



STRUCTURAL STEEL

FREA & FREA

**IF THE JOB IS A BUILDING FACADE...
...WE KNOW HOW TO DO IT!**

FREA & FREA S.r.l. is a typical family-run company, established in 1978 from the initiative of the current owner, Giovanni Frea, in the beautiful setting of Roero's hills. "This is a farming area, my grandfather grew strawberries and my father started building equipment for farming", explains Mauro Frea, Giovanni's son, who after his degree in engineering joined the family business by assisting the founder in managing activities. From structures for farming to light carpentry of aluminum doors and windows it is a short road, but it meant a crucial change. Volumes have increased and we passed from doors and windows to coverings and continuous facades and today FREA & FREA is known as specialist of this sector of the building world.

Ambition to grow, believe with passion in our work, courage to take the challenge and desire to improve” are key factors that made it possible for the company to develop to its current size: 55 employees in two plants for a total of 15,000 sqm of covered property and many prestigious constructions, including the headquarters of Lavazza, Maina, GAI Macchine Imbottigliatrici and the covering of Pedrali warehouse.

“We have the organization and the characteristics of an industry, but in the end we still consider ourselves artisans”, explains Mauro Frea, showing pride for a work culture handed down from father to son. “In the past, being artisans meant to make quality products with your hands, today volumes are high and it is not possible to ensure artisan quality without automatic machines.”

Today FREA & FREA use the machines to achieve the same care and attention to details as the craftsmanship, while also being able to realize the repeatability and accuracy of today’s high quality standards.

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“Every single job is carefully analyzed and discussed by my father and I, whether it is a single window, a facade, a covering or a complex construction. Our attitude is to check everything and to not leave anything to chance. We love having control of every detail, and technology helps us to manage the production process.”

TECHNOLOGY TO GROW

“We believe in the use of technology as a tool to step forward, as it happened in 2010, when we changed from plasma to laser with the LT COMBO by ADIGE-SYS”, Frea affirms. LT COMBO is a laser cutting system for sheet metal and tube unique in its class. We asked Mr. Frea why they chose a system that carries out two such different operations: “...And why should we have bought a machine that carries out only one?” is the immediate and direct answer of Mauro Frea, who explains: “It is common in carpentry to machine both sheet metal and tube. We wanted laser machining on flat sheet metal, but we were also interested in processing tube. We looked around

and found out that nobody has the technological level of BLM GROUP for the tube. The LT COMBO system was the solution to our needs for sheet metal and gave us the opportunity to get to know the world of laser cutting of tube.”

The choice turned out to be correct and the opportunities offered by the combined system have exceeded their expectations: “We recognized that with LT COMBO, it was enough to have imagination and the machine would offer significant advantages. For a long time, we processed the sheet metal at night and the tube during the day and over these six years, tube sections have never been the same. If we look at the volume of machined material, we’ve probably machined far more tube than sheet metal.”



ONE SUPPLIER, FROM DESIGN TO INSTALLATION

Laser in the construction industry is still at the beginning. “Major customers usually start from an architectural detailed study already prepared and we are able to engineer it, optimize machining and reduce costs.

Laser enables special machining operations that make it possible to create joints between the different elements and therefore simplify installation reducing times and errors”,



Frea explains and concludes: “The customer often proposes an architectural solution, but we know how to realize it.”

The ability to face the problem in all its aspects is an essential asset. “When we face a new job, we are able to provide the full package from design to installation. This is particularly appreciated by customers who love to deal with a single supplier”, Mauro explains.

How could we at BLM GROUP disagree as we propose the same philosophy in the tube processing machines!



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WEIGHTS AND DIMENSIONS OF CONSTRUCTIONS ARE GROWING

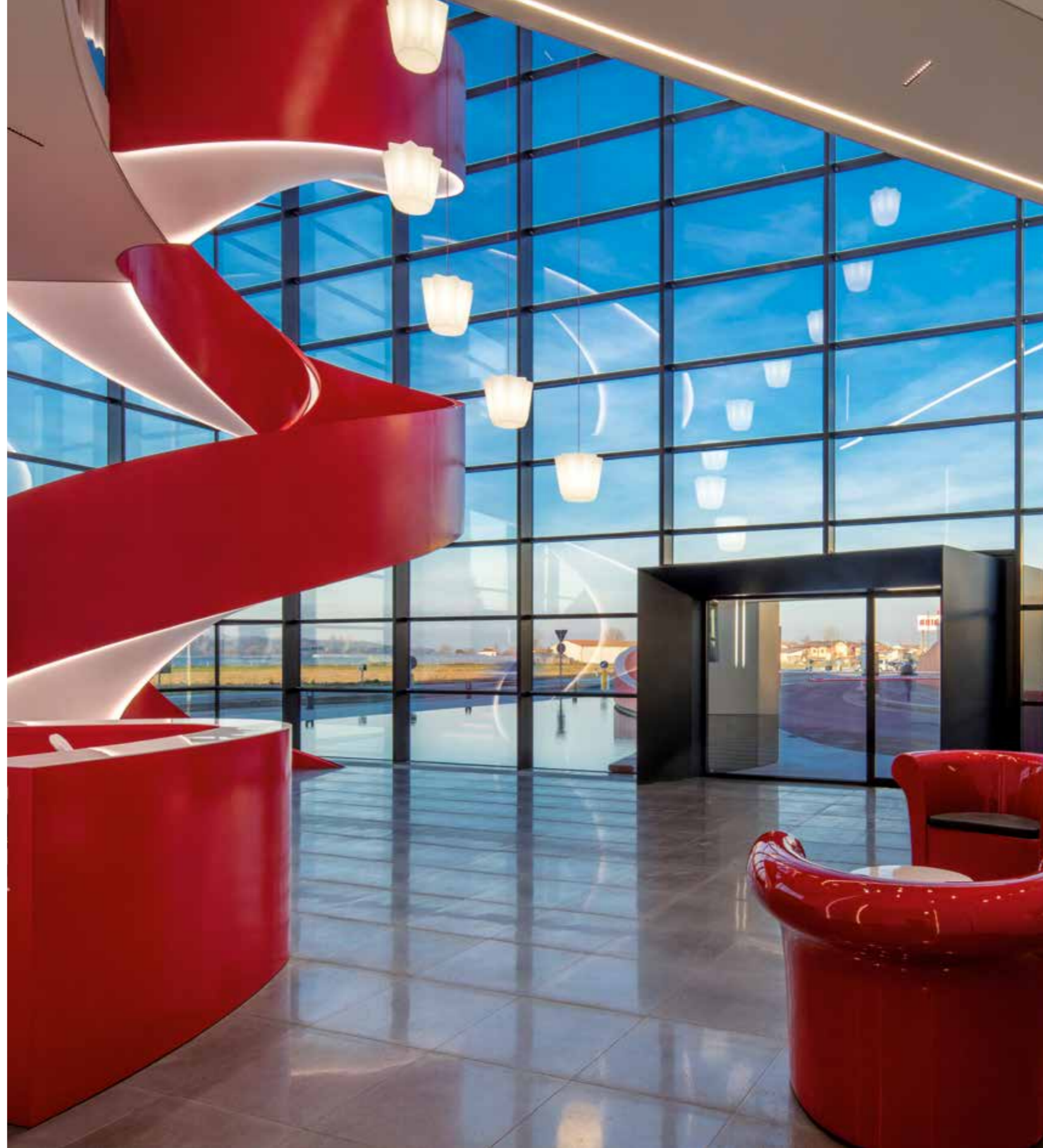
Since the purchase of the LT COMBO, the sheet metal volumes and the requests on tube have continually grown. “With a need to increase production capability, combined with the incentives offered through the National Plan Industry 4.0, we decided to invest in dedicated systems, one for sheet metal and one for tube”, explains Mauro Frea. Furthermore, in structural metal carpentry, dimensions, thickness and weight of tube are increasing and what we used yesterday is no longer sufficient.

“With the skill and support of ADIGE-SYS, we were confident in our decision to buy additional systems. Therefore, we purchased a LT14 Lasertube, dedicated to machining tubes up to 355 mm diameter and 100 kg/m weight. It’s true that 80% of tube is up to 150 mm, but the machine is however able to process it.”

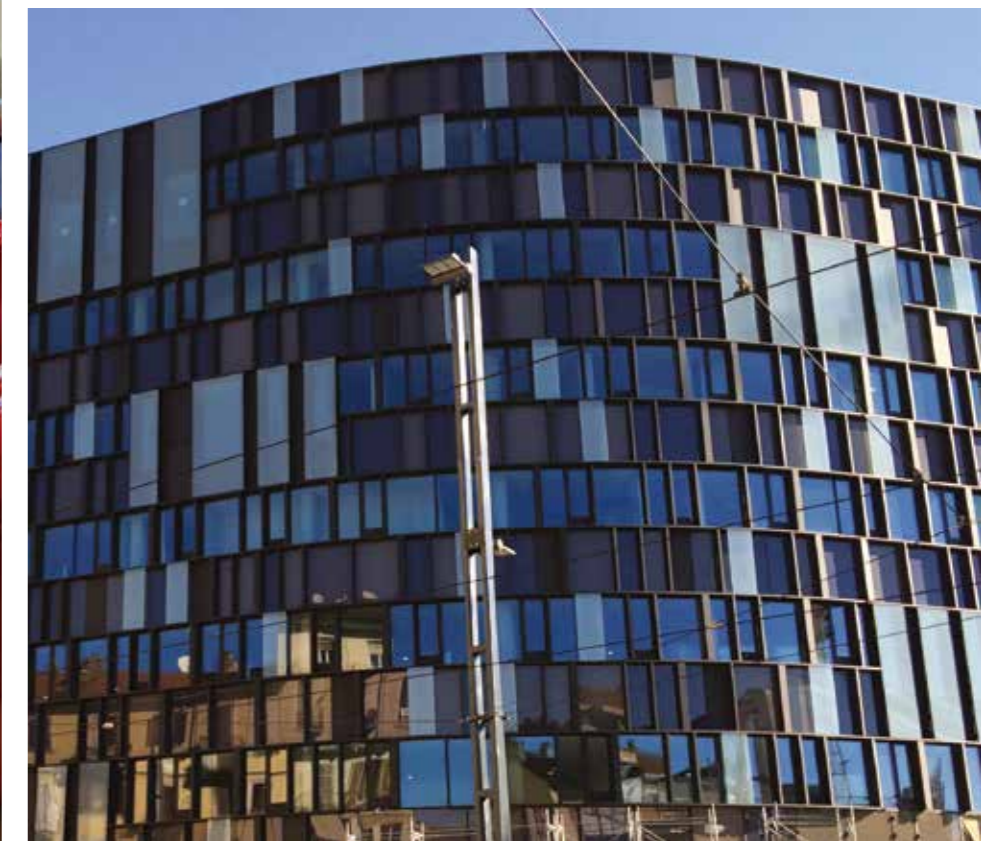
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The LT14, equipped with a 3D cutting head, can machine open sections too. “This allows us to make another important step and expand our thinking on how to design everyday carpentry. We used to make templates on paper, to wrap them on the tube, mark them with chalk and then cut with plasma by hand. Work has always been carried out this way. The problem is that if today the laser stops, our employees do not know even where to begin to perform the work manually.”

The LT14, with its 16 m of load at entry and 12 m of unload at exit, allows you to load bars, obtain finished parts and do anything in between. “Machining of network trusses made of round tubes is carried out in automatic and times are non-comparable at all. Thus shortly, all cutting and drilling operations on I-beams will move to LT14.”



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INDUSTRY 4.0: INDUSTRY OF THE FUTURE

According to Mauro Frea “Industry 4.0” is not only an occasion for financial incentives: “it is the goal we are expanding on.” Today’s production system is already automated and controlled directly from the office. “Before everything was based on the expertise of the personnel in the workshop. Now the expertise lies in the office and all the machines work autonomously. The machines in the workshop receive the programs and are managed from the office. Everything is drawn in CAD 3D and programs are sent directly to the machine.



We have a management system that tracks job orders, communicates with automatic magazines and sends out orders of materials that are not available to the suppliers. It creates magazine requests, orders sent to suppliers for what is missing and accordingly prepares carriages with materials to be assembled. Laser machines integrate well into this process; they enable us to have the control of production and to know the status of the job orders in the workshop. The great advantage is that a single person has the control of the entire situation. When I ask something the operator knows how to answer, without the risk of getting contradictory answers from multiple employees.” With the laser system, the person in charge of managing production can tell me all that is going on, from job orders to consumption, to what is necessary to complete the process. At production, we feel quite aligned to the state of the art in terms of automation and integrated factory. The LT14 is another step in this direction.