Robotics

Grehns Plåt

Case study: Metal Fabrication



Surviving the future. A small familyrun metalworking company with a big history is using ABB's Press Brake Tending ProcessPac software to take it forward

State-of-the-art technology

Bo Grehn's great grandfather could never have foreseen the efficiency with which the company he founded more than 110 years ago does business today. Grehns Plåt started in

Norrköping, on the east coast of Sweden, by bashing out metal roofing coverings.

Today, it uses state-of-the-art, computer-programmed robot technology to shape complex, accurate forms and subassemblies for a wide variety of industries, including some of the biggest automotive and truck manufacturers. Grehn is the fourth generation of family members to be steering the company into the future.

Grehns Plåt specializes in sheet metal press work and assembly of subcomponents. With more than 70 regular customers supplying the company with a wide variety



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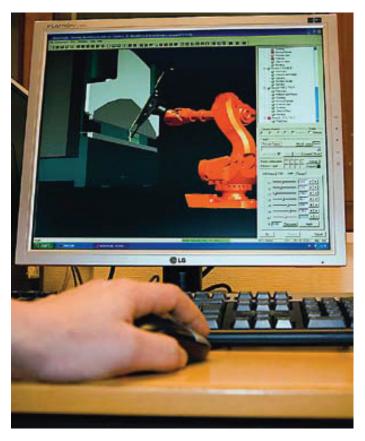
"Setting up the cell for a task is quite easy. We can test run a complete virtual cell on a PC before we download the software to the robot for a trial in real life." says Johan Jufwas, product technical engineer at Grehns Plåt...

of different requirements, the choice of technology is important in giving the company the speed and flexibility of response it needs to stay competitive today. One of its latest acquisitions is a complete robot cell, ideal for handling larger pieces of work that can be difficult or time-consuming to work by hand.

Easy set up

The cell was specified and configured by ABB Robotics, and features an irb 6600 robot and a 2.5 meter-wide, 200-tonne press. The cell is fed by a pallet conveyor and there is a tilting platform. "Setting up the cell for a task is guite easy," says Johan Jufwas, product technical engineer at Grehns Plåt. The entire task is first defined in Press Brake Tending ProcessPac, a dedicated abb software tool specifically designed for press operations. "We define the product and the fold lines, the tools on the robot, the gripper and the press. And we can test run a complete virtual cell on a pc before we download the software to the robot for a trial in real life."

Once the program for producing a particular piece is established, setting the cell up for different jobs is as quick as switching tools on the robot arm and the press. The programming for the new part can be downloaded almost instantly; they can be working on the new task in a matter of minutes.



Press Brake Tending ProcessPac

Using Press Brake Tending ProcessPac software to create the initial robot program saves the company time and money because the entire process can be designed offline in a series of easy-to-follow steps. It also ensures that the program is accurate, with little need for further adjustment once it has been downloaded to the robot. More importantly, it might help support the company with the flexibility that it needs to stay ahead for the next 100 years of its history.

FACTS

Benefits

- Press Brake Tending ProcessPac software saves time and money: The entire process can be designed offline in a series of easyto- follow steps.
- Little need for adjustment once it has been downloaded.
- Quick setup for different jobs.

ABB Robotics

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