Optional

ELECTRIC CLAMP WITH MANDREL
This type of clamp can be installed instead of the standard pneumatic version, when a first **mandrel** bend is required.
Examples given: thin thickness, very tight CLR, straight part close to "0" mm.
This is an easily removable accessory.

MOVEABLE TABLE
This table is designed for the production of flat SERPENTINES or particularly heavy and two-layer SPIRALS, which have to be supported while bending. This device is moveable and provided with sliding panels to assure a safe unloading of the finished product.

FIXED TABLE
This table is designed for the production of flat, particularly heavy and long SERPENTINES & SPIRALS, which have to be supported while bending.

ALIGATOR BENDING CLAMP
This is a clamp specially designed for the production of squared and round spirals with "0" pitch.

PL ON TRACKS
An end-forming machine resting on tracks could be coupled with the bender.
The main advantages are: automatic work cycle of cutting, bending & end-forming. The end-forming machine, either electric or hydraulic, could also be moved on the tracks out of the protected area as an independent machine.

VERTICAL DECOILER
Used for supporting the reel of coiled tube to be uncoiled in a vertical position.
Available in 10 models, it can be with a clutch or motorized with single or twin reels. The coil, in some models, is locked by means of 4 expansion jaws positioned on the axel.
Reel capacity: up to 600 Kg.
Outer diameter of reel: 1100 mm max.

HORIZONTAL DECOILER
Used for supporting the reel or coil of the pipe to be uncoiled in a horizontal position.
Available in 12 models, it can be with a clutch or motorized, with tube tensioner arm.
Reel capacity: up to 600 Kg.
Outer diameter of reel: up to 1800 mm.

COLLECTING VESSEL
Automatic component collecting trays. Coupled to pipe benders and positioned under the bending arm (or beside – the linear model), it collects a designated amount of parts and move automatically to the next tray, allowing up to 12 different models of components to be produced consecutively.

SMI we tube

COMPANY WITH QUALITY SYSTEM CERTIFIED BY DNV GL = ISO 9001 =

OVER 35 YEARS OF EXPERIENCE IN TUBE PROCESSING TECHNOLOGY AND TODAY ACTIVELY INVOLVED IN FULLY AUTOMATIC INTEGRATED WORK CELLS.

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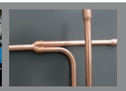
Silver Bending Centres

Silver 2
Silver 2 CD
Silver 3
Silver 3 CD

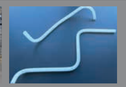
SMI we tube

Optional

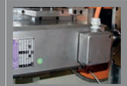
PL 35X6 SP ON ARM
Hydraulic deformation unit with 6 punching tools, plus 1 rotary tool installed on moving arm.
Max pipe diameter: 22 mm.
Working thrust: 3,5 t.


UDR 22
Electric deformation unit with rotary pressing tool.
Max deformation diameter: 22 mm.
Min deformation diameter: 2 mm.

BENDING HEAD FOR PLASTIC TUBES
The bending group is integrated with an automatic induction heater to deform the plastic tube at the desired curve and provided with a quick cooler system to eliminate the elastic return of the material and therefore maintain the required shape & angle.


GTLM
Sawblade cutting unit, installed on swing arm.
Blade diameter: 250 mm.
"Variable" cutting speed, Ø 250 HSS blade (upon request):
200 to 2800 rpm.




UFE 38 FLOW
Electric drilling/milling unit with "FLOW-DRILL" tool.
Hole : Ø 10 max.
N° holes: 10 max.
Orientation: no limitation.


UFE 38
Electric drilling/milling unit with chip removal.
Hole: Ø 10 max.
N° holes: 10 max.
Orientation: no limitation.


CRIMPING UNIT FOR "NIPPLES"
This is a crimping unit on swing arm used to reduce both ends of the bent "NIPPLE".

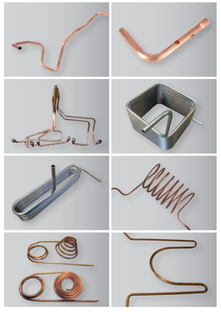
ELECTRIC CLAMP
This type of clamp can be installed instead of the standard pneumatic version. Their advantages are:
- no set-up required;
- possibility of modifying the clamping parameters while working, from check panel;
- extra opening run for working with robot or moveable table.

Silver 2

The series of pipe benders "SILVER" are characterized with tube processing starting from coils, they are fully electric, moved by three principal CNC controls operated with brushless motors – X,Y & Z.
The bending process includes: decoiling, straightening, calibrating and orbital burr-free & chip less cutting of tubes made of Cu, Al, CuNi, CuZn, Fe, & SS.
Low noise emissions, low consumption and high versatility with Quick Changeover Systems are also their main features.

APPLICATION FIELDS:
- Heat exchanger coils
- Industrial and domestic refrigeration and heating appliances
- Air conditioning & heating systems
- Electrical household appliances
- Taps and fittings

PRODUCTS:



TECHNICAL CHARACTERISTICS:

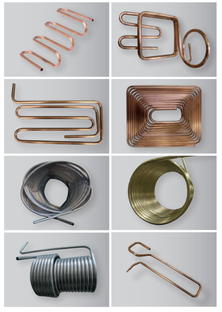
RIGHT or LEFT bending capacity
Capacity to bend annealed alloy pipes (Cu, Al, CuNi, CuZn, Fe, & SS): Ø16x1 mm
Capacity to bend annealed alloy pipes Fe & SS: Ø16x0,5 mm
Capacity to bend AISI 304 wire R=74KG/mm2 -: Ø5 mm
Fully electrical operation with brushless motors
Working length of orbital arm 1100 mm (standard) **other lengths when requested**
Lower space requirement of working axis head: 137 mm
"Adjustable" axis positioning speed –X axis: max 1360 mm/sec.
"Adjustable" positioning speed – Y: max. 954 °/sec.
"Adjustable" positioning speed – Z: max. 1000 °/sec.
Approximate time for 6 bends with orbital cut: 12 sec.
Positioning precision "X-axis ": mm ± 0,1
Positioning precision "Y": ± 0,10°
Positioning precision "Z": ± 0,10°
Bend angle Z: 190°
Bend angle Y: + 180°/0°/- 180°
Maximum operating power: kw 5
Noise level of system (cutting only): 72 Decibel
Machine weight, including NC: kg 2400

Silver 2CD

Bi-directional, multi radius and push and variable radius bending features.
This process has been patented since 2002.
The system for moving the dies offers automatic changing of the bend radii of the same pipe, offering also right and left rotation in the same work cycle.
The SILVER 2 CD, with its six controlled axes, stands at the top of the world manufacturers of pipe benders without mandrel, with an integrated orbital cutting system.

APPLICATION FIELDS:
- Heat exchanger coils
- Industrial and domestic refrigeration and heating appliances
- Air conditioning & heating systems
- Electrical household appliances

PRODUCTS:



TECHNICAL CHARACTERISTICS:

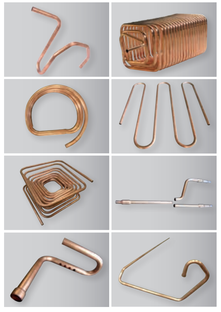
RIGHT and LEFT, MULTI-RADIUS, PUSH & VARIABLE bending capacity
Capacity to bend annealed alloy pipes (Cu, Al, CuNi, CuZn): Ø16x1 mm
Capacity to bend annealed alloy pipes Fe & SS: Ø16x0,5 mm
Fully electric operation with Brushless motors with 6 controlled axes
Working length of orbital arm 1100 mm (standard) **other lengths when requested**
Lower space requirement of working axis head: 180 mm
"Adjustable" axis positioning speed –X axis: max 1360 mm/sec.
"Adjustable" positioning speed – Y: max. 954 °/sec.
"Adjustable" positioning speed – Z: max. 1000 °/sec.
Approximate cycle time for 6 bends of orbital cut: 12 sec.
Automatic radius change: 2 sec
Positioning precision "X-axis ": mm ± 0,1
Positioning precision "Y": ± 0,10°
Positioning precision "Z": ± 0,10°
Bend angle Z: 190°
Bend angle Y: + 180°/0°/- 180°
Maximum operating power: kw 7,5
Noise level of system (cutting only): 72 Decibel
Machine weight, including NC: kg 2700

Silver 3

The special feature of the bending arm, installed on the SILVER series of machines, offers the possibility of choosing from different lengths (1.100, 1.400 or 1.600 or others) in relation to the products to be made. A complete line of accessories allows a basic pipe bender to be adapted into a multi-function machine having various implementation and with standard prices.

APPLICATION FIELDS:
- Heat exchanger coils
- Industrial and domestic refrigeration and heating appliances
- Air conditioning & heating systems
- Electrical household appliances
- Automotive components
- Taps and fittings
- Aeronautical & space industry components

PRODUCTS:



TECHNICAL CHARACTERISTICS:

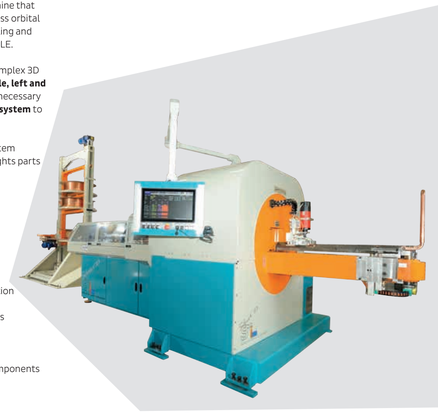
RIGHT or LEFT bending capacity
Capacity to bend annealed alloy pipes (Cu, Al, CuNi, CuZn): Ø 22x1 mm
Capacity to bend annealed alloy pipes Fe & SS: Ø 22x0,6 mm
Capacity to bend AISI 304 wire R=74KG/mm: Ø 6 mm
Fully electrical operation with brushless motors
Working length of orbital arm 1100/1400/1600 mm
Lower space requirement of working axis head: 153 mm
"Adjustable" axis positioning speed –X axis: max 1100 mm/sec.
"Adjustable" axis positioning speed – Y: max. 954 °/sec.
"Adjustable" axis positioning speed – Z: max. 630 °/sec.
Approximate cycle time for 6 bends of orbital cut: 14 sec.
Positioning precision "X-axis ": mm ± 0,1
Positioning precision "Y": ± 0,10°
Positioning precision "Z": ± 0,10°
Bend angle Z: 190°
Bend angle Y: + 180°/0°/- 180°
Maximum operating power: kw 10
Noise level of system (cutting only): 72 Decibels
Machine weight, including NC: kg 2800

Silver 3CD

This is a fully electric bending machine that utilizes, in line, burr-free and chipless orbital cutting, mandrel-less bending, drilling and end-forming, all in AUTOMATIC CYCLE.

The machinery can process very complex 3D shapes as it works, **in the same cycle, left and right bends, multi radii** and when necessary can easily operate on a **push-bend system** to also obtain **variable radii bends**.

Furthermore, the new bending system permits to achieve very short straights parts with different bending radii.



APPLICATION FIELDS:
- Heat exchanger coils
- Industrial and domestic refrigeration and heating appliances
- Air conditioning & heating systems
- Electrical household appliances
- Automotive components
- Taps and fittings
- Aeronautical & space industry components

PRODUCTS:

TECHNICAL CHARACTERISTICS:

RIGHT-LEFT & MULTI RADII bending capacity
Capacity to bend annealed alloy pipes (Cu, Al, CuNi, CuZn): Ø 22x1,5 mm
Capacity to bend annealed pipes Fe R=35 Kg. / mm²: Ø 22x1 mm
SST annealed pipe bending capacity up to: Ø 22 x 0,9
SST Rod - AISI 304 R=74 Kg. mm² wire bending capacity: Ø 10
Fully electrical operation with brushless motors
Working length of orbital arm 1150/1400 mm
Minimum & maximum CLR: 13 / 66 mm
Approximate cycle time for 6 bends of orbital cut: 18 sec.
Positioning precision "X-axis ": mm ± 0,1
Positioning precision "Y": ± 0,10°
Positioning precision "Z": ± 0,10°
Bend angle Z: 190°
Bend angle Y: + 180°/0°/- 180°
Maximum operating power: kw 30
Noise level of system (cutting only): 72 Decibels
Machine weight, including NC: kg 5800

*The manufacturer reserves the right to modify any technical or aesthetic characteristics of the machinery, without any notice.