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Jetline® Circumferential Welders

Automation Systems

Quick Specs

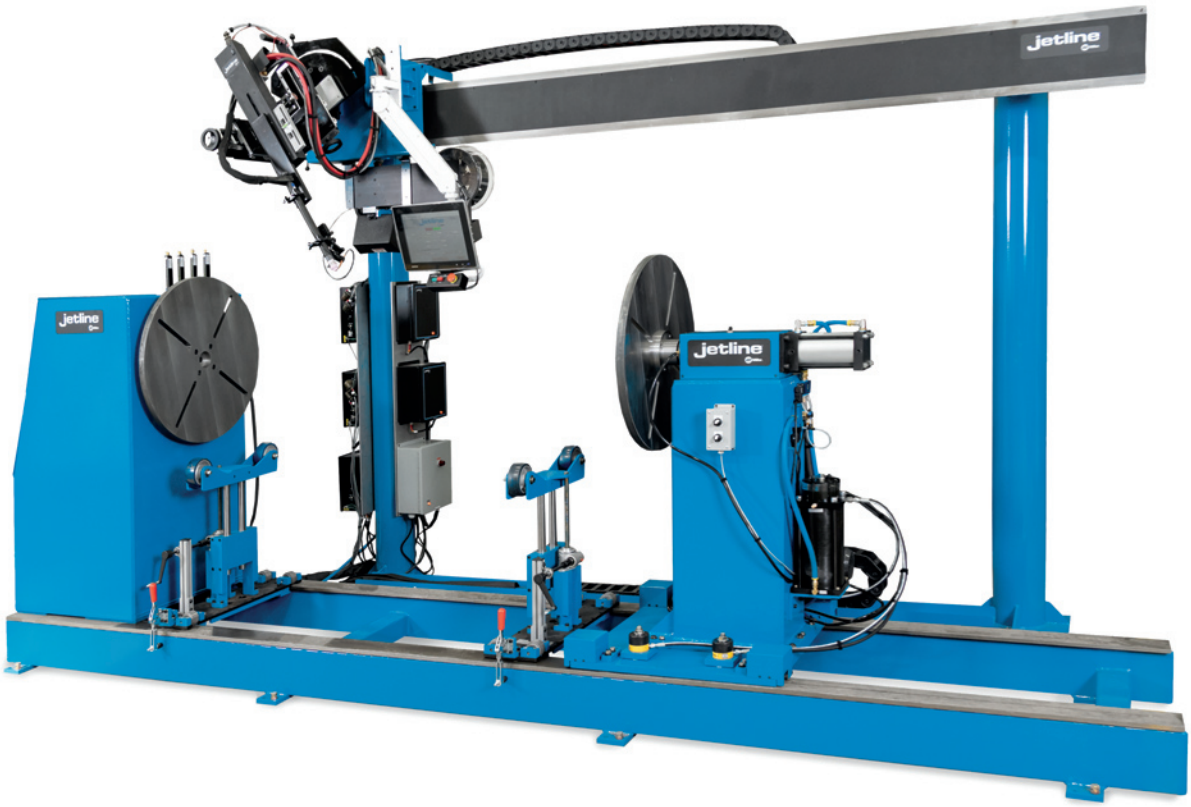
Applications
Aerospace
Tanks and pressure vessels
Transportation fuel tanks
Power generation
Food and beverage
Pharmaceutical
…and many others

Processes
TIG (GTAW)
MIG (GMAW)
Plasma arc welding (PAW)
Submerged arc welding (SAW)

Input Power
230/460 V, 3-phase, 60 Hz
115 V, 1-phase, 50/60 Hz

Jetline circumferential welders provide the speed and precision you depend on for demanding applications. The machined headstock, tailstock and base precisely locate the part and rotate it. Jetline controls and accessories work seamlessly together to complete the package.

jetline® Miller®



Jetline circumferential welders feature:

- Microprocessor or computer controls
- Full range of Jetline accessories
- Operator friendly controls
- Rugged machined bases
- Powered headstock rotation
- Pneumatic tailstock applies constant pressure
- Adjustable tailstock to accommodate different part lengths
- Optional cradle lifts are available on all models
- Optional slide-away tailstock assembly
- Optional gas purging is available through the headstock and tailstocks

Standard models based upon length, diameter and weight of the part:

- CWB light-duty series
- CWL medium-duty series
- CW5 heavy-duty series

Consult Jetline for different sizes and configurations to meet your requirements.

3YR. WARRANTY

Warrantied for three years, parts.

Miller®

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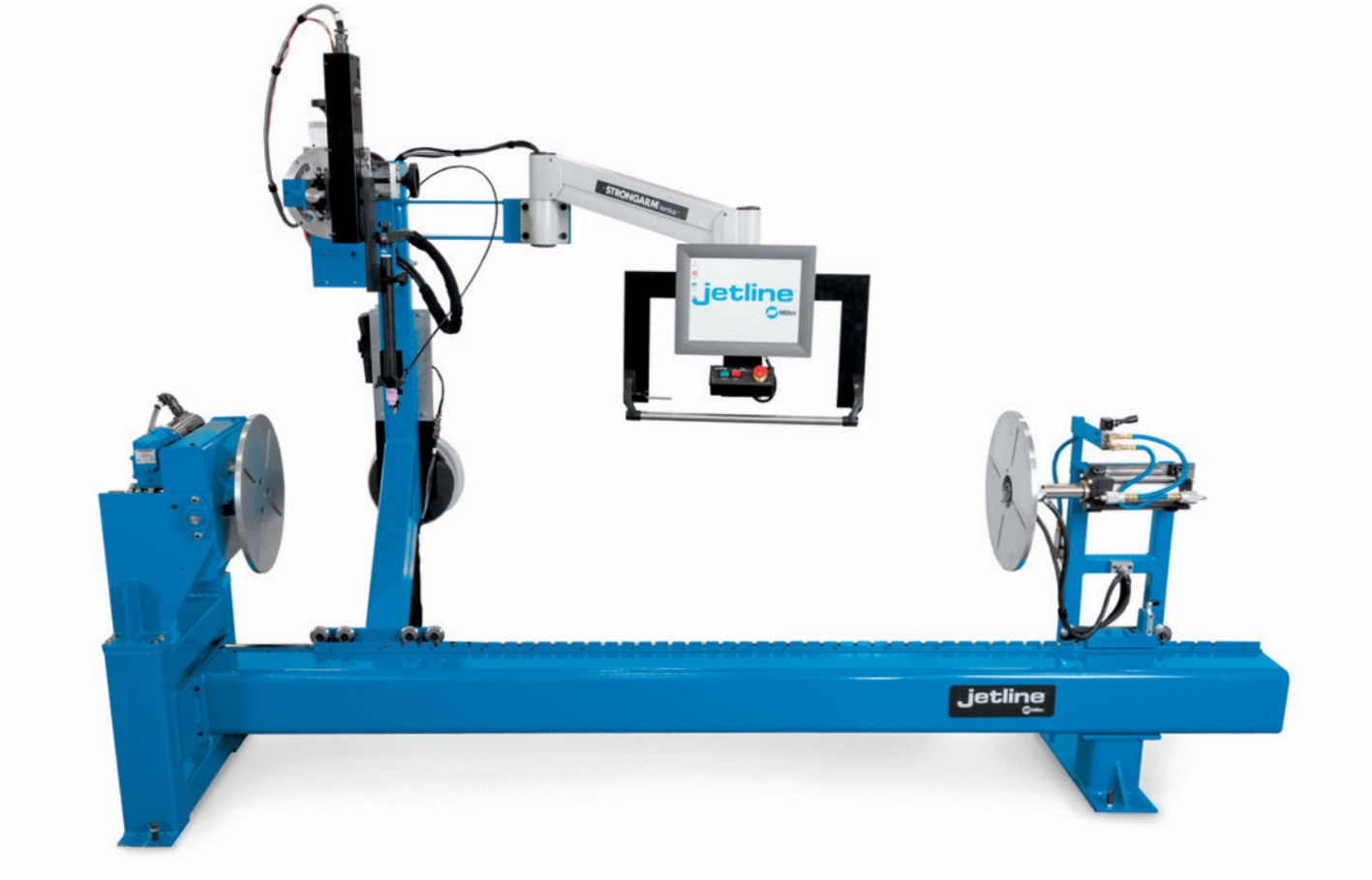
CWB Light-Duty Circumferential Welder Features

CWB circumferential welders are suitable for light-duty applications and feature an integrated weld head support column that slides along the base to accommodate different weld locations. A second support column and weld head can be supplied for applications that require performing two welds at the same time.

The CWB series consists of the CWB3 which has a maximum part load of 400 lb. (180 kg), and the CWB5 which has a maximum part load of 1,000 lb. (450 kg). The maximum part length for both models is 240 inches (6,100 mm) and maximum part diameter is 30 inches (762 mm). Consult Jetline factory for larger diameters and lengths.



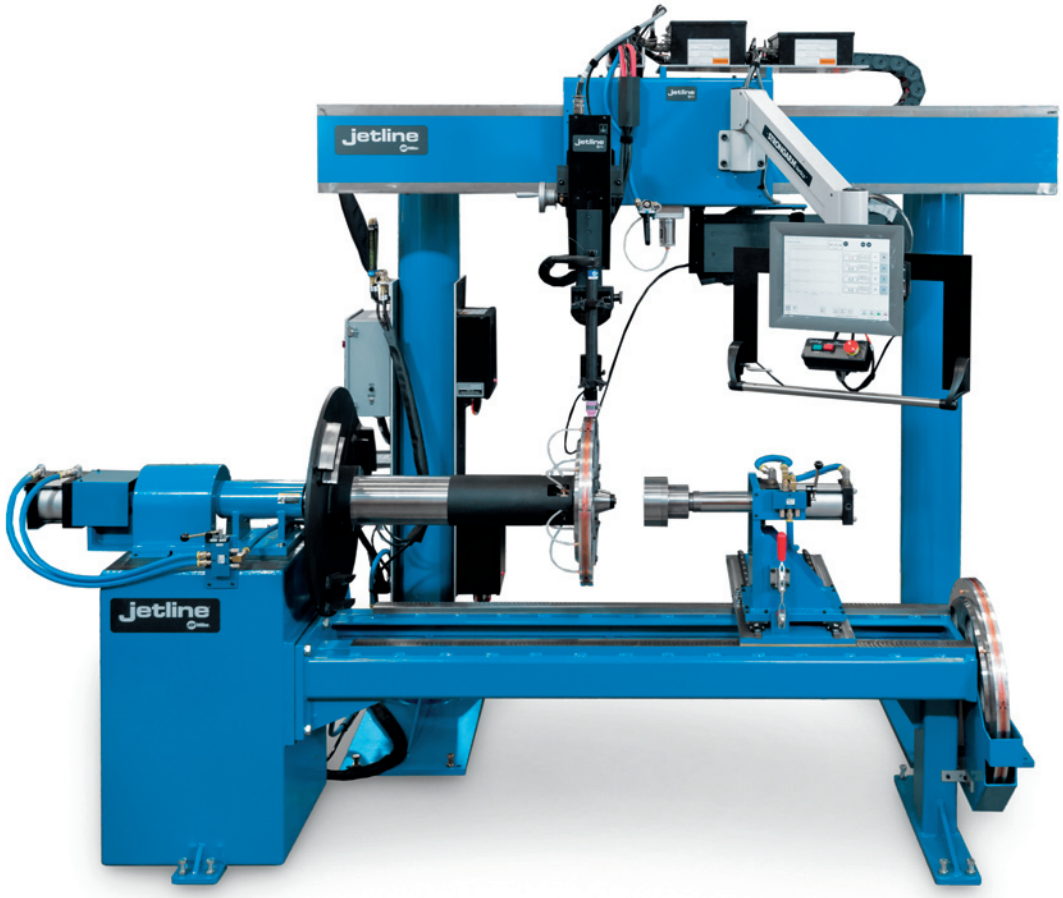
Specifications (Subject to change without notice.)

Model No.	Part Length	Shipping Weight	Speed Range
CWB3-24	24 in. (610 mm)	1,700 lb. (770 kg)	0.2–10.0 rpm or 0.07–3.3 rpm Consult Jetline for other available rpm ranges.
CWB3-36	36 in. (915 mm)	1,750 lb. (800 kg)	
CWB3-48	48 in. (1,220 mm)	1,800 lb. (815 kg)	
CWB3-60	60 in. (1,525 mm)	1,850 lb. (840 kg)	
CWB3-72	72 in. (1,830 mm)	1,900 lb. (860 kg)	
CWB3-84	84 in. (2,135 mm)	1,950 lb. (885 kg)	
CWB3-96	96 in. (2,440 mm)	2,000 lb. (900 kg)	
CWB3-120	120 in. (3,050 mm)	2,100 lb. (950 kg)	
CWB3-144	144 in. (3,660 mm)	2,200 lb. (1,000 kg)	
CWB3-168	168 in. (4,270 mm)	2,300 lb. (1,045 kg)	
CWB3-192	192 in. (4,875 mm)	2,400 lb. (1,090 kg)	
CWB3-216	216 in. (5,485 mm)	2,500 lb. (1,130 kg)	
CWB3-240	240 in. (6,100 mm)	2,600 lb. (1,180 kg)	

Model No.	Part Length	Shipping Weight	Speed Range
CWB5-24	24 in. (610 mm)	2,100 lb. (950 kg)	0.22–10.8 rpm or 0.07–3.6 rpm Consult Jetline for other available rpm ranges.
CWB5-36	36 in. (915 mm)	2,150 lb. (975 kg)	
CWB5-48	48 in. (1,220 mm)	2,200 lb. (1,000 kg)	
CWB5-60	60 in. (1,525 mm)	2,250 lb. (1,020 kg)	
CWB5-72	72 in. (1,830 mm)	2,300 lb. (1,045 kg)	
CWB5-84	84 in. (2,135 mm)	2,350 lb. (1,065 kg)	
CWB5-96	96 in. (2,440 mm)	2,400 lb. (1,090 kg)	
CWB5-120	120 in. (3,050 mm)	2,500 lb. (1,130 kg)	
CWB5-144	144 in. (3,660 mm)	2,600 lb. (1,180 kg)	
CWB5-168	168 in. (4,270 mm)	2,700 lb. (1,225 kg)	
CWB5-192	192 in. (4,875 mm)	2,800 lb. (1,270 kg)	
CWB5-216	216 in. (5,485 mm)	2,900 lb. (1,315 kg)	
CWB5-240	240 in. (6,100 mm)	3,000 lb. (1,360 kg)	

CWL Medium-Duty Circumferential Welder Features

CWL circumferential welders are suitable for medium-duty applications. A side beam track and carriage system is mounted behind the head and tailstock assembly. This allows for multiple weld heads to carry out two or more welds at the same time. Optional powered carriages allow motorized linear movement of the weld head. The CWL has a standard weight-carrying capacity of 1,000 lb. (450 kg). It can be supplied with the heavy-duty option for a weight-carrying capacity of up to 2,000 lb. (900 kg). The CWL can carry parts up to 240 inches (6,100 mm) long and up to 30 inches (762 mm) in diameter. Consult Jetline factory for larger diameters and lengths.

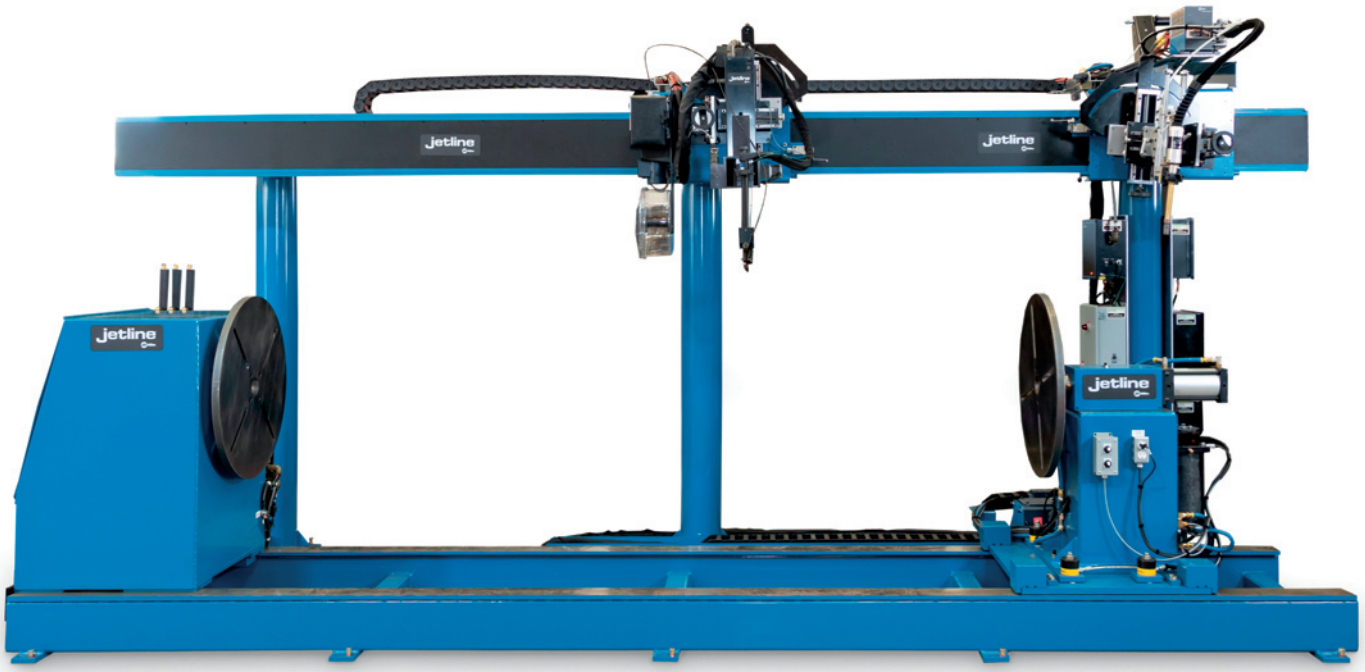


Specifications (Subject to change without notice.)

Model No.	Part Length	Shipping Weight	Speed Range
CWL-24	24 in. (610 mm)	3,000 lb. (1,360 kg)	0.1–2.0 rpm or 0.2–4.0 rpm Consult Jetline for other available rpm ranges.
CWL-36	36 in. (915 mm)	3,100 lb. (1,405 kg)	
CWL-48	48 in. (1,220 mm)	3,200 lb. (1,450 kg)	
CWL-60	60 in. (1,525 mm)	3,300 lb. (1,500 kg)	
CWL-72	72 in. (1,830 mm)	3,400 lb. (1,540 kg)	
CWL-84	84 in. (2,135 mm)	3,500 lb. (1,590 kg)	
CWL-96	96 in. (2,440 mm)	3,600 lb. (1,630 kg)	
CWL-120	120 in. (3,050 mm)	3,800 lb. (1,725 kg)	
CWL-144	144 in. (3,660 mm)	4,000 lb. (1,815 kg)	
CWL-168	168 in. (4,270 mm)	4,200 lb. (1,905 kg)	
CWL-192	192 in. (4,875 mm)	4,400 lb. (1,995 kg)	
CWL-216	216 in. (5,485 mm)	4,600 lb. (2,085 kg)	
CWL-240	240 in. (6,100 mm)	4,800 lb. (2,180 kg)	

CW5 Heavy-Duty Circumferential Welder Features

CW5 circumferential welders are suitable for heavy-duty applications. A side beam track and carriage system is mounted behind the head and tailstock assembly. This allows for multiple weld heads to carry out two or more welds at the same time. Optional powered carriages allow motorized linear movement of the weld head. The CW5 has a standard weight-carrying capacity of 5,000 lb. (2,250 kg). As an option, it can be supplied in a super-duty version carrying up to 10,000 lb. (4,500 kg). Although the standard range carries parts up to 240 inches (6,100 mm) long, there is virtually no limit to the maximum length to which this fixture can be manufactured. Maximum part diameter is 60 inches (1,525 mm). Consult Jetline factory for larger diameters and lengths.



Specifications (Subject to change without notice.)

Model No.	Part Length	Shipping Weight	Speed Range
CW5-48	48 in. (1,220 mm)	3,900 lb. (1,770 kg)	0.02–1.0 rpm or 0.1–2.0 rpm Consult Jetline for other available rpm ranges.
CW5-60	60 in. (1,525 mm)	4,100 lb. (1,860 kg)	
CW5-72	72 in. (1,830 mm)	4,500 lb. (2,040 kg)	
CW5-84	84 in. (2,135 mm)	4,900 lb. (2,220 kg)	
CW5-96	96 in. (2,440 mm)	5,300 lb. (2,400 kg)	
CW5-120	120 in. (3,050 mm)	6,500 lb. (2,950 kg)	
CW5-144	144 in. (3,660 mm)	7,400 lb. (3,360 kg)	
CW5-168	168 in. (4,270 mm)	8,300 lb. (3,765 kg)	
CW5-192	192 in. (4,875 mm)	9,000 lb. (4,080 kg)	
CW5-216	216 in. (5,485 mm)	10,000 lb. (4,535 kg)	
CW5-240	240 in. (6,100 mm)	11,000 lb. (4,990 kg)	

Accessories

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
The 9700T microprocessor-based travel controller is included on all Jetline circumferential welders. The 9700T controls the starting, stopping and rotation speed of the headstock. 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 circumferential welders 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.

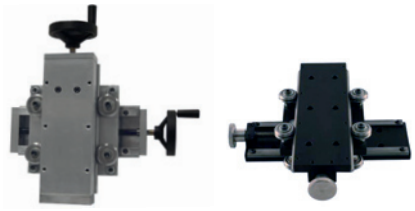
Hot Wire Feeder
The hot wire process is used in applications where high deposition of the filler wire is desired. It is used primarily with the TIG (GTAW) or plasma arc welding (PAW) process. The Jetline hot wire package is capable of controlling both hot and cold wire feed.

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.

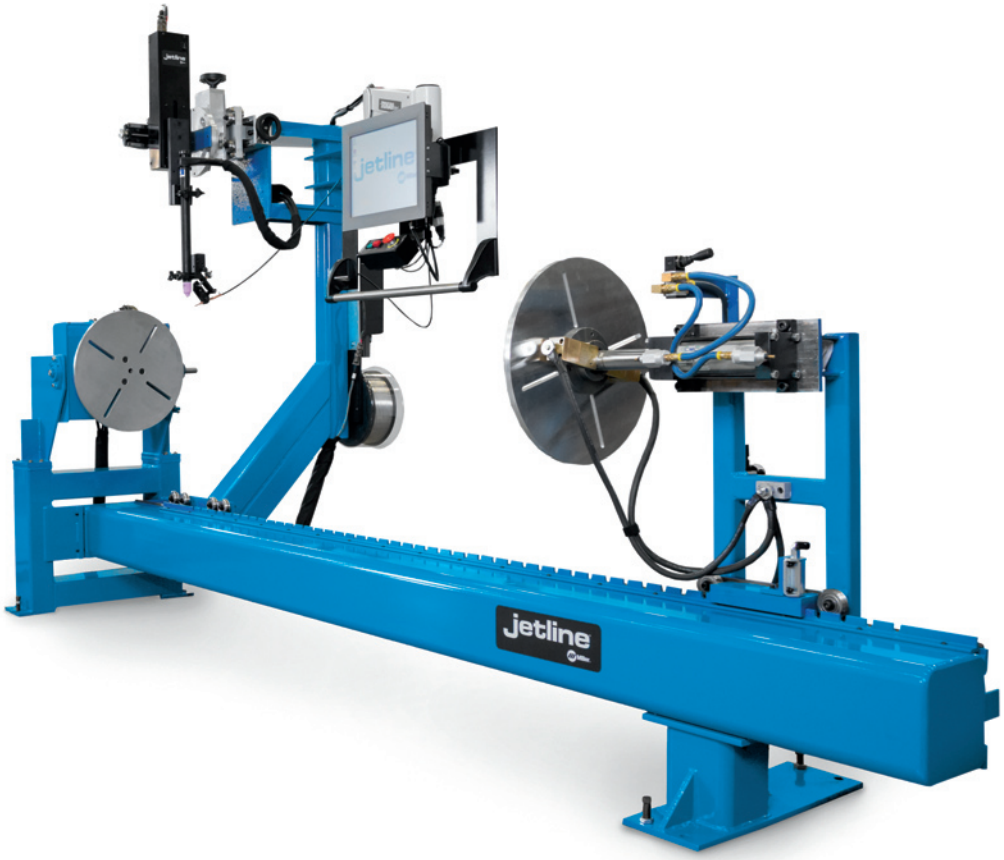
Accessories (Continued)

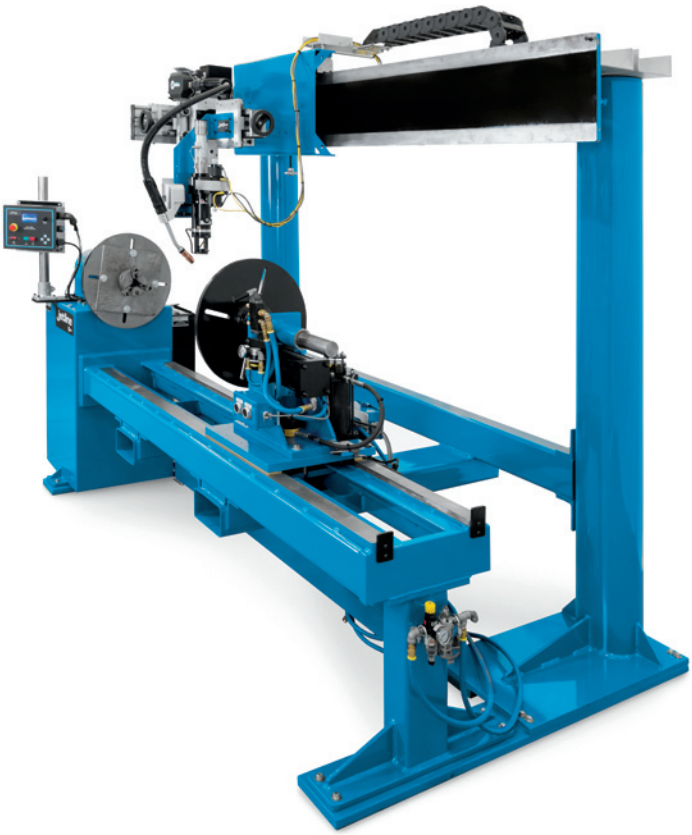
Remote Operator Station with Optional Video Monitoring
For large diameter or long parts it may be easier to have the operator control the circumferential welder remotely. Jetline can mount the circumferential welder controls, video monitoring system and remote controlled motorized slides at a remote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

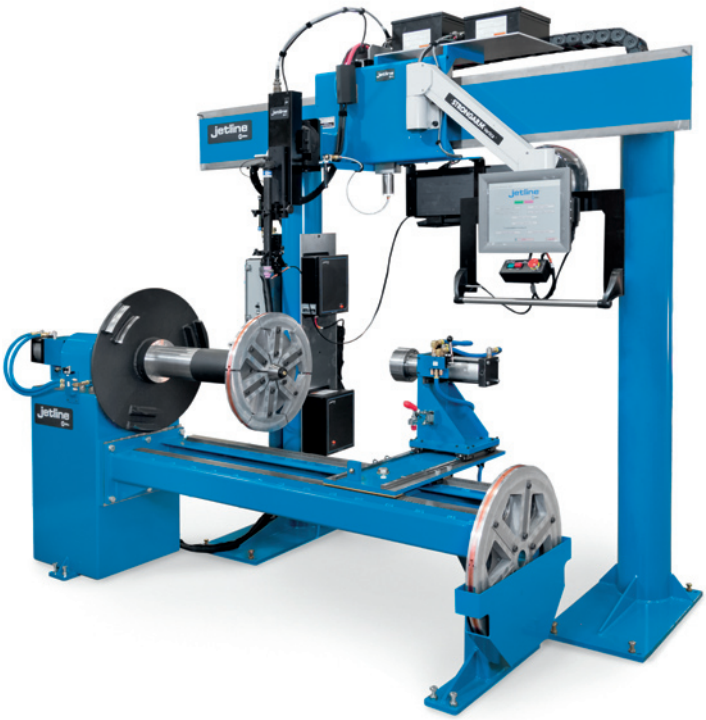
Mechanical Oscillator
In arc welding the welder typically weaves the welding arc for various welding requirements. When automating the welding process, weaving or oscillation can still be a desired effect. Oscillating the arc helps with sidewall fusion and eliminates undercut. To meet these welding requirements 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 circumferential 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 circumferential welders.

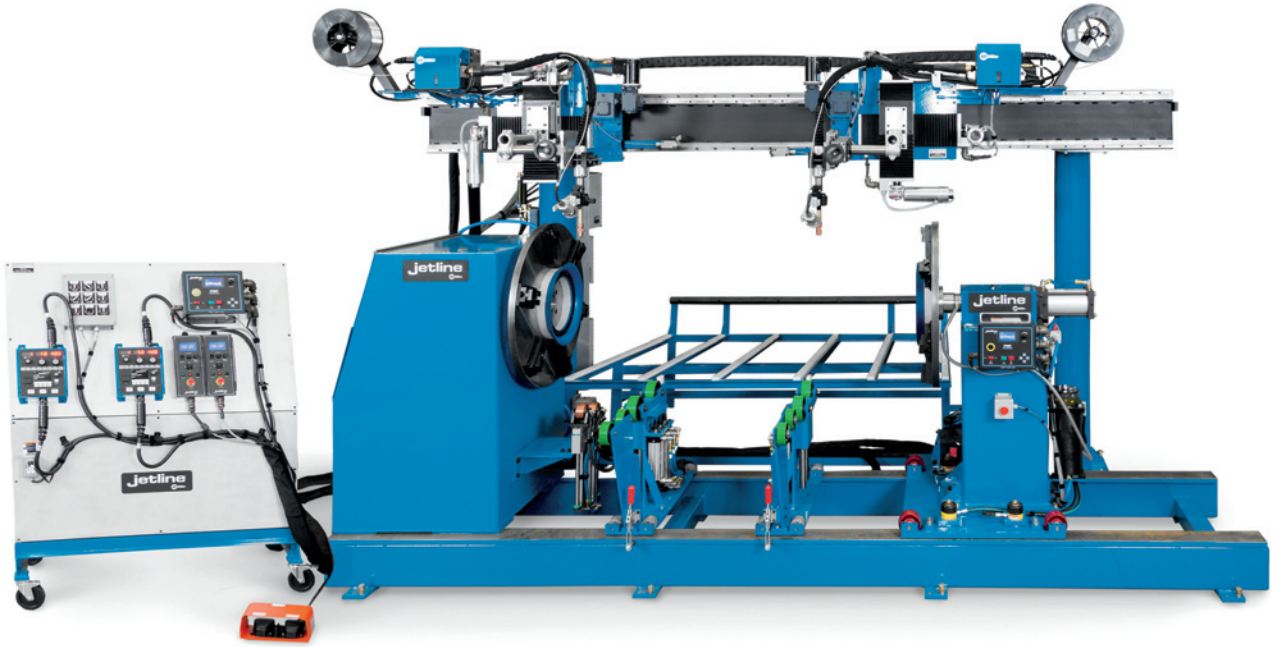
Jetline® CWB Light-Duty and CWL Medium-Duty Series

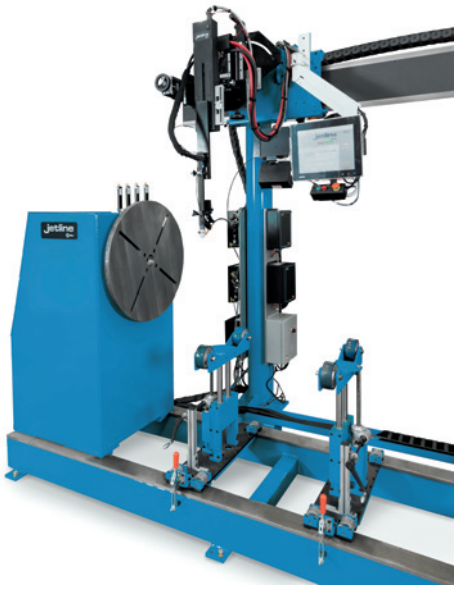


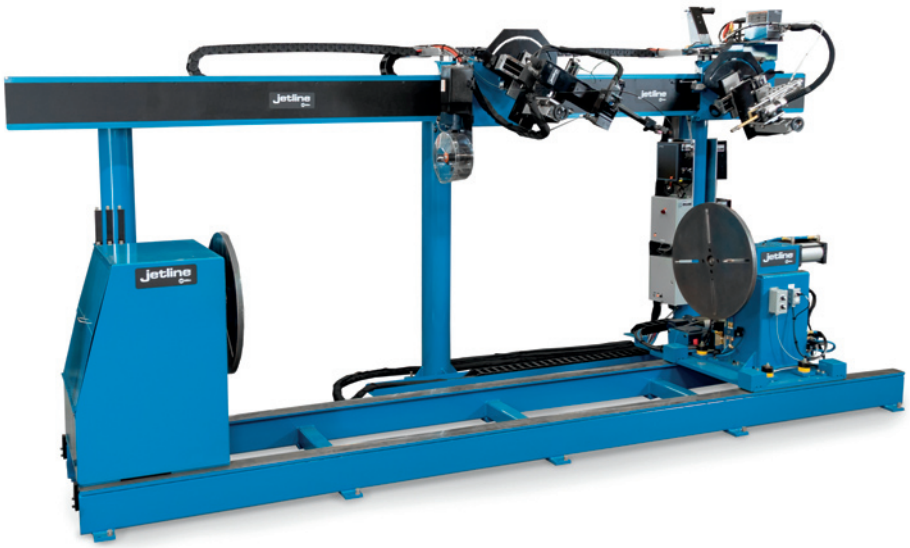




Jetline® CW5 Heavy-Duty Series







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