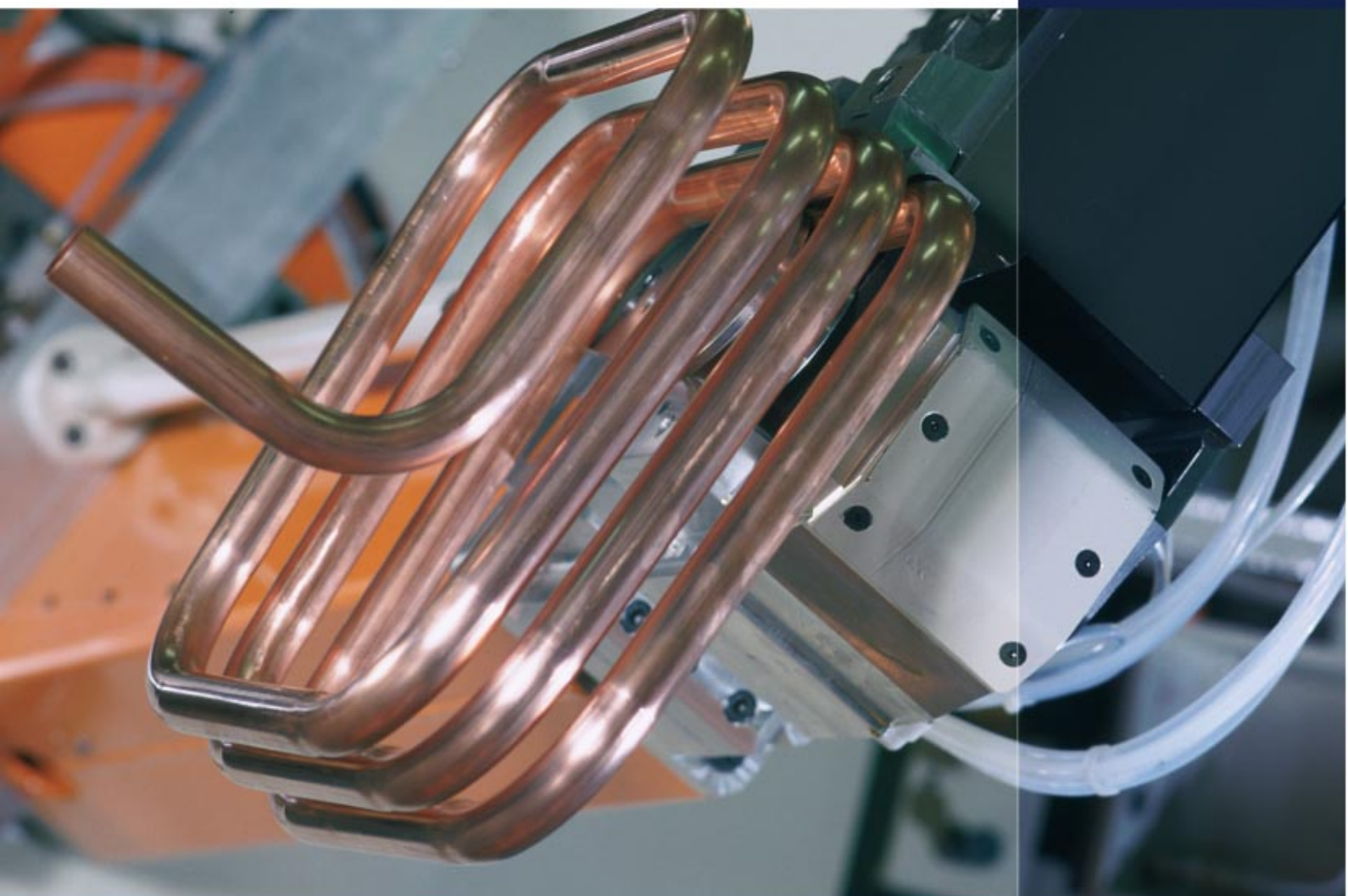




**SILVER 2**  
**SILVER 2CD**  
**SILVER 3**



**SERIE SILVER**  
BENDING CENTRES

## PL 35x6 SP

Hydraulic deformation unit with 6 tools, plus 1 rotary pressing tool installed on moving arm  
Max arm pipe diameter: 22 mm  
Working thrust: 3.5 t  
N° tools: 7



## UDR 16

Electric deformation unit with rotary pressing tool  
Max deformation diameter: 22 mm  
Min deformation diameter: 10 mm  
Max deformation length: 20 mm



## BENDING HEAD FOR PLASTIC TUBES

The bending group is integrated with an automatic heater to deform the plastic tube at the desired curve and provided with a quick cooler to eliminate the elastic return of the material and therefore maintain the required shape.



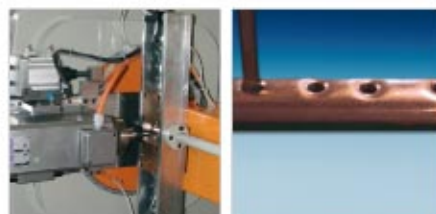
## GTLM

Blade cutting unit, installed on moving arm  
Blade diameter: 250 mm  
"Variable" cutting speed, Ø 250 blade (on request): 200 to 2800 rpm  
Blade lubrication: present



## UFE 38 FLOW

Electric drilling unit with "FLOW-DRILL" tool  
Hole : Ø 10 max  
N° holes: 10 max  
Orientation: free



## UFE 38

Electric drilling unit with chip removal  
Hole: Ø 10 max  
N° holes: 10 max  
Orientation: free



## ELECTRIC CLAMP

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



## MOVEABLE TABLE

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



## BENDING CLAMP

This is a clamp specially designed for the production of squared and round spirals.



## VERTICAL COILER

Used for supporting the reel of the pipe to be uncoiled in a vertical position.  
Available in 10 models, it can be with clutch or motorized with single or double reel. The coil is locked by means of expansion by 4 jaws positioned on the chuck.  
Reel capacity: from 200 kg to 600 Kg  
Outer diameter of reel: 1100 mm max  
Inner diameter of reel: from 330 to 570 mm (ø 130 with carton)



## HORIZONTAL COILER

Used for supporting the reel or coil of the pipe to be uncoiled in a horizontal position.  
Available in 8 models, it can be with clutch or motorized.  
Reel capacity: from 200 kg to 600 Kg  
Outer diameter of reel: from 1000 to 1800 mm  
Inner diameter of reel: from 400 to 1000 mm (ø 130 with carton)



## COLLECTING VESSEL

Automatic pipe collecting device. Coupled to a pipe bending machine and positioned under the bending arm, it is able to change collecting container at each end of production batch, so allowing up to 12 different models to be produced consecutively.  
Dimensions of boxes (LxWxH): 60x40x30 cm







The SILVER series pipe bending machines, with feeding from coil, are used to bend light alloy and other alloy pipes. The "BRUSHLESS" electric motors, installed on the machines, provide the three basic movements: bending, rotation and feeding.

They give these advantages: **no maintenance, noise reduction, optimization of movements, greater cleanliness, reduced power consumption.** The orbital

pre-cutting system with a further tube break guarantees the total absence of chips or burrs inside the pipe and reduced production times.

#### Application fields:

- Heat exchangers
- Industrial and domestic refrigeration
- Air conditioning
- Electrical appliances
- Taps and fitting

#### Products:



#### Technical characteristics:

RIGHT or LEFT bending capacity  
Capacity to bend annealed alloy pipes (CU,AL): Ø 16x1 mm  
Capacity to bend annealed alloy pipes ST/STEEL: Ø 16x0,5 mm  
Capacity to bend AISI 304 wire R=74KG/mm2-: Ø 5 mm  
Fully electrical operation with brushless motors  
Working length of orbital arm 1100 mm  
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 cycle time for 6 bends of 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  
"Variable" cutting speed, Ø 250 blade (on request): 200-2800 rpm.  
Machine weight, including NC: kg 2400



#### Application fields:

- Air conditioning
- Electrical appliances
- Refrigeration units
- Draught drink taps for communities

Bi-directional and multi radius bending. This is the new patent registered in 2002. The system for moving the dies offers automatic changing of the bend radii on the same pipe, offering also right and left rotation. The SILVER 2 CD, with its six controlled axes, stands at the top of the world manufacturers of pipe benders without mandrel with integrated orbital cut.

#### Products:



#### Technical characteristics:

RIGHT and LEFT, MULTI-RADIUS bending capacity  
Capacity to bend annealed alloy pipes (CU,AL): Ø 16x1 mm  
Capacity to bend annealed alloy pipes ST/STEEL: Ø 16x0,5mm  
Automatic correction of bending  
Fully electric operation with Brushless motors with 6 controlled axes  
Working length of orbital arm 1100 mm  
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: 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 7,5  
Noise level of system (cutting only): 72 Decibel  
Pipe completion set-up time: 15 min.  
Machine weight, including NC: kg 2700

## Application fields:

- Heat exchange coils
- Industrial and domestic refrigeration
- Air conditioning
- Electrical household appliances
- Taps and fitting
- Heating
- Automotive



The special feature of the bending arm, installed on the SILVER 3 machine, offers the possibility of choosing from three different lengths (1.100, 1.400 or 1.600 mm) in relation to the products to be made. A complete line of twelve accessories allows a basic pipe bender to be adapted into a machine having various functions with standard prices.

## Products:



## Technical characteristics:

RIGHT or LEFT bending capacity

Capacity to bend annealed alloy pipes (CU,AL): Ø 22x1 mm

Capacity to bend annealed alloy pipes ST/STEEL: Ø 22x0,6 mm

Capacity to bend AISI 304 wire R=74 kg/mm<sup>2</sup>: 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 ± 0,10

Positioning precision "Y": ± 0,10°

Positioning precision "Z": ± 0,10°

Bend angle Z: 190°

Bend angle Y: + 180°/0°/- 180°

Maximum operating power: 10 kW

Noise level of system (cutting only): 72 decibels

Machine weight, including NC: 2800 kg





**OVER 30 YEARS OF EXPERIENCE IN TUBE PROCESSING TECHNOLOGY AND TODAY ACTIVELY INVOLVED IN SOLAR ENERGY SOLUTIONS.**



TUBE PROCESS TECHNOLOGY

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