



## LASER CUTTING, ROBOTIZED BENDING AND WELDING



Our first aim has always been to offer the highest quality and the best service.

**Med Matrix, a reliable partner ready for any challenge!**



HIGH PRECISION METAL SHEET PROCESSING

Med Matrix is a company with a twenty-year experience in metalwork, specialized in high precision metal sheet processing on behalf of a third party. The development of more advanced processing methods, the constant investment in technology, meticulous organization and great accuracy in each step of the process make Med Matrix the ideal partner for the success of your products. Established in 1989 by the founders Gallini, Pivetti and Garuti, thanks to the highly qualified technical staff, Med Matrix has always had the satisfaction of its customers as its primary objective, always ensuring the highest quality and best service.

## **MED MATRIX CONTINUES TO FOCUS ON TECHNOLOGICAL INNOVATION, RENEWING CONSTANTLY THEIR MACHINERY.**

For over twenty years Med Matrix has manufactured products of high precision metal carpentry that can be immediately mounted and assembled. We carry out machining of small and large sheets without smudging, aimed at different sectors (food, ceramic, banking, industrial systems, components, medical, electro-mechanical, heating, furniture). Med Matrix has a large number of numerical control machines with the latest generation technology in terms of Programming, Laser Cutting, Folding, Robotic Welding TIG / MIG. Equipment and organization enable us to carry out a wide range of precision machining on any type of metal (iron, stainless steel, aluminum, copper, brass, titanium) such as punching, cutting, bending, welding, assembly, installation and testing, always ensuring quick execution and purchase order processing. All our metal sheets reflect characteristics such as accuracy, reliability and durability and we are always able to provide the best finishing for your needs.

### **HIGH QUALITY, PROFESSIONAL EXPERTISE AND TECHNOLOGIC PASSION**

We create high quality customized solutions and we focus on technological innovation constantly renewing our machinery. Our first aim has always been to offer the highest quality, advanced equipment and the best service. Everything you need with the right price.

### **EXPERIENCE AND EXPERTISE AT HAND FOR CUSTOMERS**

Twenty-year Know-How in precision cutting and welding of metal sheets, ability to solve technical, planning and logistics problems and ongoing support to clients during the design phase are our strengths. Customer satisfaction is our mission.

### **FROM THE IDEA TO THE FINAL WORK**

We analyze the needs of our customers supporting them from the earliest stages of design, developing complete and customized solutions, along with choosing the best way to realize the final work. With Med-Matrix metal shapes and ideas become reality!

### **WORKING**

We work different kinds of sheet steel: smooth, ribbed, galvanized, embossed, pickled and protected. The machining types performed in our production department are: Laser cut, Laser combined punching, Traditional and robotic bending, Threading and countersinking, Robotic welding, Tig-Mig Manual welding, Carpentry, Electromechanical assembly, Special finishing, Sampling

# MED MATRIX INTRODUCES THE INNOVATIVE FIBER LASER CUTTING SYSTEM!

## Amada FOL 3015AJ-4000KW



**GREAT ACCURACY, QUALITY AND UNMATCHED PRODUCTIVITY: MED MATRIX OPENS THE DOOR TO THE FUTURE!**

It has always been our mission to set up state-of-the-art pieces fully respecting the high quality standards required by our customers. So we decided to constantly renew our fleet, now introducing the innovative fiber laser cutting machine **Amada FOL 3015AJ-4000KW**. The fiber laser cutting represents a real revolution in terms of speed and quality of performances: this ultimate series of cutting machines allows greater precision and a significant reduction of processing times. The productive fiber laser system, which operates on a shorter wavelength, delivers unmatched speed, accuracy and edge quality, even with reflective and difficult to cut materials such as aluminum, copper, brass and titanium.

### Technical features

Maximum cutting area	X 3070 Y 1550
Simultaneous positioning speed	340 m/min
Iron maximum thickness	22 mm
Stainless steel maximum thickness	18 mm
Aluminum maximum thickness	16 mm
Copper maximum thickness	8 mm
Brass maximum thickness	8 mm
Titanium maximum thickness	8 mm
Position accuracy	$\pm 0,01/500$ mm



## Amada EML Z-3610 NT

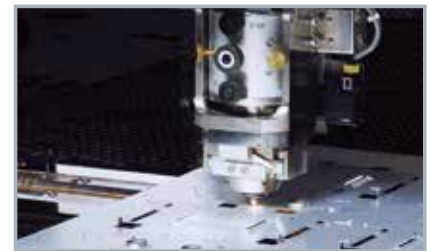


### LASER COMBINED PUNCHING

#### THE PERFECT MIX BETWEEN SPEED, FLEXIBILITY AND PRODUCTIVITY

To ensure the highest quality we use the punch press Amada EML Z-3610 NT with flying optics laser for high speed cutting. The combined technology of punching and laser cutting allows us to perform complex operations in a short time.

The combined technology of punching and laser cutting is a perfect blend of speed, flexibility and productivity and allows you to perform complex operations in a short time. To ensure the highest quality we use the combined laser punching press Amada EML Z-3610 NT with 4000x1500 working range and laser power of 4000 watts, which ensures accuracy in details and production speed. The equipment is also supported by a modular system thanks to which the pieces are automatically sorted.



#### TRADITIONAL AND ROBOTIC BENDING

The press machines available in our department allow to bend both simple and complex pieces of different thickness in a precise and efficient way in terms of costs since the new generation numerical controls always guarantee the maximum level of repeatability of the final product.



## TruBend 5170



### UNRIVALLED PRODUCTIVITY AND FLEXIBILITY WITH TRUBEND 5170 BENDING MACHINE

#### MED MATRIX IS THE RIGHT PARTNER TO ENTRUST YOUR IDEAS.

To meet the needs of our clients, we have included among our machinery the new Trumpf TruBend 5170, thanks to which we are able to perform bending work on a wide range of parts, from the simplest to the most complex geometry, with maximum accuracy and convenience, thanks to its 4-cylinder drive technology and CNC-controlled crowning system. The quality of our products is our strength, the satisfaction of our customers our main purpose; we can assure bending angle precision from the very first part, providing in a short time the most varied range of products with the highest precision and with good price/cost benefits. Moreover, with the use of automated bending cell BendMaster, in case of any necessity or client's urgency, we can schedule the production process 24 hours a day and 7 days a week, always ensuring high quality pieces.

#### UNPRECEDENTED FOLDING AND ENDLESS VARIETY OF APPLICATIONS

Technical data  
Press force: 1700 kN  
Max. Working speed: 25 mm / s

Max work-piece dimension: 2000 x 1000 mm  
Max work-piece weight: 40 kg  
BendMaster max capacity: 60 kg



Automated bending cell



First Unloading station



Control panel



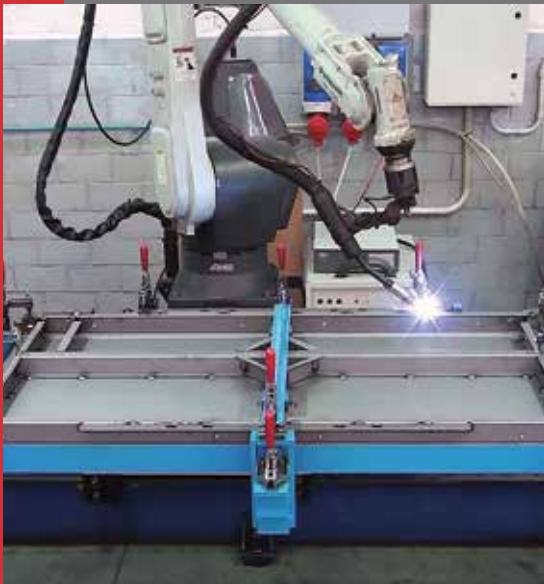
Second loading station



Angle measurement system



Laser measurement for maximum precision



## ROBOTIC WELDING

Iron sheets welding, stainless steel sheets welding, aluminum sheets welding

## TIG-MIG MANUAL WELDING

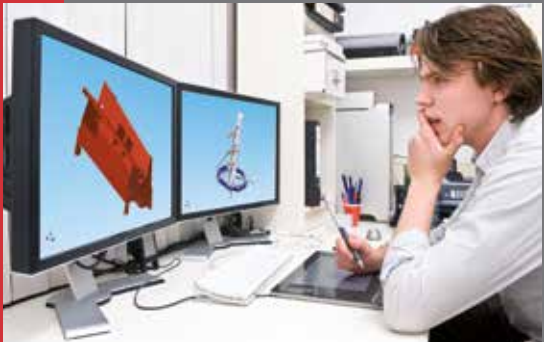
The welding department operates effectively in every stage of the production, thanks to the dexterity of our highly skilled operators and with the help of machines that are suitable for any type of work.

## CARPENTRY

Iron and stainless steel iron manufacturing, aluminum carpentry and steel structures in general.

## ELECTROMECHANICAL ASSEMBLY

The company has an assembly department which carries out electronic and electromechanical assemblies with testing. Highly qualified staff with the support of advanced technologies carefully follows all the production processes and monitors the quality of products.



## SPECIAL FINISHING

We perform surface finishing on metals such as steel, stainless steel and aluminum, among which: silking - polishing - sandblasting - tumbling and blasting - powder painting RAL - anodizing electrophoresis

## TECHNICAL ADVICE



Our production cycle starts from the design and drawing process of the commissioned piece (both paper and digital) and, based on what is required by the contracting company, the design is then processed by our technical department thanks to our three-dimensional design software (CAD 3D Inventor) which reconstructs the geometry of the piece in a very short time and realizes the program for the machines startup. Our technicians, thanks to the high experience and knowledge of the various production processes, will follow you during the implementing of the project, helping you to choose the best solution for your needs by quickly responding to all your requests with great professional expertise.

## QUALITY CONTROL



High-quality test equipment allows us to quickly perform rigorous and careful control of systematic processes to ensure the best quality of the final product. Each type of metal sheet working is addressed with particular attention to detail and with the constant monitoring of quality throughout the production cycle. We are always available for all your needs ensuring our continued commitment and with the aim of improving the quality of our products and services together with new market requirements.

## TESTING



Upon your request, we can test the finished product directly at our company, thus using our technologically advanced equipment and our highly skilled workforce.

## CERTIFICATIONS

On customer's request we can provide declarations of conformity based on customer specifications. The chemical composition of the materials we use is guaranteed by the Certificate of Analysis of our Suppliers.

## TECHNICAL ADVICE AND PROTOTYPES

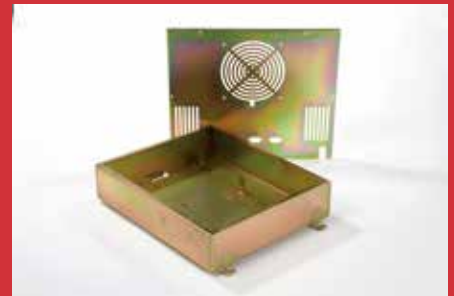
We are able to provide an accurate design assistance, advising the customer in every step of the creation process, to get the best prototype for your company. You just have to "think of it", we will provide to realize your ideas in the best way and deliver it in time!



Banking and Bancomat



Banking and Bancomat



Electro-Medical equipment



Electro-Medical equipment for Dialysis



Electro-Medical equipment for staminas



Design and implementation of an electronic display for a game console



Logistics: accessory structure for handling packages



Realization of the structure for Printers Plotter for fabrics



Accessory for agricultural machineries



Main structure for Electro-medical equipment



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Traditional and robotic bending  
Threading and countersinking  
Robotic welding  
Tig-Mig Manual welding  
Carpentry  
Electromechanical assembly  
Special finishing  
Sampling

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