

# Continuum™ Systems

**Advanced MIG  
Welding Systems** 

## Quick Specs

### Heavy Industrial Manufacturing

Construction equipment  
Automotive components  
Recreational vehicles  
Farm machinery  
Office furniture  
Mining machinery  
Industrial fabrication

### Processes

Advanced MIG processes:  
Accu-Pulse® pulsed MIG (GMAW-P)  
Versa-Pulse™  
RMD®  
MIG (GMAW)  
High-deposition MIG (GMAW)  
Flux-cored (FCAW)  
Air carbon arc (CAC-A)  
**350:** Rated for 1/4-inch carbons  
**500:** Rated for 3/8-inch carbons

**Input Power** Auto-Line™ 230–575 V  
3-phase, 50/60 Hz

### Rated Output

**350:** 350 A at 100% duty cycle  
**500:** 500 A at 100% duty cycle

### Output Range

**350:** 20–400 A, 10–44 V  
**500:** 20–600 A, 10–44 V

## Take your welding to the next level

*Advanced industrial welding solution improves productivity through weld quality, ease of use and system flexibility.*

The Continuum system delivers exceptional arc performance with less spatter and higher-quality welds on both thin and thick metals. With user-friendly controls and system modularity, Continuum will make challenging jobs easier, and improve productivity — giving you a competitive advantage.

## Insight

Integrated Welding Intelligence™ solutions deliver information to measure and improve your welding operation. See page 5 for more information.



New standard for productivity and weld quality



Reduce set-up time



Easy to add capabilities

Continuum 500 MIGRunner™ package shown (MIG 4/0 kit and motor cable not pictured). Filler metal sold separately.



Power source is warranted for three years, parts and labor.  
Original main power rectifier parts are warranted for five years.  
Gun warranted for 90 days, parts and labor.



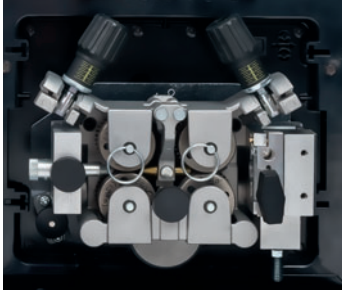
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**MillerWelds.com**  




# Continuum™ System Features



**Tru-Feed™ technology** provides precise feeding operation for stable arc performance.

- **Low-inertia motor** provides faster response for the best arc starts with the least amount of spatter.
- **Balanced-pressure drive-roll design and tensioners** feed wire in its truest and straightest form for consistent feedability, resulting in better welding performance.

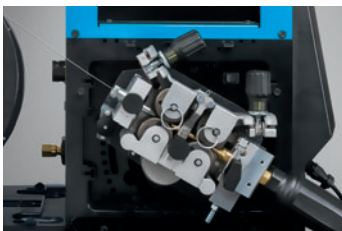
**Spring-loaded Accu-Mate™ connection** aligns gun perfectly in the drive-roll carrier — preventing the gun from being pulled loose and providing consistent wire feeding.



**Quick-change dual-bearing drive rolls** give you more consistent wire feeding.

**Drive rolls and guides are common** with other Miller industrial feeders (use existing, not new parts).

**Inlet guide installation is toolless.**



**Toolless positive-locking rotatable drive assembly** allows operator to rotate the drive, eliminating severe bends in the wire feed path. This extends gun-liner life and aids in feeding difficult wires.



**Display and controls** for program select, volts/arc length and wire feed speed

**Memory buttons** for quick program recall

**LCD setup screen**

- For easy selection of welding processes and functions
- Industrial design, full color display

**Arc control** to fine tune the welding arc

**Trigger hold, jog and purge buttons**



**Quality-engineered rear cable management** protects your connections to keep you productive.

**Wind Tunnel Technology™**

Internal air flow that protects electrical components and PC boards from dirt, dust, debris — greatly improving reliability.

**Fan-On-Demand™** operates only when needed reducing noise, power consumption, and the amount of airborne contaminants pulled through the machine.



**Auto-Line™ power management** technology allows for any input voltage hook-up (230–575 V) with no manual linking, providing convenience in any job setting. Eliminates weld defects caused by dirty or unreliable power.

# Continuum™ System Processes

## Take the performance of each process to the highest level

### Accu-Pulse®

- The most popular process for majority of industrial welding applications
- Most adaptive arc on 16 gauge (1.6 mm) and thicker
- Designed for all weld positions

### Versa-Pulse™

- Fast, low-heat, low-spatter process — for materials 1/4 inch (6.35 mm) and thinner
- Great for gap filling
- Shortest arc length/lowest pulse voltage for lower heat and lower spatter at higher speeds

### RMD®

- Lowest heat process, best for gap handling
- Limited travel speed

### MIG (short circuit)

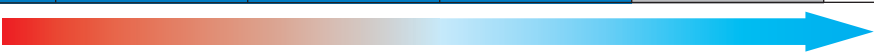
- Lower spatter than traditional MIG welders
- Better arc performance with silicon bronze and coated materials

### High-deposition MIG

- Higher deposition rates than standard spray transfer on thicker materials
- Designed for welding applications in which spray transfer is preferred



Best For	Standard Spray	High-Deposition MIG	Accu-Pulse	Versa-Pulse	Short Circuit	RMD
Deposition	A	A	A	B	D	D
Gap Filing	D	D	B	B	A	A
Low Heat Input	D	C	B	A	A	A
Out-of-Position Welds			A	B	B	B
Low Spatter	A	A	A	B	C	B
Thick Metals	A	A	A	C	D	D
Thin Metals			B	A	A	A
Increased Travel Speed	A	A	A	A	B	C

HOT  COLD

Ratings A, B, C, and D are relative values. An "A" rating indicates a best fit between your performance needs and process. A "blank" rating indicates that the process is not recommended for that application.

# Continuum™ Power Source Specifications (Subject to change without notice.)



Model	Amp/Volt Ranges	Rated Output	Amps Input at Rated Output, 50/60 Hz, 3-Phase							Max. Open-Circuit Voltage	Dimensions	Net Weight
			230 V	380 V	400 V	460 V	575 V	KVA	KW			
Continuum 350	20–400 A 10–44 V	350 A at 31.5 VDC, 100% duty cycle	36.7 0–1*	21.8 0–1*	20.8 0–1*	18.8 0–1*	14.6 0–1*	14.4 0.8*	13.8 0.17*	75 VDC	H: 27.19 in. (691 mm) (including lift eye) W: 17.5 in. (444 mm) D: 28.13 in. (714 mm)	127 lb. (57.6 kg)
Continuum 500	20–600 A 10–44 V	500 A at 39 VDC, 100% duty cycle	57.6 0–1*	34.7 0–1*	33.2 0–1*	28.9 0–1*	23.3 0–1*	23.1 0.8*	21.9 0.17*	75 VDC		148 lb. (67.1 kg)

\*While idling.

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

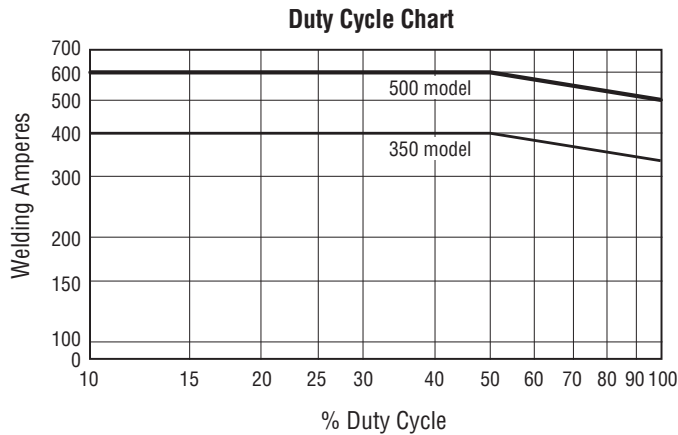
# Continuum™ Feeder Specifications (Subject to change without notice.)



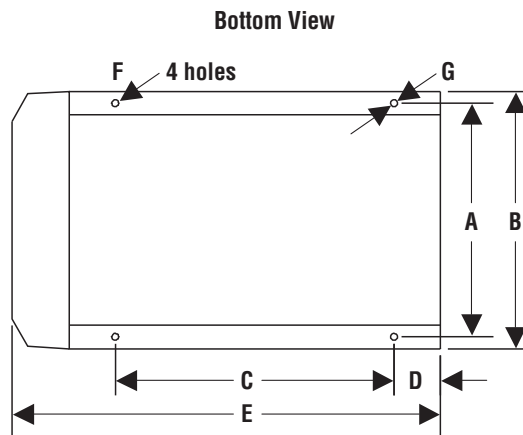
Input Power	Welding Power Source	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Dimensions	Net Weight
50 VDC	Continuum 350 or 500	500 A at 100% duty cycle	<b>Standard</b> 50–1,000 ipm (1.27–25.4 m/min.)	.035–5/64 in. (0.9–2.0 mm)	18 in. (457 mm) 60 lb. (27 kg)	H: 13.81 in. (351 mm) Single W: 16.31 in. (414 mm) Dual W: 17 in. (432 mm) D: 29.69 in. (754 mm)	<b>Single</b> 43 lb. (19.5 kg) <b>Dual</b> 61.5 lb. (27.9 kg)

Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

# Performance Data



# Mounting Specifications



- A. 16.093 in. (409 mm)
- B. 17.5 in. (444 mm)
- C. 17.375 in. (441 mm)
- D. 2.281 in. (58 mm)
- E. 26.172 in. (665 mm)
- F. .468 in. (12 mm) dia.
- G. .468 in. x 1 in. (12 x 25 mm)

**Height:** 27.187 in. (691 mm)  
**Width:** 17.5 in. (444 mm)  
**Depth:** 28.125 in. (714 mm)

## Genuine Miller® Accessories



### Continuum™ Running Gear/Cylinder Rack 301264

Small footprint and easily maneuverable, with cylinder rack low enough that you do not have to lift bottles.



### Industrial MIG 4/0 Kit

**300390** For single-wire feeders

**300957** For dual-wire feeders

Consists of flowmeter regulator with 10-foot (3 m) gas hose, 10-foot (3 m) 4/0 feeder weld cable with lugs, and 15-foot (4.6 m) work cable with 600-amp C-clamp. Dual kit comes with two flowmeter regulators and gas hoses.



### Continuum Cable Hanger 301213

Used to hang welding cables or MIG guns when not welding.



### Hanging Bail 058435

Used for suspending feeder over work area.

### Continuum Control/Motor Cables

**263368003** 3 ft. (0.9 m)

**263368015** 15 ft. (4.6 m)

**263368020** 20 ft. (6.1 m)

**263368025** 25 ft. (7.6 m)

**263368050** 50 ft. (15.2 m)

**263368080** 80 ft. (24.4 m)

Connects power source to feeder or remote operator interface. Also connects remote operator interface to remote motor drive.



### Ethernet Cables

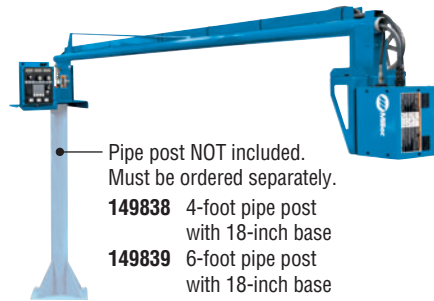
**300734** 9.8 ft. (3 m)

**300735** 16.4 ft. (5 m)

**300736** 32.8 ft. (10 m)

Ethernet cables with M12/RJ45 connectors.

Connects power source to Ethernet port of PC or network. For use with webpages and Insight Centerpoint™.



Pipe post NOT included. Must be ordered separately.

**149838** 4-foot pipe post with 18-inch base

**149839** 6-foot pipe post with 18-inch base

### Continuum Swingarc™ Boom-Mounted Wire Feeders

**951634** 8 ft. (2.4 m) single-wire

**951635** 12 ft. (3.7 m) single-wire

**951725** 12 ft. (3.7 m) dual-wire

**951636** 16 ft. (4.9 m) single-wire

## Coolant Systems



### Continuum Cooler 301214

For use with water-cooled torches rated up to 500 amps. Integrated coolant flow switch ensures coolant is flowing in the system. The Continuum cooler mounts to the bottom of the Continuum power source. Power is supplied via an internal connection with the power source.

### Low-Conductivity Coolant 043810

Sold in cases of four one-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37 degrees Fahrenheit (-38°C) or boiling to 227 degrees Fahrenheit (108°C). Also contains a compound that resists algae growth.

## Bernard™ Best of the Best (BTB) MIG Gun



Ergonomic handle with rubber grip and rear ball and socket swivel to maximize comfort while welding.

Fixed 60-degree neck with aluminum armor.



The Bernard BTB MIG gun (with limited release straight handle) that ships with Continuum has the best of all Bernard options. This 400-amp, air-cooled MIG gun is recommended for heavy manufacturing environments.

Standard QUICK LOAD™ liner AutoLength™ system.

- QUICK LOAD liners require less than half the time and effort to replace (compared to conventional liners)
- The liner feeds from the front of the MIG gun — no need to remove the gun from the feeder or to cut and waste wire
- The AutoLength power pin contains a spring-loaded module that applies constant pressure on the liner, keeping it seated properly in the retaining head
- Allows for up to one-inch (2.54 cm) forgiveness if the liner is too short or moves during welding
- Reduces burnbacks and improves wire feedability by aligning wire from liner with contact tip

## Continuum™ Swingarc™

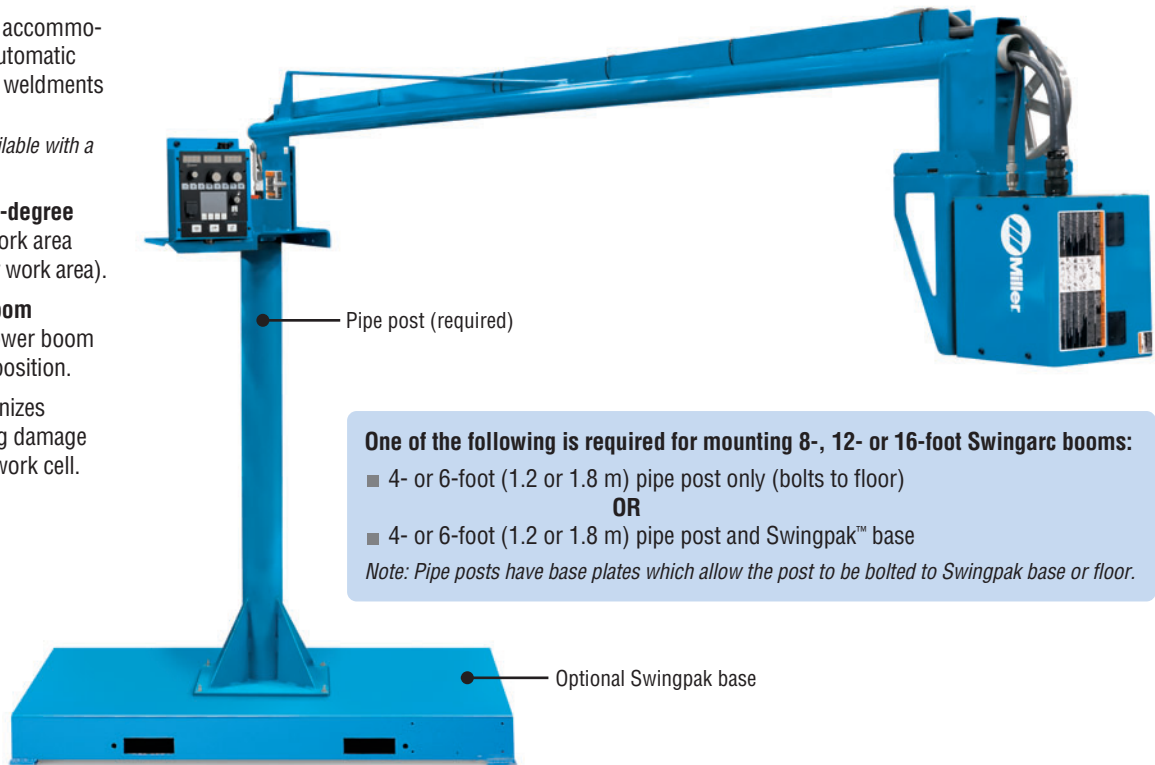
8-, 12- or 16-foot booms to accommodate a wide variety of semiautomatic applications, including large weldments and hard to reach areas.

Note: Dual-wire model only available with a 12-foot boom.

360-degree rotation and 60-degree lift angle maximizes your work area (16-, 24- or 32-foot diameter work area).

Unique counterbalanced boom makes it easy to raise and lower boom and automatically holds its position.

In-boom cable routing organizes hoses and cables, preventing damage and maintaining an orderly work cell.



One of the following is required for mounting 8-, 12- or 16-foot Swingarc booms:

- 4- or 6-foot (1.2 or 1.8 m) pipe post only (bolts to floor)
- OR
- 4- or 6-foot (1.2 or 1.8 m) pipe post and Swingpak™ base

Note: Pipe posts have base plates which allow the post to be bolted to Swingpak base or floor.

### Specifications and Usage (Subject to change without notice.)

Usage	Model	Stock No.	Dimensions	Net Weight
For 8-, 12- or 16-ft. Swingarc	4 ft. pipe post	149838	H: 4 ft. (1.2 m)	110 lb. (49.9 kg)
	6 ft. pipe post	149839	H: 6 ft. (1.8 m)	130 lb. (59 kg)
	Swingpak base	183997	L: 65 in. (1.7 m), W: 50.875 in. (1.3 m)	285 lb. (129 kg)

Note: Swingarc includes 10-foot gas hose and 10-foot weld cable for the operator to hook up.