

Deltaweld® Series

Issued Nov. 2009 • Index No. DC/16.2

**MIG Welding
Power Source** 

Quick Specs



Heavy Industrial Applications

Heavy Equipment Manufacturing
Truck and Trailer Manufacturing
Ship and Boat Building
Tank/Pressure Vessel Fabrication
Manufacture of Automotive Equipment
Railcar/Locomotive Fabrication and Repair
Furniture Manufacture
Structural Steel Fabrication
Sheet Metal Fabrication
Maintenance

Processes

MIG (GMAW)
Flux Cored (FCAW)
Air Carbon Arc (CAC-A)
Cutting and Gouging
Submerged Arc (SAW)

Input Power 302/402: 3-Phase Power
452/602: 3-Phase Power
652/852: 3-Phase Power

Rated Output 302/402: 300 A at 32 VDC, 100% Duty Cycle
452/602: 450 A at 38 VDC, 100% Duty Cycle
652/852: 650 A at 44 VDC, 100% Duty Cycle

Weight 302/402: 323 lb (147 kg)
452/602: 384 lb (174 kg)
652/852: 472 lb (214 kg)

The Power of Blue.®

Superior arc welding performance with MIG welding.

Internal digital voltage control (DVC) enables operator to preset weld voltage before striking an arc.

Two positive output terminals provide high/low stabilizer selection. Allows operator to optimize arc performance.

Line voltage compensation ensures consistent weld performance by keeping output power constant even if primary input power varies by $\pm 10\%$.

Simple control panel provides easy, efficient operation.

Digital voltmeter and ammeter are easy to read, even at 30 ft (9.2 m).

14-pin receptacle provides quick, direct connection to Miller 14-pin wire feeders and accessories.

115 V duplex receptacle provides 15 amps of auxiliary power.

Thermal overload protection light indicates power shutdown. Helps prevent machine damage if the duty cycle is exceeded or airflow is blocked.



See option and package descriptions on page 5.

Remote on/off capabilities allow operator to turn power source on/off from a distance.

Remote voltage control allows operator to change voltage from feeder.

Power efficient for exceptional value and return on your investment.

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

Enclosed circuit boards provide additional protection from contaminants resulting in longer service life.

PC board protection prevents the wire feeder power or other stray voltages (less than 115 VAC) from harming the power source PC board.

Power cord strain relief provided for your convenience at installation.



Deltaweld® 452
MIGRunner®
Package shown



Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.

MADE IN **USA**
APPLETON, WI



Miller Electric Mfg. Co.
An Illinois Tool Works Company
1635 West Spencer Street
Appleton, WI 54914 USA

Equipment Sales US and Canada
Phone: 866-931-9730
FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

Web Site
www.MillerWelds.com



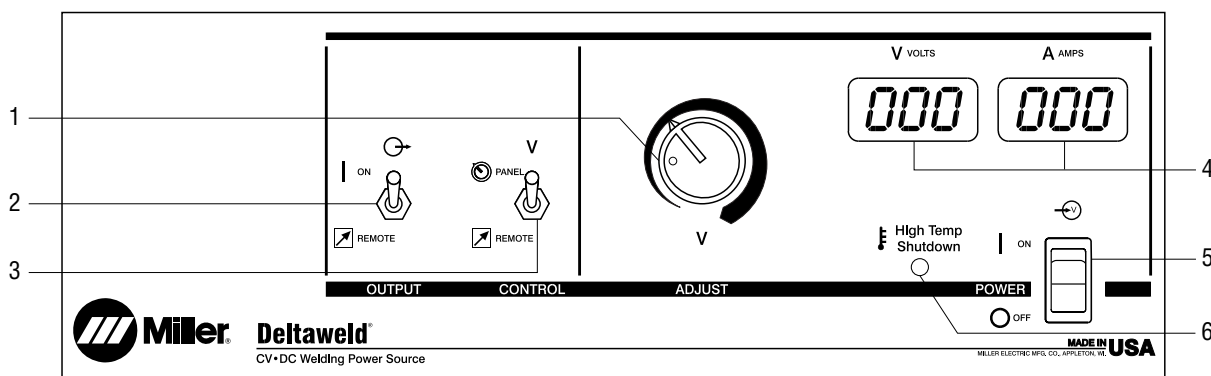
Rated Output	Voltage Range	Recommended Welding Range	Amps Input at Rated Output, 50/60 Hz									Max. Open-Circuit Voltage	Dimensions	Net Weight
			200 V	230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW			
300 A at 32 VDC, 100% Duty Cycle	10-32 V	15-32 V	48	42	27	25	23	21	17	16.9	12.9	44 VDC	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 30-1/2 in (775 mm) including strain relief	323 lb (147 kg)

Note: For input conductor and fuse size information consult the Owner's Manual.

Certified to both the Canadian and U.S. Standards for welding equipment.

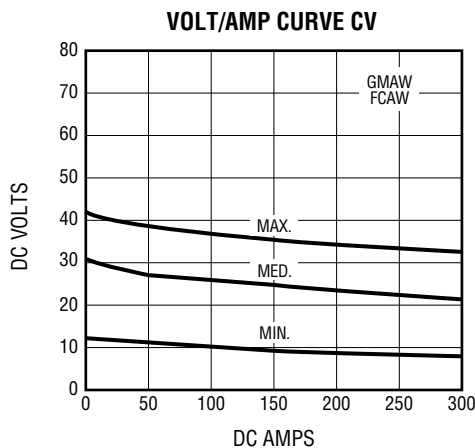
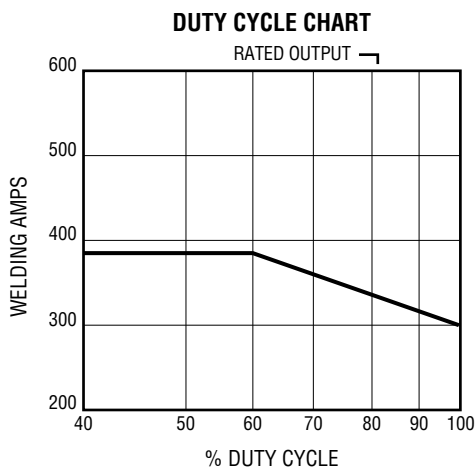
50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1.

Control Panel



- 1. Voltage Adjustment Control
- 2. Output Switch
- 3. Remote Voltage Control Switch
- 4. Digital Meters
- 5. Power Switch with Indicator Light
- 6. High Temperature Shutdown Light

Performance Data



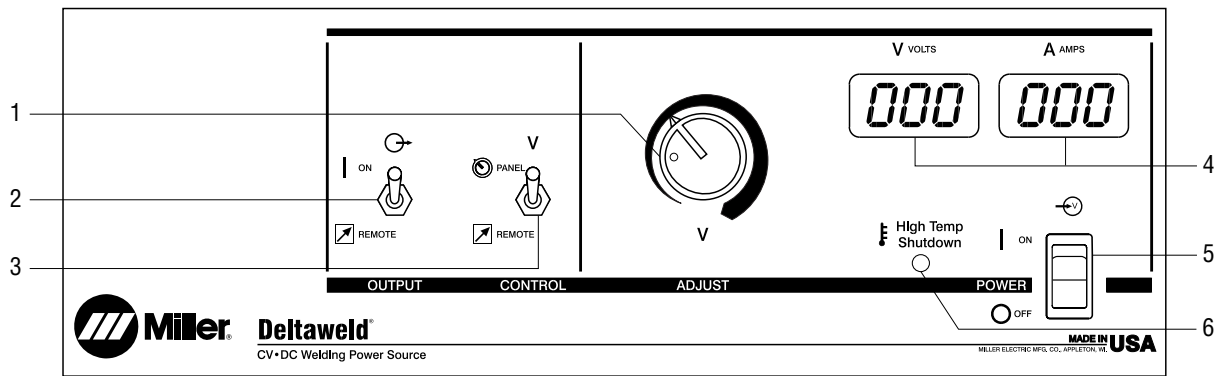
Rated Output	Voltage Range	Recommended Welding Range	Amps Input at Rated Output, 50/60 Hz									Max. Open-Circuit Voltage	Dimensions	Net Weight
			200 V	230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW			
450 A at 38 VDC, 100% Duty Cycle	10–38 V	15–38 V	72	63	39	37	33	32	25	25.1	21.1	48 VDC	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm) including strain relief	384 lb (174 kg)

Note: For input conductor and fuse size information consult the Owner's Manual.

Certified to both the Canadian and U.S. Standards for welding equipment.

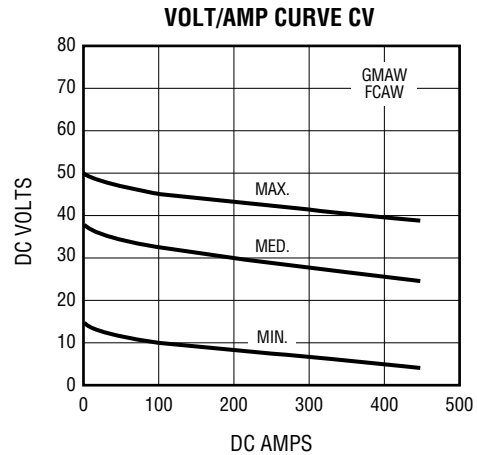
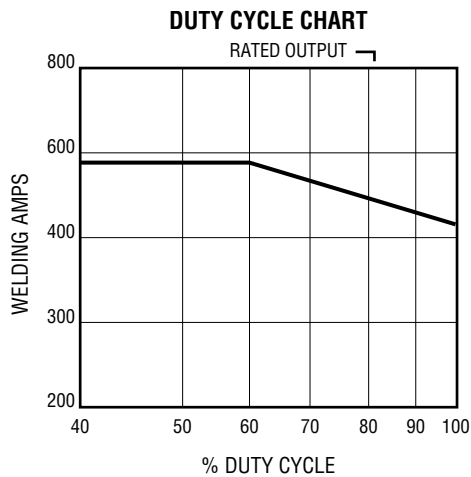
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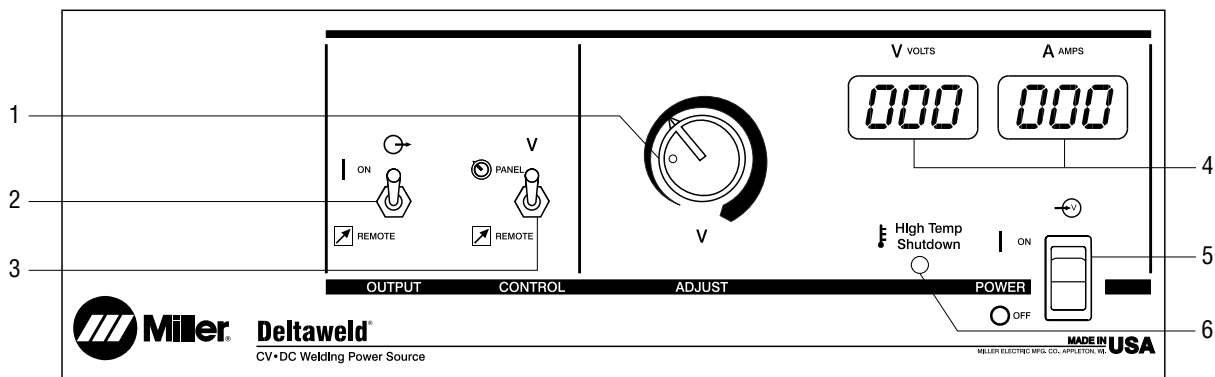
Rated Output	Voltage Range	Recommended Welding Range	Amps Input at Rated Output, 50/60 Hz								Max. Open-Circuit Voltage	Dimensions	Net Weight
			230 V	380 V	400 V	440 V	460 V	575 V	KVA	KW			
650 A at 44 VDC, 100% Duty Cycle	10-44 V	15-44 V	96	58	54	50	48	38	38.2	34.2	54 VDC	H: 30 in (762 mm) including lift eye W: 23 in (585 mm) D: 38 in (966 mm) including strain relief	472 lb (214 kg)

Note: For input conductor and fuse size information consult the Owner's Manual.

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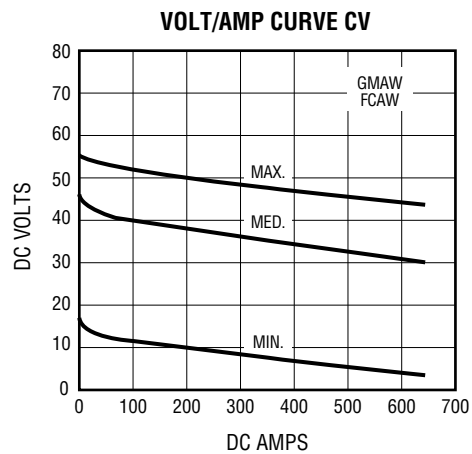
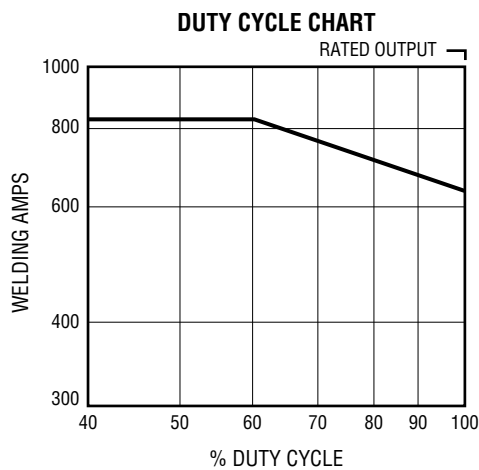
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Control Panel



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Performance Data



Genuine Miller Options

Air Filter Kit #042 939 Field
Reusable air filter helps protect internal components from dust and dirt, reducing need for maintenance and providing extended service life. Easily attaches and detaches from front of the power source.

Ground Current Sensor #195 048 Field
Disables power source if weld current is present on primary ground.

Packages



Option #1: Deltaweld® Power Sources

Purchase components separately.

Deltaweld® 302

#903 376 (200-208/230/460 V, 60 Hz)

#903 392 (230/460/575 V, 60 Hz)

Deltaweld® 452

#903 377 (200-208/230/460 V, 60 Hz)

#903 394 (230/460/575 V, 60 Hz)

Deltaweld® 652

#903 396 (230/460/575 V, 60 Hz)



Option #2: Deltaweld® Stationary Packages

Stationary display without running gear/cylinder rack.

Deltaweld® 302

#951 235 (200-208/230/460 V, 60 Hz)

#951 299 (230/460/575 V, 60 Hz)

Deltaweld® 452

#951 237 (200-208/230/460 V, 60 Hz)

#951 301 (230/460/575 V, 60 Hz)

Deltaweld® 652

#907 239 (230/460/575 V, 60 Hz)

Comes complete With:

- Deltaweld® power source
- S-74D wire feeder
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit:
Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp



Option #3: Deltaweld® MIGRunner® Packages

MIGRunner system with factory-installed running gear/cylinder rack.

Deltaweld® 302

#951 234 (200-208/230/460 V, 60 Hz)

#951 300 (230/460/575 V, 60 Hz)

Deltaweld® 452

#951 236 (200-208/230/460 V, 60 Hz)

#951 302 (230/460/575 V, 60 Hz)

Deltaweld® 652

#951 238 (230/460/575 V, 60 Hz)

Comes complete With:

- Deltaweld® power source
- S-74D wire feeder
- Bernard® Q-Gun™
- Industrial MIG 4/0 Kit:
Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp
- Factory installed running gear/cylinder rack



Industrial MIG 4/0 Kit #300 390

Consists of Smith® regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp.

Remote On/Off Control #042 869

Allows you to turn power source on or off from a distance of 20 ft (6 m). This is especially useful if your power source is located up in a mezzanine.

Polarity Control #042 871

This dual-function control is designed for use with dual wire feeders or any application where electrical isolation and/or polarity reversing of weld current is required. Both functions can be used at the same time.

Process Control Selector #042 872

Allows you to easily change weld processes. Also includes features of Polarity Control.

Extension Cables for 14-Pin Plugs to 14-Pin Sockets

#122 973 25 ft (7.6 m)

#122 974 50 ft (15.2 m)

#122 975 75 ft (22.8 m)

This extension cord makes a direct connection between the power source and the accessory control or wire feeder. No messy splicing or adapting required.



Standard Running Gear #042 886

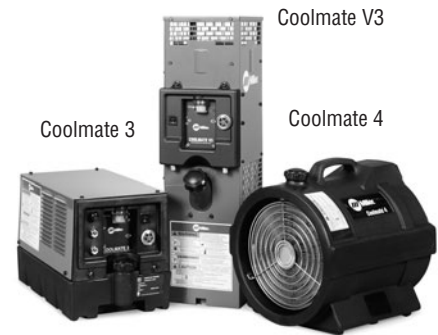
The large 10 in (254 mm) rear wheels and 5 in (127 mm) front casters on this running gear provide excellent mobility on the shop floor, making it easier to move the power source around and over cables and cracks. Very easy to install. Handles double as weld cable holder.

Standard Cylinder Rack #042 887

Holds two cylinders. Only installs on Standard Running Gear.

Water Coolant Systems

For more information, see Miller Coolant Systems Lit. Index No. AY/7.2.



Coolmate™ 3

#043 007 115 VAC

#043 008 230 VAC

For use with water-cooled torches rated up to 600 amps. Unique paddle-wheel indicator, external filter and easy fill spout.

Coolmate™ V3 #043 009 115 VAC

For use with water-cooled torches rated up to 500 amps. Vertical design conveniently mounts to Miller cylinder rack in place of one cylinder.

Coolmate™ 4 #042 288 115 VAC

For use with water-cooled torches rated up to 600 amps. Tough molded polyethylene case with carrying handle.

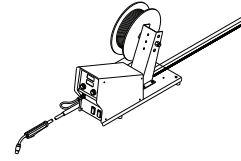
Coolant #043 810

Sold in cases of four 1-gallon recyclable plastic bottles. Miller coolants contain a base of ethylene glycol and deionized water to protect against freezing to -37°F (-38°C) or boiling to 227°F (108°C). Also contains a compound that resists algae growth.

Wire Feeder Options

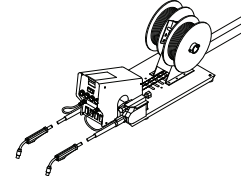
Bench-Style Feeders

	Lit. Index No.
S-22A	M/11.0
S-24A	M/11.0
S-74S	M/3.0
S-74D	M/3.0
S-74DX	M/3.0



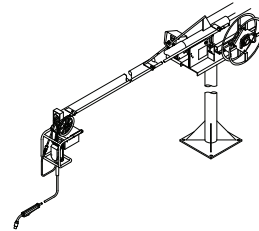
Bench-Style Dual Feeders

D-74S	M/3.0
D-74D	M/3.0
D-74DX	M/3.0



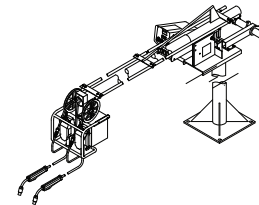
Boom-Style Feeders

SS-74S12	M/13.11
SS-74S16	M/13.11
SS-74D12	M/13.11
SS-74D16	M/13.11
SS-74DX12	M/13.11
SS-74DX16	M/13.11



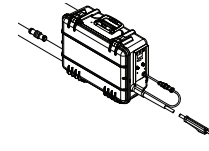
Boom-Style Dual Feeders

DS-74S12	M/13.11
DS-74S16	M/13.11
DS-74D12	M/13.11
DS-74D16	M/13.11
DS-74DX12	M/13.11
DS-74DX16	M/13.11



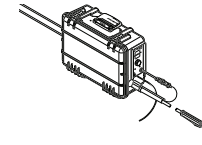
Portable Feeders

SuitCase® 8RC	M/6.5
SuitCase® 12RC	M/6.5



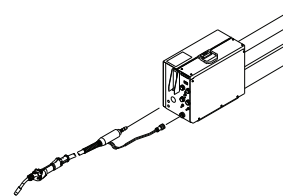
Portable Voltage Sensing Feeders

SuitCase® X-TREME™ 8VS	M/6.41
SuitCase® X-TREME™ 12VS	M/6.41



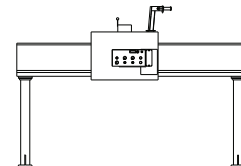
Aluminum Push-Pull Feeders

XR™-S and XR™-D Controls	M/1.7
Guns available:	
XR-Aluma-Pro™ A	M/1.71
XR-Aluma-Pro™ W	M/1.71
XR-A Pistol Grip	M/1.73



Hard Automation

Control Detach Kit 70 Series	M/3.0
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Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Power Source				
Deltaweld® 302 Power Source Only	#903 376* #903 392*	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 302 Stationary Package	#951 235* #951 299*	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 302 MIGRunner Package	#951 234* #951 300*	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 402 Power Source Only	#907 285**	380/400/440 V, 50 Hz w/CE		
Deltaweld® 452 Power Source Only	#903 377* #903 394*	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 452 Stationary Package	#951 237* #951 301*	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 452 MIGRunner Package	#951 236* #951 302*	200-208/230/460 V, 60 Hz 230/460/575 V, 60 Hz		
Deltaweld® 602 Power Source Only	#907 286**	380/400/440 V, 50 Hz w/CE		
Deltaweld® 652 Power Source Only	#903 396*	230/460/575 V, 60 Hz		
Deltaweld® 652 Stationary Package	#951 239*	230/460/575 V, 60 Hz		
Deltaweld® 652 MIGRunner Package	#951 238*	230/460/575 V, 60 Hz		
Deltaweld® 852 Power Source Only	#907 287**	380/400/440 V, 50 Hz w/CE		
Air Filter Kit	#042 939	Field		
Ground Current Sensor	#195 048	Field		
Wire Feeders				
70 Series		See Lit. Index No. M/3.0		
22A	#951 190	See Lit. Index No. M/11.0		
24A	#951 193	See Lit. Index No. M/11.0		
SuitCase® 8RC	#951 186	See Lit. Index No. M/6.5		
SuitCase® 12RC	#951 188	See Lit. Index No. M/6.5		
SuitCase® X-TREME™ 8VS	#951 181	See Lit. Index No. M/6.41		
SuitCase® X-TREME™ 12VS	#951 184	See Lit. Index No. M/6.41		
XR™ Controls	#300 601 #300 678	XR-S model. See Lit. Index No. M/1.7 XR-D model. See Lit. Index No. M/1.7		
Swingarc™ Boom Feeders		See Lit. Index No. M/13.11		
Extension Cables	#122 973 #122 974 #122 975	25 ft (7.6 m) 50 ft (15.2 m) 75 ft (22.8 m)		
Miscellaneous				
Industrial MIG 4/0 Kit	#300 390	Includes Smith regulator/flowmeter with 10 ft (3 m) gas hose, 10 ft (3 m) 4/0 feeder weld cable with lugs, and 15 ft (4.6 m) work cable with 600-amp C-clamp		
Remote On/Off Control	#042 869			
Polarity Control	#042 871			
Process Control Selector	#042 872			
Standard Running Gear	#042 886			
Standard Cylinder Rack	#042 887			
Coolmate™ 3	#043 007 #043 008	115 VAC 230 VAC		
Coolmate™ V3	#043 009	115 VAC		
Coolmate™ 4	#042 288	115 VAC		
Coolant	#043 810			
Primary Power Cable				
Secondary Welding Cables				
Work Cable and Clamp				

Date:

Total Quoted Price:

*  Certified to both the Canadian and U.S. Standards for welding equipment.

**  50 Hz models with CE Specifications are manufactured according to the Standards IEC-974-1 and EN-60974-1. Conforms with NEMA EW 1 "Electric Arc Welding Power Source," Class I (100).



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