



METAL CASTINGS FOR AUTOMOTIVE

FANUC for Gedia

Task As part of a plant redesign program, robotise welding processes to obtain 100% repeatability in terms of quality and quantity, create new jobs and improve working conditions

Solution Install 57 FANUC robots on basis of FANUC's global reach, wide range of robot types, simple and reliable design based on well-trying solutions, broad range of software, user-friendliness, ease of creating and utilising applications, and, last but not least, its fast-growing and fully professional system of technical support and training facilities throughout Europe

Result A fully automated manufacturing process and greater flexibility in face of changing customer demands, plus the ability produce several different parts on one machine. Not to mention, the creation of 200 new jobs

Fifty-seven front-rank workers

An interview with Andrzej Marcinek, President and Board Member at GEDIA Poland Assembly sp. z o.o., and Paweł Cieślak, Head of Maintenance at the same company.

Why and when did you decide to introduce robots to your factory?

To fully answer this question, I should briefly mention the history of our plant and of GEDIA in general. It all started 100 years ago. Starting as a small family-owned goldsmithing company based in the German town of Attendorn, GEDIA has become one of the main global sub-suppliers of parts for the automotive industry, with plants distributed throughout the world. GEDIA Poland Assembly, established in 2008, is one of the youngest daughter companies.

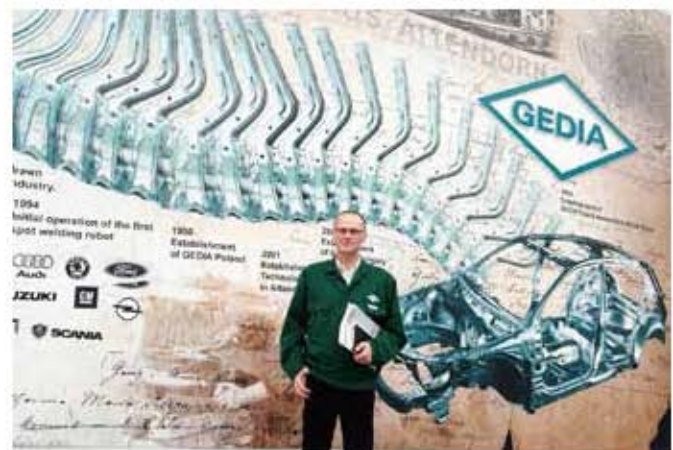
The decision to robotise the company was made when the plant was being designed. It directly stemmed from GEDIA's prior positive experience with robots (in 1994, it launched its first robotic station) and the need to ensure products of stable quality and highly advanced technologies.

Your collection of FANUC robots is really impressive. What made you choose this particular brand?

The Polish branch of our company has 57 FANUC robots.

Choosing FANUC was a strategic decision made on the basis of high targets we had adopted for robot quality.

We were also impressed by its global reach, wide range of robot types, a simple and reliable design based on well-tried solutions, broad range of software, user-friendliness, ease of creating and utilising your own



applications, and, last but not least, its fast-growing and fully professional system of technical support and training facilities throughout Europe.

What kind of processes are handled by robots in your company?

In 60%, we use robots for spot welding. In the remaining 40%, we use them for MIG/MAG welding, pin welding and work piece moving.

The company history dates back 100 years. I am guessing it will be easy for you to compare your work before and after robots? What has changed the most? Industrial robots allow us to fully automate the manufacturing process. This involves obtaining 100% reproducibility of pieces in terms of quality and quantity. Using robots also gives you greater flexibility in introducing changes on customer demand, and also enables production of several different parts on one machine. In today's tough market conditions, this is undoubtedly a big advantage and allows us to immediately respond to changes.



Studies show that robotisation creates new jobs. Is it the case in your company?

Definitely.

Our robots have “created” nearly 200 new jobs.

Without these new employees, the company growth achieved by attracting new customers, realizing more complex projects and adapting to market needs would be impossible – I'm talking about the “just in time” production.

Apart from new jobs, are there any other effects of robots on employment?

Robots open new career prospects for those who, due to their age or sex (e.g. the legal limits on heavy lifting by women at work) could not work in certain industries before. We should also remember that the amount of investment and project profitability



is not only influenced by labour costs. There are the costs related to logistics, renting the space, waste

(quality errors) and accidents when parts are moved manually. I believe that human capital is an invaluable asset of each company not to be given up. The use of automated processes allows you to save money in



other cost-generating areas.

Weren't you afraid of such a big investment? What dissipated your doubts, if any?

Robotisation was a strategic decision made on the basis of long-term calculations. If it was unprofitable, surely we would not have made it.

Are you planning any new robot implementations?

Yes, we are currently commissioning another two production lines composed of five robots and a smaller line with three robots, based on the processes of riveting, bonding and laser welding.

The automotive industry, in which you operate, is one of the most highly automated industries.

In our industry, robots are essential. It stems from the ever-increasing qualitative and quantitative requirements and the technological advancement of processes in which manual work would be very dangerous, and in some cases – even impossible. This is true e.g. for the processes using laser technologies.



However, other industries are not coping that well with new technologies. Do you think that in Poland traditional solutions are still more profitable than high-tech?

We are aware that some companies reduce the investment costs by using manual processes first, and automating them later. We believe this doubles the amount of work and the costs as well. Besides, the manual implementation of a product onto the market may affect its quality and, in turn, have catastrophic consequences for the company.

Are non-robot companies able to successfully compete with robotised companies?

There is no unambiguous answer to that. It is the nature of the product that determines the corresponding manufacturing process. Also in our industry, the one hundred percent elimination of manual processes is impossible, because in certain processes human skills are irreplaceable. In order for the company to be competitive, it needs to find the right balance between the manual and the automatic.

