

OMAS MOTOR is a typical Venetian company, born in 1978 from the entrepreneurial mindset and the passion for mechanics of Albino Sgarbossa, founder of the company and father of the current owner, Simone, who welcomes us in their plant in Cittadella (PD). Initially dedicated to the production of components for the exhaust systems, the company has been able to develop by diversifying its production in different sectors and by investing in next generation machines for continuous growth.





With Simone Sgarbossa we start talking about the origins of OMAS MOTOR: "We are a typical Venetian family who, in my grandfather's time, was working the land. My father, Albino, had a passion for mechanics and after working as apprentice for a while he managed to start his own business and founded IMASAF, that even today still produces exhaust systems for cars." The company was successful and grew considerably with the collaboration of other family members. When it became an established company with several branches and warehouses all over Italy, Albino Sgarbossa preferred to leave its management to his relatives and established a new company, OMAS MOTOR, where he could go back to work on cars giving vent to his unchanged passion for mechanics.

"Having seen the development of a company such as IMASAF, in its different phases, under the guidance of my father, has been an experience that taught me a lot," concludes Simone Sgarbossa who continues to rapidly grow OMAS MOTOR because of that experience and his wise investments into new technologies.

Differentiating to grow...

In the beginning, OMAS MOTOR manufactured almost exclusively components for the exhaust systems for its "cousin" IMASAF. "In the 80s and 90s IMASAF was already in the exhaust system market. The company mainly manufactures spare parts and some original equipment systems, but me and my cousin Alfredo, who joined the business, didn't see positively the prospect of being suppliers to a single company, even an important one," explains Sgarbossa, referring to the OMAS development strategy. He continues, "In the late 90s, we started to diversify by also adding spare parts for tractors to IMASAF components. We invested in suitable machines and managed to introduce one of our products to the market, a new line of compact push-in silencers,

without welds. From the small size mufflers to the bigger ones for engines up to 700 horsepower and above, this is the product that made us known around the 2000s".

In a short period of time they became suppliers of original equipment for tractors, then they entered the world of generating sets for which they manufacture the intake and exhaust system as well as other parts including different machine frames and anti-intrusion barriers.

Between 2010 and 2015 pollutant reduction

Between 2010 and 2015 pollutant reduction technologies were growing increasingly more important. "The muffler was gradually replaced by fume purification systems. The world had started the journey towards electric and clean energy and we had to keep pace. The new market is that of the photovoltaic panels and support structures. It is for this market that we have leveraged the capabilities of Industry 4.0 by investing in next generation machinery. Right now we are building a 2 megawatt power plant that will supply energy to both us and to the surrounding community," concludes Sgarbossa.

... investing to grow

To face the new challenges of the market OMAS MOTOR decided to purchase four BLM GROUP systems: one ELECT150 to bend tubes in the tractor and photovoltaic panel industry, one Lasertube LT5 and a LT360 robotic laser cutting cell to laser cut and trim tubes after the bending phase and then another tube bending machine the ELECT80 for smaller tubes. "We worked with the hacksaw and a tube diameter of 50 mm already seemed big to us, but after purchasing the ELECT150, we quickly got used to it and realized that cutting 2 mm stainless steel 150 by hand is not easy," explains Simone describing how after a while they decided to insert laser technology: "I was looking at the stadium where the Beijing Olympics were held, the famous Bird's Nest, a



structure made with tubular elements intersected in various ways that made me think about the real potentialities of the Lasertube systems and about how ground-breaking this technology is."

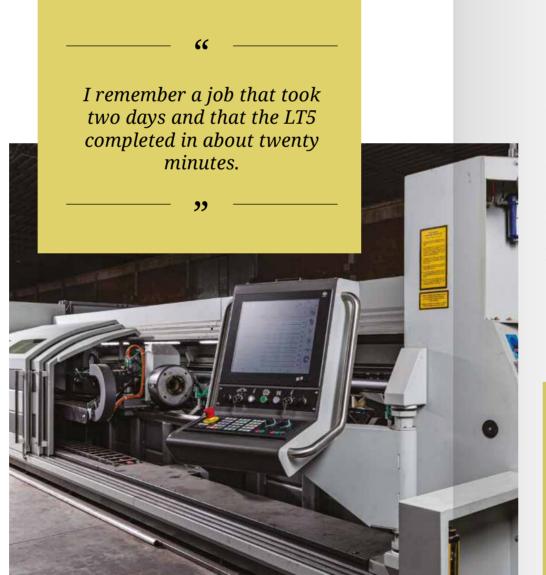
A long-standing partnership

OMAS and BLM GROUP have a long history of collaboration. Simone Sgarbossa recalls that when his father collected the first tube bending machine that BLM was still in its beginning. Today, that machine is still in the factory and it is shown to us as a museum exhibit. Since then, many other machines from BLM GROUP have been purchased by OMAS MOTOR, though careful valuation of the most advantageous solutions available on the market. "When we bought the LT5 we also investigated the competitors and we noticed that they were offering systems at lower prices, but quality and service must be taken into account, and we could not risk having a service relationship different from the one we receive from BLM GROUP."

The LT5 system was immediately a great success: "We think carefully about investments well in advance of the actual needs because we want to ensure that everything is ready at the right moment. But with Lasertube, it was not like that. As soon as it was installed and we were in the process of training, the machine was already producing parts. The benefit was huge. I remember a job that took two days to be carried out that the LT5 completed in about twenty minutes. Additionally, some manifolds, first cut by hand and then treated with additional processes, were ready in a few minutes on the Lasertube. Tremendous flexibility".

LT360 a system with great potential

The robotized laser cutting system, LT360, has been considered especially useful for prototyping before production for original equipment customers. "Before, the prototyping phase was very time-consuming and expensive. Now, with the new machines and software, you start from the 3D model and all CAD evaluations are carried out in the office, bending simulation and evaluation of the production times included. The software automatically generates the program to make the support template and part check



for the LT360, whereas the LT5, ELECT150 or ELECT80, depending on the size, we produce the sample and finally we carry out the laser operations of trimming and drilling on bends). Everything is very fast," Sgarbossa explains. LT360 uses an anthropomorphic robot to move the laser cutting head working on the part that can rest on a template or be supported by another robot making the process extremely flexible in any situation, whether we are talking about bent tubes or drawn or hydroformed sheet metals. "Previously, these jobs were carried out by machine or by hand, in both cases with more expense and processes than the laser, not to mention that the older mechanics are retiring and the new ones are skillful on CAD, but are struggling with the fine mechanics," explains Sgarbossa who concludes with an example. "We use LT360 for a manifold made of two parts, one bigger but simple that is bent on the ELECT150, and the other one smaller but more complex that requires cutting and trimming for welding after bending. There are three bends in a very narrow space and maybe we can do it as a single part. The LT360 is essential for this job, it wouldn't have been possible without it, and in many other cases, without the LT360 I should have said to look for another supplier."

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