



AUTOMOTIVE

## VANSTAR

### MORE AUTOMATION TO OBTAIN QUALITY AND FLEXIBILITY

Among Eastern European countries, Poland is probably the one having a greater development as it shows an entrepreneurial dynamism that has generated a continuous growth even during downturn periods. And thinking about a driving force in this evolution process, the automotive sector is an excellent example. In recent years, many major car manufacturers have opened production sites in Poland, boosting the growth of expansion opportunities among local suppliers.



One of these local realities is VANSTAR P.W., a company established in 1993 by Leszek Szostak to produce load systems for STAR trucks and then little by little the market extended to other manufacturers of buses and special equipment for ports and airports. Today the company employs 150 people working in a plant of 3,500 sqm. Paweł Szostak, name partner together with his father, founder of the company, recalls the early times: “At the beginning, we built a tube bending machine with a mandrel ourselves to be able to work and we went on for eight years with that machine. After completing my studies, I joined the company and with my father we bought the first industrial machine tool.”

VANSTAR lived thru the entire evolution of tube processing for the automotive industry in Poland. Paweł explains: “Initially, the market accepted machining imperfections, with some folds on the bending area and clamping tool marks. Today, the automotive world has changed and problems such as avoiding tube distortion are taken into account. This increases the necessity to use automatic production systems able to ensure accuracy, reliability and repeatability.”

### FROM SPARE PARTS TO ‘FIRST INSTALLATION’

VANSTAR has been dedicated to aftermarket production for a long time. Today the company is changing direction and about 30% of its production is dedicated to OEM components. Paweł explains: “The after-sales market in Poland is very difficult today as competition has soared. Many small businesses with simple machines produce components at very low prices. That is why VANSTAR has recently turned to OEM components. Many automotive manufacturers have come to Poland and this is a golden opportunity.” Characteristics of this market are however different and clear in the thoughts of Paweł, who lists them in order: “Very low price, very high quality and commitment to delivery times.” A company must be able to adapt in order to keep up with market changes. In 2011, the implementation of a quality system certified by ISO 9001 and ISO 14001 and recent investments combine with the objective to enter the market of first installations.



## AUTOMATION MEANS QUALITY AND FLEXIBILITY

Production is divided among truck parts and special equipment parts, such as vehicles to unload cargo vessels in ports, and VANSTAR can manufacture the finished product, ready for installation. Currently their main customer is Cargotec, a major manufacturer of vehicles to load and unload containers. Vanstar manufactures the unloading system and though it relates to the automotive sector, numbers are not the same as for cars. Paweł explains with another example: “We have a customer producing 2,000 buses/year. Production volume is established, 2,000 units in a year is not a large quantity, but the complexity and quality required is very demanding.”

In order to meet the high standards, it was essential for Vanstar to invest in machines capable of performance requirements. Low volumes imply frequent production changes and machines able to change production efficiently and this is the reason why, after some unsatisfactory experiences, they chose BLM GROUP. “We knew the person who proposed the products of the Group in Poland and we were pleased to have a Polish contact: this gave us confidence”, Paweł explains. In 2010, they acquired the first tube bending machine, a DYNAM8 then in 2016, a change in direction: an end-forming system AST80, an ELECT-M, an ELECT-L and an ELECT-XL, all fully electrical systems to ensure a real qualitative leap.

With the ELECT systems, they have been able to make quality components, free of imperfections on bends: something that was not possible before with the hydraulic machines. Torque control on clamps ensures a correct gripping force leaving no marring on tube.

## MARKET AND REQUIREMENTS ARE GROWING

Now with all the machines they’ve bought, the market has expanded. In addition to the tube bending machines,



they have a LT-FREE 5-axis laser system in their equipment portfolio. The LT-FREE augments our existing laser cutting capabilities. The market commands complex components, just in time delivery and therefore more flexibility.

The LT-FREE system allows for trimming and cutting of bent tubes, formed sheet metals and other types of 3D components with extreme accuracy and repeatability. “With the LT-FREE we are making parts that previously were not feasible with traditional processes”, explains Paweł, while he shows us a detail of a tube bent and cut very close to the bend by means of laser cutting. “Previously we tried to carry out that machining with a lathe, but the cut near the bend was not as it should have been.” The part is for a very important customer, Solaris, a bus manufacturer. This part is to be used on an innovative bus prototype, with hydrogen engine. “LT-FREE, with its 5-axis head, allows us to cut the tube as required, very close to the bend and we managed to solve the problem and get exactly what was requested.”

## QUALITY, FLEXIBILITY AND LEAD TIME IN MAKING NEW PRODUCTS

With the new machinery, Vanstar can work with its customers to efficiently process prototypes, small batch or large production with a commitment to quality and delivery. He shows us a bent and cut part.

Before having the LT-FREE system, many steps were required to produce a part: a first passage under the press and then other manual machining to drill the holes. Five days were necessary to produce 200 parts: now, with LT-FREE, the same number of parts are produced in a work shift with higher precision, reliability and time predictability. This is the necessary leap to enter the OEM market.

Paweł is already thinking about future expansions to his manufacturing capabilities and, at the end of the interview, he points out the Lasertube systems that he has seen at ADIGE and the machine could be the ideal solution for other processing needs.



-80%

Reduction of production times



