



Offline programming of complex of foundry application.

TeachSaver PowerPac

PowerPacs are “plug ins” for the off-line programming system RobotStudio to optimize it for specific applications. TeachSaver PowerPac is a tool specially developed for foundry applications. TeachSaver PowerPac includes great functions for creating and optimizing robot paths. Utilities for calibration is also included.

A Time Saver

Traditionally, hundreds of positions had to be taught with the robot. This time-consuming process can be greatly reduced with TeachSaver. TeachSaver makes it possible to perform most of the programming outside the production cell as programming is carried out off-line and the need to disturb production is minimal. High-accuracy calibration allows the transfer of

predefined programs to the real cell with maintained accuracy.

Cleaning of castings

For decades, the foundry industry has been searching for effective, profitable ways to automate its cleaning operations. The programming time and the fact that the production has to be stopped during the programming is one of the biggest obstacles to a more expansive use of robots and has also restricted automation to only the biggest batches. With TeachSaver, robot programming can be made off-line and the time can be cut dramatically, from weeks to hours. This opens up new possibilities for the automated cleaning of smaller batches and complex parts with a high cleaning content.

Enjoy the power of True Offline Programming™

TeachSaver programming step-by-step:

Process path programming

Create the process path with the digitizer or by using a CAD model in RobotStudio. This ensures quick and easy generation of hundreds of robot positions. Guidelines will help the user during the programming.

Process path generation, simulation and modification

With TeachSaver you can easily generate and simulate the process paths, optimise the programs, estimate the cycle time and eliminate potential collisions. The final result is a robot program that is ready for production including all customer specific procedures.

Calibration

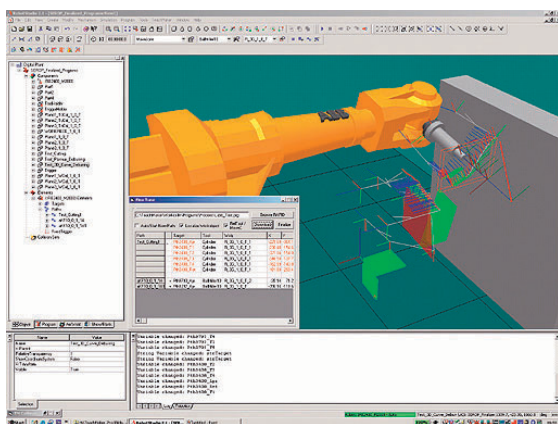
TeachSaver provides automatically methods for calibration of the tools and the relation between the robot and the part, work object. This ensures higher accuracy compared with doing the calibration manually and the results are repeatable time after time.

Process fine-tune

Download the process program to the robot controller and, if necessary, fine-tune the process and the robot paths.

Duplication of cell programs

Duplications of robot programs between robot cells are very fast done with TeachSaver. Together with the automatically calibration methods this ensures the same result in all robot cells and that several work cells can be ready for production in less than a day.



FACTS ABOUT ROBOTSTUDIO:

RobotStudio is an offline programming system that allows you to build an exact virtual copy of the real ABB robotics system.

It has the power to seamless download programs to the real robot without any post-processing or filtering of the robot programs.

RobotStudio utilizes ABB VirtualRobot™ Technology.

VirtualRobot Technology is that the actual robot system software controls the robot simulation.

With VirtualRobot Technology, you can be assured that your programs are accurate and ready to go!

RobotStudio PowerPacs are available for different applications such as welding, painting and cutting.