

Jetline® 9900 Controller



Quick Specs

Applications

Aerospace
Automotive
Defense/military
Food and beverage
Nuclear
Pharmaceutical
Tanks and vessels
Transportation
...and many others

Processes

TIG (GTAW)
MIG (GMAW)
Plasma arc welding (PAW)

Materials

Steel, titanium, copper, aluminum, tantalum, stainless steel, Inconel, Hastelloy, Monel and other weldable materials

Input Power

120 V, 1-phase, 50/60 Hz
Optional: 230/460 V, 3-phase, 50/60 Hz

Automated welding is a cornerstone in the manufacturing industry's ability to meet productivity goals, deal with welder shortages, and stay competitive. Jetline's 9900 controller delivers an integrated solution that allows our customers to automate their welding operation and consistently produce high-quality parts.



The 9900 controller brings the latest computer technology coupled with Jetline's intuitive welding software. Designed with the operator in mind, we provide innovative solutions to simplify the welding process and empower our customers to deliver results that improve their bottom line.

Rugged, industrial computer-based control system with 15-inch touch screen running Jetline's intuitive welding software.

Reliable and simple to operate.

Robust interface for creating and editing weld programs.

Standard and advance software packages available.

Stores unlimited weld programs.

Stores over 250 user accounts. Each user can be given unique permissions for programming and for overrides during the weld.

Dual arc capable. Controls multiple welding arcs at the same time.

Modular design allows for easy configuration changes and expandability.

Allows for programming of torch gas and backing gas.

USB ports to connect optional backup devices, keyboard, mouse or printer.

Fiber optic communications to eliminate vulnerability to high frequency noise.

Uses Windows file management and backup utilities.

Optional module to monitor gas and water flow.

Does not allow the weld to be started without flow.

During a weld alerts the operator or goes to the end of weld step of the program.



Warrantied for three years, parts.



Miller Welding Automation

An ITW Welding Company
281 E. Lies Rd.
Carol Stream, IL 60188 USA

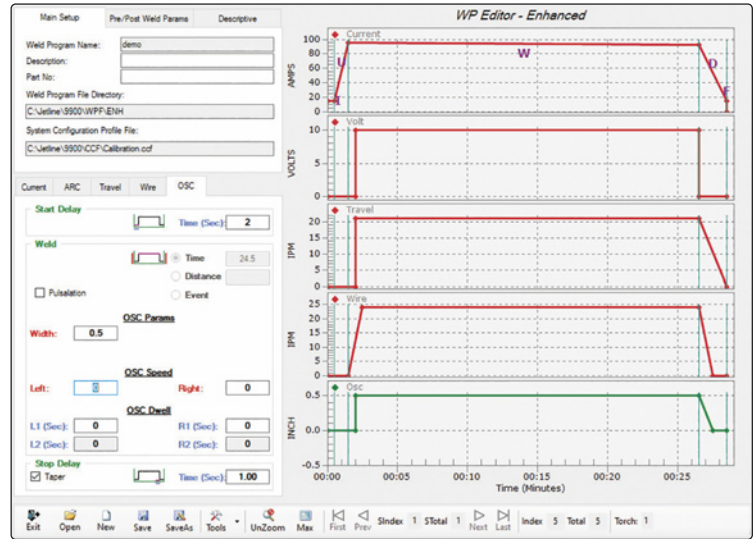
Equipment Sales

Phone: 630-653-6819
Email: JetlineSales@millerwelds.com

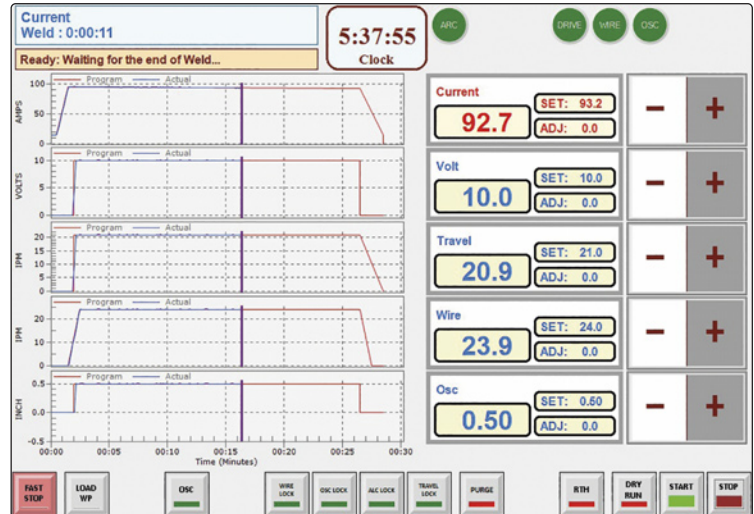
MillerWelds.com



9900 Controller Features

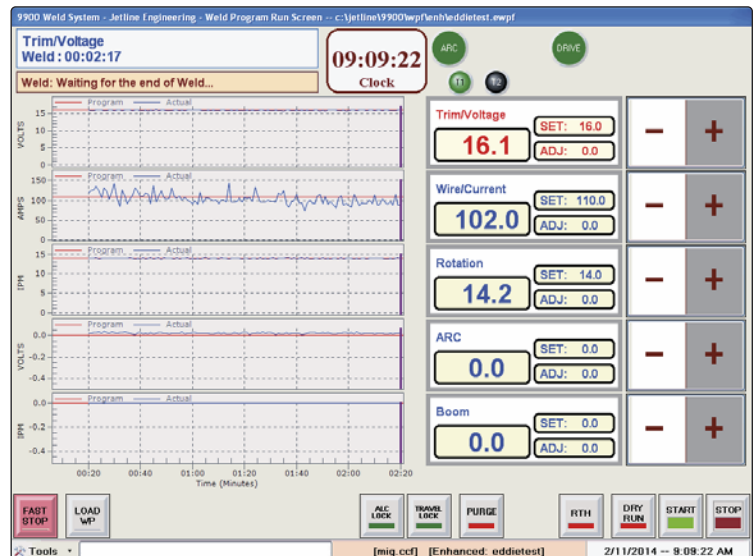


The 15-inch standard touch screen HMI (human machine interface) provides access to all the parameters controlled during welding. A graphical representation of the weld program aids the operator during the welding process. On the graph, in real time, the actual process parameters are displayed in parallel with the set values. This feature provides instant feedback to the operator about the state of the process. A progress bar, along with a multi-function timer, is also present to allow easy monitoring of the program's progress. The graph can be zoomed or viewed in a full screen format to allow the operator to analyze and monitor the program parameters in relation to each other. The 9900 software has been designed with large buttons for convenient parameter adjustment. The actual and program parameter displays are large enough to be easily seen from several feet away. Indicator lights on the screen show the current state of each channel.

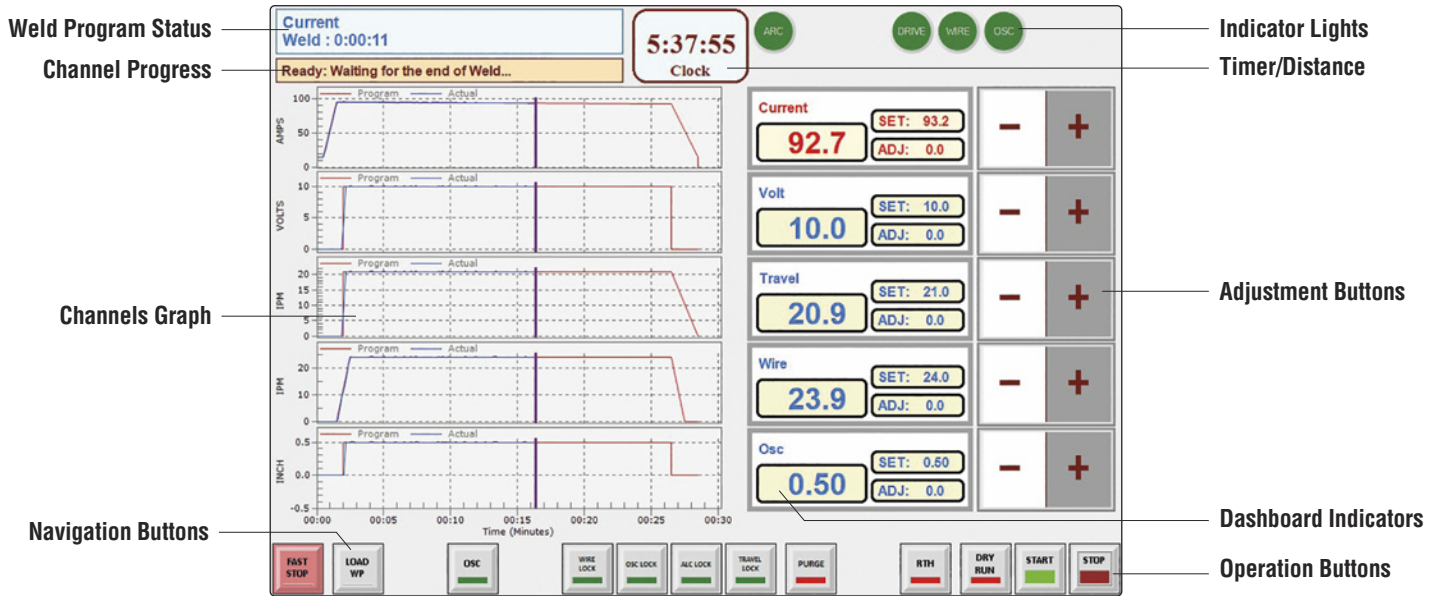


The 9900 controller is designed to control up to 15 channels (voltage, wire, travel, oscillator, etc.) in a closed-loop format. All system parameters and variables are incorporated in the weld program and are closely monitored by the 9900 software to ensure the accuracy of the weld. This means that oscillation (mechanical or magnetic), hot wire voltage or any other parameters are integrated and controlled from a single easy-to-access weld program. The modular design allows the system to easily be expanded or updated from the original configuration.

The 9900 controller is comprised of an industrial PC connected to dedicated channel modules. The channel modules are special-purpose computers designed to perform channel-specific functions. Since the channel modules are dedicated to specific tasks, they are characterized by increased reliability and performance. The 9900 system is designed to be immune to high frequency or inverter noise present in the welding environment. Each channel input and output is electrically isolated and all external inter-module connections are made via fiber optic cables to assure signal integrity over long distances and to shield the welding system from the environment.



Production Mode Screen



There are two versions of the 9900 software available to meet your application requirements.

The **standard version** is designed with simplicity and efficiency in mind. The screens are intuitive and the operator's learning curve is minimal. The program provides a familiar framework for the operator by using standard welding terms. It is ideal for most applications. The standard version includes an option to run all weld programs in the enhanced mode which allows sloping (upslope and downslope) of all channels. This gives the operator more flexibility in more challenging circumferential, hot wire or dual-arc applications.

The **advanced version** gives full control to the operator in designing the weld program. The standard weld program can be expanded with an unlimited number of segments which satisfies even the most demanding applications. It is recommended for complex weld joints and applications where programming flexibility is key. The advanced version also includes all the optional software modules available.

Both software versions utilize usernames and allow for password protection of the two main menu categories: program editing mode and production mode.

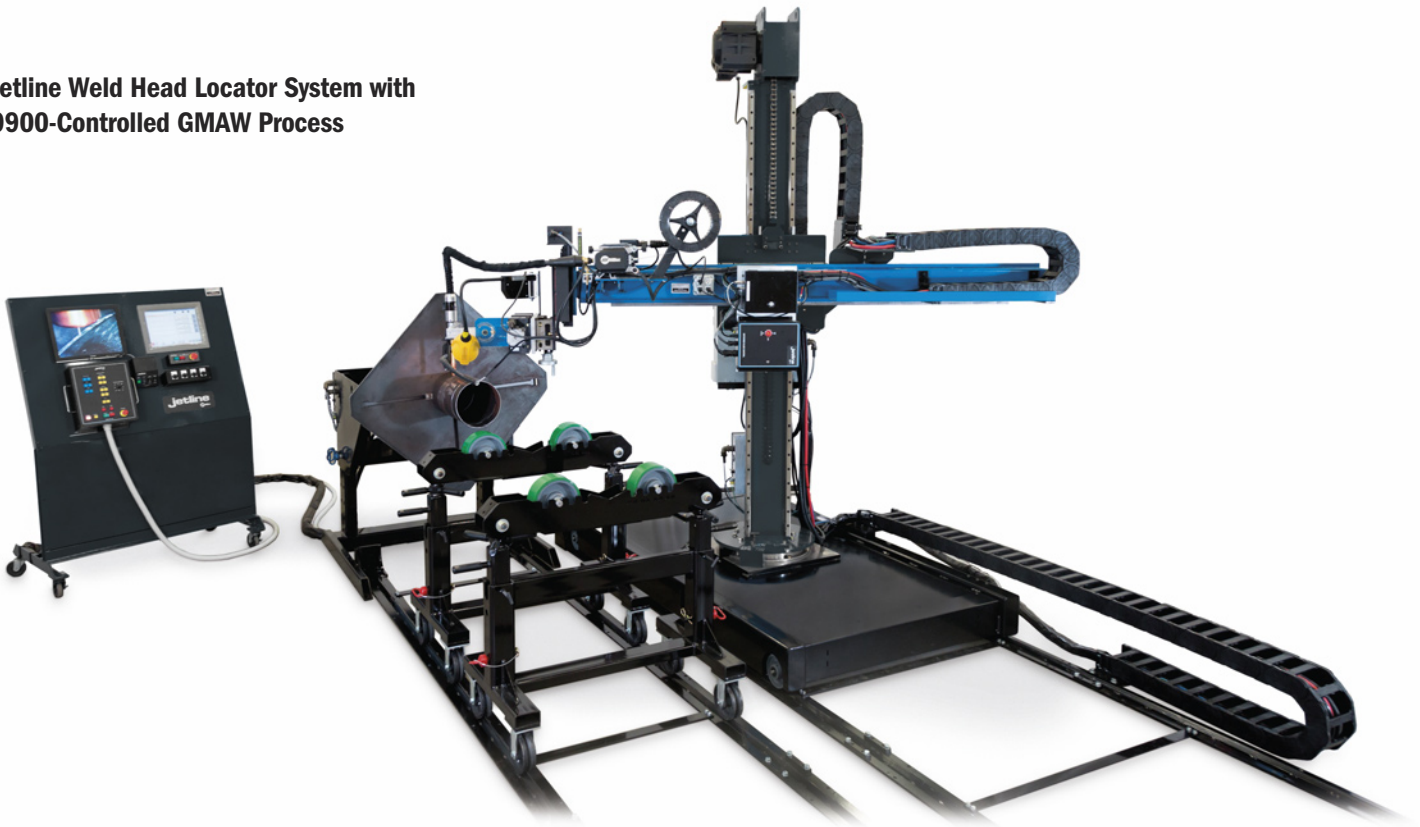
Software Function Availability	Standard	Advanced
Pulsing of power source	■	■
Slope of all channels	■	■
Upload/download	■	■
Off-line programming	■	■
More than five segments per channel		■
Dual-arc (multi-torch)	Optional	■
Multipass program	Optional	■
Data acquisition	Optional	■
Weld monitoring	Optional	■

Typical Installations

**Jetline Weld Head Locator System with
9900-Controlled Cold Wire GTAW Process**

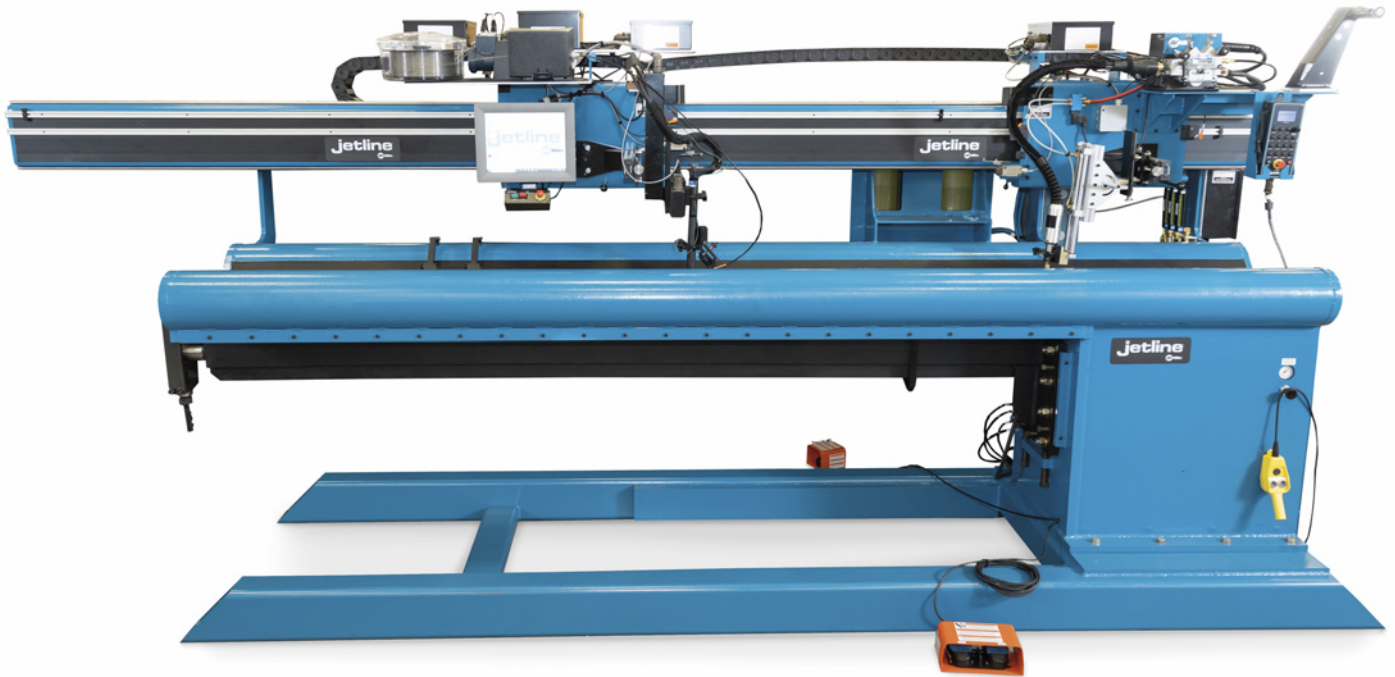


**Jetline Weld Head Locator System with
9900-Controlled GMAW Process**



Typical Installations

**Jetline Longitudinal Seam Welder with
9900-Controlled Cold Wire GTAW Process
and GMAW Process**

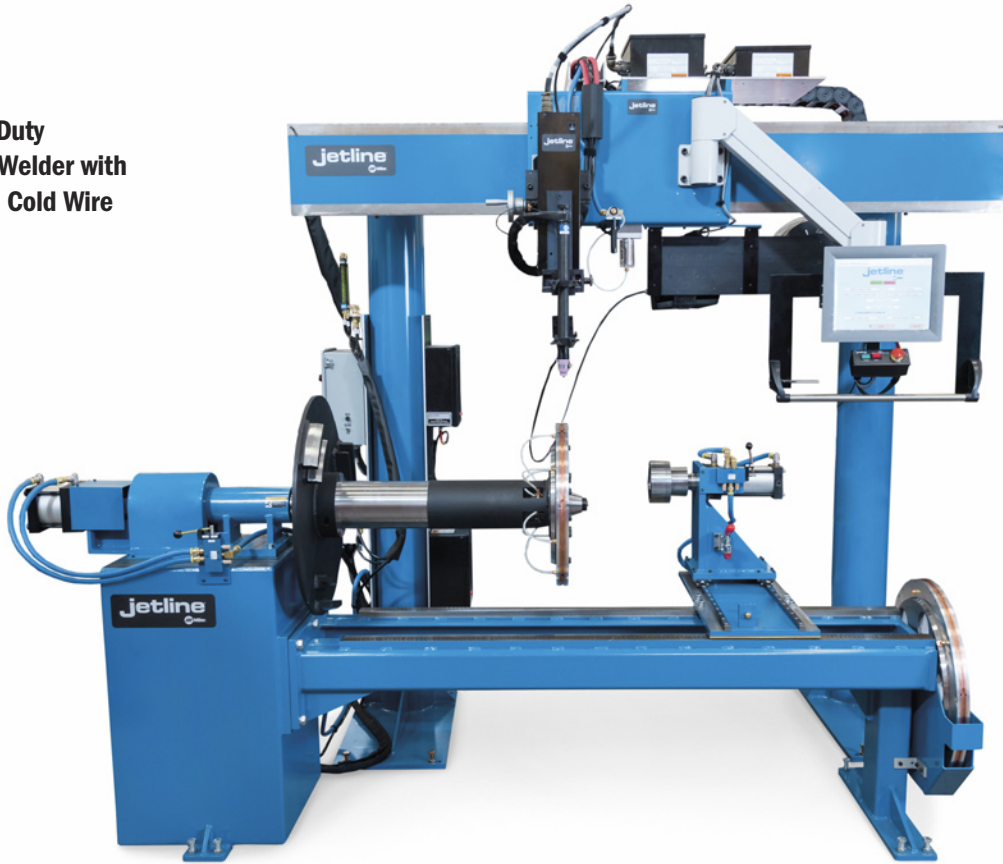


**Jetline Longitudinal Seam Welder with
9900-Controlled Cold Wire GTAW Process**

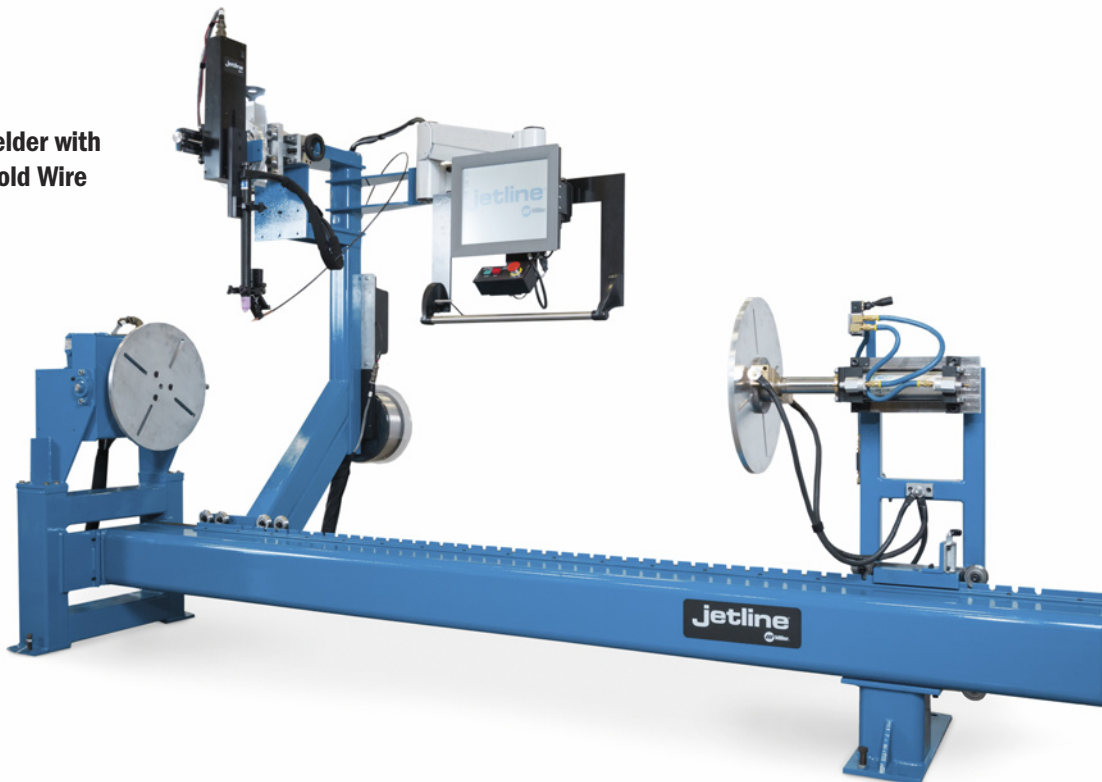


Typical Installations

**Jetline Medium-Duty
Circumferential Welder with
9900-Controlled Cold Wire
GTAW Process**

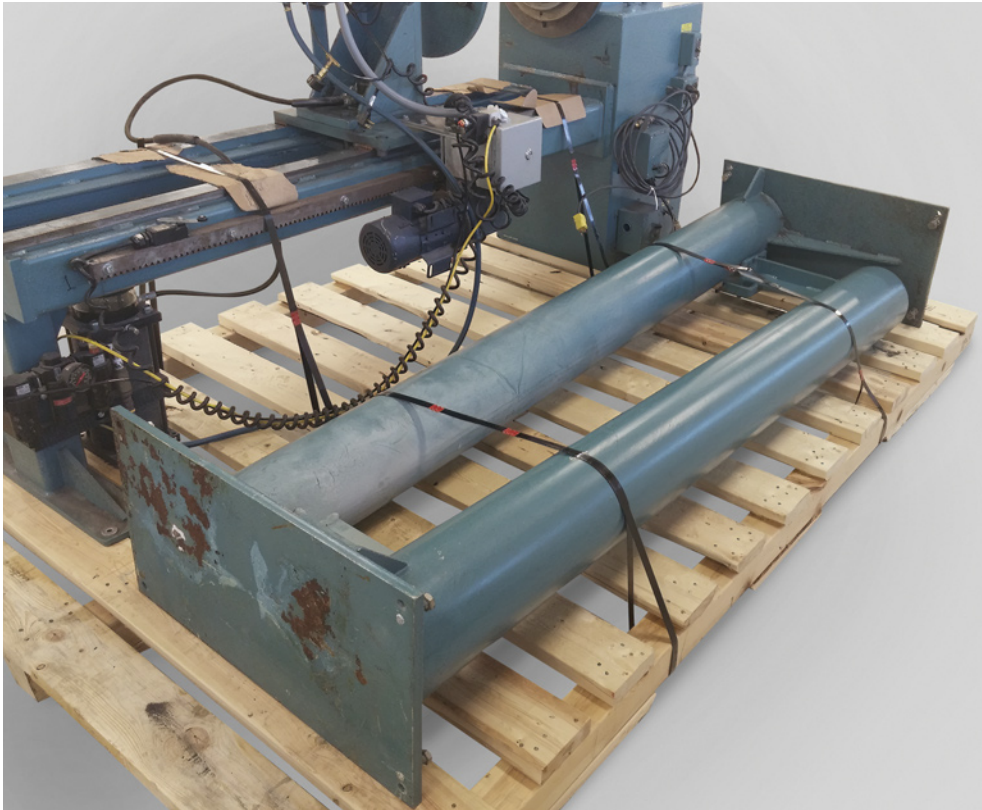


**Jetline Light-Duty
Circumferential Welder with
9900-Controlled Cold Wire
GTAW Process**



Retrofit Solutions Using 9900 Controller

Jetline offers retrofit solutions for customer's existing matured welding fixtures. Integrate a new Jetline 9900 control system and accessories onto your tired existing system. Jetline can utilize your existing steel and functioning parts and upgrade the controls to a 9900 controller along with a new Miller® welding process. A retrofit can help resolve operating issues caused by tired equipment and ensures your system will continue to have a long life cycle.



Accessories



9900 Remote Pendant

A tethered remote pendant is available for the 9900 controller. The pendant allows the operator to remotely control the 9900 when they are away from the touch screen. The operator can load programs and start a weld from the pendant. The operator can also jog the various channels prior to starting the

weld or make adjustments during the weld. During a weld the pendant screen will display the actual values. For a typical TIG weld the pendant would display: current, voltage, wire feed speed, travel speed and oscillation.



Arc Length Control

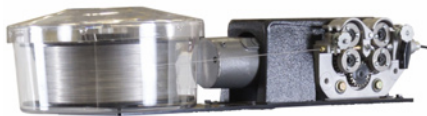
Used with either the TIG (GTAW) or plasma arc welding (PAW) process, the Jetline arc length control maintains a constant preset arc length via control of the arc voltage.

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



Remote Operator Station with Optional Video Monitoring

The remote podium allows the operator to control the automated welding fixture remotely. The remote operator stations are typically supplied with additional accessory items such as a video monitoring system and motorized slides.



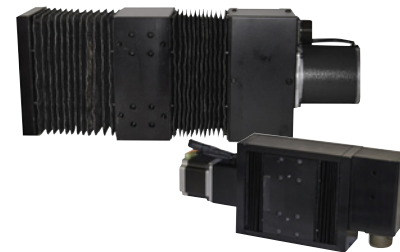
Cold Wire Feeder

Jetline cold wire feeders are used for automated TIG (GTAW) and plasma arc (PAW) welding to add "fill" to a weld joint. The 9900 controller controls the starting, stopping, pulsing and speed of the wire.



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.



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 5-inch stroke and 2-inch stroke oscillator systems controlled by the 9900 controller. See literature AU/14.0.



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 9900 controller controls the starting, stopping, pulsing and speed of the wire along with hot wire current.



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 probe bolts onto a TIG or plasma torch and is controlled by the 9900 controller.

Distributed by: