

NON-MANDREL TUBE AND PIPE BENDER

CC90 CNC

GESA

🔊 4.0 Technology

NNAR



"than 40 years manufacturing industrial machinery

TUBE AND PIPE BENDER

The new generation of CC60 non-mandrel machines can bend up to 180° curves on hollow profiles ensuring the best bent finishes in today's market. Equipped with a Touch Screen control grant the user interactaction with the standard features offered using the latest 4.0 technology. The sleek look, versatility and faster bending speeds also allows us to have one of best machines offered in our industry. Materials can be round, oval, square, rectangular and made of different metals such as steel, aluminum, stainless steel, copper...

GET A QUOTE

Please complete the following form. We'll contact you in less than 24 hours. Business days

CC60

Maximum working stroke: 60.3 mm or 2" Schedule 40 or 2" ISO x 5 mm. Maximum radius of curvature: 320 mm or 12,60" CNC control with 7" touchscreen included 4.0 Technology Automatic rotation speed from 0.7 up 4.5 rpm Automatic unlocking Automatic and programmable springback Offset head for complex parts. Reinforcement tool post support included





Packaging included

Maximum working stroke: 88.9 mm or 3" Schedule 40 or 3" 1/2 Whitworth or 3" ISO x 6 mm. Maximum radius of curvature: 346 mm or 13,60" CNC control with 7" touchscreen included 4.0 Technology Automatic rotation speed from 1.5 up 5.4 rpm Automatic unlocking Automatic and programmable springback Offset head for complex parts. Reinforcement strap included Packaging included



TECHNICAL SPECIFICATIONS

Motor power: 4 KW / 5,5 HP. Electrical voltage: 230/400V Three phase 50/60Hz Intensity: 16/9 A Machine weight: 900Kg / 1985 Ibs



* All our products are made at our facilities in Spain. The hydraulic and electronic components are completely standard and from the best leading European brands with technical assistance services throughout the world: Rexroth, Bosch, Roquet, Schneider Electric, LG, Telemecanique, Pizzato...



WHAT YOU SHOULD KNOW BEFORE PURCHASING A PIPE BENDER



4.0 Technology

The advantages of having this technology in a machine are endless, so we're only going to mention the most relevant. Whenever a customer agrees, the manufacturer may remotely connect to their machine to do any software updates completely free of cost and detect any anomalies in the machine without needing to travel to the machine site. Customers are notified when preventive maintenance must be done on the machine along with many other advantageous features.



Robustness and speed

The weight of the machine in comparison to other brands provides an idea of how it's built. Some of our units are almost double in weight than our competitors. These are not DIY machines; they're pipe benders that can work 24 hours a day. Made of robust materials, which are tempered in areas subject to wear, and activated with a helical-cut pinion planetary gear system. The rotation speed is also something to be taken into account. It can reach 4.5 rpm for more aggressive production; in many cases, more than twice as much when compared to similar machines in today's market.



Curve thicknesses and finishes

Most tube and pipe benders can only bend very thick-walled pipes with a 10% minimum thickness of the diameter of the pipe normally calculated. For example, a good curve on a 40 mm pipe is usually guaranteed with a 3.5 or 4 mm wall thickness. The original counter-shape designed by Nargesa guarantee a good finish even with a thin-walled pipe. The minimum thickness for a 40 mm pipe can be 1.5 or 2 mm. This significantly lowers the cost of the raw material.



Offset head and two-directional bending

The offset head design allows for complex curves as the pipe goes underneath the head. Bending pipe below the head is not possible with some pipe bender models. The all-new CC60 and CC90 benders can curve to the right and left without needing to rotate the die, meaning any piece can be bent regardless its complexity.



Enhanced energy efficiency

The consumption per machine working stroke has been significantly reduced to save energy. Only 4 Kw with a working stroke of up to 88.9 mm.



Automatic unlocking

The bending carriage moves automatically to the right or to the left depending on the direction of the curve to more easily release the piece without needing to re-adjust the grip. This original system can complete pieces in much less time.



Reinforcement tool post support included

The CC90 CNC pipe bender comes standard with a reinforcement arm. It's used to prevent machine chassis deformations. The Control indicates when this device is required or not required.



Bend 8 Lubricant included

With the purchase of the CC90 CNC pipe bender, you'll receive a 400 ml bottle of special bending lubricant: for a better finish on the outside of the curve, to prevent roughness and inner corrugation and reduce wear on the counter-shape die. Ideal for thin tubes and pipes. Lubricates to reduce friction. Prevents and dissolves corrosion. Polishes and protects. Cleans and removes dirt.

ESA S625 CONTROL PANEL

Nargesa tube and pipes benders are controlled with a very intuitive and easy-to-use 7" color touchscreen with the latest 4.0 technology. Just enter the pipe dimensions, thickness, angle of the curve or curves and choose a die from the library and the control programs the rest of the parameters automatically; elastic recovery correction or springback, recommended rotation speed, whether a tool post support is necessary or not, and if the intended curve is possible... All of this may be modified by the end user based on their own needs. These are some of the most relevant features of this control system. > Stores up to 10,000 programs.

> Up to 50 different angles on the same piece can be programmed.

> Dimensions may be programmed in inches or millimeters.

> A library of available dies with the possibility of programming new ones.

> A library of differently shaped pipes with varying thicknesses.

> The CNC can be supplied in more than 20 different languages.

> Automatic or manual rotation speed adjustment from 1.5 to 5.4 rpm.

- > Manual or automatic operation.
- > Automatic elastic recovery correction (springback).
- > Piece counter.

> Independent correction of the programmable final curve degree.

- > 4.0 Technology
- > On-screen alarm diagnostics.
- > Preventive maintenance warning.

> Can be remotely connected by the manufacturer without having to travel to the machine site.

> Warning on screen if the tool post support needs to be used.

- > 7" color touchscreen with 800 x 480 resolution
- > 128 MB silicon disk
- > 2 analog inputs, 12 bit resolution.
- > 16 digital inputs (24 Vdc).
- > 16 digital outputs (24 Vcc, 0.7 A max.) Protected against overloads and short circuits.
- > 1 RS232 serial port
- > 1 CAN port with 9 D-Sub F connector contacts.
- > 24 Vdc power source
- > 1 USB port

OUTSIDE DIMENSIONS



PACKAGING CHARACTERISTICS

- Tariff Code: 84622180
- \cdot A lower pallet bench to transport the machine to the worksite or storage.
- •The CC90 pipe bender is sent completely assembled.
- · An wooden pallet and 3-layer cardboard box suitable for seafreight.
- · Optional: NIMF15 wooden container.

CC90 CNC									
Width	830 mm								
Depth	1290 mm								
Height	1524 mm								
Volume	1,63 m³								
Net Weight	900 Kg								
Gross Weight	935 Kg								

ACCESSORIES

Accessories supplied with the Pipe Bender

BEND8 aerosol lubricant



The CC90 pipe bender comes with a 400 ml bottle of BEND8 lubricant.

Formats available for this product: **REF.** 060-SPR-00003 400 ml bottle. **REF.** 060-SPR-00004 Box of 12 400 ml bottles.

This is a high-additive and low-viscosity aerosol oil. Contains PTFE. Does not contain silicone.

- > Enables the finish on the outer bend
- > Inhibits roughness and inner marks
- > Reduces wear of the tooling
- > Especially designed for tubes of small thickness
- > Lubricates to reduce friction
- > Avoids and disolves corrosion
- > Gives shine and protects
- > Cleans up and removes dirt

OPTIONAL ACCESSORIES

Customers must equip their pipe bender with a specific die to get the desired curving.

The diameter and thickness of the pipe as well as the radius of curvature must be taken into account when choosing a roller.

Characteristics of the elements:

Main Roller made of highly resistant steel which has been thermally hardened with carbonitriding for 50-54 HRC hardness; this roller guide perfectly adapts to the pipe for excellent results.

Counter-shape designed by the Nargesa R+D department which reduces friction and ensures optimal curving. It's made of a highly resistant aluminum bronze alloy and mechanized in 3D.

Clamp with a fastener to firmly secure the material during the bending process.

Support holder made of highly resistant steel which has been thermally treated with carbonitriding for 50-54 HRC hardness; this roller reduces the surface of contact with the counter-shape and, therefore, reduces friction.

Accessories for round pipes in millimeters · 15 to 40 mm



Units suitable for bending all types of round pipes in millimeters. The following is supplied with the unit: A main roller A counter-shape A clamp with a fastener

REF	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight			
140-17-01-10001	15 mm	4D=60 mm	1 mm	5 mm	3,176 Kg			
140-17-01-10002	20 mm	3D=60 mm	1 mm	5 mm	3,216 Kg			
140-17-01-10003	25 mm	3D=75 mm	1,2 mm	5 mm	5,545 Kg			
140-17-01-10004	30 mm	3D=90 mm	1,2 mm	5 mm	8,292 Kg			
140-17-01-10005	35 mm	3D=105 mm	1,5 mm	5 mm	12,140 Kg			
140-17-01-10006	40 mm	3D=120 mm	1,5 mm	5 mm	17,112 Kg			
Check with the manufacturer for other dimensions								

Accessories for round pipes in millimeters · 50 to 90 mm



Units suitable for bending all types of round pipes in millimeters. The following is supplied with the unit: A main roller A counter-shape A clamp with a fastener A support holder Supporting Roller Kit REF: 140-17-02-00002 is required

REF	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight		
140-17-01-10007	50 mm	3D=150 mm	2 mm	10 mm	31,407 Kg		
140-17-01-10008	60 mm	3D=180 mm	3 mm	8 mm	45,207 Kg		
140-17-02-10001	70 mm	3D=210 mm	3,6 mm	8 mm	72,404 Kg		
140-17-02-10002	80 mm	3D=240 mm	4 mm	6 mm	88,171 Kg		
140-17-02-10003	90 mm	3D=270 mm	4 mm	6 mm	114,363 mm		
Check with the manufacturer for other dimensions							

Accessories for round tubes in Whitworth inches \cdot 5/8" to 1" 1/2



Rollers made of treated steel. Units suitable for bending all types of round tubes in Whitworth inches. The following is supplied with the unit:

A main roller A counter-shape A clamp with a fastener

REF	Ø Ext.	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight	
140-17-01-30001	5/8″	15,88 mm	4D=63,5 mm	1 mm	4 mm	3,601 Kg	
140-17-01-30002	3/4″	19,05 mm	3D=57,15 mm	1 mm	4 mm	2,794 Kg	
140-17-01-30003	1″	25,40 mm	3D=76,2 mm	1,2 mm	5 mm	5,723 Kg	
140-17-01-30004	1″ 1/4	31,75 mm	3D=95,25 mm	1,5 mm	6 mm	10,213 Kg	
140-17-01-30005	1″ 1/2	38,10 mm	3D=114,3 mm	1,5 mm	7 mm	15,698 Kg	
Check with the manufacturer for other dimensions							

Accessories for round tubes in Whitworth inches \cdot 2" to 3" 1/2



Rollers made of treated steel. Units suitable for bending all types of round tubes in Whitworth inches. The following is supplied with the unit:

A main roller

A counter-shape

A clamp with a fastener

A support holder

Supporting Roller Kit REF: 140-17-02-00002 is required

REF	Ø Ext.	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight	
140-17-01-30006	2″	50,80 mm	3D=152,4 mm	2 mm	11 mm	32,241 Kg	
140-17-01-30007	2″ 1/4	57,15 mm	3D=171,45 mm	2,5 mm	11 mm	40,500 Kg	
140-17-02-30001	2″ 1/2	63,50 mm	3D=190,5 mm	3 mm	8,64 mm	40,500 Kg	
140-17-02-30002	3″	76,20 mm	3D=228,6 mm	3 mm	7,21 mm	80,689 Kg	
140-17-02-30003	3″ 1/2	88,9 mm	3D=266,7 mm	4 mm	6,05 mm	110,807 Kg	
Check with the manufacturer for other dimensions							

Accessories for round pipes in ISO inches \cdot 3/8" to 1" 1/2



Rollers made of treated steel. Units suitable for bending all types of round pipes in ISO inches. The following is supplied with the unit: A main roller A counter-shape A clamp with a fastener

REF	Ø Ext.	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight	
140-17-01-20001	3/8″	17,10 mm	4D=68,4 mm	1,65 mm	3,2 mm	4,22 Kg	
140-17-01-20002	1/2″	21,30 mm	3D=63,9 mm	1,65 mm	7,47 mm	3,567 Kg	
140-17-01-20003	3/4″	26,70 mm	3D=80,1 mm	1,65 mm	7,82 mm	6,738 Kg	
140-17-01-20004	1″	33,40 mm	3D=100,2 mm	1,65 mm	6,35 mm	11,176 Kg	
140-17-01-20005	1″ 1/4	42,20 mm	3D=126,6 mm	1,65 mm	6,35 mm	18,860 Kg	
140-17-01-20006	1″ 1/2	48,30 mm	3D=144,9 mm	2,77 mm	7,14 mm	27,0478 Kg	
Check with the manufacturer for other dimensions							

Accessories for round pipes in ISO inches · 2" to 3"



Rollers made of treated steel. Units suitable for bending all types of round pipes in ISO inches. The following is supplied with the unit: **A main roller**

A counter-shape

A clamp with a fastener

A support holder

Supporting Roller Kit REF: 140-17-02-00002 is required

REF	Ø Ext.	Ø Ext.	Radius	Min. thickness	Max. thickness	Weight	
140-17-01-20007	2″	60,30 mm	3D=180,9 mm	2,77 mm	11,7 mm	45,755 Kg	
140-17-02-20001	2″ 1/2	73,0 mm	3D=219 mm	3,05 mm	9,53 mm	72,00 Kg	
140-17-02-30003	3″	88,9 mm	3D=266,7 mm	3,96 mm	6,35 mm	110,807 Kg	
Check with the manufacturer for other dimensions							

Supporting Roller Kit



REF: 140-17-02-00002

The CC90 Supporting Roller Kit is used to bend pipes with a diameter equal to or more than 50 mm, 2" Whitworth or 2" ISO. This unit is comprised of:

A roller holder: The roller holder is made up of three highly resistant steel pieces that are precision mechanized and treated on the surface. They're fixed and centered with rectified bolts to ensure proper operation.

The coupling axis: The coupling axis is made up of a chrome Ø20 mm Matera axis

Weight: 24,573 kg

OUR RANGE OF MACHINERY



IRON WORKERS



NON-MANDREL PIPE BENDER



GAS FORGES



IRON EMBOSSING MACHINES



BROACHING MACHINES



HORIZONTAL PRESS BRAKES



HYDRAULIC PRESS BRAKES



END WROUGHT IRON MACHINES



WELDING POSITIONERS



SECTION BENDING MACHINES



TWISTING/SCROLL BENDING MACHINES



HYDRAULIC SHEAR MACHINES



POWER HAMMERS



PRESSES FOR LOCKS

WARRANTY

Nargesa machines have 3 years warranty provided that the customer registers it in our website. Otherwise it would be only one year warranty. This one encloses any manufacturing default all along these 3 years for components. Any misuse is excluded from this condition. Labor, back and forth shipping and any eventual repair, are not included in this warranty.

Partner companies



SHIPMENT EVERYWHERE

Nargesa will arrange transport up to final destination, whenever the customers asks for so. There is also the possibility for the customer to arrange the shipment himself with his own agency.

TECHNICAL ASSISTANCE

All our customers have access to technical support quickly and efficiently.

90% of incidences are solved out on the phone, mail, Skype or videoconferencing in less than 24hours. In case of needing presencial technical assistance, we may as well send a technician to the customer's facilities.

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