

XMT® 450/600 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, 400 V or 575 V, 3-phase power

Output Range 15–600 A, 10–38 V

Net Weight 122 lb. (55.3 kg)

Auxiliary Power (option) 120 V, 10 amps

ArcReach® (recommended option)

Remote voltage control without a control cord

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

With multiprocess capabilities and more welding output, the XMT 450/600 is versatile for applications from jobsites to the factory floor.



XMT 450/600 shown.



Uses fewer amps
for cost savings



Best multiprocess
capabilities



ArcReach® —
remote control without a cord

ArcReach®

Remote voltage control at the wire feeder or remote without a control cord. See page 5 for more information.



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



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f X v i n



Choose the Correct XMT® 450/600



MOST POPULAR!

XMT 450/600

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 450/600 MPa

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



XMT 450/600 ArcReach (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.

FEATURE	XMT 450/600	XMT 450/600 MPa	XMT 450/600 ARC REACH
Input power	230/460 V, 400 V (CE) or 575 V, 3-phase	230/460 V or 575 V, 3-phase	230/460 V or 575 V, 3-phase
Weld output	450 A at 38 VDC, 100% duty cycle 600 A, 56% duty cycle	450 A at 38 VDC, 100% duty cycle 600 A, 56% duty cycle	450 A at 38 VDC, 100% duty cycle 600 A, 56% duty cycle
Carbon arc gouging	Rated: 5/16-inch carbons Capable: 3/8-inch carbons	Rated: 5/16-inch carbons Capable: 3/8-inch carbons	Rated: 5/16-inch carbons Capable: 3/8-inch carbons
Net weight	122 lb. (55.3 kg)	122 lb. (55.3 kg)	122 lb. (55.3 kg)
Output connections	1/2-inch stud	1/2-inch stud	1/2-inch stud
Stick/TIG/MIG	■	■	■
Pulsed MIG		■	
Available with ArcReach® (recommended option)			■
Compatible Accessories			
ArcReach® SuitCase® feeders	■	■	■
Bench feeders	■	■	■
Spool guns	■	■	■
Remote controls	■	■	■

XMT® 450/600 Series Features



XMT 450/600 panel shown.

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.

Multiprocess weld quality

High-quality performance in all welding processes.

Adaptive Hot Start™ provides positive arc starts without sticking.

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 only operates when needed, reducing power consumption and keeping internal components cleaner.

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.

Specifications (Subject to change without notice.)



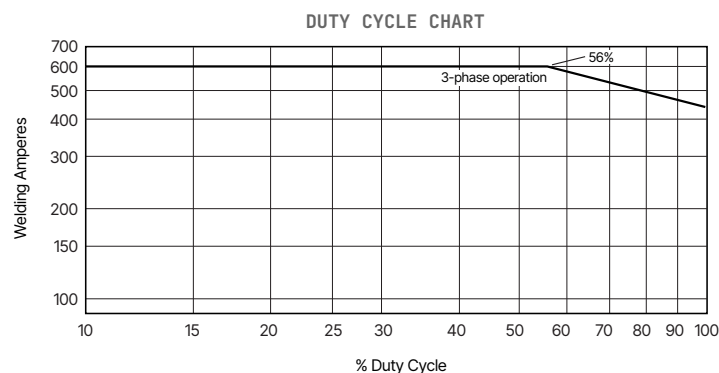
MODEL	AMPERAGE/ VOLTAGE RANGES	RATED OUTPUT	AMPS INPUT AT RATED LOAD OUTPUT, 60 HZ						MAX. OPEN- CIRCUIT VOLTAGE	DIMENSIONS	NET WEIGHT
XMT 450/600 and XMT 450/600 ArcReach®	15–600 A in CC mode 10–38 V in CV mode	450 A at 38 VDC, 100% duty cycle	51	32.1	27.6	24.4	22	18.9	90 VDC	H: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)
XMT 450/600 MPa			51	32.1	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



Additional XMT® 450/600 MPa Features

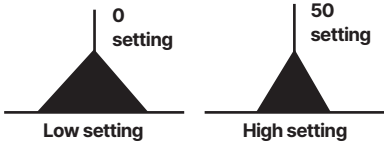
Built-in pulse programs for manufacturing and fabrication applications that have benefits for standard steels, high-strength steels and aluminum.



- 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.

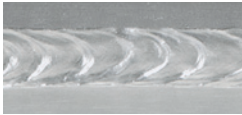
WIRE TYPES – DIAMETER IN INCHES (MM)		GAS TYPES
Steel	.035 (0.9) STL, .045 (1.2) STL, .052 (1.4) STL, 1/16 (1.6) STL	ARGN CO2 (argon/carbon dioxide) 80 ARGN CO2 (argon/carbon dioxide) ARGN OXY (argon/oxygen)
Steel 100S	.035 (0.9) STL, .045 (1.2) STL, 1/16 (1.6) STL	100S C5 (95 argon/5 carbon dioxide)
Metal Core	.045 (1.2) MCOR, .052 (1.4) MCOR, 1/16 (1.6) MCOR	ARGN CO2 (argon/carbon dioxide)
Stainless Steel	.035 (0.9) SSTL, .045 (1.2) SSTL	TRI MIX (tri-gas mixture) ARGN OXY (argon/oxygen) ARGN CO2 (argon/carbon dioxide)
	1/16 (1.6) SSTL	ARGN CO2 (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 74 MPa Plus feeder or XR-AlumaFeed® SuitCase® feeder.

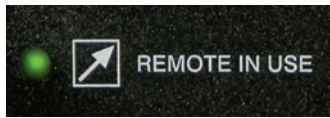


Synergic pulsed MIG. As you increase/decrease the wire feed speed, the pulse parameters increase/decrease, matching the right amount of power output to match the wire speed, eliminating the need to make additional adjustments.

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.



Additional XMT® 450/600 ArcReach® Features



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.

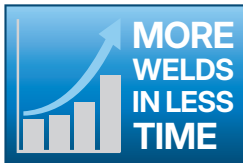
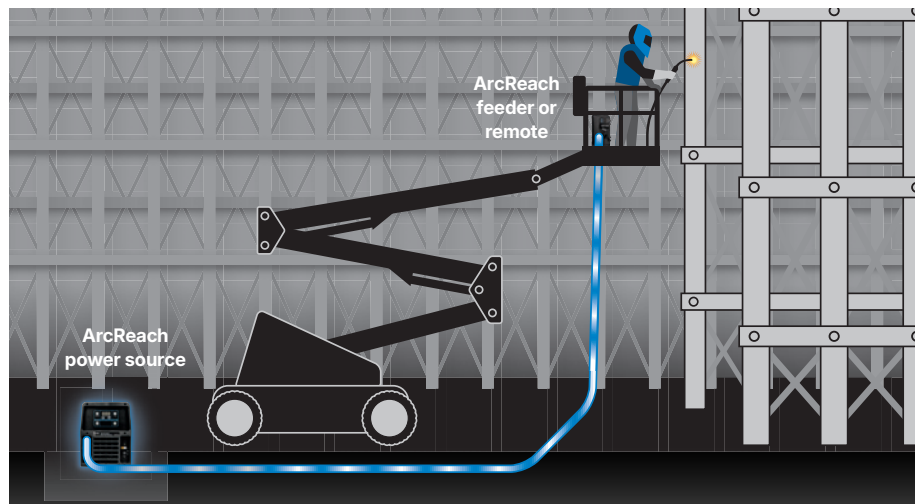


LED process indicator. Front panel process selections are illuminated with an LED that identifies the active process. This enables the selected weld process to be seen at a distance from the power source. Includes new carbon arc gouging mode for enhanced arc stability and control, and two new stick modes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

ArcReach®

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.



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).

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

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.

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.

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.

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.



Improved weld quality



Reduced maintenance

Genuine Miller® Accessories



XMT® 450/600 ArcReach® 4-Pack Rack

907700 460 V

907608 575 V

Comes assembled with four XMT 450/600 ArcReach power sources fused for 460 or 575 volts.

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/19.0.



MIGRunner™ Cart 195445

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

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.



ArcReach® Stick/TIG Remote 301325

When paired with an ArcReach power source, provides remote control of the power source without a cord — saving time and money. See literature AY/14.5.



Industrial MIG 4/0 Kit 300390

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.

Adapter Cord 301259

115-volt cord for legacy 14-pin accessories. Required to connect to legacy accessories.

Note: For XMT models with auxiliary power only.

Wire Feeders/Guns



ArcReach® SuitCase® 8

951726001 With Bernard® BTB Gun 300 A

951728001 With Bernard® IronPro™ 350 gun

ArcReach® SuitCase® 12

951729001 With Bernard® BTB Gun 300 A

951731001 With Bernard® IronPro™ 350 gun

Portable feeder designed to run off of arc voltage. Includes BTB Gun or IronPro™ gun with AccuLock™ consumables. 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.



ArcReach® SuitCase® 12 Heavy Duty 951000096

For 3/32-inch cored wire. Portable feeder designed to run off of arc voltage. Includes Bernard® IronPro™ 450 flux-cored gun with AccuLock™ consumables. 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 951580001

Lightweight, portable wire feeder for a variety of wires up to .062-inch diameter. Holds up to a 12-inch spool of wire. Includes remote voltage control, drive roll kit and Bernard® BTB Gun 300 A with AccuLock™ consumables. See literature M/6.5.



XR-AlumaFeed® SuitCase® 301567

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.



74 MPa Plus

S-74 MPa Plus 951291001

D-74 MPa Plus 951292001

Heavy-duty industrial feeder with features for weld control and programs, plus push-pull aluminum capabilities. Handles a variety of wires up to 5/64 inch. Includes Bernard® BTB Gun 400 A with AccuLock™ consumables. Works synergically with MPa power sources. See literature M/3.0.



20 Series

Basic 951779001

Digital 951780001

Simple and cost-effective industrial feeders. Digital model adds digital meter, remote voltage control and adjustable run-in control. Handles a variety of wires up to 5/64 inch. Includes Bernard® BTB Gun 400 A with AccuLock™ consumables. See literature M/11.0.

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.

Genuine Miller® Accessories

Wire Feeders/Guns (cont.)



Spoolmatic® 30A 130831

One-pound, air-cooled spool gun that extends the weld process range by adding

a handy portable system for small wire MIG. Rated at 200 amps at 100 percent duty cycle. Includes 30-foot (9.1 m) cable assembly. Requires WC-24 Weld Control **137549** for use with 14-pin receptacles, order separately.



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.

Remote Controls



Wireless Remote Foot Control 301580

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 301582

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 301589

Heavy-duty foot pedal current and contactor control provides increased stability and durability from larger base and heavier cord.

Includes 20-foot (6 m) cord with 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 74 MPa Plus feeder.

Ordering Information (Most popular models ◀)

POWER SOURCE AND OPTIONS	STOCK NO.	DESCRIPTION	QTY.	PRICE
XMT® 450/600	907481 ◀ 907525	230/460 V CE. 400 V with auxiliary power		
XMT® 450/600 MPa	907479 ◀ 907479001 907468 907480	230/460 V 230/460 V with auxiliary power CE. 400 V with auxiliary power 575 V		
XMT® 450/600 ArcReach™	907481003 ◀ 907481004 907481006 907482	230/460 V 230/460 V with auxiliary power 400 V 575 V		
XMT® 450/600 ArcReach® 4-Pack Rack	907700	Fused for 460 V. See Multioperator Racks literature DC/19.0 for more information		
Accessories				
Gas Valve Kit	300928			
MIGRunner™ Cart	195445	For single feeders		
Running Gear Cylinder Rack	300408	For single or dual feeders		
ArcReach® Stick/TIG Remote	301325	Point-of-use control for stick or TIG welding and gouging		
Industrial MIG 4/0 Kit	300390	See page 6 for contents		
Adapter Cord	301259	115-volt cord for legacy 14-pin accessories — required to connect to legacy accessories. For use with XMT models with auxiliary power only		
Wire Feeders/Guns				
ArcReach® SuitCase® 8 MIG/FCAW Feeder with Tweco-style Connectors	951726001 951728001	With drive rolls and Bernard BTB Gun 300 A with AccuLock™ consumables With drive rolls and Bernard IronPro™ 350 flux-cored gun with AccuLock™ consumables		
ArcReach® SuitCase® 12 MIG/FCAW Feeder with Tweco-style Connectors	951729001 951731001	With drive rolls and Bernard BTB Gun 300 A with AccuLock™ consumables With drive rolls and Bernard IronPro™ 350 flux-cored gun with AccuLock™ consumables		
ArcReach® SuitCase® 12 Heavy Duty FCAW Feeder w/Tweco-style connectors	951000096	For 3/32 in. flux-cored wire. With drive rolls and Bernard® IronPro™ 450 flux-cored gun with AccuLock™ consumables		
SuitCase® 12RC MIG/FCAW Feeder with Tweco-style Connectors	951580001	With drive rolls and Bernard BTB Gun 300 A with AccuLock™ consumables Not compatible with XMT 650 ArcReach polarity reversing model		
XR-AlumaFeed® SuitCase® Aluminum MIG Feeder	301567	Feeder only. For high-volume, high-production aluminum MIG welding Not compatible with XMT 650 ArcReach polarity reversing model		
74 MPa Plus MIG/FCAW Feeder	951291001 951292001	S-74 MPa Plus (single-wire). Works synergically with MPa power sources D-74 MPa Plus (dual-wire). Works synergically with MPa power sources		
20 Series MIG/FCAW Feeder	951779001 951780001	Basic Digital		
Extension Cables (11-conductor)		See page 6		
Spoolmatic® 30A Spool Gun	130831	Requires WC-24 weld control 137549 for use with 14-pin receptacles		
Bernard® BTB Gun (GMAW)		See Bernard literature SP-BTB		
Bernard® IronPro™ (FCAW)		See Bernard literature SP-IP		
Remote Controls				
Wireless Remote Foot Control	301580	Foot control with wireless 90 ft. (27.4 m) operating range		
Wireless Remote Hand Control	301582	Hand control with wireless 300 ft. (91.4 m) operating range		
RFCS-14 HD	301589	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		

DATE: TOTAL QUOTED PRICE:

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