ELO I a METAL TECHNOLOGIES

COMPANY PROFILE









Since 1974 METAL SHEET MANUFACTURING EXPERIENCE AND TECHNOLOGY

Rolla, born in 1974, is today a company that deals with of light metal carpentry with recognized multi-sector experience: from "furnishing accessories / furnishings / lighting" to the "industrial / machinery / plant engineering" sector.

The services offered do not only concern the creation of the product, but they also include design, prototyping, development of molds and equipment, up to product assembly. Thanks to the experience in the use of metals with different chemical/physical and dimensional characteristics, the company has acquired a notable ability to create aesthetic finishes, thanks also to an efficient powder coating department of high quality.

The values on which the company is founded are based on continuous updating in technologies and skills, thanks to which the customer can benefit from a flexible customer oriented production.

In addition to the main branch in Padernello di Paese (TV), the company has a production site in Romania, which is entrusted with the more "labour intensive" production.







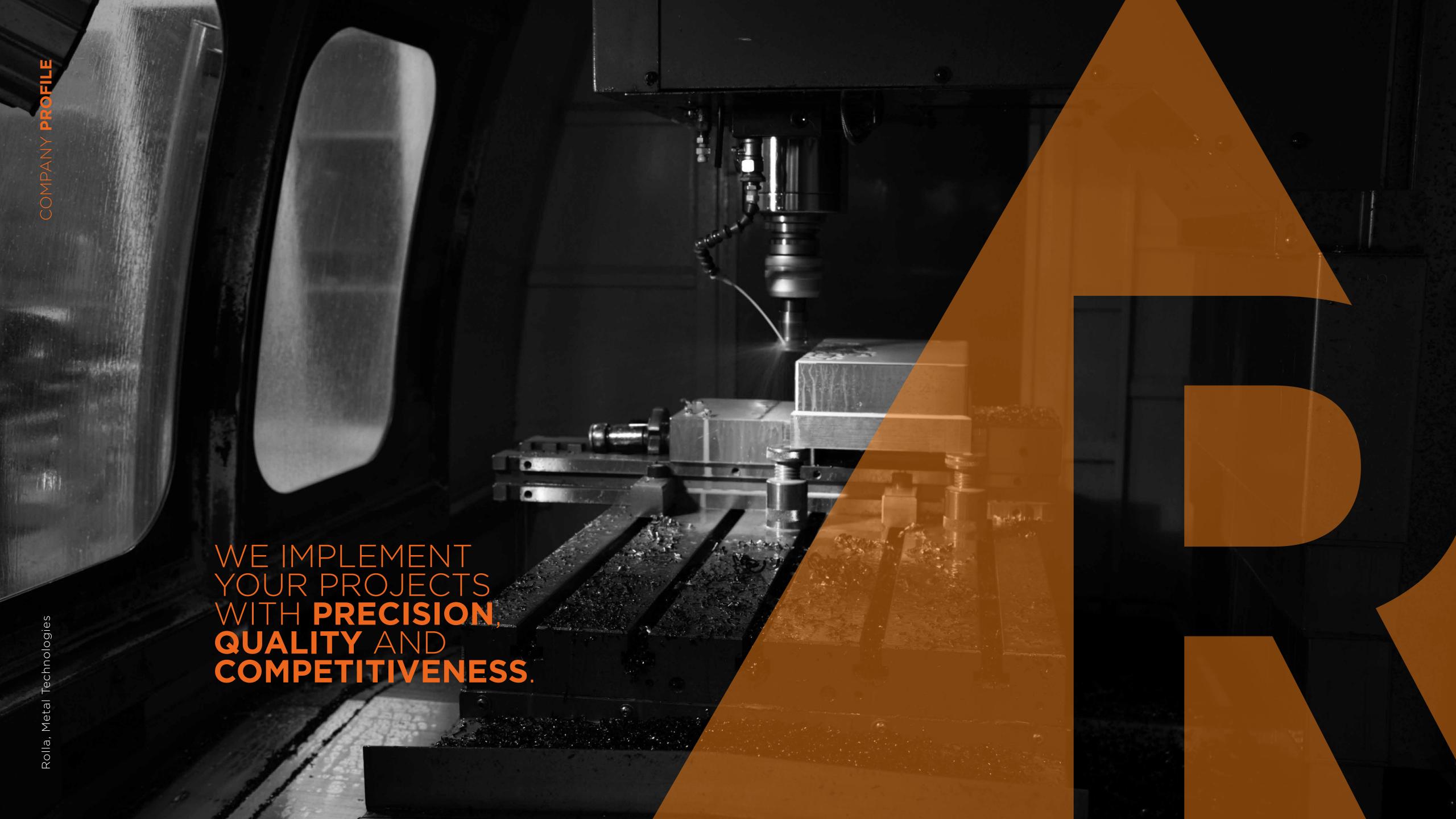
About us **PRODUCTION**

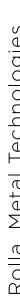
Tailor-Made approach to the project

For us each project is unique, and starts from the analysis of the specific customer requests.

The collaboration begins from the indepth analysis phase of the project, during which the Rolla technical team proposes any changes to optimize resources and technology in order to guarantee the customer the best result in terms of quality with respect to the specific requests, carefully optimizing production costs.









Our MANUFACTURING

At Rolla we have acquired experience and technologies for the sheet metal working of materials such as steel, stainless steel, aluminium, copper and brass.

Thanks to the ability to optimize the production process, we are able to guarantee high quality of the finished product, providing a complete and competitive service.

Manufacturing:

- LASER CUTTING / LASER PUNCHING COMBINED
- SHEARING AND DEEP DRAWING
- BENDING AND CALENDERING
- WELDING
- COATING



LASER CUTTING and LASER PUNCHING COMBINED

Work centers for 2D laser cutting play a strategic role in almost all mechanical processes. These machines, often used in natural combination with those for press bending and calendering, allow to obtain high production flexibility and the possibility of customizing the product.

The laser cutting machine park is grouped into two important technologies:

- The Salvagnini Fiber Laser, mainly dedicated to cutting sheets of significant thickness. It can process metal sheets with a maximum size of 3 x 1.5 m. and up to 20 mm thick, of different types of material: steel, stainless steel, aluminium, copper and brass, with variable thickness limits;
- the Trumpf combined laser, dedicated to laser processing combined with punching processing, with automatic loading/unloading. It can process metal sheets with a maximum size of $3 \times 1.5 \text{ m}$. and up to 8 mm thick, of steel, stainless steel or aluminum material, with variable thickness limits.

02 SHEARING and DEEP-DRAWING

Our machine park, which includes mechanical, hydraulic and automatic transfer presses, is not only the history of Rolla but continues to be a key manufacturing department as it integrates and completes the production process, allowing for a significant reduction in product costs.

BENDING and CALENDERING

Our bending and calendering machinery, a natural completion of the production processes coming from the laser cutting department, allow extraordinary process flexibility for product customization. The blanking and drawing department has the following characteristics:

- power presses from 80, 100 up to 250 tons;
- processes that can be performed: drawing, shearing, trimming and edging;
- with the possibility of processing metal strips from 100 to 700 mm in width and from 0.6 to 3 or 5 mm thick;
- processing of different types of metal: steel, stainless steel, aluminium, copper and brass.

The materials that can be bent and calendered by machinery are steel, stainless steel, aluminium, copper and brass.

The fleet of machines for bending and calendering includes:

- **CNC bending machines**, from 25 to 100t of power, with 4 and 6 axes, with bending angle control and variable workable dimensions of metal sheets from 1.2 to 3.1 meters in width and from 2 to 8 mm thick (thicknesses and dimensions vary depending on the machinery and the type of metal);
- calendering machines that fold sheets up to 1 meter in length and up to 2mm thick.



04 WELDING

We are able to perform multiple types of welding:

Tig, Mig, brazing, on steel, stainless steel, brass, copper and also aluminium. Based on the technical drawings and customer specifications we carry out welding both on load-bearing parts and meticulous aesthetic executions.

05 COATING

We have an **epoxy powder painting system**, which guarantees high production flexibility in compliance with the most recent anti-pollution regulations, production efficienty and high quality standard.

The welding machines in the department are:

- **CNC welding machines** for studs and bushings, from M3, M4 and M6, on steel, stainless steel or aluminum sheets up to 1.5 meters in length;
- automatic TIG (Tungsten Inert Gas) welding machines for steel, stainless steel and aluminum of various sizes and thicknesses;
- MIG (Metal-arc Inert Gas) welding machines, for steel, stainless steel, of various sizes and thicknesses;
- other threading, drilling, milling, riveting and electro-welding machines.

The painting plant allows to obtain a resistance of the product color against the salt spray up to 500 hours for steel and up to 600 hours for stainless steel and aluminium.









NEW PAINTING SYSTEM INDUSTRY 4.0

Technical aspects of the new system:

the **washing tunnel** has 5 stages: degreasing / 1st wash / 2nd wash / 3rd wash with demi water and finally the 'Lineguard APNR' passivation stage with the addition of a nanotechnology-based coating.

The **drying oven** has a heat exchanger powered by an air vein burner.

The **polymerization oven** has direct exchange heating and 100% efficiency, and has a humidity, ventilation and temperature uniformity control system along the entire length.

Construction materials: AISI 304 and AISI 316 stainless steel and insulation with 100kg/m3 rock wool, 100mm thick, for the drying tunnel, and 100kg/m3.200mm thick, for the polymerization tunnel.

PLC control system of the different plant components and tunnels.

The interconnection of the painting plant to the factory IT systems allows bidirectional data exchange.





The new powder coating system allows you to obtain:

a **very high quality of painting**: homogeneity of the painting, reduction of the risk of dust pollution, reduction of the risk of color change; **long duration of paint adhesion**; **resistance to salt spray** (up to 500 hours for steel and 600 hours for stainless steel or aluminium, through the use of the nanotechnology station).

The new system is particularly attentive to energy saving, both in terms of consumption of methane gas and electricity.

Paintable materials: steel, stainless steel, aluminum and other metals and metal alloys.

Paintable pieces dimensions: H1800xLu1000xLa700















Servizi
DESIGN, ASSEMBLY,
MANUFACTURING
MOULDS, LOGISTICS
and WAREHOUSE

Prototype manufacturing, design and industrialization of the product, design and construction of the moulds, up to the assembly of the finished product, are not only skills that we have acquired after years of experience, but derive from our ability to listen to and interpret customer needs operating in increasingly complex and competitive markets.



O1 DESIGN

Our design team is able to analyze the development and engineering of the product, starting from the customer's idea. We listen to the specific needs to propose the best solution: all design phases are carried out in collaboration with the customer, thanks also to design software such as SolidWorks, AutoCAD and Autopol which allow you to view 2D and 3D models with photographic quality. Over the years we have gained specific experience in the sectors of lighting, furnishing accessories and metal furniture, fire prevention

accessories and alarm systems, and in the creation of components for industrial machinery.

In every project we evaluate carefully production processes, in order to guarantee **high quality** with respect to the required specifications, carefully **optimizing production costs**.

O3 MANUFACTURING MOULDS

Mold design and production service is offered to the customer: the analisy and identification of specific equipment is based on particular customer needs (especially with regard to the blanking/drawing and bending/calendering departments).

After sharing the 2D or 3D design with the help of the Goelan software, our technicians proceed with the production of the molds or equipment dedicated to the customer, using the turning and milling technologies present in our machine park:

- work centre (useful workable dimensions 1000 x 500 x 700)
- CNC milling machine (useful workable dimensions 2000 x 700 x 800)
- **EDM machine** (with useful workable dimensions 700x400x350)
- grinding machine (with useful workable dimensions 1000×400)
- parallel turning machine (maximum turnable dimension D 350 and bench L.2000)

O2 ASSEMBLY

An **opportunity for the customer**. For customers who require the supply of a finished product, we offer a complete **assembly and packaging service**, following the required technical specifications, with particular reference to the safety and quality requirements asked by the customer, thanks to the collaboration with a logistically adjacent partner company.

LOGISTICS and WAREHOUSE

For us, organization is very important, which is why we care about the logistical and organizational aspects related to the handling of materials and finished products, thanks to the availability of large storage warehouses.





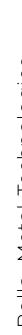
O1 LIGHTING / FURNISHING ACCESSORIES / FURNISHING

Operators in this sector require reliable partners both in terms of quality and care of finishes, as well as reliability and timeliness of deliveries.

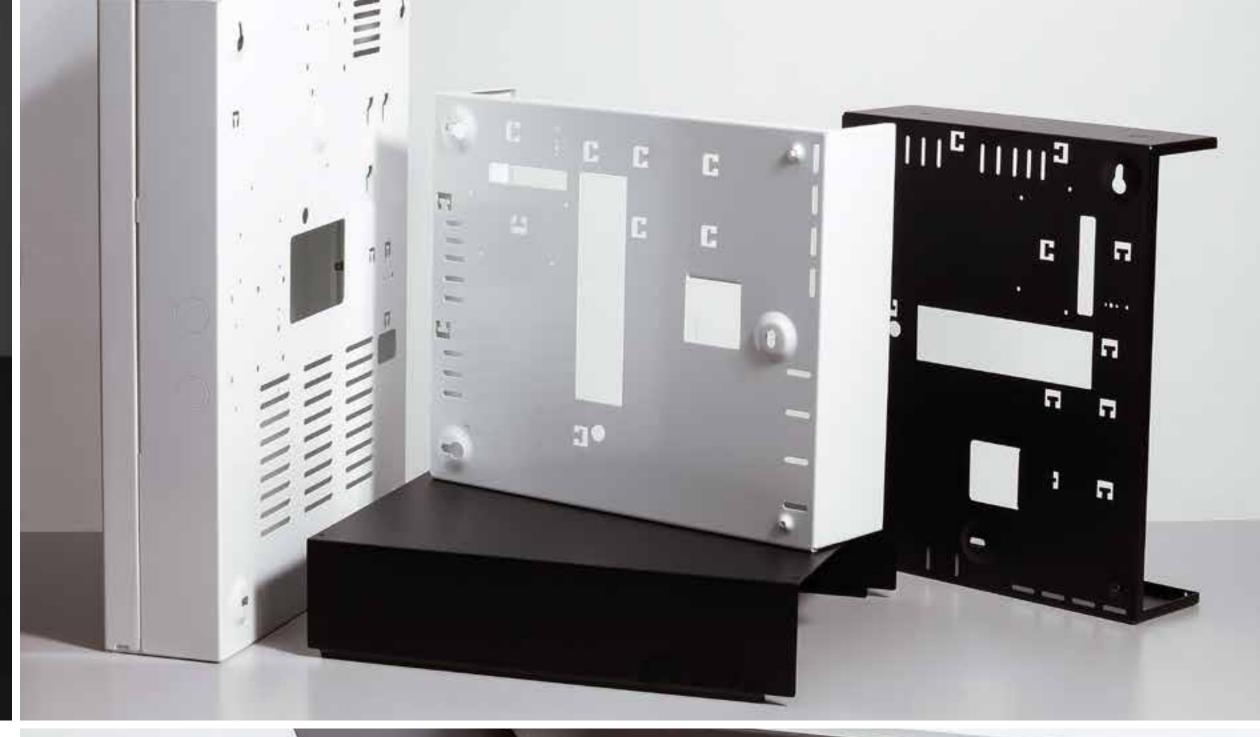
Rolla is therefore an ideal partner!







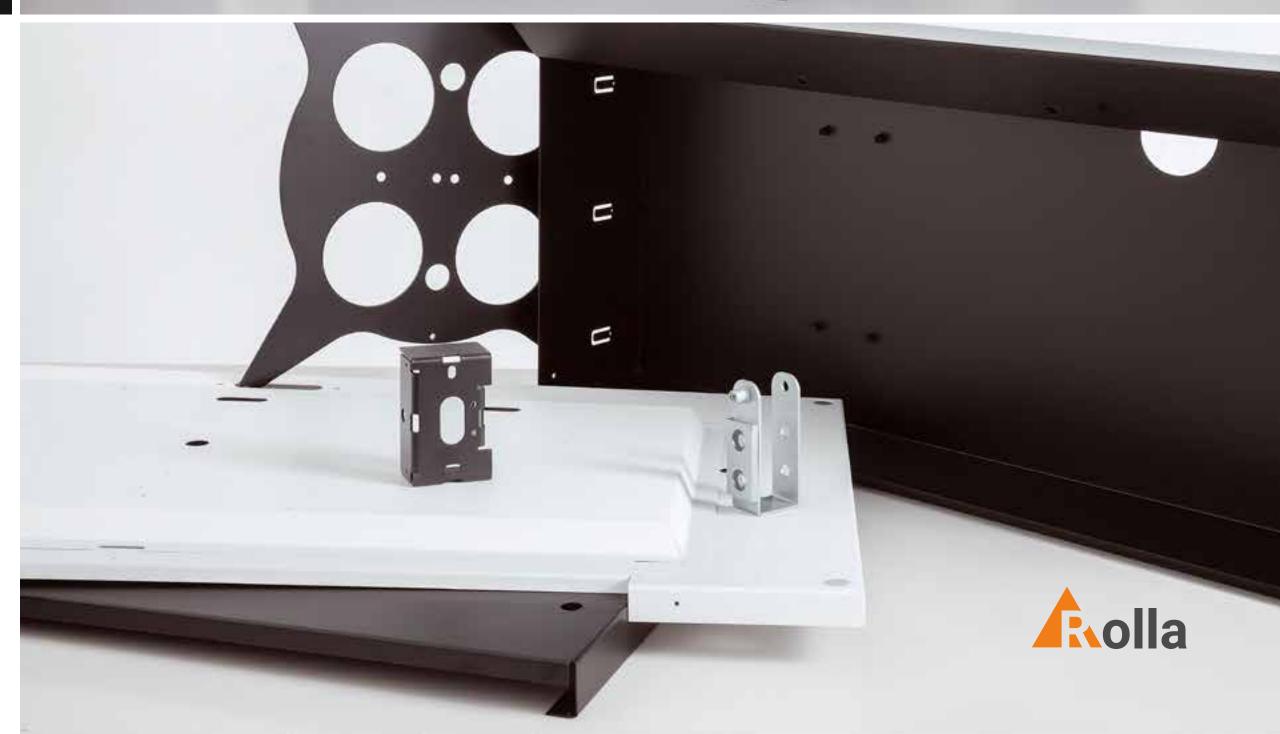


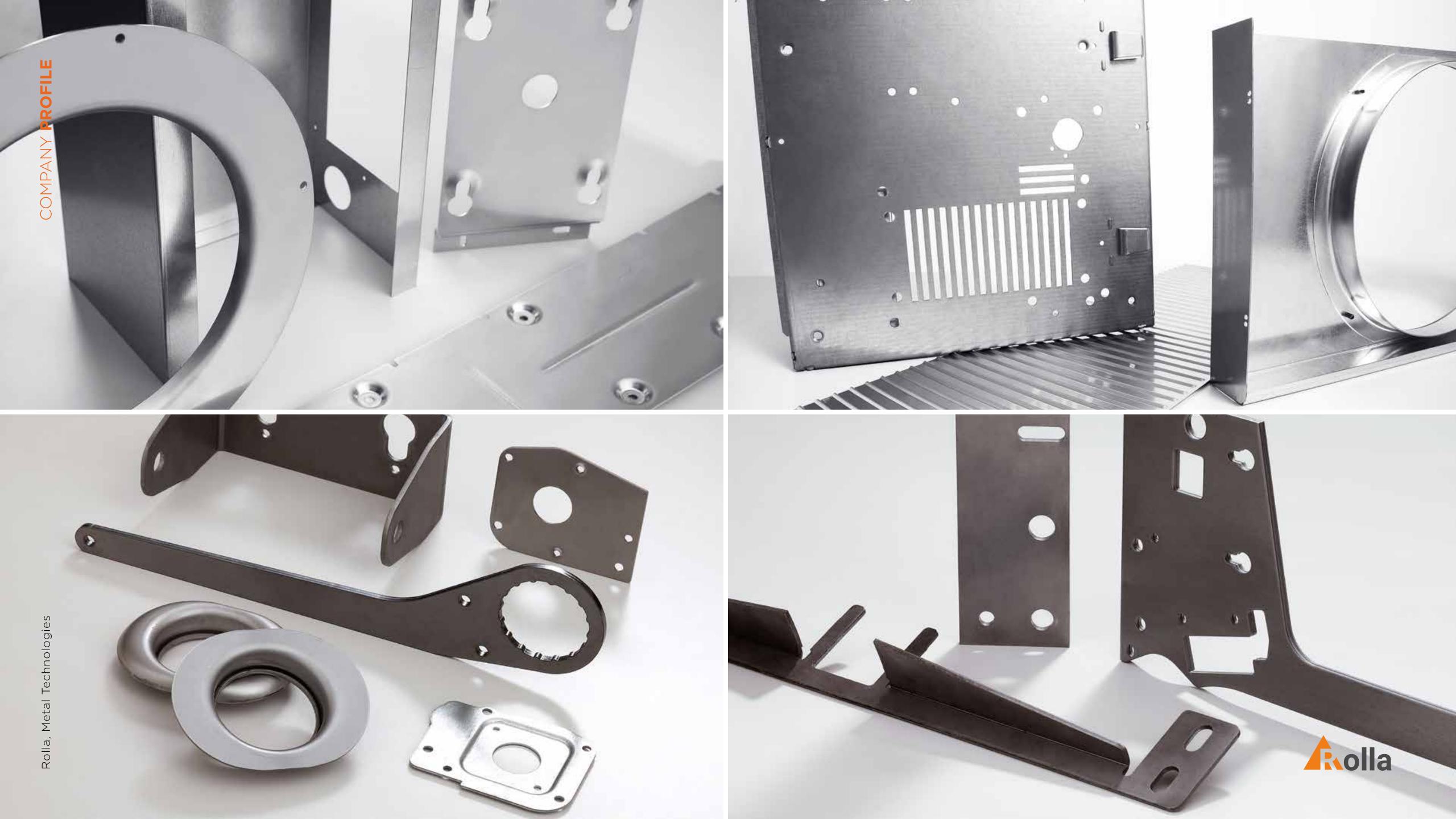


02 INDUSTRIAL / MACHINERY / PLANT ENGINEERING

The industrial machinery market is among the most complex and competitive, where specialization, robustness, reliability, **timeliness and high quality** are crucial elements for the success of its players and their partners.

Rolla guarantees you maximum support for the success of your product!





THANKS TO THE EXPERIENCE GAINED OVER THE YEARS, WE ARE A **RELIABLE PARTNER**, FROM THE DESIGN TO THE MANUFACTURE OF THE FINISHED PRODUCT.

Important companies have already chosen to work with us:























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