

Menti Metal Meccanica
wire needs your fantasy



The customer is assisted from the initial project through to shipment



About Us

Our story began in the early 1970s in Meledo di Sarego in the province of Vicenza. Over the years we have specialised in metal wire processing.

We believe in technology associated with human relations. In addition to the quality of the products, our goal is to guarantee fast and punctual delivery times and quick, comprehensive answers. We stay close to the customer from design, production and assembly to after-sales service.

The experience we have gained allows us to produce products for various sectors that are subjected to strict regulations such as the hospital, automotive, heating, air conditioning, hydraulic, submersible pumps, electric motors, agricultural machine industries and many others. We carry out our work mainly on low carbon, stainless, lead, hardened and tempered steels, etc.



Cut to size

The cut-to-size operation allows transforming the wire coils into perfectly straightened and cut to size bars, without material waste.

We have automatic lines for coil cutting from 1.5 mm to 12 mm in diameter.

All the machines are equipped with an automatic system that uses a minimum quantity of lubricant, which evaporates immediately after cutting, leaving the material clean and ready for subsequent processing.

We also have semi-automatic lines to quickly cut off bars up to 30 mm in diameter. With the same process we can also machine bars with different profiles such as flat, square and hexagon.

The processed material is transferred to another department for a subsequent operation, or packed in bundles or sturdy boxes for delivery to the customer.



Automatic wire straightening in coils and cut to size



Semi-automatic cutting of bars up to Ø30





Automatic production of larges batches



From the customer's CAD drawing to the finished part



The bending process can start from a coil or a pre-cut bar. Currently, three numerically controlled bending machines are installed in the department, which automatically straighten, bend, cut and chamfer the ends. The advanced technology enables making both flat and three-dimensional bends with continuous variation of the radius. With the same process, we can bend tubes and strips even with the help of internal presses. The dedicated software loads the CAD drawing directly into the machine so as to program the processing faster with an evident streamlining of the process.

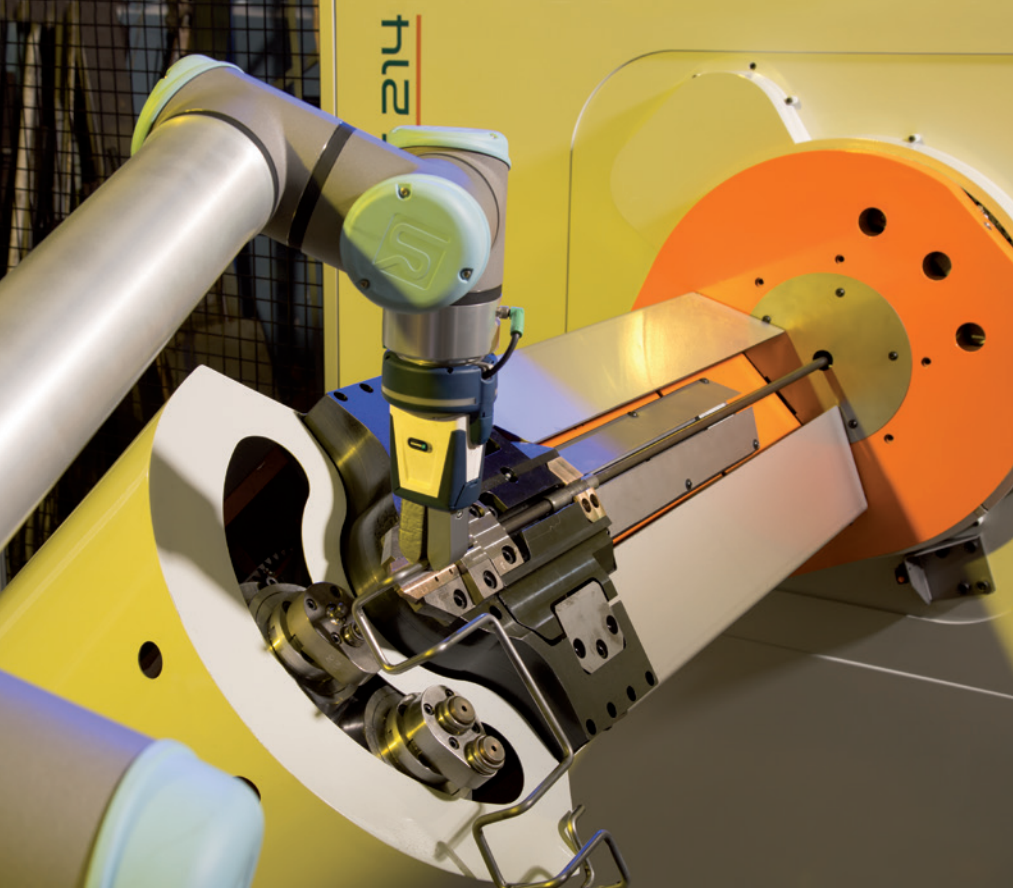
Robot handler: When the machine has bended the part, the robot picks it up to perform other operations such as moulding, threading, drilling, and at the same time the machine starts to bend another part.

We also have three pre-cut bar benders, which are more suitable for symmetrical bends or very large frames, or whenever there is a need to bend parts with previously machined ends. Productivity is guaranteed by loaders or versatile robots that make the cycle completely automatic and therefore optimal even for large production batches.

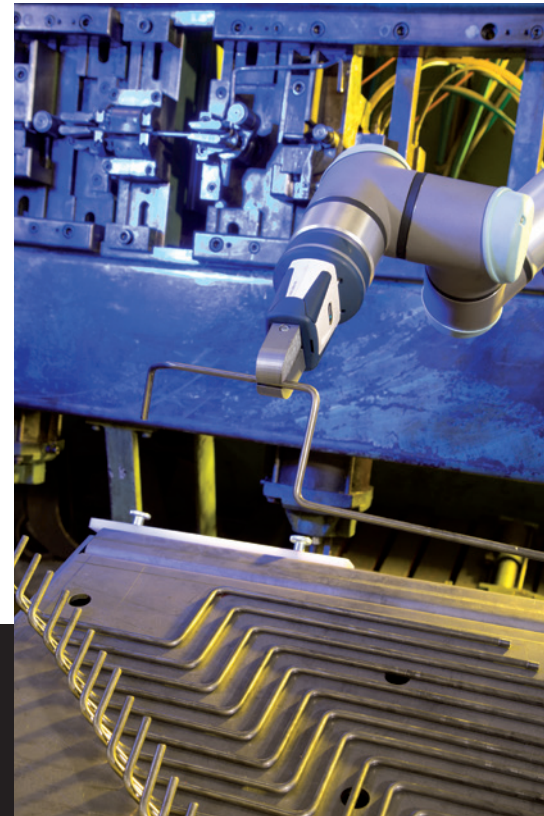
With these systems we can also bend square, hexagon and flat profiles. The multiple bending solutions mean we always use the most suitable solution for each part to be produced.



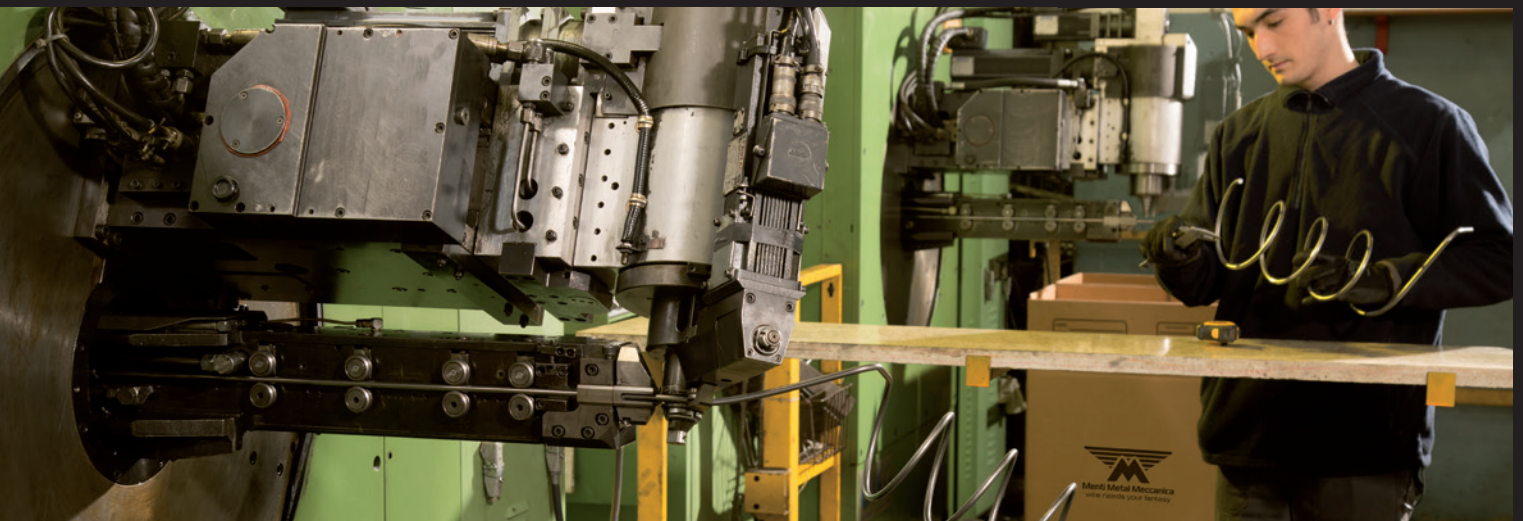
Bent pieces



The extra-long arm allows bending large parts up to Ø14



Three-dimensional CNC bending with robotized loading and unloading



CNC bending line with internal press

Welding

In the welding department we produce flat or three-dimensional parts such as baskets, guards, chairs and various gratings.

We use manual or semiautomatic solutions for small series, while for more complex parts and larger production batches we use numerical control automatic machines with up to 8 axes.

The medium frequency equipment gives a more accurate adjustment of the welding, and special instrumentation enables controlling the passage of current in order to check the correct performance of each single welding process.

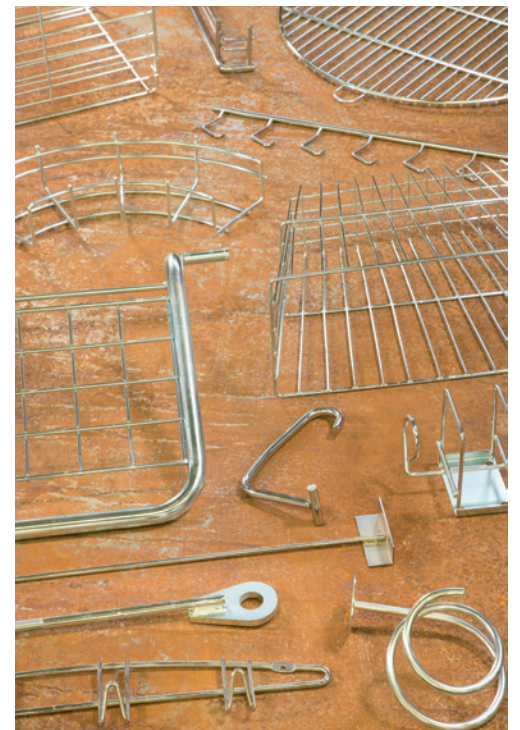
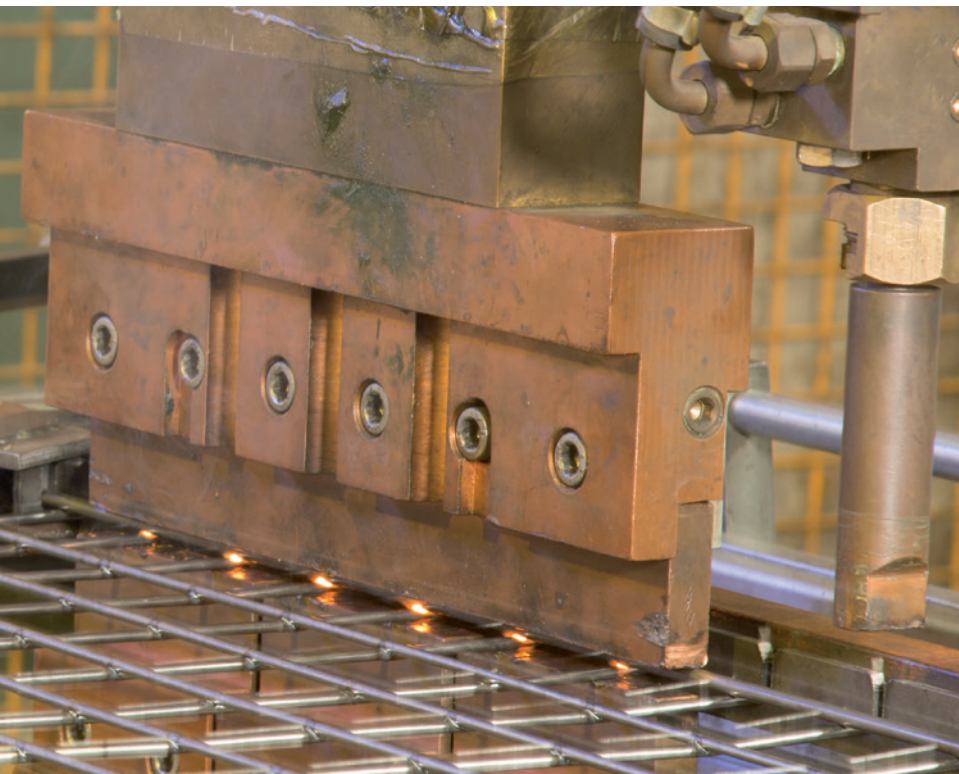
In addition to wire, we can weld different types of materials together, such as sheets and pipes.



Three-dimensional system for medium frequency welding with 8-axis CNC movement



Resistance welding with semi-automatic cycle



Welded parts in wire, pipe and sheet metal

Threading

We carry out 2 types of threading operations: removal and rolling. The first entails removing the material using special units that open once the thread has been completed, so as to speed up the processing. Normally this type of operation is used when the unworked part and the thread must have the same diameter.

The other type, rolling threading, involves the rotary movement of special rollers that transfer their impression to the finished part, therefore other processes can also be performed such as grooves or knurls. The starting diameter is smaller than the final profile, it is a faster process and a better result is obtained in terms of appearance and mechanical strength. Rolling can be performed both with manual systems and with the help of robots that make the cycle completely automatic. We also have automatic rotary rolling solutions, which simultaneously work multiple parts and are therefore ideal for large production batches.

We can also work on already bent parts. The parts obtained are tie rods, studs, jumpers, anchor bolts and other special parts.



Threading performed with the rolling process with robotized loading and unloading

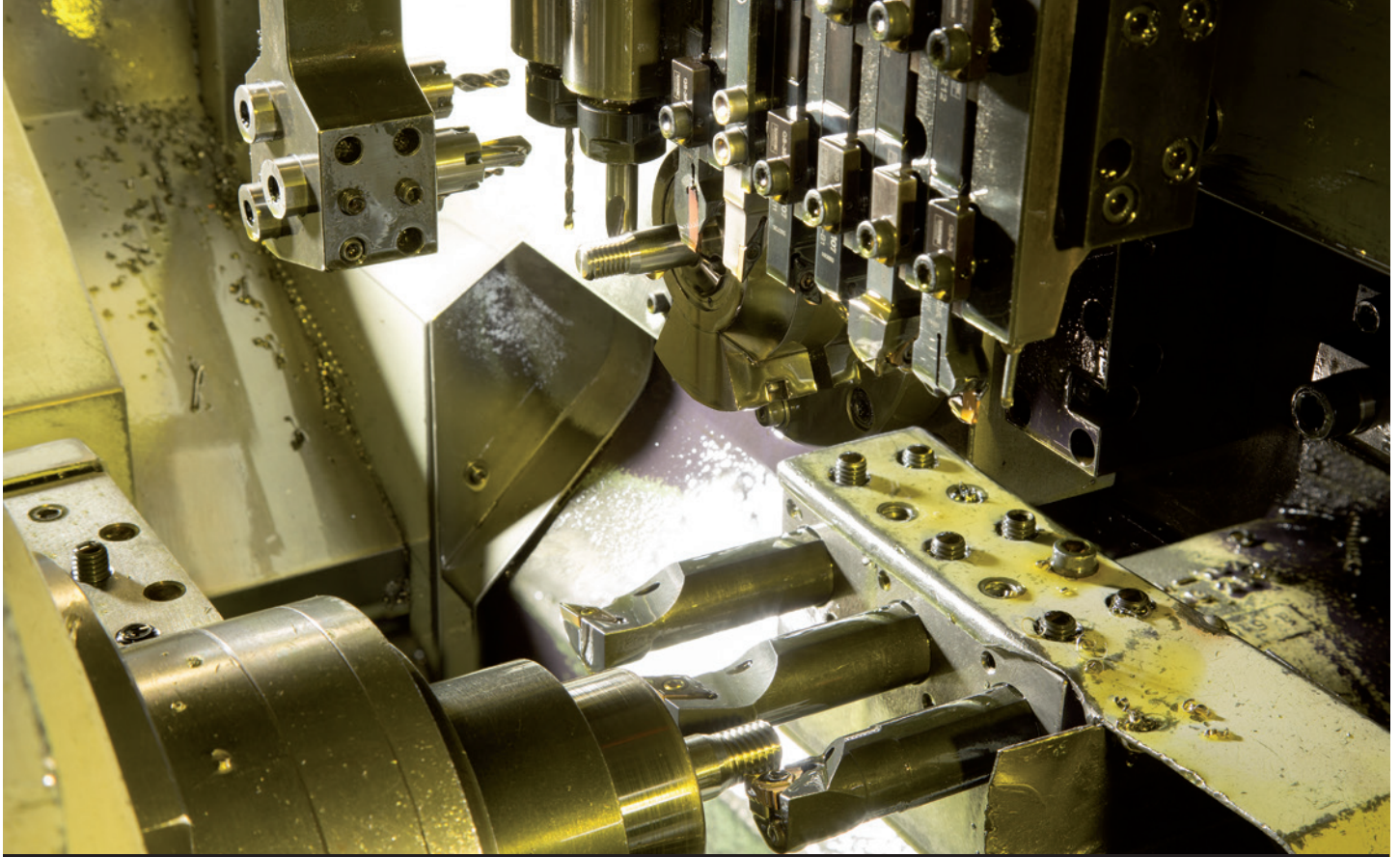


Threaded parts by chip removal and rolling, even on bent parts



Automatic threading performed with the rotary rolling process





CNC automatic turning and milling centre

Turning and milling

This is a completely automatic process that inserts the bar to be machined into the turning centre and can perform simultaneous machining at the two ends of the part, so as to reduce production times. The technology used, called mobile headstock, is ideal for small diameters. Turning, milling, drilling and tapping operations can be performed on round, hexagon and square bars. The multiple processes that can be carried out within our factory mean the turned products can undergo other processes such as bending, moulding, welding and many others.

Turned, milled and bent pieces





100 TON eccentric press

Moulding and other processes

In order to deliver the finished products to the customer, we have equipped ourselves with various machines that allow completion work such as flattening, drilling, deburring, deformation and many others.

We have 16 presses, hydraulic, eccentric and press-bending, with a maximum power of 100 tons; 3 of these are equipped with automatic feed and enable producing straps and other details directly from coils.

We deliver the parts complete with surface treatment such as galvanising, chrome plating, zinc nickel, cataphoresis, epoxy painting and other antique finishes.

We are equipped to prepare packaging suitable for retail sale, labelled with respective barcode.



Multiple drilling operations on already bent parts



Other processing and customer services



Packaging suitable for every need



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