

Millerbernd has been a regional leader in the manufacturing of quality assemblies for over 80 years. Our 105,000 square foot facility is home to state-of-the-art robotic welding technology center, over 20 weld stations, and a team of highly experienced welders working in the metal and stainless steel industries. Whether your welding needs include complex projects or general production, we deliver outstanding quality, on-time and at a competitive price.

## TRADITIONAL WELDING FOR STEEL, STAINLESS STEEL & ALUMINUM

**Gas Metal Arc Welding (MIG):** Gas metal arc welding or GMAW, also referred to as MIG, is an electric arc welding process in which an arc is struck between a consumable wire electrode and a work piece. Shielding is provided by an inert gas, hence MIG for metal inert gas.

**Gas Tungsten Arc Welding (TIG):** Gas tungsten arc welding or GTAW is an arc welding process that uses a non-consumable tungsten electrode to produce the weld. The weld area is protected from atmospheric contamination by a shielding gas, and a filler metal is normally used to seal the joint.

**Shielded Metal Arc Welding (Stick):** In shielded metal arc welding or SMAW, an electric arc is established between a flux-coated consumable rod electrode and the workpiece. A gaseous shield is provided by vaporization of the flux coating. SMAW is frequently referred to as "stick" welding.

**Spot Welding:** Electric resistance spot welding is a process in which contacting metal surfaces are joined by the heat obtained from resistance to electric current flow. Work pieces are held together under pressure exerted by the electrodes.

**Orbital Welding:** A specialized welding technique whereby the arc is rotated mechanically 360° (180 degrees in double up welding) around a static pipe, in a continuous process for high quality repeatable welding. Also, offers optimal welding quality passing the most stringent testing (x-ray inspection) weld after weld.

## ROBOTIC WELDING

**We have two articulating robotic welders for mild and stainless steel:**

- **Lincoln Fanuc Welder**, M-710ic-20L, 10' Working Radius/20' End to End x 18' Height, 3500 lb Load Rating
- **Panasonic PerformArc 102S**, TA-1400G2, 54" Working Radius/108" End to End x 36" Height

**Features of our robotic welders include:**

- Rotating fixture tables reduce set-up times by allowing operators to load and unload while parts are being welded.
- MIG welds are extremely consistent and clean improving appearance and reducing finishing times.
- Six axis motion allows the torch angle to maintain correct weld position at all times.
- Cost savings opportunities for medium to high volume weldments.



**USDA Welding and Finishing Standards**

**Pharmaceutical Grade Welding and Finishing Standards**

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