Jetline[®] Weld Head Locators

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Automation Systems

Applications

Aerospace Tanks and vessels Transportation Power generation Food and beverage Pharmaceutical ...and many others

Processes

TIG (GTAW) MIG (GMAW) Plasma arc welding (PAW) Submerged arc welding (SAW) Input Power 460 V, 3-phase, 60 Hz

Standard Weld Head Locator Sizes 6 ft. x 6 ft. 9 ft. x 9 ft. 12 ft. x 12 ft. Consult Jetline for different size configurations

Jetline weld head locators (column and boom manipulators) provide precise placement of the torch over the weld joint. They also provide smooth and precise linear travel when using the boom as a welding axis, rendering them suitable for critical applications.

Reliable and simple to operate.

Quick

Specs

Easily adjusts to accommodate a wide range of part sizes, shapes and weld joint configurations.

Heavy-duty construction with linear guide rails allows for smooth and precise travel. Designed to deliver repeatable high-quality welds and precision linear welds using the boom as a welding axis.

Kingpin base provides 360 degrees of column rotation to service multiple weld stations consisting of positioners, turning rolls or other fixtures.

Microprocessor- and computer-based control systems available.



Weld head locators are used for:

• Pipe spooling • Pressure vessels

- Flat sheets
- Cylinders
 - Cylinders
- Cones
- Rectangles Ovals
- Linear welding...and other part

 Circumferential welding

configurations



Warrantied for three years, parts.



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Weld Head Locator Features

Available with optional microprocessor- or computer-based control packages. Jetline can also include a seam tracker, motorized slides, mechanical oscillator, magnetic oscillator, hot or cold wire feeder, arc length (voltage) control, and video monitoring system, along with the required brackets to get the torch in the position you need it. We can also supply a wide variety of turning rolls, positioners and part support to hold and locate the part, or rotate the part under the weld head. Designed with rigidity and precision for consistent high-quality welds. Hardened linear rails are included on all Jetline weld head locators, allowing for precise placement of the torch and smooth, precise travel of the boom. The precision and rigidity of a Jetline weld head locator boom allows the boom to be a welding axis for demanding linear TIG and plasma welds along with MIG and SAW processes. **Can be supplied as a complete and integrated single-source solution** that includes Jetline automation controls and Miller welding processes.











WHL-12x12





Dimensions



Specifications (Subject to change without notice.)

Capacity on Boom End	Vertical Column Travel Speed	Boom Travel Speed	Base Rotation	Base	Drive	Operator Controls	Control Functions
500 lb. (227 kg)	50 ipm (1,270 mm)	2–100 ipm (51–2,540 mm)	360 degrees	Standard cross (X)	AC motor	Remote tethered push-button pendant	Lift direction and boom direction



Weld Head Locator Major Components



Weld Head Locator Key Options and Accessories

Travel Carts

Manual or powered carts offer extended operational capabilities where the part length exceeds the normal operational reach of the weld head locator.

Cable and Hose Carrier

Accommodates all the service lines and prevents them from becoming entangled. Available for weld head locator fixture and travel carts. Welding Positioners Turning Rolls Pipe Stands



Accessories

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9900 Touch Screen Computer Controller The Jetline 9900 controller is an industrial touch-screen computer running Windows and a custom Jetline software package. The 9900 uses a simple interface to control the full range of accompanying weld hardware modules. Up to 15 parameters or channels can be simultaneously controlled in closed-loop format. The modular design allows the system to be easily expanded or changed as applications and requirements change. The 9900 can store unlimited weld programs. System parameters and variables are incorporated in the welding programs, offering simplicity and efficiency for basic welding applications or full control of the most demanding ones.



9700T Controller

Microprocessor-based travel controller can control the horizontal motion of the weld head locator boom for linear welding or rotation on an optional positioner for circumferential welding. The 9700T can be interfaced with suitable power supplies for weld sequence control. The 9700T controller also sequences arc length controls, cold wire feeders, pneumatic torch retractors and magnetic or mechanical oscillators.



Cold Wire Feeder

Jetline cold wire feeders are available as an option on all Jetline weld head locators using a TIG (GTAW) or plasma arc welding (PAW) process. The wire feeder shown is for use with the standard 9700T controller. The wire drive shown above can also be used with the optional 9900 controller.



Hot Wire Feeder

The hot wire process is used in applications where high deposition of the filler wire is desired. It is used primarily with the TIG (GTAW) or plasma arc welding (PAW) process. The Jetline hot wire package is capable of controlling both hot and cold wire feed.



Arc Length Control

Used with either the TIG (GTAW) or plasma arc welding (PAW) process, the Jetline arc length control maintains a constant preset arc length via control of the arc voltage. Arc length controls are compatible with the standard 9700T or the optional 9900 controller.

- Regulation of welding voltage for precise, repeatable procedures.
- Higher weld travel speeds.
- Compensation for electrode erosion.
- Automatic setting of the starting arc gap.



Motorized Slide

Jetline motorized slide packages simplify welding operation, allowing the operator to position the weld head assembly to a desired location before and during welding for optimal arc performance.



Seam Tracking Systems

Jetline tactile seam tracking systems simplify welding operation, ensuring the weld head is consistently positioned for optimal arc performance.



Manual Hand Crank Slides

Jetline manual hand crank slides allows operator to manually position the torch head assembly to a desired location before and during welding.



Accessories



Remote Operator Station with Optional Video Monitoring

For large diameter or long parts it may be easier to have the operator control the weld head locator remotely. Jetline can mount the weld head locator controls, video monitoring system and remote controlled motorized slides at a remote operator station. The remote station allows the operator to control the weld head locator and view the weld from anywhere nearby. All Jetline weld head locators can be supplied with an optional station configured for the customer's needs.



Mechanical Oscillator

In arc welding the welder typically weaves the welding arc for various welding requirements. When automating the welding process, weaving or oscillation can still be a desired effect. Oscillating the arc helps with sidewall fusion and eliminates undercut. To meet these welding requirements Jetline offers the JMO 150 and JMO 80 mechanical oscillator systems which can easily be added to an existing weld system or included with new Jetline seam welders. See literature AU/14.0.



Magnetic Oscillator

Magnetic arc control provides even heat distribution, prevents undercutting, eliminates excessive porosity, ensures sufficient penetration, and evens out the weld puddle. Combined with a magnetic probe, a magnetic field is created around the arc

to precisely position, oscillate, and stabilize it. The magnetic arc system bolts onto an existing automatic or semi-automatic welding torch or can also be included on new Jetline seam welders.



Optional Mounting Accessories



Swivel tilting brackets (left) and rotary tilting brackets (right) are available to allow precise torch positioning while welding.



An articulating arm can be provided for mounting the 9900 HMI in a convenient and accessible location for the operator while welding.



Power supply mounting rack off of the column base provides a convenient mounting space for the welding power supply, helping minimize the unit's footprint.



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