by Mario Palmisano

If quality can be found in the processes, **it is reflected in the product**

THIS STATEMENT PERFECTLY SUMS UP THE PHILOSOPHY OF THIS VERONA-BASED COMPANY. THANKS TO ITS STATE-OF-THE-ART MACHINERY AND SPECIALISED MEMBERS OF STAFF, EVERY ORDER IS ATTENTIVELY OVERSEEN FROM THE DESIGN PLANNING STAGES RIGHT UP UNTIL THE DELIVERY OF THE FINISHED PRODUCT. CUSTOMERS ARE QUITE LITERALLY ACCOMPANIED EVERY STEP OF THE WAY ALONG THEIR JOURNEY

The wall of the meeting room where we are welcomed by engineer Gaetano Carcano, Director General of Verona Lamiere S.p.A. of Campagnola di Zevio (VR), is adorned with a photographic reproduction of a painting of a stuffed chair by the French writer Charles Pèguy (1874-1914). Under the artwork hangs a text describing the vision that Pèguy himself attributed to the work. The following is an excerpt: "Workers once cultivated an honour, absolute, as befits an honour. The leg of a chair had to be well made. It was natural, it was intended. It didn't need to be well made for a salary, or in proportion to salary. It was not to be well made for the master, nor for the connoisseurs, nor for the master's clients. It had to be well made in and of itself, in its very nature. And each part of the chair you couldn't see was worked with the same perfection as the parts you could see. Following the same principle as for cathedrals". And it is with these words that the founder of this Veneto-based company, Remigio Lucchini- still in business at the ripe old age of 83, has always identified himself, leading him to conquer a number of prestigious goals.

Mr Gaetano, based on the above it is clear that you have great respect for the work, which you see as a noble gesture aimed, above all, at satisfying those who undertake it through the pursuit of qualitative excellence. But have you really managed to make that a reality?
We believe so, and at any rate we're working hard to ensure that certain concepts are embraced by all company staff. A true master in this regard was the company founder, who, first and foremost, was an honourable and passionate man of the trade. He succeeded in transforming this company into a large family, as demonstrated by the recent 30th anniversary celebrations which were attended by our employees and their nearest and dearest.

Let's delve a little deeper into the concrete aspect of the matter. Can you explain your understanding of quality?
Above all, we believe that quality starts with the quality of the processes, followed closely by the technological methods used in the various phases of the production chain, namely: the design analysis, quality control, laser cutting, drilling/punching, bending, assembly and welding, stamping, mould and equipment making, pre-treatment and painting, packaging and, finally, the management of the finished product. If each of these stages is carried out with the highest standards, the resulting product can be nothing less than excellent. This is something that our customers have understood very well. It's no coincidence that before deciding to become a customer of ours they want to observe our production departments and check our production processes in detail by carrying out special audits.

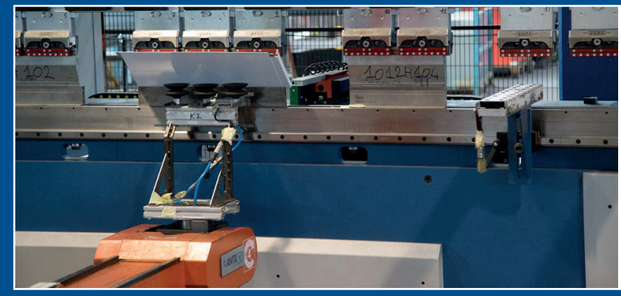
What kind of products do you manufacture and for which sectors in particular?
Anything and everything- our production is known for its versatility. We manufacture for a countless number of sectors with batch sizes ranging from single pieces to 3000-4000 pieces per year. And although, on the one hand, this poses many challenges due to the obvious organisational demands, on the other hand it's a delight, because it engages us, makes us use our brains and, ultimately, keeps us young. In this regard, our main daily challenge is that we must be extremely flexible and competitive, despite our medium-large company structure.

What other strength makes you stand out?
Our ability to work hand in hand with our customers starting with the initial, yet crucial, phase of product sampling, an aspect on which we focussed a lot of our energy in the past year and for which we have developed dedicated internal software. We also place great importance on the optimisation of the product itself in terms of quality and technical and economic aspects and, last but not least, on the delivery of the finished component.

30 YEARS of medium-light carpentry **made by VR**

The name Verona Lamiere S.p.A. has close ties with Remigio Lucchini, who was born in 1937. Lucchini, disregarding the expectations of his father, a butcher, who wanted him to continue the family business, took a different path and obtained a diploma in mechanical engineering. He then threw himself into the world of mechanics which was his true passion, and, in the 50s, founded ICI Caldaie, a manufacturer of industrial boilers for large steam generators, in the town of Campagnola di Zevio (VR). In 1989, he established Verona Lamiere which manufactured the semi-finished products needed by his previously established factory and which was conveniently located just next to it. Directed by the founder's son-in-law, Gaetano Carcano, an environmental engineering graduate, today the factory makes medium to light carpentry parts from sheets of carbon steel (60-65%), stainless steel and special alloys (25-30%), and aluminium (10%). The thickness of the sheet metals ranges from 0.5 to 20 mm and they can weigh up to 300-400 kg. They are assembled and painted and are manufactured for various purposes including, in addition to the above, furniture, forklifts, industrial vehicles, the electric industry, vending machines and so on. In possession of all the certifications related to its operations (ISO 9001, OHSAS 18001:2007, UN EN 15085-2 e UNI EN ISO 3834 part 2), this Veneto-based company processes about 8000-9000 tons of raw material per month, serves about a hundred customers, employs 200 people and has a turnover of €30 million, 30% of which from direct exports.

Gaetano Carcano,
Verona Lamiere S.p.A.



Can you tell us about a couple of orders that put your technical and organisational skills to the test?

The first was the roof structure of a train carriage which was made of aluminium and stainless steel pieces measuring up to 5-6 metres long and which housed the air conditioning system; the second more recent example concerned the construction of the parts for the electrical panels installed in the emergency hospital built in the pavilions of the Fiera di Milano in response to the Covid-19 pandemic. Thanks to this project as well as a few other orders during the lockdown period, we were able to maintain a production capacity of 20-30%.

What are the main difficulties you encounter when working with sheet metal?

From a technical point of view, the main problems we face when working sheet metal are residual stresses (from previous processing, e.g. rolling) and anisotropy (meaning that the material responds differently depending on the direction). These factors are responsible for a certain degree of variation after processing. It is also very challenging to meet the increasingly narrow tolerances required by customers, and we are certainly not helped in this matter by steelworks that continue to work with very wide tolerances. Essentially, we are working on sheets that have flatness tolerances of, let's say, a few millimetres per metre, however the customer may ask us to manufacture a product with a tolerance of tenths of a millimetre whilst also having very high aesthetic standards. It's up to us, therefore, to ensure that we're equipped to succeed in this challenging undertaking, both by means of technologically advanced machinery and sophisticated control equipment.

In this regard, it has to be said that you're equipped with everything you need given the army of facilities at your disposal, many of which are the result of the €5 million invested over the last three years. Which pieces of equipment do you want to tell us about first?

I'd have to say the most versatile and high performing ones, which include our laser cutting systems, 5 of which are the CO_2 variety and 3 of which use fibre lasers; our 2 combined laser/punching machines; and our 4 punching machines with robotised loading, unloading and palletising systems. In the bending department we have at our disposal 3 panel bending machines, 15 press brakes and 7 robotic bending systems. In the moulding area we have 6 mechanical presses from 40 to 500 tons and 3 hydraulic presses from 100 to 200 tons which are also equipped with automatic feeding units. Our chip removal department, which also serves as a tooling department for the construction of moulds and various production equipment, consists of 3 machining centres, with a working range up to 8 metres, as well as milling machines and lathes. The welding and assembly department has an area dedicated to welding stainless steel and aluminium which is equipped with 15 manual stations and 3 TIG robotic stations. It also features an area for welding carbon steel which has 2 robotic stations and 10 manual stations and an area for assembly and electrical welding. This department also benefits from 2 3D measuring systems. Finally, in the painting and finishing area, we have 1 automatic powder coating and nanoceramic pre-treatment line and 1 semi-automatic powder or liquid line.

What's the next investment on the horizon?

We're currently in the process of constructing a new warehouse next to the three existing ones which, with a surface area of 17,000m^2, will allow us to improve the company's logistical structure. We also plan to work on the automation of production processes by introducing collaborative robots that will act in symbiosis with our staff, particularly for processes that have previously only been carried out manually.

As for the competition, which is now fought in an international arena, who are your toughest competitors?

Nowadays the competition is very tough, not only between us contractors, but also among our customers. In fact, for some years now, customers have been comparing us not only with our Italian competitors, but also with foreign ones. They've also been seeking out rival companies in countries as far away as China and Turkey, even for small batches.