

ComArc

PROVEN ECONOMICAL ARC WELDING SENSOR



ComArc is a low-cost, reliable seam tracker that overcomes part inaccuracies ensuring the utmost in weld quality and productivity. It is an economical solution for parts with variations.

This "through-the-arc" seam tracker measures the arc characteristics during a weave pattern to determine variations between the robot's taught path and the desired path. This is a simple and reliable method of compensating for inaccurate work pieces or work-holding fixtures.

HIGHLIGHTS

Reliable Seam Tracking

- Track lap, "T" and double "V" groove butt joints in mild steel with up to 500 amperes of welding current.
- Seam track lap joints from 2 mm (0.080") in thickness and higher.
- Seam tracking function can be enhanced and used in conjunction with several optional software functions, including Pause Weaving, Multi-Layer Welding and Coordinated Motion.
- Pause Weaving allows the robot to perform a weave motion while round parts are rotated on a non-servo positioner.
- With Multi-Layer welding, once the root pass is memorized, the robot adjusts the torch angle and makes preprogrammed offsets for multiple weld passes.
- When used with Coordinated Motion, seam tracking can be performed on complex parts that are repositioned on an external axis or when positioned by another robot.

- Touch Sensing circuit with ComArc provides 200 vDC signal to reliably detect surfaces coated with rust or scale.

Laser Seam Finding

- Combine ComArc seam tracking with high-speed AccuFast point laser which eliminates the time for wire cutting and searches faster.
- Laser cameras can be used to find start points and joint gaps, and can be combined with ComArc to seam track contoured parts.

Totally Integrated

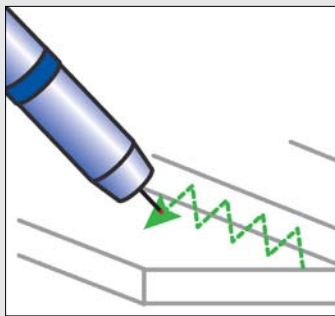
- The arc welding application software of the DX controller's INFORM III programming language easily integrates these functions for simplified setup and programs.
- Touch Sensing, Laser Seam Finders and ComArc can be purchased individually or as a package.
- ComArc unit provides optimum seam tracking/seam finding signals with either digital or analog interface. ComArc IV unit is designed for power supplies with inverter switching, while a ComArc III unit works with older SCR welders.

High-Tech Software

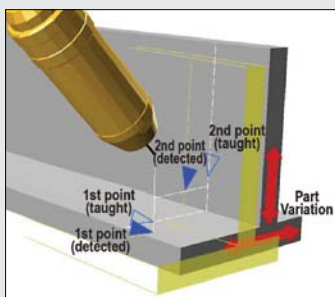
- Phase Compensation function accounts for variation in welding circuits between systems.
- Patented PassOver Function allows users to define rectangular zone around the programmed path to limit maximum deviation and prevent scrapped parts from seam tracking errors.
- Threshold values limit the correction for excessive current such as welding over tack welds.
- Correction amount allows the user to vary the "gain" or robot correction amount when it senses an offset is required
- Measurement mode eases set-up by displaying the parameters detected when welding the ideal taught joint.
- Diagnostic display shows the maximum correction distance in each direction for trouble shooting.

ARM YOURSELF

...with ComArc. Providing higher productivity and quality for robotic welding flexibility at a low cost... further establishing Motoman Robotics' reputation as the leader in robotic arc welding.



COMARC SENSES CURRENT AT EDGES OF WEAVING MOTION TO TRACK



INCLUDES 200 VDC TOUCH SENSE AND MACRO JOBS WITH AUTO-TEACH

TOP REASONS TO BUY!

- Proven, easy-to-use arc welding sensor
- No external sensors on torch to impede access to weld joints
- Consistent performance with any welder due to sensing unit and software

High-Speed Touch Sensing

- Macro Jobs simplify programming with Auto-Teach function that automatically searches perpendicular to the part/joint.