



Do more with less: ABB robots cut resource costs by 75%

Intra Mölntorp is the leading manufacturer of stainless steel kitchen sinks in northern Europe. According to managing director Roland Movitz, the company's growth strategy includes a combination of modern product design and robot-based production that allow flexibility and rapid response to customer needs. ABB has become an integral part of the team.

A five-year plan for efficiency

To help achieve its objectives, Intra Mölntorp - part of the Norway-based Intra Group - embarked on a five-year investment plan that includes the installation of two IRB 6400 robots from ABB in each of two production cells. The cells produce components for mini kitchens and stainless steel kitchen sinks.

Along with the robots, ABB provided complete engineering including system design, programming, and integration of the robots with other equipment.

While adding speed and flexibility, ABB's efficient design helped accomplish more work with fewer resources. "The robot cell requires only 25 percent of the floor space that was needed for manual production," says Hans Gustavsson, chief engineer at the factory. "The workforce is now only a quarter of that required prior to automation."

A safe and flexible work environment

The ABB robots perform a variety of machine tending tasks, effortlessly moving stainless steel sheets and sub-assemblies between stations used for welding, shaping, and polishing. The robots enabled Intra Mölntorp to utilize a heavier grade of stainless steel without risking the safety of its 85 employees, who would have otherwise had to handle up to 20 kilogram steel sheets by hand.

"A good work environment is just as important as good product design and efficient equipment if we are to remain an attractive and responsible employer," says Gustavsson. The ABB manufacturing cell design also supports quick changeover, supporting more than 30 product variants with minimal set-up time. Cell manager software from ABB monitors every production event and helps operators to maximize machine utilization.

The six-axis ABB robot series IRB 6400 is suited for handling loads up to 200 kg. and is one of the most widely used robots in the world. More than 30,000 units are at work in numerous industrial applications, including welding, machine tending, material handling, palletizing and assembly.