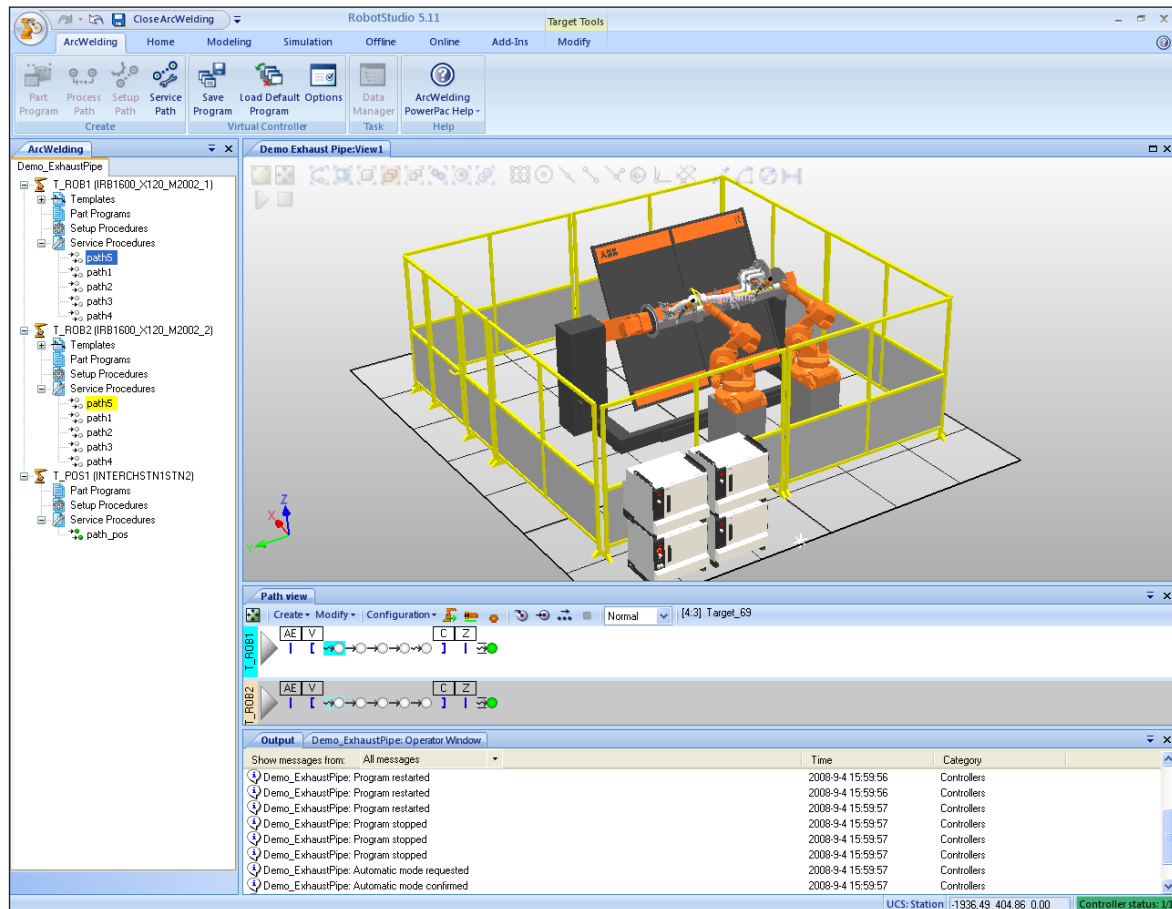


ArcWelding PowerPac for RobotStudio™ 5

Industrial Software Products



Offline programming of multi robot cell for arc welding application.

ArcWelding PowerPac for RobotStudio 5

ArcWelding PowerPac is a dedicated programming tool for generating arc weld programs and is based on RobotStudio.

ArcWelding PowerPac and RobotStudio utilize the CAD geometry as the basis for all robotics programming.

The programmer defines the weld locations in the CAD geometry and creates robot positions in relation to the geometry. This method is known as geometry-based offline programming.

Integration with VirtualArc

ArcWelding PowerPac automatically reads process related data, such as weld speed, voltage, angles, from VirtualArc cases. These parameters are then used in process templates to generate welding instructions. Users can also open VirtualArc directly from ArcWelding PowerPac, to modify parameters and view predicted weld quality.

ArcWelding PowerPac saves time and money.

With ArcWelding PowerPac you can program your robots offline without taking them out of production.

You can verify at an early stage that you won't get interference from fixtures, which reduces the risk of costly mistakes during production startup.

When you create your welds you get precise control of the gun angles, which results in increased weld quality.



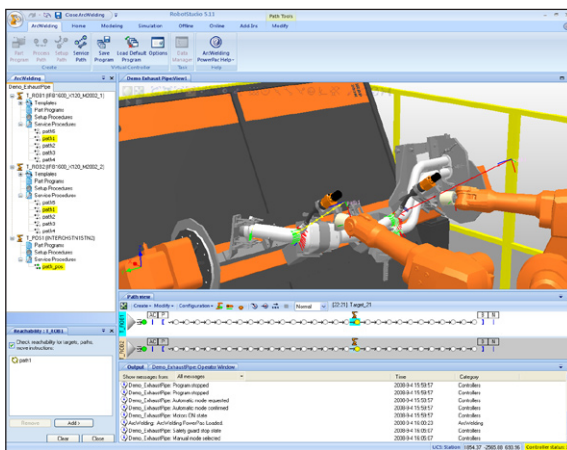
Enjoy the power of True Offline Programming™

Creating a weld

To create a weld, the user starts by picking the start and the end of the weld on the geometry. The next step is to define the process parameters such as Torch Angles – Work Angle, Push/Drag and Spin angles, Weld Parameters – Seam, Weld and Weave data, Motion Parameters – Speed, Zone, Motion Type – Linear, Circular and Joint motion, Instruction Type – Move, Arc, Search.

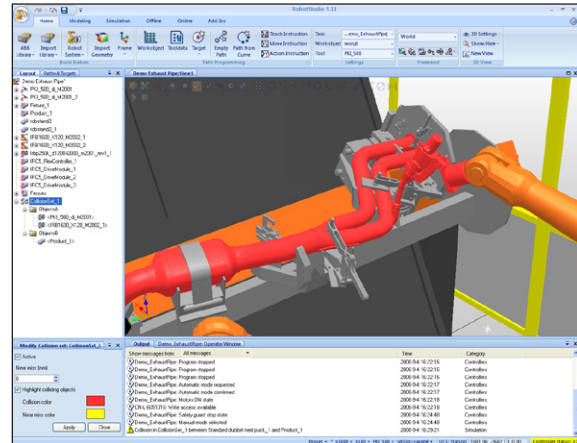
Check for reach

ArcWelding PowerPac automatically generates the weld path based on the input, and creates approach and depart positions that will move the robot in and out of the weld location. The semi-automatic optimization tool defines arm configurations along the weld path, and avoids joint-limit and singularity errors. ArcWelding PowerPac automatically checks for reach and notifies the user if any reachability problems occur.



Collision Detection

The built-in collision detector will indicate any interference between the robot and the part. This will prevent any undesirable surprises when taking the program into production. It is even possible to get a cycle time estimate, which will help the user optimize the program. Before downloading the final program to the real robot, the user can debug it by executing the entire program in RobotStudio.



MultiMove

With RobotStudio 5, ABB takes its Virtual Robot Technology to the next level. It is now possible to run several virtual robots at the same time, and there is support for MultiMove, the new IRC5 technology for running several robots from one controller. RobotStudio 5 is the solution that makes MultiMove systems easy to use, easy to plan and easy to program. With RobotStudio 5 ABB is the first and only supplier that can offer an offline programming and simulation tool for MultiMove systems.

