

LTH in the fast lane

Since the Slovenian die-casting company started using ABB robots, productivity has increased by up to 10 percent.

Text Danny Chapman **Photo:** BildN

LTH Castings has over 50 years' experience of die-casting light metals for the automotive industry. The company has two plants in Slovenia and two more in Macedonia and Croatia. Its customers include BMW and Mercedes-Benz.

"We provide the customer with everything from development and production of die-casting tools to final production of parts for installation in their products," says Janez Rupnik, a development technologist for automation at LTH Castings. "We produce several products for the automotive industry including engine parts, undercarriage and transmission parts,

safety systems, and parts for electronics and braking systems."

As a high-pressure die-casting plant, the working conditions are tough. "Robots fit into this well," Rupnik says. "And we use ABB robots. ABB provides a wide range of products, so we can always find one that fits our needs."

The company currently uses more than 100 robots. And because it has machines of varying sizes, it needs different robots for different machines.

The smallest robot it uses is IRB 140. The company also uses IRB 2400s and IRB 2600s on its smaller machines, IRB 4400s for mid-sized machines and IRB





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6640s, and the newest model, IRB 6700, for its largest machines.

“The biggest advantage of using robots is increased productivity,” Rupnik says. “According to our calculations, the increase in productivity is at least 5 percent and up to 10 percent for advanced applications. The use of robots also significantly decreases production waste and improves the quality of the produced parts. Robots also make it much easier and faster for us to introduce new products and new production processes.”

ABB has worked collaboratively with LTH Castings to develop solutions. “I enjoy working with ABB,” Rupnik says. “ABB’s technical support is always helpful, and they have been able to help us every time that we have had a problem. And ABB has influenced our choice of technical solution on more than one occasion, primarily with advice and by providing us with solutions, which we have then developed together.”

Due to the severe working conditions of high-pressure die-casting, LTH Castings’ newer robots are equipped with ABB’s Foundry Plus package. “Our experience with it has been consistently positive,” Rupnik says. “Use of this package significantly reduces maintenance and repair costs in case of damage to the robot.”

Robots are an integral part of the company’s growth plans. “Robots will aid the future growth and development of our company by providing increased flexibility and shortened production cycles,” Rupnik says. “Robots can also help with the introduction of new materials by allowing us easy real-time monitoring of the effects caused by changes in the production process. With continued enthusiasm, and continued excellent cooperation with our award-winning customers and suppliers, the future is bright for our company.”

