

## **Welding Automation**

**DTPS** (DeskTop Programming and Simulation)

## Complete Virtual Design

- Programming (OLP) tool for Miller Welding Automation robots, replacing programming the robot from a teach pendant. With a click and drag of the mouse you are creating robotic welding programs on your PC.
- The software matches a 3-D model of the robot system with imported 3-D CAD models of your parts and fixtures, creating a virtual replica of the welding system.
- After simulation eliminates collisions, export the robot program from the PC to the robot via Ethernet or USB Memory.

### Speed Up Programming, Reduce Robot Downtime

- Production does not need to stop for robot programming, allowing you to realize maximum uptime.
   DTPS software reduces traditional programming time by as much as 80 percent.
- Special macros suited for programming on a PC. High tech copy/paste/mirror function lets you duplicate programming steps or create multiple iterations with the click of the mouse.
- System diagnosis and fault analysis by PC without production interruption.

# Compete Globally, Compete For The Future

- Quickly and accurately assess production costs by creating offline programs - obtain cycle time and wire usage estimates.
- To aid in project feasibility and fixture design, input weld sequences and run a program simulation to troubleshoot areas where weld procedure angles might be difficult to reach.



The Ultimate Virtual Reality Robotic Welding Automation Software

## **DTPS** (DeskTop Programming and Simulation)

#### **Features**

- Program transfer with your robot system through Ethernet or USB memory
- Import your wrl, xgl, igs, stl and 3dxml CAD files
- · High tech copy/paste/mirror and macros to expedite programming
- · Quickly edit weld push/drag and work angles with consistency
- Review visual workspace through simulation to avoid robot reach and access problems
- Collision Detection function included in simulation to eliminate crashes as the robot, part and external axis move as they would in the real world
- Cycle time estimation, including weld length and wire usage (only wire usage for TAWERS PS)
- Add welding lines for automatic CAD to path robot programming
- Wizard style tool to assist in adding touch sensing to your programs
- · Network License available, to provide installation flexibility
- · Calibration functions inside DTPS maximize virtual to real accuracy
- Additional Sensor App (SLS Editor) required to utilize Heavy Plate and Extended Touch Sensor robot options
- System diagnosis and fault analysis by PC without production interruption
- All Miller Welding Automation Perform Arcs in DTPS, all standard component CAD models available, custom systems possible

#### **Benefits**

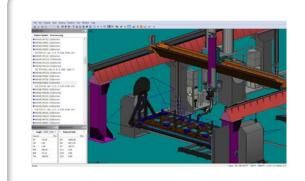
- Minimize machine downtime program your robotic fleet while production continues
- Edit existing programs to optimize weld procedures with computerized consistency, improving quality and minimizing cycle times
- Lower costs for automation implementation by assessing new product and tooling designs with simulation
- Save time programming, decreasing implementation time by up to 80% for families of parts, up to 50% for one-off runs
- Shorten time to production programs can be made during system build
- System can grow with you, compatible across multiple Panasonic robot generations
- Possible outsourcing of your weld engineering and program generation to the experts at Miller Welding Automation

#### **Applications**

- Low-volume, High-mix: Shops with low volumes of differing parts can program parts without interrupting production. Making automation possible in places where the ROI previously did not add up.
- Big parts with many welds: Especially suitable for heavy equipment manufacturers. Reduce programming time by 50 percent.
- · Projects with short start up times
- Quoting tool: You can determine if a job is suitable for your robotic system and hedge your costs
- · Creation of system layouts



Special functions speed up programming of similar parts and welds



Program new parts while your system is in production

