products CtS





ABOUT US

Founded in 1967, the MEMOLI Company has been manufacturing manual and motorized bending machines ever since, for more than 50 years. The Company started as a small craft-men workshop, which then developed its technologies and products to suit them to nowadays requirements.





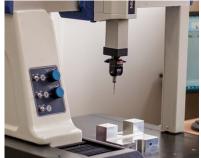


MECHANICAL DESIGN

Each Memoli machine is a unique and **customized** product, specifically designed to fulfill every single Customer's needs and resulted from the multiple possible combinations of models, sizes and equipment.

Our commitment is constantly oriented at Customer satisfaction, because we believe in a long-lasting relationship with our dealers and our direct user Clients.







PRODUCTION

Made in Italy products are a guarantee: high quality and security standards mark Memoli machinery as a product of excellence, thanks to the long time expertise gained through decades in manufacturing machines capable of becoming really favorable solutions for the market requirements.

We also offer a consulting service through our internal technical department, which is always available to study and find out the best possible solution: our goal is actually our Customer's complete satisfaction.









Eurekamatic

Universal machine for bending pipes and metal bars	4-5
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ETM

Tube bending machine P 6-7



ETM with mandrel

Tube bending machine with fix mandrel P8-9



ETM-H

Hybrid semi-automatic Tube bending machine P 10-11



ACH

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CP 30

Manual angle rolls bending machine



MEK 40

Hydraulic angle rolls bending machine P 17



Custom machines

Turn key



Eurekamatic





Universal machine for bending pipes and metal bars

One machine only for 5 different operations: circle-curve bending, angle-bending, tube bending with two options to bend with or without mandrel, scroll-bending and twisting.

Machined from solid cast iron block and designed to work cold iron, it is extremely easy to use because it is run and aided by an incorporated software, which allows total precision and efficiency of the curving system. The display shows the desired angle of curvature and constantly informs the operator about the position and movements of the curving axis.

The **software** allows the storage of 45 different angles of curvature. It is very easy and fast to change toolings. The machine can work both in manual and in **semi-automatic** mode, thus reducing working times and error possibility. It is also possible to have the clamping vice either pneumatic or hydraulic, besides some more customized options depending on the Customer's specific needs.

Eurekamatic has been for many years so far one of the most requested and used machines by **black-smiths** for their applications on tubes, profiles and square tubings, in order to carry out railings, handrails, tables, chairs, doors, windows, gratings and many more.



Technical specifications

Motor power	KW 4	
Rotation speed	7 - 14 g/1'	
Gears	In oil	
Weight	280 kg	
Size	850 x 620 x 980 h.	



Control panel

- ✓ User-frieldly
- ✓ Digital screen
- Tactile keyboard
- ✓ RAM
- ✓ Safety-mode

Eurekamatic AB-PF

Angle bender



Eurekamatic AB-CF

Circle-curve bender



Eurekamatic AB-CTA

Tube&Pipe bender with/without mandrel





Eurekamatic CS

Scroll-spiral bender







Eurekamatic D

Twister













Maximum capacities (mm)

Material	AB-PF	AB-CF	AB-CTA	CS	D
FE37 solid round	Ø 25	Ø 25	-	Ø 12	-
FE37 solid square	22	22	-	12	25
FE37 flat	100 x 10	50 x 15	-	30 x 12	40 x 10
FE37 pipe without mandrel	-	-	Ø 40 x 2	-	-
FE37 pipe with mandrel	-	-	Ø 30 x 2	-	-

ETM









Tube bending machine

The ETM series is equipped with state of the art technologies meant to bend with or without mandrel tubes and profiles, and capable of bending both in right and left direction. It allows to bend tubes with a range diameter from 8 mm up to 168 mm and it can make curves over 180° with top finish quality for a minimum bending radius of 3 x the tube diameter. Every ETM machine is manufactured from single welded steel block and the toolings are machined from solid steel.

The system of counter formers is specifically designed to reduce mechanical effort and to make the bending operation faster than other brands machines of the same category, thus granting a very good finishing even when bending very thin wall thicknesses.

Thanks to its **new software** technology called "Digital Bend Programming Touch Screen", this machine is extremely easy to use: this software in fact was specifically studied for our machines and enables to select up to **99 programs** each of them with a 5-stop sequence in the bending operation and to automatically adjust the material springiness (*springback*). Moreover, it allows to save and store one's projects as repeatable programs.

ETM 60



Technical specifications

ETM 80



	ETM 60	ETM 80	ETM 90	ETM 120	ETM 150
Motor power	KW 2	KW 2,2	KW 2,5	KW 3,5	KW 5,5
Rotation speed	5 g/1' *	3,5 g/1 ⁻ *	3 g/1'*	1 g/1' *	0-5 g/1'
Gears	In oil	In oil	In oil	In oil	In oil
Weight	210 kg	560 kg	800 kg	1050 kg	2500 kg
Dimensions (mm)	600 x 500 x 950	810 x 1100 x 1200	870 x 1250 x 1300	1200 x 1300 x 1300	1700 x 1400 x 1600

^{*} possibility of variable speed.

ETM 90 ETM 150







Positioner



Lenght and rotation measuring system with digital display

Maximum capacities (mm)

Material	ETM 60	ETM 80	ETM 90	ETM 120	ETM 150
FE37	60 x 4	76 x 6	90 x 6	114 x 8	168 x 7
Aluminium	60 x 8	76 x 8	90 x 10	140 x 7	168 x 10
INOX AISI 308	60 x 3	76 × 4	90 x 4	114 x 6	168 x 5,5
Solid round	45	55	65	85	110
Square pipe	50 x 3	60 x 4	80 x 4	110 x 5	140 x 6

ETM with mandrel









Tube bending machine with fix mandrel

The ETM range of fixed mandrel bending machines is perfect for the machining of tubes of small wall thickness without deformation of the bent tube: a compact, high performance and cheap solution.

Our fixed mandrel ETM tube benders allow the machining of tubes up to 90 mm diameter and are able to bend with high-level finish quality, with a minimum bending radius of 2.5 x the tube diameter.

General features:

- ✓ Carbon steel frame
- ✓ C45 molds, machined from solid with (optional) hardening process
- ✓ Fixed mandrel position
- ✓ Eccentric clamp die
- ✓ Eccentric pressure die
- ✓ Compact machine
- ✓ Variable bending speed
- ✓ Positioning device for tube length and rotation, incl. 3-jaw spindle
- ✓ Useful tube length 1.5; 2.5; 4.5; 6 m
- ✓ Length and rotation measuring system with digital display



Fix mandrel



Eccentric clamp, top view



Eccentric clamp, front view

ETM 60

Tube bender with fix mandrel



Maximum capacities (mm)

Material	ETM 60	ETM 80	ETM 90
FE	50 x 3	60 x 3	80 x 3
Inox AISI 304	50 x 2	60 x 2	76 x 4
Aluminum	60 x 2	76 x 3	90 x 3
Square pipe	40 x 3	60 x 3	70 x 3

ETM-H









Hybrid semi-automatic Tube bending machine

The ETM-H range of semi-automatic hybrid tube bender is ideal for the machining of thin tubes without deformation of the processed tube: a compact, high-performance and economical solution.

In semi-automatic bending machines of the ETM-H series, the bending function is performed automatically, while the feeding and rotation of the tube between the curves must be performed manually.

Simplicity, sturdiness and precision are the key features of this particularly cost-effective line.

These bending machines are particularly used for the production of medium-small sized batches, for adaptation and maintenance work or as mobile bending machines on site.

When machining tubes with multiple curves, the manual positioner will greatly facilitate the work, as this device allows the exact fixing of the length of the tube and the rotation position between the curves.

As standard supply, this electric bending machine is equipped with a hydraulic mandrel extractor, hydraulic clamp die and pressure die, thus ensuring an excellent quality bend finish.

Our ETM-H semi-automatic hybrid bending machines can bend tubes with a diameter up to 80 mm diameter with maximum quality of finishing, with a minimum bending radius of 1.5 x the tube diameter.

ETM-H 60



General features

- ✓ Carbon steel frame
- ✓ Separate control pulpit
- ✓ Adjustable pressure dies
- ✓ Programmable advance mandrel extraction for optimized bending quality
- ✓ Interchangeable shaft for small bending radii
- ✓ Variable bending speed
- ✓ Positioner for tube length and rotation, incl. 3-jaw spindle (optional)
- ✓ Useful tube length 1.5; 2.5; 4.5; 6 m.
- ✓ Compact machine
- ✓ Counter pressure die with automatic return
- ✓ Mandrel lubrication system (optional)
- ✓ Length and rotation measuring system with digital display.



Length and rotation measuring system with digital display





Maximum capacities (mm)

Material	ETM-H 60	ETM-H 80	ETM-H 89
FE	50 x 2,5	76 x 2	82,2 x 3
Inox AISI 304	50 x 1,5	63,5 x 2	76 x 3
Aluminum	60 x 4	76 x 4	90 x 3
Square pipe	40 x 3	55 x 3	65 x 4

ACH







CNC Tube bending machine

Memoli would like to present their new series of 3-axis CNC bending machines for the linear bending of tubes up to 65 mm diameter. The bending machines of the ACH series are fully automatic bending machines with CNC 3 axes: bending (Y axis), advancement (X axis) and rotation (Z axis).

This hybrid tube bending machine has been developed for the accurate bending of tubes and profiles. The main axes are **electrically** controlled, while the auxiliary axes are **hydraulically** controlled.

The extremely small bending head is made of steel with a chain-driven transmission to ensure more space in the sub-bending head; in this way, the machine can bend in a single cycle even tubes with the most complex geometries. The setup times are extremely short and ensure great flexibility.

The ACH series of CNC mandrel bending machines is developed and **produced entirely in Italy**, in close collaboration with the main tube bending Companies.



Some more functions

- ✓ Primary axes handling with brushless CNC motors.
- ✓ Toggle lock closure.
- ✓ Programmable advance mandrel extraction.
- ✓ Bending with variable radius.
- ✓ Rear booster.
- ✓ Preparation for punching accessory Up/Down mold opening.
- ✓ Compact and exposed bending head for maximum bending space.

Memoli interface-software 3D bending

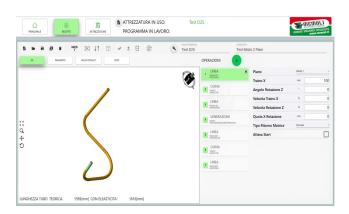
All of ACH mandrel bending machines are equipped with MEMOLI interface – 3D bending software, designed for tube bending applications. Extremely easy and intuitive, it allows you to program directly through the adjustment of LRA (length - rotation - angle). MEMOLI software is also compatible with a wide variety of CAD software programmes.

Thanks to the latest generation technologies it is possible to access main features as:

- ✓ Automatic **springback** compensation.
- ✓ Memorization of tools configuration and geometry.
- √3D Tube Development Graphics.
- ✓Axis movement simultaneously.
- ✓ Calculation of tube length.
- ✓ Continuous monitoring of the machine.
- ✓ Software for anti-collision testing.



ACH 45



MEMOLI interface Software 3D bending

Maximum capacities (mm)

Material	ACH 45	ACH 65
Steel with mandrel	45 x 2	65 x 2
Steel bending with interpolation	40 x 3	60 x 3
Aluminium	60 x 2	80 x 3
Aluminium bending with interpolation	50 x 2	65 x 3

BA







CNC angle roll bending machine

The BA machines are benders with computerized numeric control (CNC) which work either in manual or automatic mode and allow the direct insertion of the bending radius and of the data to obtain multiple forms and different developments.

Electronic control consisting of a central 64-bit PLC system for controlling the movement of the A1 – A2 – A3 axes and a computer – 64 bit – 1.4 GHz – 1 GB RAM, complete with 16 GB SD card. LCD-VGA-HDMI-15 "color active matrix monitor, for the interface with the operator, both assembled on an independent console. Side ports for female USB and LAN RJ45 connections. Retractable control keyboard and control mouse.

Multi language BPR bending program "PROBENDING 2® system" facilitated with acquisition of the type of material and the section of the profile, possibility of filing the work performed with predefined and parameterized bending with memorization of the program combined with the selected material. Acquisition and transfer of DXF files.

Allows the execution of variable radius bends, with interpolated axes system.

Possibility of direct connection with an external personal computer via RJ-45 (LAN) with diagnostics and automatic setup of the machine. USB connection for transferring and copying of bending programs. Remote connection for remote assistance and preparation for INDUSTRY 4.0.





Technical specifications

	BA 20	BA 35	BA 50	BA 55
Pump motor	KW 1,1	KW 3	KW 4	KW 4
Drive motor	KW 0,37	KW 1,1	KW 2,2	KW 2,2
Variable rotation speed	g/1' 1-30	g/1′ 1-30	g/1′ 1-24	g/1 ⁻ 1-20
Shafts diameter	20 mm	35 mm	50 mm	55 mm
Rolls diameter	On demand	On demand	On demand	180—97
Weight	302 kg	520 kg	765 kg	850 kg
Machine dimensions	600 x 800 x 1130 h.	740 x 1020 x 1110 h.	850 x 1130 x 1260 h.	890 x 1150 x 1260 h.
Consolle dimensions	570 x 660 x 1120 h.	590 x 710 x 1200 h.	590 x 710 x 1200 h.	590 x 710 x 1200 h.

General features

- ✓ Ramps of acceleration and deceleration, stop and inversion of the cycle,
- ✓ Self-learning program and mirror cycle.
- ✓ Progress reading encoder with pneumatic movement contact
- ✓ Cycle start limit switch
- ✓ Connection for digital archimeter.
- ✓ Electronic control of the speed settings of moving of the bending roll (up to 20 mm/sec) and of the profile displacement (up to 20 RPM) in manual or automatic cycle.



Maximum capacities (mm)

Haximan edpactics (mm)				
	BA 20	BA 35	BA 50	BA 55
Section	Dimensions	Dimensions	Dimensions	Dimensions
	10 x 3 20 x 5	20 x 5 50 x 10	70 x 12	80 x 15
	6 x 6 10 x 10	30	40	45
	20 x 20 x 1,2	40 x 2	50 x 4	60 x 3
	20 x 10 x 1,2	25 x 15 x 2 50 x 30 x 2	70 x 40 x 3	70 x 40 x 4
60	6 x 1 20 x 1,5	48,3 x 2,9	80 x 2	80 x 2
600	16 x 8 x 1,2	30 x 15 x 2 50 x 30 x 2	30 x 15 x 2 80 x 40 x 2	30 x 15 x 2 80 x 40 x 2

CP 30





Manual angle rolls bending machine

The CP30 bending roller machine has been designed to minimize the manufacturing costs and thus obtaining maximum bending performance on tubes and profiles.

This machine was designed and manufactured to make applications with various types of profiles such as flat iron or sheet metal, T profile, U profile, angle bending, solid rod bending (both square and round), to scroll tubes and square or rectangular tubing, and all of these shapes in many different materials as well, such as iron, carbon steel, stainless steel, brass, copper, aluminum.

Our machine is **foldable** and can work both in horizontal and vertical position. It is equipped with two driven rolls: the two lower rolls are driven and knurled for a better traction; mechanical adjustment of top roll with position monitored by millimetric rod and graduated goniometer. The possible applications are many, ranging from greenhouses or chairs manufacturing to an endless variety of workings.

CP30





Technical specifications

	CP 30
Drive motor	KW 0,75
Variable rotation speed	6,8 g/1 ⁻
Shafts diameter	30 mm
Rolls diameter	128 mm
Weight	190 kg
Machine dimensions	770 x 680 x 1210 h.

MEK 40







Hydraulic angle rolls bending machine

The MEK pyramidal hydraulic profile bending machines are perfect for applications that require more operations where repeatability is critical. They are available in the version with two or three motorized rollers to meet the most diverse needs. The extremely intuitive operating method allows them to be used by both apprentices and experienced operators.

The position of the upper roller of the hydraulic profile bending machine is displayed on the digital display, located on the control unit of the independent operator.

The MEK 40/3 motorized three-roller profile benders are particularly suitable for narrow radii and they can minimize material marking; they are also equipped with the digital control panel with visualization and storage functions (even in self-learning) of 20 bending programs, each of them containing up to 20 steps (upper movable bending roller stop positions), and with the possibility to import and/or export programs via USB flash drive. Also included is the connector for MDA archimeter for direct detection/visualization of the bending radius. The MEK profile bending machines can work both horizontally and vertically, allowing them to be used in smaller workspaces.

MEK 40 / 2





Technical specifications

	MEK 40 / 2	MEK 40 / 3
Pump motor	KW 0,55	KW 0,575
Drive motor	KW 1,1	KW 1,5
Variable rotation speed	9 g/1'	9 g/1'
Shafts diameter	40 mm	40 mm
Rolls diameter	162	162
Weight	380 kg	550 kg
Machine dimensions	670 x 980 x 1300 h.	700 x 995 x 1355 h.

Custom machines

Turn key

One of our strength points is the realization of special machines meant to bend and curve any metal material.

They are designed and manufactured on specific custom needs, combining the best technical solution with the budget possibility of our Customers, aiming at granting top high production rates and optimizing the costs. These machines are manufactured and assembled with top quality mechanical and electronic parts in order to grant them a higher level of reliability.

Our design project service is always at our Customers' complete availability for the analysis and feasibility of their projects for cost estimate, lay-out and final realization of the required suitable machine.

We are specialized in producing CNC spring cold coiling machine for the production of spring, for wire up to \emptyset 80 mm.

The machine is used for the production of compression springs with left or right winding, with constant or variable pitch controlled by CNC control.

Cold spring machine



Augers machine





Press



Notes



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