Automated Gas Welding Systems
For Gas Metal Arc Welding
MESH Automation has the experience and skill to automate your welding process

Common features of MESH designed systems

Welding Expertise
• AWS-certified engineers on staff and a member of the Robotic Industries Association (RIA)

Part Fixturing
• Fixture design and construction that is rugged, ergonomically friendly, and repeatable
• Quick-change tooling
• Anti-splatter coatings in critical areas
• Cell design with Poka-yoke error proofing options

Welding Power Supply
• Flexible, feature-laden power supplies and torches by Fronius for unrivaled gap bridging, spatter-free applications, and the highest welding speeds

Robot and Control System
• Certified robotic integrator using only the best full-line robot suppliers and industry welding robot leaders – ABB and Motoman/Yaskawa
• Hardened industrial controls from AB or Siemens
• Software systems for simple stand-alone or complex MES integration; many options for data gathering and recipe control

Welding Quality and Cell Maintenance
• Bullseye, torch cleaners, wire straighteners, Smartac and other process improvement features
• Seam tracking systems
• Vision inspection, character reading, and other
• Easy to clean cell design

Safety
• Safety systems comply with the new ISO12100 and 13849-1 regulations

Service, Support and Training
• Dedicated service department that is involved with your project from the start and available for emergency service or to provide regular pre-arranged service or preventative maintenance
• Dedicated training staff that provides comprehensive training and operations manuals - the key to any automation project’s success

MESH Automation has the experience and skill to automate your welding process
We pull it all together with our proven system designs, pre-engineered solutions and software expertise.

Semi-Automatic Welding Systems by MESH

MESH’s semi-automatic systems – or lean systems – address key areas for the success of any MIG welding process:

• Pre-engineered safety systems
• Pre-engineered torch cleaning and tool center point locating module
• Pre-engineered part positioner solutions
• Several skid mounted size formats for easy installation and commissioning
• Optional fume hood and exhaust system (by Kemper) integration package
Our Specialty is Turnkey Lines

With MESH's proven experience in assembly, fixturing, metal processing, and material handling it's a natural fit to use MESH for your complete production line. Our turnkey lines incorporate automated welding processes with other automation processes, including:

- Grinding, deflashing, polishing and deburring
- Metal bending and forming
- Press tending
- Assembly
- Inspection
- Packaging
MESH Partners With The Best

Good system design incorporates products from the best robot, welding equipment and controls suppliers in the industry. MESH partners with, and is a certified integrator of, the following industry leaders:

**Fronius - Perfect Welding**
- Power supplies, wire feeders and torch systems
- The most advanced welding technologies, such as cold metal transfer

**ABB Robotics**
- All size robots with the IRC5 controller
- RobotWare Arc, Production Manager, Bullseye, Safemove, Collision Detection

**Motoman/Yaskawa Robotics**

**Kemper America**
- Fume hoods
- Exhaust systems