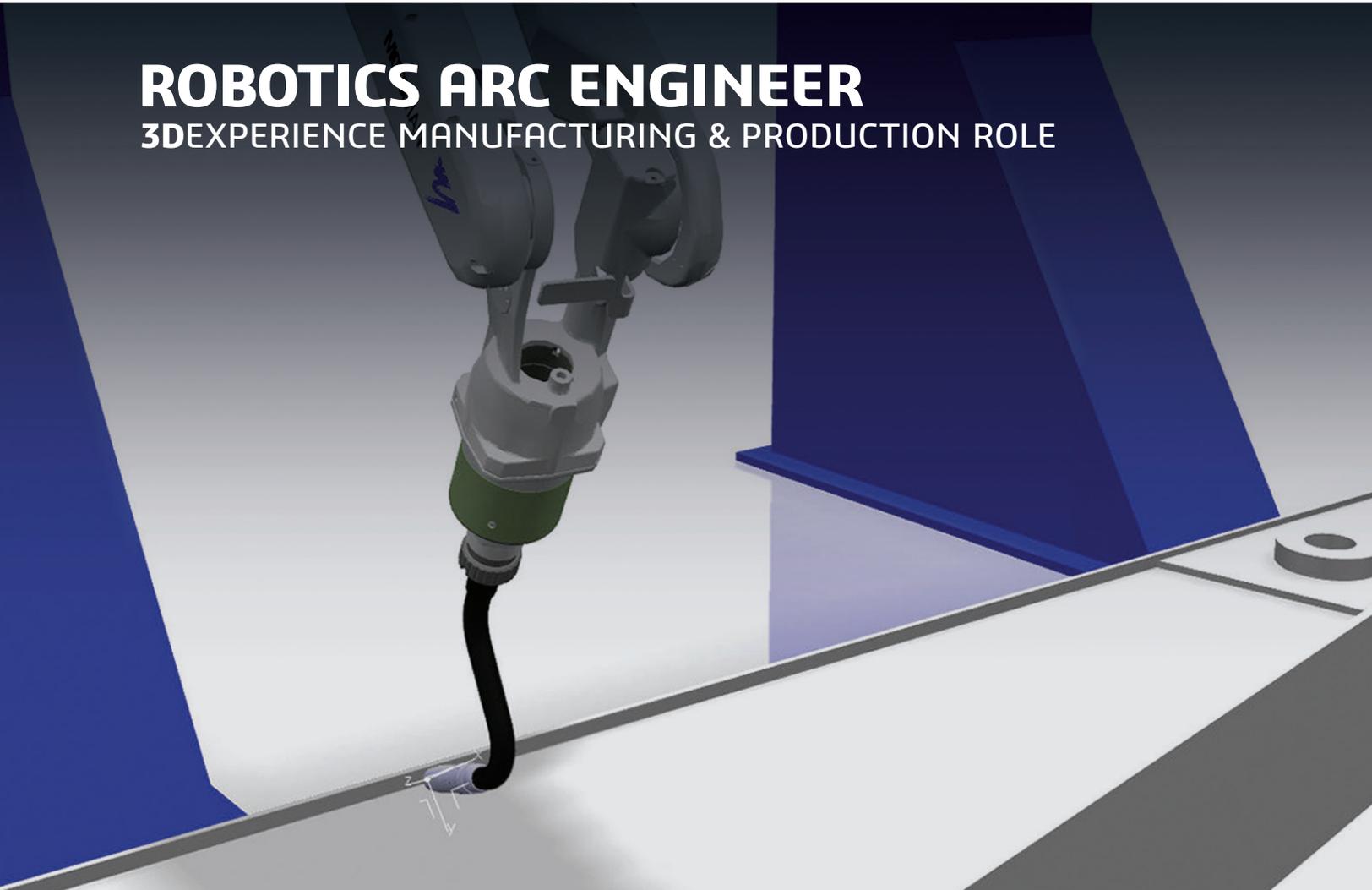


ROBOTICS ARC ENGINEER

3DEXPERIENCE MANUFACTURING & PRODUCTION ROLE



SIMULATE ARC WELDING ROBOTS

Robotics Arc Engineer automatically generates a welding tool trajectory based on the geometric design of the product to be welded.

Robotics Arc Engineer delivers a 3D environment to create, simulate and validate an entire robotic arc welding workcell for any manufacturing industry. Capabilities include: position resources, simulate robots, debug motion trajectories, and establish input and output connections between robot controllers and other devices. Robotic arc welding programs and setups can be defined, validated, and enhanced prior to delivery to the shop floor. This capability simultaneously improves quality, reduces costs and helps to maximize resource utilization by keeping production equipment engaged in value-added activities.

FAST, SIMPLE ROBOTIC WORKCELL LAYOUT

Robot simulation engineers can choose from an extensive library of robot and controller models from all major industrial robot manufacturers. Auto placement and workspace envelope tools help them position the robot in a reachable position and benefit from early feasibility studies.

GENERATE AND MODIFY GEOMETRY-BASED ARC WELD TRAJECTORIES

Users can generate and modify arc weld trajectories with a full suite of geometry-based capabilities. Fully detailed robotic trajectories are automatically created for both seam search and arc welding based on the CAD models of the parts to be welded. The trajectories include robot approach and departure via points.

EARLY DISCOVERY AND RESOLUTION OF DESIGN FOR MANUFACTURING (DFM) ISSUES

Robot task feasibility studies can be performed early in the planning and detailing stages, reducing the cost of re-work generated by product and tooling changes.

CONCURRENT ROBOT SIMULATION

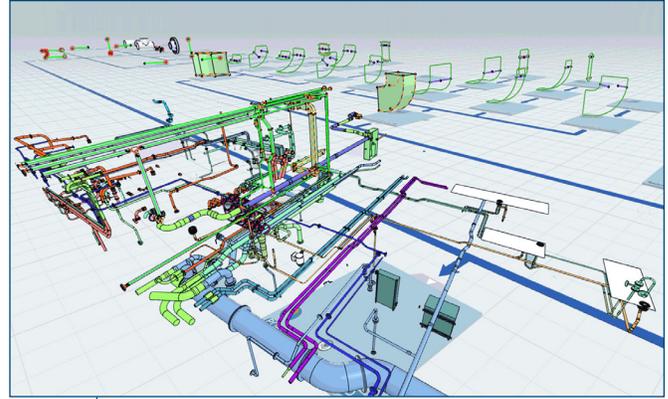
Robot simulation engineers can concurrently create and validate individual robot tasks in a single workcell or assembly line, or across an entire factory. As users complete their work, the robot task details become available to all stakeholders and are incorporated in the parent process, so that multiple users concurrently incorporate the collective work into their own work.

IMPROVED COLLABORATION BETWEEN SIMULATION ENGINEERS AND DESIGNERS

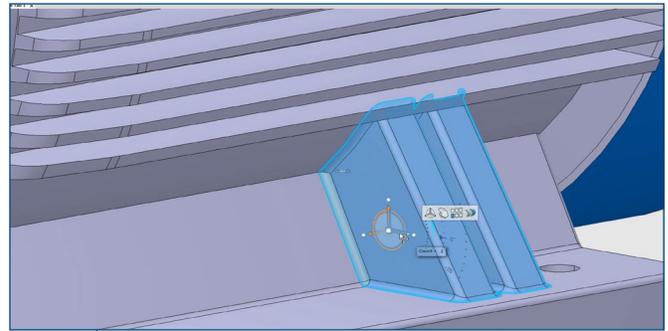
Integrated with the 3DEXPERIENCE® platform, collaboration is supported throughout the extended enterprise. Powerful lifecycle and change management capabilities streamline the business process and improve the overall quality of work.

CONCURRENT ROBOT SIMULATION

Robot simulation engineers can create and validate robot tasks in a variety of manufacturing contexts. This helps in understanding how motion variables will impact task definition.



Create, simulate, and validate robot tasks in the manufacturing context



Fast, simple robotic workcell layout

ROLE HIGHLIGHTS

- Groundbreaking 3DEXPERIENCE® platform
- Rapid station layout
- Intuitive robot teach pendant-like interface
- Support advanced logic with inputs and outputs in the simulation
- Generate and modify geometry-based arc weld trajectories
- Optimize workpiece positioning

Our 3DEXPERIENCE® platform powers our brand applications, serving 12 industries, and provides a rich portfolio of industry solution experiences.

Dassault Systèmes, the 3DEXPERIENCE® Company, provides business and people with virtual universes to imagine sustainable innovations. Its world-leading solutions transform the way products are designed, produced, and supported. Dassault Systèmes' collaborative solutions foster social innovation, expanding possibilities for the virtual world to improve the real world. The group brings value to over 220,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.

