

EPOSZ

QUALITY WORKMANSHIP FIRST

Eposz Kft is a private Hungarian company with almost 30 years of history and a strong propensity for innovation. Zoltán Farkas, the company's R&D manager, explains how the founder and sole owner, Janos Kovacs, started out in 1992 with the production of plastic coatings, subsequently expanding his scope to include metalworking. The company has grown due to its ability to innovate, offering an ever-increasing wide range of processing and implementing new technologies. Today Eposz Kft is a well-established company, with its warehouses occupying an area of 16,000 square meters in which 150 employees and about fifty CNC machine tools work to produce mechanical components for various sectors, from automotive to railway and agricultural machinery.



From sheet metal to tube

Metal processing and experience with laser cutting systems began in the late 1990s with the purchase of the first sheet metal systems. The first tube processing demands were met on these systems by turning the square tube by hand, but the limitations of that process were obvious.

As the tube demand grew, Eposz Kft decided to invest in more suitable systems and turned to BLM GROUP.

“We immediately purchased a Lasertube LT8 system and an ETURN52 tube bender that met the requirements for quality and efficiency in laser cutting, starting from tube bundles, and subsequent bending of individual parts,” explains Zoltán Farkas.

Quality above all

Eposz has, among its customers, several world-renowned brands with approximately 80% of its production exported to Germany. Their customers have very stringent requirements and what Eposz offers them first and foremost are very high-quality products. Zoltán Farkas explains, *“If I ask customers what they want between quality, respect for times and a low price, they will certainly answer me all three, but we, while giving great consideration to respect for times and a fair price, consider quality to be the fundamental and indispensable characteristic of our products.”* In order to achieve the desired quality, they decided to rely on the BLM GROUP. *“When the time came to renew the fleet of tube mills, we looked around and consulted other manufacturers, but in the end the choice was to rely on the BLM GROUP again,”* Zoltán Farkas explains and indeed in 2019 they purchased a new LT8.20 and an ELECT80 tube bender.

Innovation as a strategy

The systems are of the latest generation and certainly able to meet the new quality and productivity requirements, but the problem of post-bending processing remained. We are talking, for example, about

holes and slots that cannot be made before bending because, being too close to the deformation zone, they would risk causing a breakage or an uncontrolled deformation of the tube during bending. The solution was found in the LT-FREE laser cutting system, a robotized processing cell for 3D laser cutting of bent tubes as well as deep-drawn, hydroformed or three-dimensional parts.

In practice, Eposz Kft completed the fleet of machines to efficiently manage the entire production cycle: initial laser cutting on straight tube from a tube bundle, bending and laser cutting of the bent tube. *“All the machines were put in one hall to optimize logistics costs and ensure an overall more efficient process,”* Zoltán Farkas concludes.

A truly flexible system

Zoltán Farkas continues, *“The great advantage of the LT-FREE is that it does on its own what we used to do on several machines in sequence, with all the problems related to moving parts between different workstations, including accuracy, which necessarily suffers from the resetting of parts on different machines.”*

The advantages of the LT-FREE system are certainly in the achievable precision, but also in the speed and efficiency of the entire process.

Another advantage is in the saving of material, as Zoltán Farkas explains conclusively, *“Before the arrival of LT-FREE, the machining on already bent tubes was carried out by removal and excess parts of the tube had to be left to guarantee the grip of the machine tool. Now LT-FREE, with the robot, can grip the bent part at any point where machining is not required and this saves material.”*

Continuous innovation

Now that they have completed the entire machining process with the LT-FREE, Eposz Kft. is eagerly awaiting the work that the BLM GROUP is doing on welding to truly have the entire production cycle of their parts within their control. Until now, they have primarily

worked on the production of single parts with the percentage of composite parts being very low, but this dynamic company is always looking ahead and this situation is destined to change in the future, aided in part by advanced welding options.