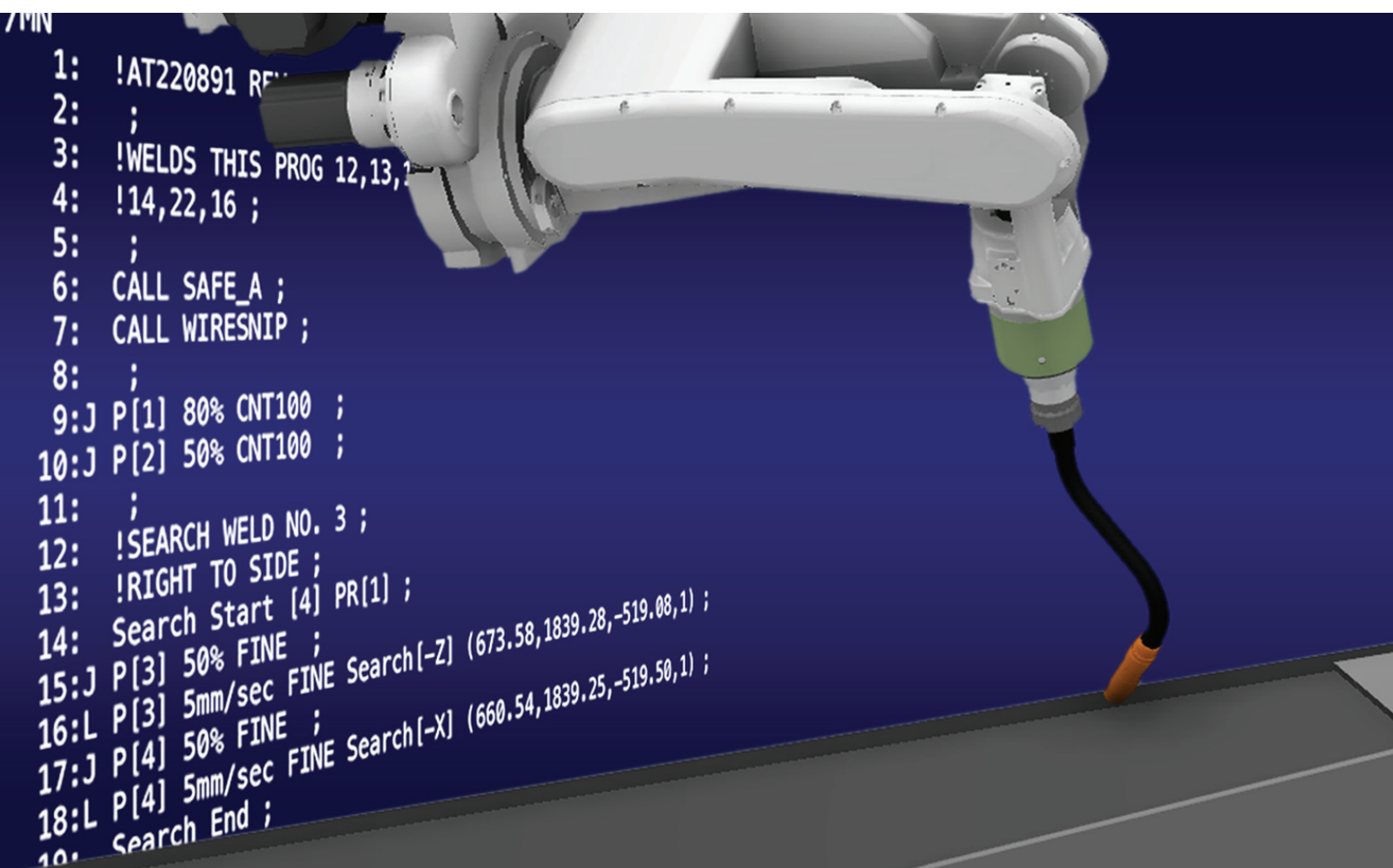


ROBOTICS ARC WELDING PROGRAMMER

3DEXPERIENCE MANUFACTURING & PRODUCTION ROLE



**SIMULATE,
IMPORT AND
EXPORT ROBOT
ARC WELDING
PROGRAMS**

Robotics Arc Welding Programmer creates programs, simulates and validates the entire robot workcell before sending programs and setups to the shop floor.

Robotics Arc Welding Programmer provides the ability to position resources, program individual robots, debug motion trajectories, and establish input and output connections between robot controllers and other devices. The sequencing tool creates complete workcell logic by sequencing robot and device programs. In this interactive 3D environment, feasibility studies can be performed while creating optimized, interference-free production quality programs that can be downloaded to the real robot.

Fast, simple robotic workcell layout

Robot programmers can choose from an extensive library of robot and controller models from all major industrial robot manufacturers. Auto placement and workspace envelope tools help to place the robot in a reachable position.

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 programmers can concurrently create and validate individual robot tasks in a single workcell, 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.



Tools that automate precise robot arc welding program development



Tools that make programmers more productive and precise

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.

Delivery of validated and fine-tuned robot programs to the shop floor

Programmers can deliver validated programs to the shop floor for execution. They can also upload existing robot production programs from the robot controller to the **3DEXPERIENCE** platform for validation and editing.

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
- Translate programs from 8 robot manufacturers
- Customizable translators using VB.Net
- Calibration tools align virtual and physical workcells

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 190,000 customers of all sizes in all industries in more than 140 countries. For more information, visit www.3ds.com.



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