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XMT® 450 Series

Multiprocess Welding Power Source

Quick Specs

Heavy Industrial Applications
- Construction
- Shipbuilding
- Railroad
- Truck/trailer manufacturing
- Fabrication
- Repair shops
- Rental fleets
- Power generation plants

Processes

MIG (GMAW)/Pulsed MIG (GMAW-P)*
- Stick (SMAW)
- TIG (GTAW)
- Flux-cored (FCAW)
- Air carbon arc cutting and gouging (CAC-A)
  - Rated: 5/16-inch carbons
  - Capable: 3/8-inch carbons

**Available on select models.*

Input Power 230/460 V or 575 V
Requires 3-phase power

Output Range 10–38 V, 15–600 A

Net Weight 122 lb. (55.3 kg)

Aux. Power (optional) 120 V, 10 amps

ArcReach (recommended option)
Remote voltage control without a control cable

Excellent arc performance make the XMT family the most popular in the industry.

With multiprocess capabilities and more welding output, the XMT 450 is versatile for applications from jobsites to the factory floor.



XMT 450 CC/CV shown

90% EFFICIENT
Uses fewer amps for cost savings

QA BETTER WELDS WITH LESS REWORK
Best multiprocess capabilities

PRODUCTIVITY QUALITY SAFETY
ArcReach®— remote control without a cord

TRUE BLUE® 3YR. WARRANTY

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

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An ITW Welding Company
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MillerWelds.com

Certified System ISO 9001 Quality

Choosing the Correct XMT® 450



MOST POPULAR!

XMT 450 CC/CV

Flexibility and simplicity make this the most popular model. It has the core multiprocess capabilities along with the flexibility of a 14-pin for spool guns, feeders, and remote controls.



XMT 450 MPa

Built-in pulse programs for manufacturing and fabrication applications that have benefits for standard steels, high-strength steels and aluminum.



ArcReach® XMT 450 CC/CV (Recommended Option)

Remote control of the power source without a cord.

With an ArcReach® SuitCase® feeder and ArcReach power source you can change the output voltage at the feeder, and save a trip to the power supply. No extra control cord to purchase, maintain, string or unstring — saving time and money.

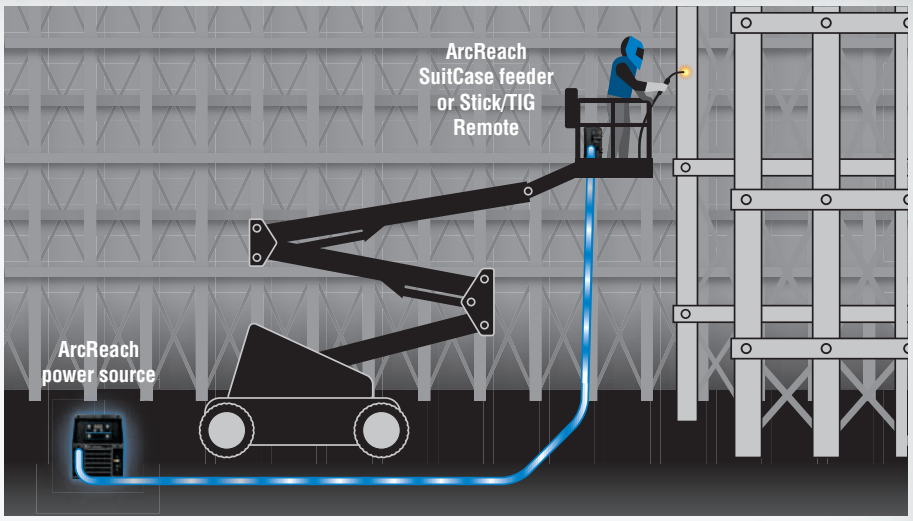
		XMT 450 CC/CV	XMT 450 MPa
Input Power		230/460 V, 400 V (CE) or 575 V, 3-phase	230/460 V or 575 V, 3-phase
Weld Output		450 A at 38 VDC, 100% duty cycle	
Carbon Arc Gouging		Rated: 5/16-inch carbons, Capable: 3/8-inch carbons	
Net Weight		122 lb. (55.3 kg)	
Output Connections		1/2-inch stud	
Stick/TIG/MIG		●	●
Pulsed MIG			●
Available with ArcReach® (recommended option)		●	
Compatible Accessories	Insight Core™	●	●
	ArcReach® SuitCase® Feeders	●	●
	Bench Feeders	●	●
	Spool Guns	●	●
	Remote Controls	●	●

Tech Talk

ArcReach®

Remote control of the power source without a cord.

ArcReach technology uses the existing weld cable to communicate welding control information between the feeder or remote and power source. This technology eliminates the need for control cords, and their associated problems and costs.



XMT® 450 Series Features

Versatility

14-pin receptacle has the flexibility to be used with spool guns, feeders, and remote controls.

Optional 115-volt auxiliary power provides 10 amps of circuit-breaker-protected power for coolant systems, etc.

Insight Core™

Optional Welding Intelligence™ system. XMT CC/CV and MPa models are Insight-capable to monitor weld voltage, amperage, and arc-time and percentage.



XMT 450 CC/CV panel shown

Multiprocess weld quality

High-quality performance in all welding processes.

Adaptive Hot Start™ makes starting stick electrodes easy without creating an inclusion.

Infinite arc control available in the stick and wire modes for easier fine tuning of tough-to-weld materials and out-of-position applications.

Lift-Arc™ provides arc starting that minimizes contamination of the electrode and without the use of high-frequency.

Reliability

Wind Tunnel Technology™. Internal air flow that protects electrical components and PC boards from dirt, dust and debris… greatly improving reliability.

Fan-On-Demand™ cooling system operates only when needed, reducing noise, energy use and the amount of contaminants pulled through machine.

Unique case design helps protect internal components from dirt and dust. To connect input power cord and/or set unit up for correct input power, remove the easy-to-handle panel (1/3 case). The remaining two-thirds of the case never needs to be removed!

Welder friendly control panel

Process selector switch reduces the number of control setup combinations without reducing any features.

Large, dual digital meters are easy to view and are presettable to ease setting weld output.

Ultra-tough, polycarbonate-blended cover protects front controls from damage.

Primary voltage display shows what primary voltage the power source is linked for without removing the side panels. Saves time and assures you that the power source has been correctly linked for available input voltage.

Auto Remote Sense™ enables unit to automatically use remote control if connected to remote control receptacle.

Additional XMT® 450 MPa Features

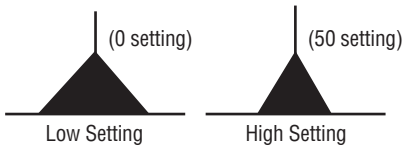
Built-in pulse programs for manufacturing and fabrication applications that have benefits for standard steels, high-strength steels and aluminum.



Setup indicator lights
- Arc control indicator
- Wire type indicator
- Gas type indicator
- Setup button

Advanced arc control enables an improved pulse welding arc. The operator has more control over puddle and bead characteristics using SharpArc. In addition, the unit provides a more robust and stable arc at very low arc length, reducing heat input, and providing the ability to weld on a wider range of material thickness.

SharpArc® controls the arc in pulsed MIG mode and gives total control over the arc cone shape, puddle fluidity and bead profile. If a gas is used other than what is listed in the chart above, SharpArc can be adjusted to help customize your arc to the gas being used. Lower SharpArc settings widen the arc cone, increase puddle fluidity and flattens the weld bead.



Built-in pulsed MIG programs provide reduced heat affected zone, weld in all positions, great for thick-to-thin metal, good gap filling ability and faster travel speeds and deposition. See the table below for the wide range of pulsed MIG (GMAW-P) welding applications the XMT MPa models can handle.

Wire Types — diameter in inches (mm)		Gas Types
Steel	.035 (0.9) STL, .045 (1.2) STL, .052 (1.4) STL, 1/16 (1.6) STL	ARGN CO_2 (argon/carbon dioxide) 80 ARGN CO_2 (argon/carbon dioxide) ARGN OXY (argon/oxygen)
Steel 100S	.035 (0.9) STL, .045 (1.2) STL, 1/16 (1.6) STL	100S C5 (95 argon/5 carbon dioxide)
Metal Core	.045 (1.2) MCOR, .052 (1.4) MCOR, 1/16 (1.6) MCOR	ARGN CO_2 (argon/carbon dioxide)
Stainless Steel	.035 (0.9) SSTL, .045 (1.2) SSTL	TRI MIX (tri-gas mixture) ARGN OXY (argon/oxygen) ARGN CO_2 (argon/carbon dioxide)
	1/16 (1.6) SSTL	ARGN CO_2 (argon/carbon dioxide)
Aluminum	.035 (0.9) AL4X (4000 Series) .040 (1.0) AL4X (4000 Series) 3/64 (1.2) AL4X (4000 Series) 1/16 (1.6) AL4X (4000 Series)	ARGN (argon)
	.035 (0.9) AL49 (4943) .040 (1.0) AL49 (4943) 3/64 (1.2) AL49 (4943) 1/16 (1.6) AL49 (4943)	ARGN (argon)
	.035 (0.9) AL5X (5000 Series) .040 (1.0) AL5X (5000 Series) 3/64 (1.2) AL5X (5000 Series) 1/16 (1.6) AL5X (5000 Series)	ARGN (argon) HE AR25 (helium/argon)
Nickel	.035 (0.9) NI, .045 (1.2) NI	ARGN HE (argon/helium) ARGN (argon)
	1/16 (1.6) NI	ARGN (argon)
Copper Nickel	.035 (0.9) CUNI, .045 (1.2) CUNI	HE ARGN (helium/argon)
Silicon Bronze	.035 (0.9) SIBR, .045 (1.2) SIBR	ARGN (argon)
Titanium	.035 (0.9) TI-5, .045 (1.2) TI-5	ARGN HE25 (75 argon/25 helium)
	.035 (0.9) TI-5, .045 (1.2) TI-5, 1/16 (1.6) TI-2	ARGN HE50 (50 argon/50 helium)
	1/16 (1.6) TI-2	HE100 (100 helium)

Additional features when using a 70 Series MPa Plus feeder or XR-AlumaFeed® feeder.



Synergic pulsed MIG. As you increase/decrease the wire feed speed, the pulse parameters increase/decrease, matching the right amount of power output to match the wire speed, eliminating the need to make additional adjustments.



Profile Pulse™ provides TIG appearance with MIG simplicity and productivity. Achieve "stacked dimes" without gun manipulation. Profile Pulse frequency can be changed to increase or decrease the spacing between the ripple pattern to achieve the desired weld appearance.

Added capabilities with Insight Core™. When using an MPa Plus feeder, wire deposition is added to the Insight Core capabilities.

ArcReach® Features and Advantages (Available on select CC/CV models.)

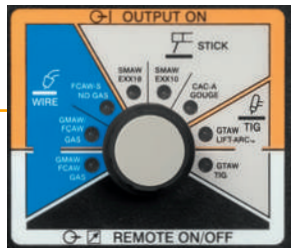


Remote in use indicator provides convenient feedback indicating an ArcReach wire feeder is controlling the power source. While under ArcReach control, process and voltage/amperage adjustments are locked out, preventing accidental changes by personnel other than the welding operator.

Auto-Bind automatically establishes an exclusive communication between the power source and the wire feeder, using the existing weld cables upon system power up.



Fleet compatibility. ArcReach-equipped power sources and wire feeders work with non-ArcReach equipment; however, the complete ArcReach benefit is only realized with the ArcReach system.



LED process indicator. Front panel process selections are illuminated with an LED that identifies the active process. This enables the selected weld process to be seen at a distance from the power source. Includes new carbon arc gouging mode for enhanced arc stability and control, and two new stick modes (EXX10 and EXX18) designed to reduce spatter and enhance arc starts.

ArcReach provides remote voltage control at the wire feeder without needing a control cable.



Increased productivity

More arc-on time and reduced exposure to workplace hazards for operators can be realized using ArcReach because less time is spent going back to the welding power supply to set process and arc voltage.

Auto-Process Select.™ System automatically changes to MIG/FCAW (with gas) if electrode positive polarity is detected or FCAW (no gas) if electrode negative polarity is detected, when ArcReach communication is established between the feeder and the XMT® — reducing the need to access the power supply.

Automatic return to panel settings. System automatically returns to XMT setting when ArcReach communication is terminated. For example, if the XMT is set to gouging at 350 amps and an ArcReach feeder is connected, the XMT will go to a MIG/FCAW process. If the feeder is disconnected, the XMT will go back to its previous setting (gouging at 350 amps).

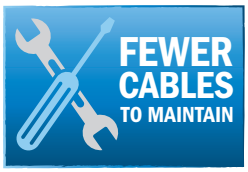
Less operator fatigue by not needing to move or reposition both heavy secondary weld leads bundled with control cords on the jobsite. Control cables are not used.



Improved weld quality

Remote override of XMT. When an ArcReach feeder is connected to an XMT the feeder has full control and the XMT controls are disabled. While under ArcReach control, process and voltage/amperage adjustments are locked out, preventing accidental changes by personnel other than the welding operator.

Operator can precisely set arc voltage at the feeder and monitor the actual arc voltage and current delivered to the weld using the digital meters on the feeder. This removes guesswork when it comes to adhering to weld procedures.



Reduced maintenance

Save time by no longer needing to troubleshoot welding system problems that result from damaged control cords.

Eliminate costly control cord repairs because control cords are not used.

Specifications (Subject to change without notice.)

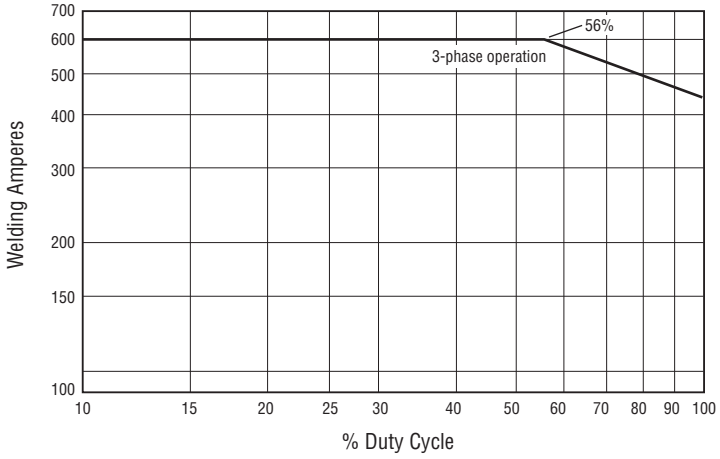
Model	Input Power	Voltage Range in CV Mode	Amperage Range in CC Mode	Rated Output	Amps Input at Rated Load Output, 60 Hz 230 V	400 V	460 V	575 V	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
XMT 450 CC/CV	Three-phase	10–38 V	15–600 A	450 A at 38 VDC, 100% duty cycle	51	32.1	27.6	24.4	22	18.9	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)
XMT 450 MPa					51	—	27.6	23.6	21.6*	18.3			

**KVA is 23.5 on 575 V.*

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

Performance Data

Duty Cycle Chart



Genuine Miller® Accessories



XMT® 450 CC/CV ArcReach® Rack
907700 4-pack rack, fused for 460 V

Conveniently houses multiple XMT power sources for multiple welders. Features include:

- Provision to parallel power sources on common work connections
- Two lifting eyes for transportation
- Rugged skids for dragging or pushing

For detailed information on customized inverter rack systems see literature DC/18.81.



MIGRunner™ Cart
195445 For single feeders
Small footprint and easily maneuverable, with dual-cylinder rack low enough that you do not have to lift bottles. Durable ergonomic handles are designed for comfort.
Note: Not compatible with dual wire feeders.



Running Gear Cylinder Rack
300408 For single or dual feeders
Holds two large gas cylinders and has gun cable hangers and a consumable drawer in front. A convenient handle allows the cart to be pulled easily through doorways. Power source and single or dual feeders can be mounted to cart and secured.

Genuine Miller® Accessories (Continued)

Remote Controls



Wireless Remote Foot Control 300429
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 90-foot (27.4 m) operating range.



Wireless Remote Hand Control 300430
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 300-foot (91.4 m) operating range.



RFCS-14 HD Foot Control 194744
Maximum flexibility is accomplished with a reconfigurable cord that can exit the front, back or either side of the pedal. Foot pedal provides remote current and contactor control. Includes 20-foot (6 m) cord and 14-pin plug.



RHC-14 Hand Control
242211020
20-foot (6 m) cord
242211100
100-foot (30.5 m) cord
Miniature hand control for remote current and contactor control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm). Includes cord and 14-pin plug.



RCC-14 Remote Contactor and Current Control 151086
East/west rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord and 14-pin plug.



RCCS-14 Remote Contactor and Current Control 043688
North/south rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord and 14-pin plug.

Extension Cables for Remote Controls and 24 VAC Wire Feeders
242208025 25 ft. (7.6 m)
242208050 50 ft. (15 m)
242208080 80 ft. (24.3 m)
14-pin plug to 14-pin socket. Not for use with XR-AlumaFeed® or 70 Series MPa feeder.

Wire Feeders/Guns



ArcReach® SuitCase® 8
951726 With Bernard® BTB Gun 300 A
951728 With Bernard® Dura-Flux™ gun
ArcReach® SuitCase® 12
951729 With Bernard® BTB Gun 300 A
951731 With Bernard® Dura-Flux™ gun
Portable feeder designed to run off of arc voltage. When paired with an ArcReach power source, provides remote control of the power source without a control cord — saving time and money. See literature M/6.55.



SuitCase® 12RC 951580
Lightweight, portable wire feeder for a variety of wires up to .062 inch. Holds up to a 12-inch (12RC) spool of wire. Includes remote voltage control, drive roll kit and Bernard® BTB Gun 300 A. See literature M/6.5.



XR™-S Control 300601
Controls offer unsurpassed performance and reliability for feeding aluminum and other difficult-to-feed wire types. Models include .035-inch and factory-installed 3/64-inch drive rolls. See literature M/1.7.



XR-AlumaFeed® 300509
Advanced push-pull wire feeder designed for high-volume, high-production aluminum MIG welding where quality and consistency is a high priority. See literature DC/34.0.



70 Series
S-74S 951196
S-74D 951198
Features Posifeed™ wire drive assembly and handles a variety of wires up to 1/8 inch. Includes Bernard® BTB Gun 400 A. Dual-wire models also available. See literature M/3.0.



70 Series MPa Plus
S-74 MPa Plus 951291
D-74 MPa Plus 951292
Same features as traditional 70 Series plus more. Handles a variety of wires up to 5/64 inch. Includes Bernard® BTB Gun 400 A. Works synergically with MPa power sources. See literature M/3.0.

Extension Cables
247831025 25 ft. (7.6 m)
247831050 50 ft. (15.2 m)
247831080 80 ft. (24.4 m)
Eleven conductors to support contactor control and remote voltage control on all Miller® electronic CV 14-pin power sources. Additional functions supported when using MPa power sources include synergic pulsed MIG, remote process select and side select capabilities.



Spoolmatic® 30A 130831
WC-24 (137549) required for use with 14-pin receptacles, order separately. A one-pound, air-cooled spool gun that extends the weld process range by adding a handy portable system for small wire MIG. Rated 200 amps at 100% duty cycle. Includes 30-foot (9.1 m) cable assembly.



WC-24 Weld Control 137549
Required to use Spoolmatic 30A spool gun. Designed for use with Miller CV power sources with 14-pin receptacles and supplying 24 VAC.

Welding Intelligence™



Insight Core™ 14-pin Module 301072
Easy-to-install module brings Insight Core capabilities to your existing fleet. This simplified, Internet-based weld data solution collects, transmits and presents actionable information to any Web-connected device. Insight Core can help you increase productivity, improve weld quality and manage costs.

Ordering Information Most popular models◄

Power Source and Options	Stock No.	Description	Qty.	Price
XMT® 450 CC/CV	907481 ◄ 907525	230/460 V 400 V with auxiliary power and **CE**		
XMT® 450 MPa	907479 ◄ 907479001 907480	230/460 V 230/460 V with auxiliary power 575 V		
XMT® 450 CC/CV ArcReach™	907481003 ◄ 907481004 907482	230/460 V 230/460 V with auxiliary power 575 V		
XMT® 450 Rack	**907700**	Fused 460 V. See literature DC/18.81		
Gas Valve Kit	**300928**	For XMT 450		
Accessories				
MIGRunner™ Cart	**195445**	For single feeders		
Running Gear Cylinder Rack	**300408**	For single or dual feeders		
Remote Controls				
Wireless Remote Foot Control	**300429**	Foot control with wireless 90 ft. (27.4 m) operating range		
Wireless Remote Hand Control	**300430**	Hand control with wireless 300 ft. (91.4 m) operating range		
RFCS-14 HD	**194744**	Foot control with 20 ft. (6 m) cord and 14-pin plug		
RHC-14	**242211020** **242211100**	Hand control with 20 ft. (6 m) cord Hand control with 100 ft. (30.5 m) cord		
RCC-14	**151086**	Fingertip control		
RCCS-14	**043688**	Fingertip control		
Extension Cables (8-conductor)		See page 7		
Wire Feeders/Guns				
ArcReach® SuitCase® 8	**951726** **951728**	With Bernard® BTB Gun 300 A. See literature M/6.55 With Bernard® Dura-Flux™ gun		
ArcReach® SuitCase® 12	**951729** **951731**	With Bernard® BTB Gun 300 A. See literature M/6.55 With Bernard® Dura-Flux™ gun		
SuitCase® 12RC	**951580**	With Bernard® BTB Gun 300 A. See literature M/6.5		
XR™-S Control	**300601**	Standard model with wire feed speed digital display, jog/purge, run-in control, and trigger hold. See literature M/1.7		
XR-AlumaFeed®	**300509**	Advanced model adds Profile Pulse™, synergic control, trigger schedule select, lock capabilities and flow meter. See literature DC/34.0		
70 Series	**951196** **951198**	S-74S. See literature M/3.0 S-74D. See literature M/3.0		
70 Series MPa Plus	**951291** **951292**	S-74 MPa (single-wire). Works synergically with MPa power sources D-74 MPa (dual-wire). Works synergically with MPa power sources		
Extension Cables (11-conductor)		See page 7		
Spoolmatic® 30A Spool Gun	**130831**	Requires WC-24 for use with 14-pin receptacles		
WC-24 Weld Control	**137549**	Required for use with Spoolmatic® 30A and power sources **with** 14-pin		
Bernard® MIG Guns		See Bernard literature SP-BTB		
Welding Intelligence		See page 7		

Date: **Total Quoted Price:**

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