

## **CNC PIPE BENDER**

## MC550CNC

4.0 Technology

**NEW** 









UNE 166002



#### GET A QUOTE

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

#### **SOME OF OUR CUSTOMERS**

Our customer's endorsement is our best business card



















#### **CERTIFICATES AND ACCREDITATIONS**

Some of the certificates that support our processes and benefit our customers







The all-new Nargesa MC550CNC CNC pipe and profile bendingmachinewasfullydevelopedin-house, guaranteeing absolute quality and precision. Designed for single pieces as well as mass production, its advanced CNC control panel makes it possible to easily create any desired geometry by directly programming the radiuses required to obtain mass-produced pieces with exceptional repetitiveness.

With the capacity to bend round pipes up to 3 inches (76.2 mm) or 80 mm, this machine is ideal for industrial applications and architectural projects.

Built with welded and machined steel sheet, the MC550CNC stands out due to its resistance and stability, perfectly adapting to applications such as the manufacture of clamps, greenhouses, railings, pergolas, circular beams, and metal structures for domes and tunnels. It's also perfect for creating urban furniture such as streetlamps, bike racks, tree protectors, bollards and public transport shelters.

The capacity to bend profiles and tubes of different dimensions in addition to its innovative technology and total connectivity make it the perfect solution for the thriving industry 4.0 both for in-house use as well as for offering bending services to third parties.

All Nargesa products are adapted to EC industrial machinery manufacturing standards.

All our products are manufactured in our facilities in Spain. Hydraulic and electrical components are completely standard from the best European leading trademarks, with technical suppeort all over the world: Rexroth, Bosch, Roquet, Schneider Electric, LG, Telemecanique, Pizzato...



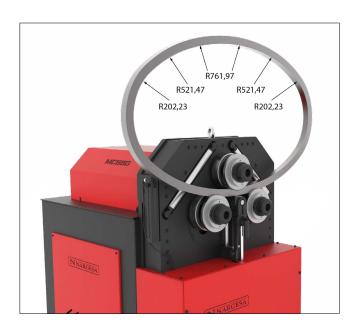
# TECHNICAL FEATURES



- > A smart predictive system to obtain the desired radius right away.
- > Easy to use: Anyone with minimal knowledge can make very complex pieces with different radiuses using the all-new CNC.
- > A library with profiles, radiuses and rollers to choose from.
- > Speed control and axle interpolation for perfect results and fluid transitions between segments.
- > Completely automatic production, simply by pushing a button.
- > A high-resolution encoder with 4096 pulses and quadrature encoder for optimal position control at all times.
- > Maximum bending capacity for round tubes up to 3 inches (76.2 mm) or 80 mm.
- > 9 standard rollers included, which are suitable for square and rectangular pipes, for solid, UPN, IPN and T-profiles, for angles, plates and much more. Plus, optional rollers are also available for round pipes and tubes.
- > Outside roller diameter: 170 mm or 6.7 inches.
- > Axle characteristics: Built in F154 steel, tempered and rectified.
- > Diameter: 50 mm or 2 inches.
- > Useful length: 90 mm or 3.5 inches.
- > 3 pull rollers for a better hold and to eliminate any drag marks on the surface of the finished pieces.
- > Safe transmission through tempered flat pinions, avoiding the use of chains and fragile components.
- > Electro-hydraulic drive and electronic regulation independent of the position of the lower rollers to optimize the material, create smaller radiuses and provide the best results in all types of jobs.
- > Adjustable roller speed: From 3 to 8 rpm, adjustable to adapt to different materials and pipe and profile sizes.
- > Main motor: 1.5 kW / 2 CV.
- > Hydraulic unit motor: 0.75 kW / 1 CV.
- > CNC ESA S625 control panel, with a touch graphic interface.
- > Voltage: 220 V single-phase.



## WHAT YOU SHOULD DO BEFORE PURCHASING A CNC PIPE AND PROFILE BENDER



## Smart predictive system and axle interpolation

The all-new CNC is able to predict any desired radius right away all while avoiding material waste, thus facilitating the creation of pieces with complex geometries in just a few minutes to guarantee perfect results and optimize the production of large series. Axle interpolation for perfect results and fluid transitions between segments.



#### **CNC** components

**High-resolution encoder:** Absolute positioning control with a high-resolution 4096 impulse encoder, quadrature decoder, A+B channels, 5 Vdc, DB9 connector.

**CNC bending software:** Gets radiuses right away, axle interpolation, bend direction configuration, soft transitions, step-by-step, digital mode.

**Photocell:** 300 mm long-range direct reflection, PNP NO output, M12 connector.



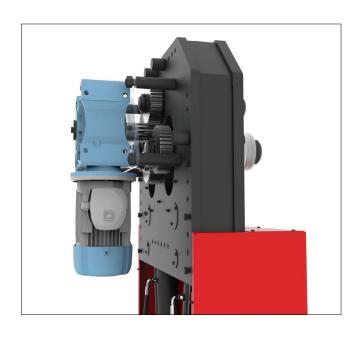
#### **Industry 4.0**

The fourth industrial revolution is coming at the hands of Nargesa, offering complete connectivity on all of its machines for an unbeatable after-sale experience. Get free updates, professional remote technical advising, real-time diagnostics and automatic preventive maintenance warnings to enhance the machine performance and avoid problems.



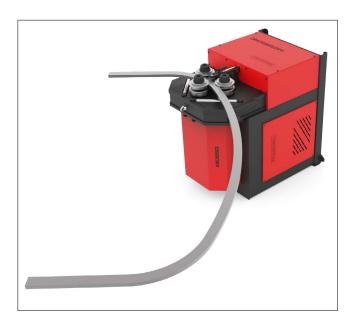
#### **EcoMode function**

Automatically reduces energy consumption, disconnecting the electrical parts that consume the most during periods of inactivity. This not only minimizes energy consumption, but also reinforces Nargesa's commitment to the sustainability of our planet and caring for the environment.



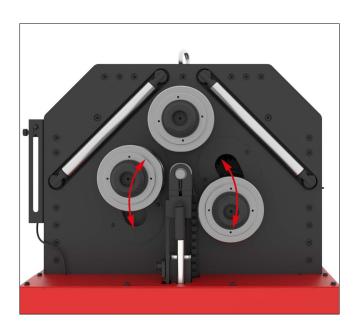
#### Robustness and power

Built to comply with the most demanding operating conditions, the all-new Nargesa MC550CNC 3 inch pipe bender can operate full 24-hour days without any problems. Its robustness is based on its steel sheet structure, which is thermally treated for high resistance to wear. Its power comes from an efficient reducer that transmits the movement to the axles through induction-tempered flat pinions, thus avoiding weak points.



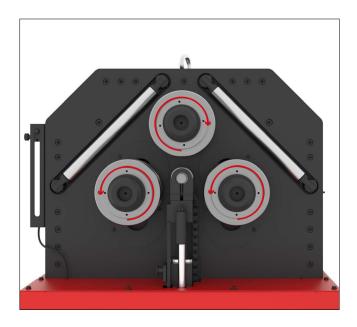
#### Work in vertical and horizontal positions

The versatility of the all-new Nargesa MC550CNC 3-roller Roller makes it useful for creating small pieces as well as those with enormous radiuses. The manufacture of pieces with radiuses equal to or smaller than 750 mm can be easily done with the bending machine, working in a vertical position. However, for larger bend radiuses, it's best to work in a horizontal position to ensure good support and prevent the weight of the material from compromising the resulting piece. This working position is also ideal if there are any height problems at the facilities where the machine is located.



## Asymmetric roller position and electronic control

Unlike pyramidal benders, the Nargesa MC550CNC asymmetric bending machine can move the two lower axles independently. This makes it possible to vary the center distances for better use of the material, which can be bent almost all the way to the ends. Likewise, the asymmetric configuration means the rollers can be practically brought together to create much smaller bend radiuses than those obtained with a pyramidal bending machine.



#### 3 pull rollers

They increase the operating speed and provide the optimal material drag, which is essential when bending rectangular, square or round pipes to prevent unwanted marks on the finished product as occurs on pieces created with bending machines featuring just two pull rollers due to the need to use knurled rollers for a better hold.



#### Easily moved to the worksite

The hole at the top allows for movement using a crane and the lower pallet bench design means it can be moved without complicating the logistics in order to create the desired pieces in situ, thus offering better customer service and preventing continuous transfers from worksites to workshops. Plus, with a single-phase electric connection, the bending power can be available anywhere with just a standard power outlet.

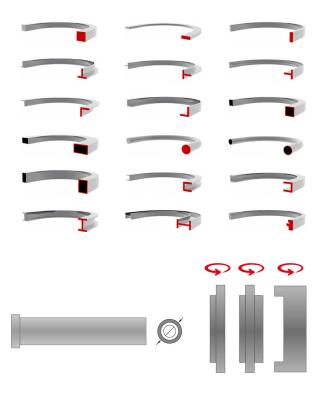


#### Adjustable bending speed

Standard in the MC550CNC CNC pipe bender, unlike other brands, it can adapt at any time to the characteristics of the material used and optimize production without compromising the results to guarantee exceptional repetitiveness in large series as well as the creation of unique pieces in just a few minutes.

# The Nargesa MC550CNC CNC pipe bender was designed so that any operator, even without experience, could bend pieces of all kinds with complex geometries.

Finding someone who's experienced in the world of bending is complicated and often nearly impossible. The only way is to apply new technology to the world of bending. Given the technology and quality/price ratio, the MC550CNC three-roller bending machine is considered by many government institutions, training schools, customers and manufacturers as the best 50 mm axle bending option.



CNC Control, unlike others, the bending process is so easy that no professional bender is required to do quick and precise bending. Plus, productivity has increased and the same work and even very similar bends can be easily repeated in the future.

For this purpose, it has a complete profile library and extensive editable database with pre-defined radiuses.

If that were not enough, it has a useful tool that allows you to graphically position the rollers on screen as one of the other many advantages offered by the all-new MC550CNC bending machine control and management touchscreen.



Many months have gone into testing, programming and fine-tuning to achieve the perfect "assistant" for present and future generations of operators.



#### Visual roller position indication

The bending machine has a visual roller position indicator for each axle, which graphically shows which rollers have been installed, their direction and arrangement for a certain piece. The ultimate objective is to achieve exceptional production repetitiveness to save time and reduce errors with programming as the arrangement of the bending machine rollers can be known even months after their creation.



#### **Profile library**

The bending machine has an extensive library with all the profiles our machine can bend. Likewise, the dimensions and thicknesses can be defined in order to know what type of material was used to do the work upon later production.



#### A list of pre-defined radiuses

With the idea in mind of maximum savings for our customers, a sample bar based on the work to be done can be created. By bending said bar, an unequivocal ratio between the real roller position and radius achieved is entered into the bending machine database. This allows operators to know beforehand where the rollers must be positioned in order to make known radiuses or extrapolate the data to create new radiuses based on positions already known. Moreover, any radius will soon be possible without trial and error if new values can be entered as the work is done. In other words, this saves time and very valuable material.



## **ESA S625 CONTROL CHARACTERISTICS**

The CNC ESA S625 control panel which comes standard with the Nargesa MC550CNC CNC pipe bender features total connectivity to comply with the requirements of the industry 4.0 as well as a 7 inch color touchscreen, which combines processing power with an intuitive, easy-to-use graphic interface. With step-by-step digital programming modes, creating a unique piece or large series based on the initial concept is super fast and easy: define the type of tube or profile, the dimensions, the material and the axle roller configuration, and then ask the control for the desired radiuses. After that, you just have to press a button to get excellent results.

These are some of the most relevant features of this control system.

- > A smart predictive system to obtain the desired radiuses right away.
- > Storage capacity for more than 10,000 programs in step-by-step, digital mode.
- > Interpolated axle control with independent speed adjustment for soft transitions on perfect pieces without any marks.
- > Configuration of measurements in inches and millimeters.
- > A database with the available rollers, featuring addition and editing options.
- > A database for profiles, pipes and materials, featuring addition and editing options.
- > A multilingual interface with a display in more than 20 different languages.
- > Adjustable bending speeds of between 3 and 8 rpm for optimal results.
- > Manual or automatic operating mode.
- > Total connectivity to meet the requirements of industry 4.0 and receive remote technical advising and assistance anywhere in the world.
- > A 4-way joystick for rotation movements and positioning in manual model, and step-by-step programming.
- > Digital programming to more easily create the first piece.
- > A button with an indicator light for mass production.
- > On-screen alarm and status diagnostics.
- > Real-time warnings for preventive maintenance.
- > 800x480 pixel screen graphic resolution.
- > SSD storage disc with 128 MB capacity.
- > 2 analog inputs with a 12 bit ADC converter.
- > 16 digital inputs (24 Vdc).
- > 16 digital outputs (24 Vdc, 0.7 A max.), protected against overloads and short circuits.
- > Up to 3 differential encoder inputs with a TTL interface and optional external power.
- > 1 RS232 serial port with a standard DB9 connector.
- > 1 CAN port with a standard DB9 connector.
- > 24 Vdc supply voltage.
- > 1 USB port.

## **BENDING CAPACITY**

The dimensions shown in the following table are provided for guidance only; they are directly related to the hardness and quality of the pipe or profile.









	MC150B		MC200		MC400		MC200H	
Profile	Dim.	Min. radius	Dim.	Min. radius	Dim.	Min. radius	Dim.	Min. radius
	50x10	300	50x10	300	50x10	250	60x10	200
	60x20	200	80x20	150	80x20	150	80x20	150
	25x25	200	30x30	200	30x30	150	30x30	150
	50x50x3 40x40x3	700 350	50x50x3 40x40x3	600 300	50x50x3 40x40x3	600 300	50x50x3 40x40x3	450 300
	40	200	40	200	40	150	40	200
	40	250	40	250	40	200	40	250
	40	300	40	300	40	250	40	250
	50	200	60	300	60	225	60	225
	50	250	60	300	60	225	60	225
	40	500	40	420	40	200	40	300
•	25	180	30	150	30	150	30	150
600	50,8x3* =2"x3* 40x2*	600 600 300	63,5x3* =2"1/2x3* 40x2*	500 500 250	63,5x3* =2"1/2x3* 40x2*	450 450 200	63,5x3* =2"1/2x3* 40x2*	450 450 200

<sup>\*</sup> Optional rollers



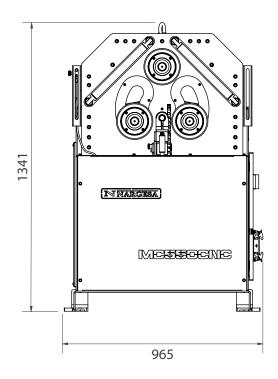


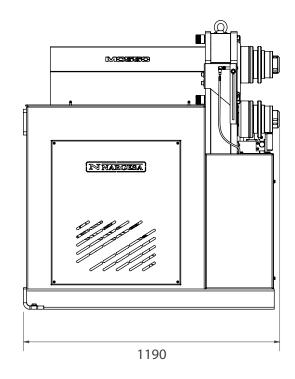
	MC550 · M	C550CNC	MC650·MC650CNC		
Profile	Dimensions	Min. radius	Dimensions	Min. radius	
	60x15	400			
	60x8	200	100x15	1250	
	50x15	350	80x20	450	
	50x10	175	60x15	300	
	40x8	150	50x15	155	
	30x5	110	20x10●	140	
	25x5	105			
	100x20	250	120x20	250	
	80x20	200	100x25	350	
	80x15	180	80x20	200	
	35x35	400	45x45	300	
	30x30	200			
	25x25	175	40x40	280	
	20x20	150	25x25 ●	200	
	15x15	150	20x20 ●	150	
	60x60x3	800	70x70x4	750	
	50x50x3	600	60x60x3	750	
	35x35x3	200	40x40x3	300	
	70x30x3	500	80x40x3	500	
	60x30x3	400	60x30x3	300	
	50x30x3	250	50x30x3	250	
	60x60x7	300	80*	500	
			70	400	
	50x50x6	250	60	200	
	40x40x5	200	40	150	
	60x60x7	500	80*	500	
	50x50x6	400	60	400	
	40x40x5	300	40	150	
	60x60x7	350			
	50x50x6	300	60x8	450	
	40x40x5	250	40x6	250	
	40x20x5	160	120*	600	
	60x30x6	200	100*	600	
	80x45x6	400	80	350	
	80x45x6	600	120*	700	
	60x30x6	250	100*	700	
	40x20x5	200	80	400	
			70x7	600	
	50x5	550	60x5	400	
	40x5	400	50x5	300	
_ <b>-</b>	10/10	100	40x4	250	
	50x5*	750	50x5*	750	
	40x4*	500	40x4*	500	
<del>_</del>			1234.		
	40	300	50	300	
	35	250	40	200	
•	30	200	25	175	
	20	130			
	76.2.2*(2//.2)	500	101,6x3,5* (=4"x3)	500	
	76,2x3* (3"x3)	500	100x3*	500	
6 0	40x2	180	88,9x4* (=3"SCH)	700	
•	20x2	100	35x2*	120	
			20x1,5*	115	

<sup>\*</sup> Optional rollers

<sup>•</sup> Consult with manufacturer

## OUTSIDE DIMENSIONS





# PACKAGING CHARACTERISTICS

- Tariff Code: 84622900
- A lower pallet bench to easily transport the machine to the worksite or storage.
- The machine is shipped fully assembled.
- An iron pallet and 3-layer cardboard box suitable for maritime transport.
- Optional: NIMF15 wooden container.

## MC550CNC

Width	1380 mm
Length	1070 mm
Height	2090 mm
Volume	3,08 m <sup>3</sup>
Nett weight	883 Kg.
Gross Weight	925 Kg.

# STANDARD ACCESSORIES SUPPLIED WITH THE MACHINE

#### **Standard rollers MC550**



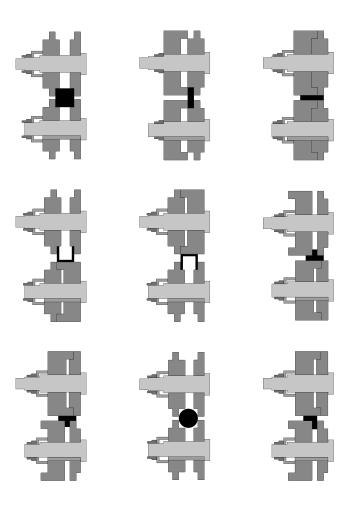
It's equipped with 9 standard pieces, by means of which the user can work all kinds of profiles. Square,

rectangular pipe, solid round and square bars. U Profile, T profile, angle, flat bar, edged flat bar...

Adjustable rollers. The user may combine the set up position and it will allow bending the different profiles, adapting the sizes.

Steel rollers F155 treated and rectified.

Assembling of the rollers





#### High precision digital radius gauge



REF: 140-MED08-00001

The **High precision digital radius gauge** allows the user to have a direct and immediate reading of inner and outer radius in a range from 55 to 11.250 millimeters or from 2" to 443" inches.

The High precision digital radius gauge measures radii in spherical objects such as tubes, profiles and pipes in a quick and accurate way. It is really fast and easy to use! It indicates the inner or outer radius of the part we are bending without removing it from the machine and without needing to previously draw and cut a guide template.

This Digital arc meter allows the direct and immediate reading of the values of the inner or outer radius in a wide range of bends.

- > Comfort: No need to prepare and cut a template to know the radius of a bend, it is not necessary to remove the part from the machine to measure it either. The digital radius gauge makes the job quicker and easier.
- > Easy to use: Its use is simple and the measurement process is very fast. We only have to place the digital radius gauge on the internal or external part of the curve and it will automatically show the value.
- > Multi-material: This tool is suitable for any kind of solid and consistent materials like steel, wood or plastic shapes.
- > **High precision:** Its error tolerance over the radius is 0,01mm. Precision will depend on the surface quality of the material to measure.
- > **Application scope:** This digital radius gauge is supplied with three different high precision arc meters. The use of either one or other arch meter offers a measurement range swinging from 55 to 11.250 millimeters and from 2" to 443" inches.
- > LCD digital screen: Comfortable reading of all data and low power consumption.
- > **Practical:** It is small and light, we can easily use it for different measurements. It is comfortable, reliable and long lasting.
- > **Storage:** We deliver it inside a stainless briefcase, with an inner foam protection to keep it safe and protect the arc meter when it is not in use. It is comfortable to carry and shock-resistant.
- > Two units of measure: We can select either millimeters or inches just by pressing a button.
- > Perfect for wide radii: Unlike other manufacturers, the High Precision Arc Meter Nargesa can measure radii up to 12m with maximum precision. For bigger radii, please consult the manufacturer.
- > Ideal for smaller radii: The great touch sensor length allows its use even when the inner radius to measure is very tiny.

#### **TECHNICAL SPECIFICATIONS**

- > Measurement scope: From 55 to 11.250 millimeters or from 2" to 443" Inches.
- > Error tolerance over the touch sensor:  $\Delta L = 0.02$ mm
- > Error tolerance over the radius:  $\Delta R = (0.01*R)$ mm
- > Power supply: 3V CR2032 Lithium battery
- > Working temperature: 0±40°C
- > Storage and transport temperature: -20°C 60°C
- > Relative humidity: =80%

#### 100 Measurement arc



The 100mm High precision arc meter is supplied along with the High precision digital radius indicator.

This tool is attached to the arc meter to measure internal or external radii, amongst the following ranges:

Minimum radius: 55mm or 2"
Maximum radius: 625mm or 25"

#### 200 Measurement arc



The 200mm High precision arc meter is supplied along with the High precision digital radius indicator.

This tool is attached to the arc meter to measure internal or external radii, amongst the following ranges:

Minimum radius: 125mm or 5"
Maximum radius: 2.500mm or 99"

#### 300 Measurement arc



The 300mm High precision arc meter is supplied along with the High precision digital radius indicator.

This tool is attached to the arc meter to measure internal or external radii, amongst the following ranges:

Minimum radius: 475mm or 18" Maximum radius: 11.250mm or 443"

#### **OPTIONAL** · 400 Measurement arc



This tool is attached to the arc meter to measure internal or external radii, amongst the following ranges:

Minimum radius: 1.150mm or 45"

Maximum radius: 20.000mm or 787"

#### Treated steel rollers · MC550



Rollers made of Steel F155 and treated to 62 Rc. Suitable for bending all kind of round steel or stainless steel pipes.

Always clean up the rollers well before using stainless steel not to get the pipe contaminated.

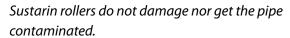
When the tube measurements are small, two measurements are added on the same roller.

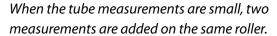


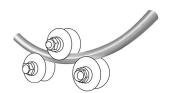
	Tube size in mm	
Reference	Dimensions	Weight
140-08-13-RHT0001	(25 + 30)	40,04 Kg.
140-08-13-RHT0002	(20 + 35)	39,65 Kg.
140-08-13-RHT0003	40	39,93 Kg.
140-08-13-RHT0004	50	36,24 Kg.
140-08-13-RHT0005	60	31,92 Kg.
140-08-13-RHT0006	70	28,57 Kg.
140-08-13-RHT0007	80	23,22 Kg.
	For Schedule pipe	
140-08-13-RHISOT0001	(3/8" + 1/2") = (17,2 + 21,3  mm)	43,53 Kg.
140-08-13-RHISOT0002	(1" + 3/4") = (33,7 + 26,9  mm)	38,57 Kg.
140-08-13-RHISOT0003	1" 1/4 = 42,4 mm	39,11 Kg.
140-08-13-RHISOT0004	1" 1/2 = 48,3 mm	36,91 Kg.
140-08-13-RHISOT0005	2" = 60,3 mm	31,77 Kg.
140-08-13-RHISOT0006	2" 1/2 = 73 mm	27,01 Kg.
	For inches pipe	
140-08-13-RHWT0001	(1/2"+1"1/4) = (12,70 + 31,75 mm)	41,67 Kg.
140-08-13-RHWT0002	(1"+3/4") = (25,40 + 19,05 mm)	42,35 Kg.
140-08-13-RHWT0003	1″1/2 = 38,1 mm	40,56 Kg.
140-08-13-RHWT0004	2" = 50,8 mm	35,92 Kg.
140-08-13-RHWT0005	2″1/2 = 63,5 mm	30,28 Kg.
140-08-13-RHWT0006	3" = 76,2 mm	25,31 Kg.



Rollers made of Sustarin to bend round stainless steel pipes, aluminium and delicate materials with thickness not bigger than 2.5mm.







	Para tubo en mm				
Reference	Dimensions	Weight			
140-08-13-RI0001	(25 + 30)	7,24 Kg.			
140-08-13-RI0002	(20 + 35)	7,17 Kg.			
140-08-13-RI0003	40	7,22 Kg.			
140-08-13-RI0004	50	6,55 Kg.			
140-08-13-RI0005	60	5,77 Kg.			
140-08-13-RI0006	70	5,17 Kg.			
140-08-13-RI0007	80	4,20 Kg.			
For Schedule pipe					
140-08-13-RIISO0001	(3/8" + 1/2") = (17,2 + 21,3  mm)	7,87 Kg.			
140-08-13-RIISO0002	(1'' + 3/4'') = (33,7 + 26,9  mm)	6,98 Kg.			
140-08-13-RIISO0003	1" 1/4 = 42,4 mm	7,07 Kg.			
140-08-13-RIISO0004	1" 1/2 = 48,3 mm	6,68 Kg.			
140-08-13-RIISO0005	2" = 60,3 mm	5,75 Kg.			
140-08-13-RIISO0006	2" 1/2 = 73 mm	4,89 Kg.			
	For inches pipe				
140-08-13-RIWT0001	(1/2"+1"1/4) = (12,70 + 31,75  mm)	7,54 Kg.			
140-08-13-RIWT0002	(1"+3/4") = (25,40 + 19,05  mm)	7,66 Kg.			
140-08-13-RIWT0003	1″1/2 = 38,1 mm	7,33 Kg.			
140-08-13-RIWT0004	2" = 50,8 mm	6,50 Kg.			
140-08-13-RIWT0005	2″1/2 = 63,5 mm	5,47 Kg.			
140-08-13-RIWT0006	3" = 76,2 mm	4,58 Kg.			

## **OUR RANGE OF BENDING MACHINES**



#### MC150B

- > Two drive rollers.
- > Diameter of axes: 40 mm.
- > Useful axes length: 74 mm.
- > Center distance between lower axes: 230 mm.
- > Maximum capacity for bending round pipe: 2" inches or 50 mm.



#### MC200

- > Diameter of axes: 40 mm.
- > Useful axes length: 74 mm.
- > Center distance between lower axes: 286 mm.
- > Maximum capacity for bending round pipe: 2" 1/2 inches or 63.5 mm.



#### MC400

- > Three drive rollers.
- > Diameter of axes: 40 mm.
- > Useful axes length: 80 mm.
- > Maximum capacity for bending round pipe: 2" 1/2 inches or 63.5 mm.
- > Independent bending regulation of the lower rollers.



#### **MC200H**

- > Two drive rollers.
- > Diameter of axes: 40 mm.
- > Useful axes length: 74 mm.
- > Center distance between lower axes: 286 mm
- > Maximum capacity for bending round pipe: 2" 1/2 inches or 70 mm.



#### MC550

- > Three drive rollers.
- > Diameter of axes: 50 mm.
- > Useful axes length: 90 mm.
- > Max. capacity for bending round pipe: 3" inches (76,2 mm) or 80mm
- > Independent bending regulation of the lower rollers.



#### MC650

- > Three drive rollers.
- > Diameter of axes: Lower 65 mm / Upper 80 mm.
- > Useful axes length: 130 mm.
- > Maximum capacity for bending round pipe: 4" inches or 101,6 mm.
- > Independent bending regulation of the lower rollers.

## **CNC PIPE BENDERS**



#### MC550CNC

- > Three drive rollers.
- > Diameter of axes: 50 mm.
- > Useful axes length: 90 mm.
- > Max. capacity for bending round pipe: 3" inches (76,2 mm) or 80mm
- > Independent bending regulation of the lower rollers.
- > A smart predictive system to obtain the desired radius right away.
- > Speed control and axle interpolation for perfect results and fluid transitions between segments.
- > A high-resolution encoder with 4096 pulses and quadrature encoder for optimal position control at all times.



#### MC650CNC

- > Three drive rollers.
- > Diameter of axes: Lower 65 mm / Upper 80 mm.
- > Useful axes length: 130 mm.
- > Maximum capacity for bending round pipe: 4" inches or 101,6 mm.
- > Independent bending regulation of the lower rollers.
- > A smart predictive system to obtain the desired radius right away.
- > Speed control and axle interpolation for perfect results and fluid transitions between segments.
- > A high-resolution encoder with 4096 pulses and quadrature encoder for optimal position control at all times.

## OUR RANGE OF MACHINERY



**IRON WORKERS** 



NON-MANDREL PIPE BENDER



SECTION BENDING MACHINES



**CNC PIPE BENDERS** 



HORIZONTAL PRESS BRAKES



TWISTING/SCROLL BENDING MACHINES



HYDRAULIC PRESS BRAKES



HYDRAULIC SHEAR MACHINES



**GAS FORGES** 



IRON EMBOSSING MACHINES



END WROUGHT IRON MACHINES



**BROACHING MACHINES** 



**POWER HAMMERS** 



BLACKSMITH FORGING PRESS

## 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.

Follow us on

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