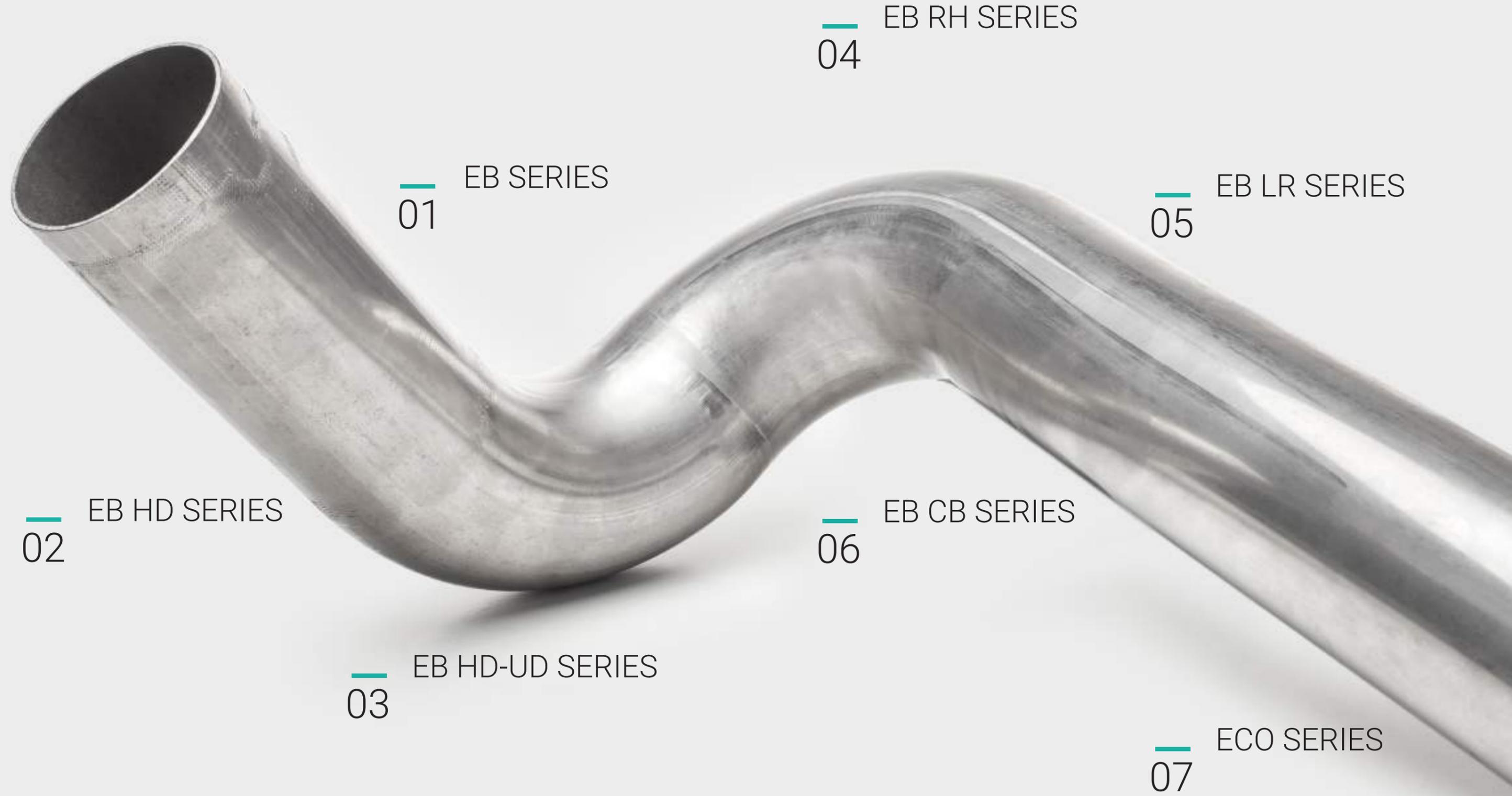
## STATE-OF-THE-ART PRODUCTION

We strive for excellence in everything, from human resources to facilities. The VLB group is equipped with "state-of-the-art" fabrication capacity, with facilities covering more than 15,000m<sup>2</sup> divided by two production units.

The installed machine park consists entirely of CNC equipment, from the most important manufacturers worldwide. In order to promote efficiency, these types of equipment are strategically installed in an exclusively dedicated pavilion, occupying an area of approximately 4.500m<sup>2</sup>.



THE MOST ADVANCED  
**TUBE BENDING TECHNOLOGY**  
IN THE WORLD



01 EB SERIES

04 EB RH SERIES

05 EB LR SERIES

02 EB HD SERIES

06 EB CB SERIES

03 EB HD-UD SERIES

07 ECO SERIES

# EB SERIES

EB43CNC | EB53CNC | EB63CNC | EB83CNC



WATCH VIDEO



## EB83CNC

- ø83mm
- 100% Fully electric bender
- Bending of multiple fixed and variable radii
- Compact Design

The EB Series electric VLB bending machines are equipped with the latest Electric Motion Technology. With up to 11 fully electric drive axis, pipes with a diameter of 6 to 83 mm can be bent. Equipped with a Booster System, it is possible to achieve radii up to 1D with reduced marks in the inner bend. The drives on all axis are optimized to reduce energy consumption and increase speed, making these machines ideal for high-volume production batches that require high consistency.



This equipment is ideal for industries that prefer speed, efficiency, high productivity, and repeatability like Automotive, Furniture, Aerospace, HVAC, or industries that require rapid tool changes.



EASY PRODUCTION CELL INTEGRATION

## MAIN FEATURES OF THE FULLY ELECTRIC CNC TUBE BENDERS | EB SERIES

- > 100% electric drive of all 11 axis.
- > Bending of multiple fixed and variable radii in the same cycle.
- > Quick change of bending tool, without having to readjust.
- > High production speed and low power consumption.
- > Axis movements controlled by servo motors with absolute encoder feedback.
- > Simplified synchronization and optimization of bending cycles.
- > Compact and ergonomic design guarantees operating comfort.
- > Low maintenance costs with preventive intervention warnings.
- > Sensors that monitor the elastic behavior of the material, compensate for the bending cycle and provide more precision and less waste.
- > Bend left or right, with a shorter change time.
- > Powerful and intuitive VLB 3D software with anti-collision simulation.
- > Easily program or import files from the cloud or from the network.



ARTIFICIAL VISION



LOW PROFILE BENDING HEAD



HIGHLY COMPLEX PARTS



CUTTING STATION

### STANDARD CHARACTERISTICS

	EB43-CNC	EB53-CNC	EB63-CNC	EB83-CNC
Steel Round Tube - Max Diam x Wall Thick	43 x 2 mm	53 x 2 mm	63 x 2 mm	83 x 2 mm
CNC Controlled Axis	9	9	9	9 / 11
Maximum Bending Radius*	300 mm	300 mm	300 mm	330 mm
Useful Tube Length Inside Collet (Stopper)	3000 mm	3000 mm	3000 mm	3000 mm
Axis' Accuracy	± 0.05	± 0.05	± 0.05	± 0.05
Tube Loading Height	1120 mm	1120 mm	1120 mm	1250 mm
Machine Size (mm)	5700 x 1600 x 1500	5700 x 1600 x 1500	5700 x 1600 x 1500	6510 x 1570 x 1680

\*Other specifications by request

# EB HD SERIES

EB105CNC | EB130CNC | EB150CNC

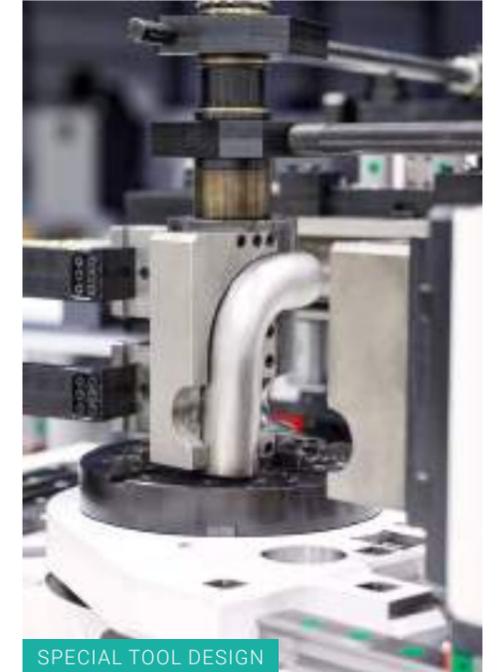


WATCH VIDEO



## MAIN FEATURES OF THE FULLY ELECTRIC CNC TUBE BENDERS | EB HEAVY DUTY SERIES

- > 100% electric drive of all 11 axis.
- > Bending of multiple fixed and variable radii in the same cycle.
- > Quick change of bending tool, without having to readjust.
- > High production speed and low power consumption.
- > Axis movements controlled by servo motors with absolute encoder feedback.
- > Simplified synchronization and optimization of bending cycles.
- > Compact and ergonomic design guarantees operating comfort.
- > Low maintenance costs with preventive intervention warnings.
- > Sensors that monitor the elastic behavior of the material, compensate for the bending cycle and provide more precision and less waste.
- > Bend left or right, with a shorter change time.
- > Powerful and intuitive VLB 3D software with anti-collision simulation.
- > Easily program or import files from the cloud or from the network.



SPECIAL TOOL DESIGN

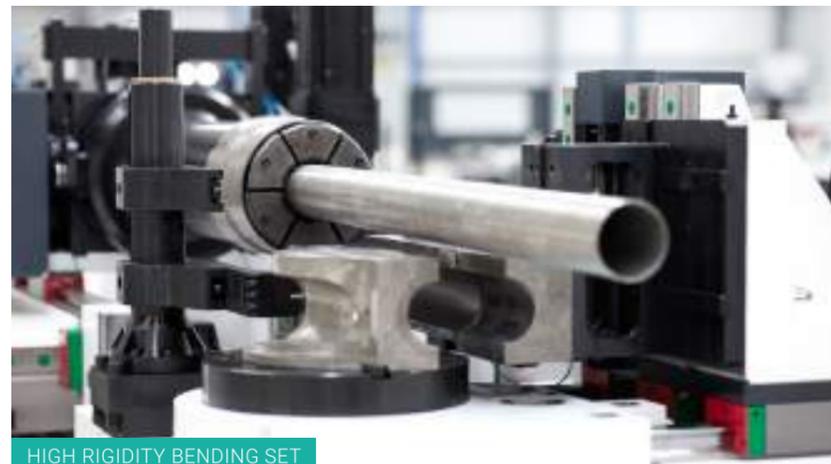
### EB130CNC

ø130mm  
100% Fully electric bender  
Bending of multiple fixed and variable radii  
Compact Design

The EB HD Series electric VLB bending machines are equipped with the latest Electric Motion Technology. With up to 11 fully electric drive axis, pipes with a diameter of 18 to 150 mm can be bent. Equipped with a Booster System, it is possible to achieve radii up to 1D with reduced marks in the inner bend. The drives on all axis are optimized to reduce energy consumption and increase speed, making these machines ideal for high-volume production batches that require high consistency.



This equipment is ideal for industries that prefer speed, efficiency, high productivity, and repeatability like Automotive, Energy, Aerospace, Pharmaceutical, Food and Beverage.



HIGH RIGIDITY BENDING SET



ERGONOMIC LOADING HEIGHT



TANGENT BOOSTER SYSTEM

STANDARD CHARACTERISTICS	EB105CNC	EB130CNC	EB150CNC
Steel Round Tube - Max Diam x Wall Thick	105 x 2,5 mm	130 x 3 mm	150 x 3 mm
CNC Controlled Axis	10 / 11	10 / 11	10 / 11
Maximum Bending Radius*	450 mm	420 mm	410 mm
Useful Tube Length Inside Collet (Stopper)	4000 mm	4000 mm	4000 mm
Axis' Accuracy	± 0.05	± 0.05	± 0.05
Tube Loading Height	1300 mm	1350 mm	1410 mm
Machine Size (mm)	7900 x 2100 x 1950	7760 x 2200 x 1940	7900 x 2300 x 2100

\*Other specifications by request

# EB HD-UD SERIES

EB150CNC-UD | EB180CNC-UD | EB220CNC-UD



WATCH VIDEO



## EB150CNC-UD

ø150mm  
100% Fully electric bender  
Bending of multiple fixed and variable radii  
Compact Design



This equipment is ideal for industries that prefer speed, efficiency, high productivity, and repeatability like Automotive, Defense, Energy, Aerospace, Pharmaceutical, Shipyard, Food and Beverage.

The EB HD-UD Series electric VLB bending machines are equipped with the latest Electric Motion Technology. To improve ergonomics, the vertical and horizontal movement has been transferred to the POB. With up to 13 fully electric drive axis, pipes with a diameter of 25 to 220 mm can be bent.

Equipped with a Booster System, it is possible to achieve radii up to 1D with reduced marks in the inner bend. The drives on all axis are optimized to reduce energy consumption and increase speed, making these machines ideal for high-volume production batches that require high consistency.



COMPACT POB WITH BOOSTER SYSTEM

## EB180CNC-UD

ø180mm  
100% Fully electric bender  
Bending of multiple fixed and variable radii  
Ergonomic loading height



SERVO-CONTROLLED TOOL RETURN

### MAIN FEATURES OF THE FULLY ELECTRIC CNC TUBE BENDERS | EB HEAVY DUTY UP-DOWN SERIES

- > 100% electric drive of all 13 fully axis.
- > Bending of multiple fixed and variable radii in the same cycle.
- > Quick change of bending tool, without having to readjust.
- > High production speed and low power consumption.
- > Axis movements controlled by servo motors with absolute encoder feedback.
- > Simplified synchronization and optimization of bending cycles.
- > Compact and ergonomic design guarantees operating comfort.
- > Low maintenance costs with preventive intervention warnings.
- > Sensors that monitor the elastic behavior of the material, compensate for the bending cycle and provide more precision and less waste.

### STANDARD CHARACTERISTICS

	EB150CNC-UD	EB180CNC-UD	EB220CNC-UD
Steel Round Tube - Max Diam x Wall Thick	150 x 3 mm	180 x 3 mm	220 x 12 mm
CNC Controlled Axis	10 / 11	11	12 / 13
Maximum Bending Radius*	410 mm	700 mm	1000 mm
Useful Tube Length Inside Collet (Stopper)	2800 mm	4200 mm	6000 mm
Axis' Accuracy	± 0.05	± 0.05	± 0.05
Tube Loading Height	1170 mm	1430 mm	1440 mm
Machine Size (mm)	6800 x 2600 x 2240	9700 x 4600 x 2600	13000 x 4500 x 2800

\*Other specifications by request

# EB RH SERIES

EB43CNC-RH | EB53CNC-RH | EB63CNC-RH



WATCH VIDEO



## MAIN FEATURES OF THE FULLY ELECTRIC CNC TUBE BENDERS ROTATIVE HEAD | EB RH SERIES

- > 100% electric drive of all 11 axis.
- > Bending head with 360 ° radial axis and horizontal and vertical linear axis.
- > Bending clockwise and counterclockwise in an automatic cycle.
- > Bending of multiple fixed and variable radii in the same cycle.
- > Quick tool change, without having to readjust.
- > High working speed and low power consumption.
- > Axis movements controlled by servo motors with absolute encoder feedback.
- > Simplified synchronization and optimization of bending cycles.
- > Compact and ergonomic design for optimal operating comfort and maintenance.
- > Sensors that compensate for material bending back and provide greater precision and less waste during the bending cycle.
- > Easily program or import files from the cloud or from the network.



SELF LOADING/UNLOADING MECHANISM



HIGH CLEARANCE POB DESIGN

### EB53CNC-RH

- ø53mm
- 100% Fully Electric Bender
- Bending of multiple fixed and variable radii
- Compact Design
- Left and Right bending direction

VLB's fully electric EB RH Series bending machines with rotating heads, contain the most advanced Electric Motion Technology on the market with 11 fully electric drive shafts. The bending head moves 360° on a radial axis and on horizontal and vertical axis. This system offers complete freedom of movement and allows the production of very complex parts in an automatic bending cycle. This range of machines is capable of bending pipes and profiles from 6 to 53 mm with even radii up to 1D with minimal marking when equipped with the booster system.



This equipment is ideal for industries that prefer speed, efficiency, high productivity, and repeatability like Automotive, Furniture, Aerospace, HVAC, or industries that require rapid tool changes.



EASY PRODUCTION CELL INTEGRATION



PUNCHING SYSTEM



HIGH PRODUCTION AND REPEATABILITY

STANDARD CHARACTERISTICS	EB43CNC-RH	EB53CNC-RH	EB63CNC-RH	EB83CNC-RH
Steel Round Tube - Max Diam x Wall Thick	43 x 2 mm	53 x 2 mm	63 x 2 mm	83 x 2 mm
CNC Controlled Axis	11	11	11	11
Maximum Bending Radius*	255 mm	255 mm	330 mm	330 mm
Useful Tube Length Inside Collet (Stopper)	3000 mm	3000 mm	3000 mm	3000 mm
Axis' Accuracy	± 0.05	± 0.05	± 0.05	± 0.05
Tube Loading Height	1250 mm	1250 mm	1360 mm	1360 mm
Machine Size (mm)	6400 x 2000 x 1650	6400 x 2000 x 1650	6800 x 2200 x 1800	6800 x 2200 x 1800

\*Other specifications by request

# EB LR SERIES

EB20-LR | EB32-LR



WATCH VIDEO

## MAIN FEATURES OF THE FULLY ELECTRIC CNC TUBE BENDERS LEFT/RIGHT | EB LR SERIES

- > 100% electric drive of all 8 axis.
- > Bending head with horizontal and vertical linear axis.
- > Bending clockwise and counter clockwise in automatic cycle.
- > Bending of multiple fixed and variable radii in the same cycle.
- > Quick tool change, without having to readjust.
- > High working speed and low power consumption.
- > Axis movements controlled by servo motors with absolute encoder feedback.
- > Simplified synchronization and optimization of bending cycles.
- > Compact and ergonomic design for optimal operating comfort and maintenance.
- > Sensors that compensate for material bending back and provide greater precision and less waste during the bending cycle.
- > Easily program or import files from the cloud or from the network.



EXTENDED VERTICAL STROKE



HIGH CLEARANCE POB DESIGN

### EB32-LR ø32mm

- 100% Fully Electric Bender
- Bending of multiple fixed and variable radii
- Compact Design
- Left and Right bending direction

The EB LR Series electric VLB bending machines with Left/Right bending head direction are equipped with the latest Electric Motion Technology. The bending head has horizontal and vertical linear axis. This system offers complete freedom of movement and allows the production of very complex parts in an automatic bending cycle. This range of machines is capable of bending pipes and profiles from 6 to 32 mm with even radii up to 1D with minimal marking when equipped with the booster system.



HIGHLY COMPLEX PARTS



ARTIFICIAL VISION



This equipment is ideal for industries that prefer speed, efficiency, high productivity, and repeatability like Automotive, Furniture, Aerospace, HVAC, or industries that require rapid tool changes.



USER-FRIENDLY SOFTWARE

### STANDARD CHARACTERISTICS

	EB20CNC	EB20CNC-LR	EB32CNC	EB32CNC-LR
Steel Round Tube - Max Diam x Wall Thick	20 x 2 mm	20 x 2 mm	32 x 2 mm	32 x 2 mm
CNC Controlled Axis	8	8	8	8
Maximum Bending Radius*	130 mm	130 mm	130 mm	130 mm
Bending Direction	Left or Right	Left - Right	Left or Right	Left - Right
Useful Tube Length Inside Collet (Stopper)	2000 mm	2000 mm	2000 mm	2000 mm
Axis' Accuracy	± 0.05	± 0.05	± 0.05	± 0.05
Tube Loading Height	1130 mm	1130 mm	1130 mm	1130 mm
Machine Size (mm)	3920 x 1160 x 1400			

\*Other specifications by request

# EB CB SERIES

EB12CNC-CB | EB22CNC-CB



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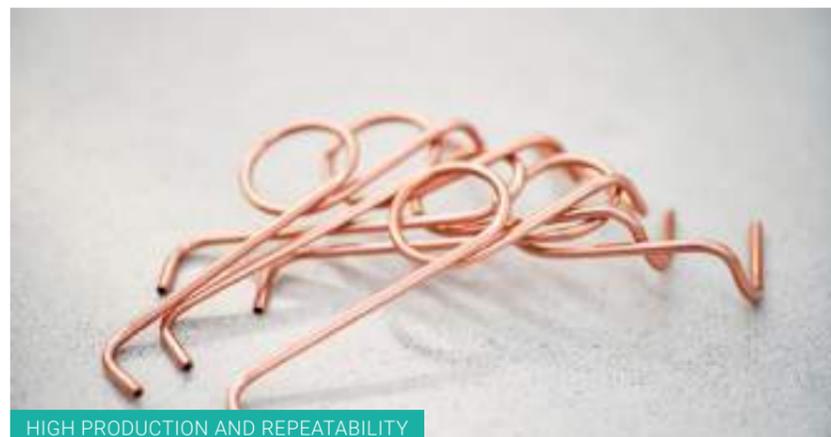
## EB22CNC-CB

ø6 a ø22mm  
100% Fully Electric Bender  
Bending of multiple fixed and variable radii  
Compact Design

The EB CB Series electric VLB bending machines with orbital head are equipped with the latest Electric Motion Technology. With fully electric drive axis, pipes with a diameter of 6 to 22 mm can be bent. CB benders were specifically developed for bending copper and aluminium directly from coil. This fully automatic production line may have four operations integrated: Straightening / End-Forming / Tube Bending / Cutting. The system is particularly well suited for making parts typically used in the refrigeration, HVAC, automotive and householding appliance industries.



This equipment is ideal for industries that prefer speed, efficiency, high productivity, and repeatability like Automotive, Furniture, Aerospace, HVAC, or industries that require rapid tool changes.

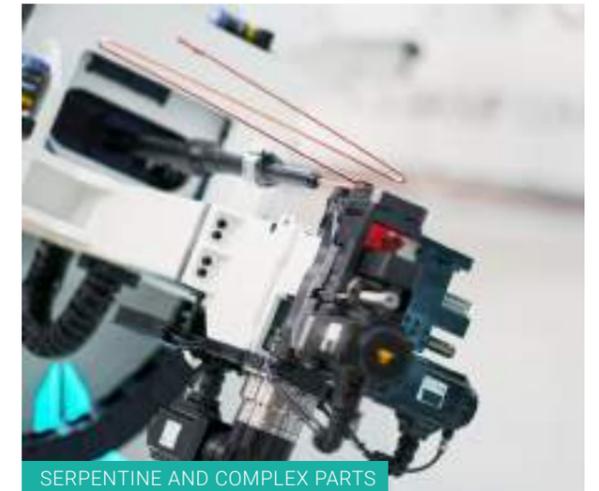


HIGH PRODUCTION AND REPEATABILITY



### MAIN FEATURES OF THE FULLY ELECTRIC CNC COIL BENDER | EB CB SERIES

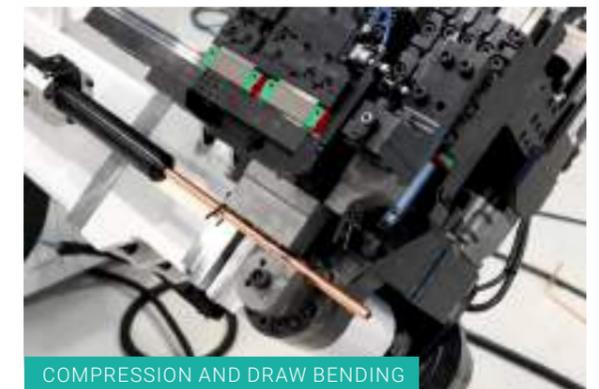
- > Bending head with 360° radial axis and horizontal and vertical linear axis.
- > Bending clockwise and counter clockwise in automatic cycle.
- > Bending of multiple fixed and variable radii in the same cycle.
- > Quick tool change, without having to readjust.
- > High working speed and low power consumption.
- > Axis movements controlled by servo motors with absolute encoder feedback.



SERPENTINE AND COMPLEX PARTS



QUICK TOOL CHANGE



COMPRESSION AND DRAW BENDING

### STANDARD CHARACTERISTICS

	EB12CNC-CB	EB22CNC-CB
Steel Round Tube - Max Diam x Wall Thick	12 x 2 mm	22 x 2 mm
CNC Controlled Axis	8	8
Maximum Bending Radius*	120 mm	120 mm
Useful Tube Length Inside Collet (Stopper)	Coil	Coil
Axis' Accuracy	± 0.05	± 0.05
Tube Loading Height	1160 mm	1160 mm
Machine Size (mm)	4760 x 1400 x 1600	4760 x 1400 x 1600

\*Other specifications by request

# ECO SERIES

ECO35CNC | ECO63CNC | ECO92CNC



WATCH VIDEO

## ECO92CNC

ø92mm  
Hybrid Bender  
Quick tool change  
Compact Design

The bending machines of the ECO CNC series are easy to operate, robustly constructed, and achieve excellent bending results. Entering a new bending program is very intuitive with the help of an advanced touch controller and the accurate and user-friendly VLB 3D Software on the CNC. Additionally, we also have the VLB 2D software on the CNC-L. The program precisely controls the bend angle (Y-axis) and rotation (Z-axis). The distance between the bends (X-axis) is configured using easily adjustable and very precise mechanical stops.



ROBUST DESIGN



These machines are intended for sectors that choose versatility and bending quality in terms of speed and productivity like Urban Furniture, Agriculture, Prototyping, Chemical Industry, and Ship Repair.

## MAIN FEATURES OF THE ELECTRIC CNC TUBE BENDERS | ECO SERIES

- > Simple, durable, and with excellent bending results.
- > Very intuitive programming of bending angle and rotation with industrial touch controller.
- > Drive of bending and rotation of the tube partly electrically.
- > Supporting hydraulic drive.
- > Quick change of bending tool, with easy adjustment possibility.
- > Revolutionary clamping system, with a compact bending head.
- > Powerful and low-maintenance bending machine with a reduced bending head increases the possibilities of complex bending work.
- > Integrated tool cabinet with interior lighting.
- > Compact and ergonomic design takes up little production space and improves operating and maintaining comfort.



CNC-L 2D CONTROLLER



CNC 3D CONTROLLER

## ECO63CNC-L

ø63mm  
Hybrid Bender  
Quick tool change  
Compact Design

STANDARD CHARACTERISTICS	ECO35CNC	ECO63CNC	ECO92CNC
Steel Round Tube - Max Diam x Wall Thick	35 x 2 mm	63 x 4 mm	92 x 4 mm
CNC Controlled Axis	3	3	3
Maximum Bending Radius*	135 mm	150 mm	225 mm
Useful Tube Length Inside Collet (Stopper)	3000 mm	3000 mm	3000 mm
Axis' Accuracy	± 0.05	± 0.05	± 0.05
Tube Loading Height	1110 mm	1110 mm	1220 mm
Machine Size (mm)	1120 x 4700 x 1400	1100 x 4600 x 1400	1650 x 5020 x 1550

\*Other specifications by request



SOFTWARE VLB 3D

### VLB 3D SOFTWARE

VLB tube bending machines are at the forefront of automation and control, as well as the VLB 3D software that is developed by an experienced IT team.

This department works in direct contact with the technical department and end-users.

The programming is highly intuitive and the import and export of files is carried out directly with the main CAD design software. The information received helps us to evolve and find answers to constant challenges. Each evolution achieved can be installed in existing equipment.

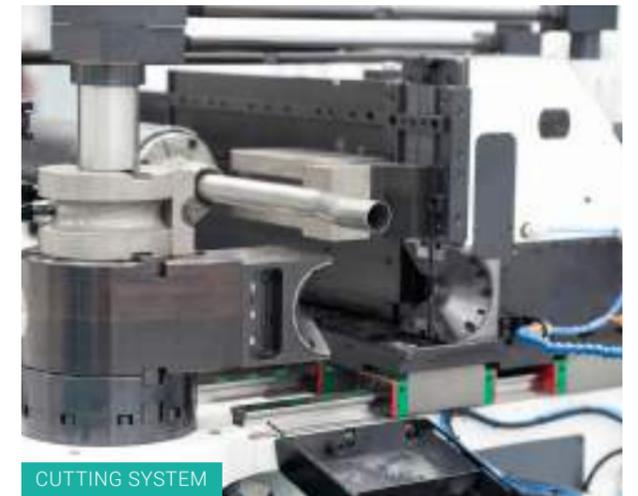
### MAIN FEATURES

- › Collision simulation;
- › Cycle time simulation;
- › Automatic correction of elasticity and calibration of the bending workpiece with calculation of the actual required length;
- › Offline installation and connectivity with peripherals;
- › Connectivity with measuring arms in combination with automatic correction;
- › Feasibility analysis, modification and export of the file for use in the design department;
- › Remote online assistance.

### TUBE CUTTING SYSTEM

Production optimization is an increasingly important topic. To save time, material, and electricity consumption, and to increase the productivity of our machines, we have developed an effective servo-controlled cutting system, without material deformation.

It is a cutting system with a knife integrated into the bending head. This allows cutting in a continuous automatic bending cycle without material waste and post-processing is often not necessary.



CUTTING SYSTEM

### LOADING AND UNLOADING SYSTEMS

Aware of the needs of modern industry, our bending machines have been developed with a clear goal: productivity! They are completely designed and prepared for the highest production level 24/7.

Mechanically, they only contain high-quality and low maintenance components. In terms of software and hardware, they can effortlessly integrate with automatic loading and unloading systems such as tube storage, robots, or manipulators.



EASY PRODUCTION CELL INTEGRATION

### EVOLUTIONARY DESIGN

Our bending machines are the result of decades of experience in the world of bending. The user experience of thousands of customers worldwide has resulted in unique application-oriented solutions for these machines.

We facilitate human-machine "communication", using visual status indicators and warning messages. We improve operating comfort, preventative maintenance, and corrective actions and increase the safety of the operator and equipment.



ENERGY EFFICIENCY

Partnering with **THE BEST...**



all around the **WORLD!**



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