Mett Case study: Foundry/Die Casting

Down stream aluminum casting at Mett. Australian manufacturer Mett turned to robots in 1991 to improve its production of automobile parts. Some 40 robots from ABB do everything from sawing and deburring to assembly work.



Work smart

When Mett Pty Ltd, a state-of-the-art manufacturing facility based in Melbourne, Australia was founded in 1983, every aspect of the manufacturing process was examined, says Sven Westphal, manager of manufacturing operations within the Westphal Group.

"Quality is paramount, and the customer is always king when performance and delivery are to be measured," he says. With this motto, the management and staff knew it was important to "work smart, not work hard," and to use automation to its full capacity.

Automation played a strong part in Mett's development during the 1980s, but it was during Australia's recession in early 1991 that Mett invested in its fi rst ABB robot cell. Westphal says that Mett was so impressed with the capabilities of the ABB robotics as well as the user-friendly software, the local product support and the training offered that within 18 months it had invested in fi ve installations and was getting a return on that investment within 12 months for most of the robots.

Light metal specialists

Today the Westphal Group and Mett have diversified into many different but complementary aspects of manufacturing. "ABB is an important strategic partner to Mett's continued success," says Westphal. Westphal explains that the company originally used robots for machine tending in the foundry. Today, he

says, there is no limit as to what the company tries to achieve with ABB robot automation. The list includes, in addition to machine tending, sawing, deburring, ladling, palletizing, gluing, assembly work and cleaning. World globalization and shrinking local markets have forced Mett to shift into export markets. The company operates 24 hours a day, selling its products to Europe, Asia, North and South America as well as to the local industry in Australia. It produces 35,000 to 40,000 parts per day. Annually it uses 8,000 metric tons of aluminum and 2,500 metric tons of zinc.



Mett



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Light metal specialists

The Westphal Group employs 350 people, a quarter of which are women. ABB robot automation enables Mett to tap into a wider potential pool of employees, says Westphal. Currently Mett has more than 40 robot installations throughout a wide range of manufacturing sectors. The ABB robots used at Mett include IRB 2400s, IRB 4400s, IRB 6400s and IRB 6600s.

The future will be challenging, says Westphal. But, he says, the Westphal Group's strategy of diversity in manufacturing using ABB robot automation will strengthen opportunities of growth for Mett Pty Ltd in the world market, he says.

FACTS

Benefits

Mett has 40 robotic installations. These include a range of robots from ABB, including IRB 2400, IRB 4400, IRB 6400 and IRB 6600 robots. From these it has realized a number of benefi ts, including:

- Cost savings: The ROI for most robots is around 12 months.
- Ease of use: Offl ine programming makes it easy to change applications.
- High quality: Robots provide consistency in terms of quality.

ABB Robotics www.abb.com/robotics

