



BENDING in 5th gear

From professional catering to interior design and lighting, from the marine sector to the plastics industry, in processing and production plants, and in general industry: these are the core sectors for Larinox, a company founded in the late 1990s on the belief and willpower of its two founders, Lucio Pengo and Antonio Ghion, who combined their diverse professional experience to transform a small business into a key player in steel processing. Located in a strategic position to the north of Padua, the company is divided into two high-tech, cutting-edge operations of around 6,000 sq.m., employing around fifty workers: the site at Campodarsego is dedicated to general sheet metal processing, while the site at Vigodarzere processes tubes and profiles. And it was right in the middle of where sheet metal work was being carried out that we met Lucio Pengo, to catch up on a company undergoing continuous growth, where outstanding craftsmanship has always gone hand in hand with an evolving, state-of-the-art installed base of equipment. “To succeed in satisfying our customers’ needs”, Pengo explains, “it is undoubtedly our inventiveness, creativity and ability to find solutions that makes our operations stand out in an ever more competitive market.

Even more so when medium, small and especially complicated parts are involved, which can be produced, according to the customer’s specification, as semi-finished goods or as ready-made assemblies”. Tradition and innovation in synergy, finding fertile ground to grow in the company’s entrepreneurial farsightedness. It is not by chance that Larinox was itself one of the first in the north-east to install a laser tube cutting plant (around ten years ago). “With the same approach”, Pengo adds, “we decided to buy 5 new 100-tonne electric press brakes, positioning ourselves for the future in terms of energy efficiency and safety, not to mention production capacity and environmental awareness”.

Efficient, high-quality and ecological bending

Supplied through Betto Macchine of Rubano (Padua), the 5 electric presses bought by Larinox and installed in the sheet metal processing plant are SafanDarley E.Brake 100 – 3100 models. As already mentioned, these are 100 tonne machines with a working length of 3,100 mm, that are modular and ergonomic,



A SPECIALIST IN PROCESSING STEEL, ALUMINIUM, COPPER AND BRASS, LARINOX HAS INSTALLED FIVE NEW ELECTRIC PRESS BRAKES FROM SAFANDARLEY, THROUGH ITS DISTRIBUTOR FOR NORTHERN ITALY, BETTO MACCHINE. THIS UPGRADE WITH IMPROVED TECHNOLOGY WILL ALLOW THE COMPANY TO INCREASE PRODUCTION CAPACITY AND COMPETITIVENESS IN NATIONAL AND INTERNATIONAL MARKETS.

characterised by a special structure which helps to balance the absorption of large forces. The “O” shape of the structure itself behaves as a single unit and deformation is kept to an absolute minimum. It is therefore more stable, more resilient and undergoes much less deformation than a conventional “C”-shaped structure. The flexible belts, which have a thickness of only 3 mm and a width of 50 mm, are reinforced with steel cables and coated in highly-resistant polyurethane. This belt and pulley system distributes the load evenly all the way along the length of the machine. To meet the needs of Larinox, there were also the considerations of increased production capacity and energy-saving, as well as the environmental awareness already mentioned. In terms of the production cycle, the target was met by the SafanDarley E-Brake by means of its very low reaction and stop times (a bending speed of 10 mm/s can be reached). From an energy-saving point of view, there is a considerable saving compared to a traditional hydraulic bending machine, in that the press brakes consume energy only when the upper beam is in motion. The absence of hydraulic components means that problems with polluting and dangerous oils can at last be forgotten.

In addition, there is no need to maintain valves, fittings and cylinders, and there are no filters to check and replace. The servo-electronic system features increased reliability, also due to the absence of oil, reservoirs, pumps, plugs, valves and filters. With a standard stroke of 300 mm, and an opening of 650 mm, the press brakes selected by Larinox have been configured with a European Style clamping system, and fitted with an integrated safety system with photocell controlled automatically by SafanDarley E-Control. The machines are also equipped with another integrated safety system in which a mechanical spring return is fitted, allowing the upper beam to always remain in a raised position even when there is a fault.

By the customer's side

Adding the new Safan press brakes means that the company can now respond even more quickly and effectively to market requirements. “For the most part we work on commissions and projects”, Pengo emphasises, “but thanks to our broad in-depth experience and the crossover skills in our company, we can stand alongside the customer, supporting them with co-design

DELIVERING ON THEIR PROMISES



Working on one of the new SafanDarley E.Brake 100 – 3100 electric press brakes acquired by Larinox and installed at their sheet metal processing site.

to identify the best technological solutions for development of the product, and making sure they achieve maximum competitiveness". Where necessary, Larinox is also able to offer the customer use of its own technical/design office headed by engineers, offering technical and manufacturing consultation, with the aim of optimising products and processes, thus accelerating the prototyping process. Coordination of orders also benefits from the Kanban method (a lean production method with the objective of avoiding overproduction, thus improving performance of the entire production system), used by the company for some time now.



For Larinox, stainless steel represents around 70% of the raw materials used for most production of semi-finished goods, while the remaining 30% is represented by ordinary or galvanised steels, aluminium in its various alloys, copper and brass.

"Thanks to this approach to production", Pengo adds, "we can deliver directly to our customers' production lines, and at the same time optimise our process flows. So for us there is no difference between fulfilling the needs of small or large batches. We can adapt to operating requirements with maximum flexibility, and in all phases of development and production we can rely on our well-supplied in-house stock of materials in a wide range of dimensions and thicknesses, always kept up to date". In this context, for Larinox, stainless steel represents around 70% of the raw materials used for most production of semi-finished goods,

QUALITY, RELIABILITY, INNOVATION AND SUSTAINABILITY

Headquartered in Lochem, Netherlands, SafanDarley employs 170 staff in all (of which around 10% work in research & development), committed to the production of a wide range of electric press brakes, servo-hydraulic press brakes and shears. Over 90% of its output goes to export via its network of distributors in 45 countries worldwide. "Our company", explains Mauricio Gutierrez Matta, SafanDarley's Export Area Manager for South East Europe and the Americas, "is successful because of four important factors: quality, reliability, innovation and sustainability, and it is on these four major cornerstones that our commercial success is founded". A global brand in sheet metal working machinery, SafanDarley (www.safandarley.com) offers innovative solutions for all types of processing, with revolutionary electronic applications and proven hydraulic technologies. These innovations represent constantly evolving progress, resulting in important achievements including the construction of the first servo-hydraulic press brake (in 1980), the first servo-electronic press brake (in 1995), the first hybrid guillotine shear (in 1999) and the first 100% electronic press brake (in 2004).



Lucio Pengo, owner and founder of Larinox, and his son Denis.

Timely, professional support for the sheet metal processing sector.

Founded in 1978 by the current director Antonio Betto, Betto Macchine of Rubano (Padua) has worked for almost 40 years in machine tools for sheet metal processing. Thanks to a display area of around 1,000 sq.m. and a permanent showroom of another 500 sq.m., the company positions itself as a valuable partner for not only the supply of new machines, but also a wide range of guaranteed used equipment. Timeliness, a professional approach, and attention to detail are the three essential aspects of the service offered by the company, resulting in practical and continuous collaboration with its customers. This collaboration is underpinned by staff kept constantly up-to-date on a technological level, coordinated and directed by Massimiliano Betto, at the helm with his father. The staff of technicians and salespeople are ready to collaborate with customers from project planning to after-sales support. As in the case of Larinox, through the supply of 5 SafanDarley press brakes.

while the remaining 30% is represented by ordinary or galvanised steels, aluminium in its various alloys, copper and brass. The initial processes at both sites, whether dealing with tubes or sheet metal, take place with laser cutting, punching or automatic cutting, then continue to bending, roller bending or stamping, all with numerical control machines. Then, work moves on to any welding or soldering phase needed (TIG, MIG and brazing), carried out with advanced equipment and specialist personnel, and to surface treatment (polishing, satin finishing, sand blasting, micro shot peening), also carried out in-house at the company. In more detail, the installed base of



Larinox is split over two high-tech sites, at which general sheet metal working as well as processing of tubes and profiles takes place.



Traditional craftsmanship and technological innovation help Larinox develop components for interior design and retail equipment for major international stores.

equipment, which now also includes the 5 new SafanDarley press brakes, consists of: 3D laser cutting plant (for round tube 10 to 220 mm in diameter, square section tube 10 x 10 mm to 200 x 200 mm, and IPE and shaped tube), sheet metal laser cutting plant with automatic stacking (3000 x 1500 mm format); laser cutting – combined punch press for sheet metal; curving and roller bending of tube with mechanical control of diameters from 6 mm to 250 mm.

Looking to the future to solve new challenges

Innovation and continuous evolution has always been a part of Larinox's make-up. Experience and know-how, but also a professional approach, creativity and a vision of the future are exactly what the company brings to its work every day, and, through its products, exports to Italy and abroad. "Abilities", Pengo concludes, "which have enabled a rapid progression from a more local market to a national and international one. Especially when it comes to creating items for professional catering or components for plants for production and recycling of plastic materials; all the way to creating components for interior design and retail equipment for major international stores". An entrepreneurial vision from the two founders and owners who are looking to the future to solve new challenges in the market. And they are doing it not just by upgrading and updating the technology, but also by adding new young staff to the workforce, motivated and well-trained. The second generation of the family is already involved with the company, with Denis Pengo and Debora Ghion employed in a number of operating departments, confirming the fact that Larinox plans to continue its growth. And this also fits in with the potential production increase which could soon become a reality, thanks to new facilities, and the resulting optimisation of workflows.