

Factory Definition & Simulation
DELMIA Robot Arc Welding (ARW)

DELMIA V5R21





Factory Definition & Simulation

DELMIA - ARC Welding

DELMIA Arc Welding enables the offline creation of robot arc welding process simulation.

Product overview

DELMIA Arc Welding eliminates on-line production arc welding robot programming allowing the user to achieve substantial cost savings through the creation and optimization of robotic arc welding trajectories, tasks, and programs in the offline digital environment. This allows the user to plan and create arc welding programs while keeping hardware in production and minimizes mistakes and rework in arc welding robot cell development. Seamless integration with Delmia's robot task definition allows users to create arc welding process specific task generation for development of a complete robot arc welding simulation with synchronization of all resources. The highly productive and intuitive simulation environment provides the tools required to fulfill robot arc welding simulation needs.

The new Arc Weld Macro Programming (AMP) environment allows users to quickly and accurately generate complex robot weld trajectories. With just a few mouse button clicks, weld seams containing complex seam search paths and collision free via points are automatically generated, drastically speeding up the time it takes to program a robot. Primitive Files (or Templates) can be created to define how to weld various seam configurations. These primitives automatically generate robot trajectories based on specific user defined rules and joint configurations. Libraries of these primitive files can be created and then selectively applied to the relevant weld joints.

When used with DELMIA Robotics solutions, Arc Welding has access to the DELMIA standard library of over 700 robot models. Users can leverage programming knowledge and automate much of the repetitive work involved in robot arc welding programming.

Product Highlights

- ❑ Geometry based arc weld robot path generation and modification
- ❑ Supports curve fastener import (PLM)
- ❑ Supports modification of curve fasteners
- ❑ Robot task generation based on curve fasteners
- ❑ Seam search robot path generation.
- ❑ Work piece positioner programming
- ❑ Supports Rail/Gantry programming
- ❑ Arc Weld Macro Programming (AMP)

Product Key Customer Benefits

- ❑ Use 3D to plan and create arc welding robot programs while keeping hardware production
- ❑ Minimize mistakes and rework in arc welding robot cell development

This publication is for general guidance only. For the most current and accurate information, please refer to the product announcement letters.

ABOUT DELMIA V5R21

DELMIA enables companies to develop and anticipate optimal process for their manufacturing needs.

www.3ds.com/products/delmia

