XMT® 350/450 MPa Series

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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)

Input Power
350: Requires 3- or 1-Phase Power, 208–575 VAC, 50/60 Hz
450: Requires 3-Phase Power, 230/460 VAC, 60 Hz

Rated Output
350: 10–38 V, 15–425 A
450: 10–38 V, 15–600 A

Net Weight
350: 80 lb (36.3 kg)
450: 122 lb (55.3 kg)

The Power of Blue.®

WIRELESS REMOTE COMPATIBLE

Wind Tunnel Technology™ protects electrical components and PC boards from contamination.

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

Lift-Arc™ allows TIG starting without the use of high-frequency. Starts the arc without contaminating the weld with tungsten.

Adaptive Hot Start™ increases the output amperage at the start of a weld if necessary, eliminating electrode sticking.

Lightweight, aerospace-grade aluminum case offers protection with the benefit of reduced weight.

Standard built-in Pulsed MIG programs with synergic capability (see page 3).

XMT 350 MPa

New! **XMT 450 MPa —** Higher Output for Demanding Applications.

EQUIP to WELD™

Build your own system at **MillerWelds.com/equiptoweld.**

Inverter arc control technology provides greater puddle control for superior 6010 Stick electrode performance, and outstanding MIG weld performance.

Line voltage compensation keeps welding output constant even if input power varies by +/-10%. XMT 350 model further expands line voltage compensation to an amazing +37% and -59% when operating on 460 VAC.

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.

115 VAC auxiliary power provides 10 amps of circuit-breaker-protected power for water circulators, etc.

XMT 350 MPa Model Only

Auto-Line™ **Power Management Technology** allows for any input voltage hook-up (208–575 V) with no manual linking required, providing convenience in any job setting. Ideal solution for dirty or unreliable input power. (450 model is manual link.)

Dinse- or Tweco-style weld disconnects provide high-quality weld cable connections. (450 model utilizes studs.)

TRUE BLUE® 3 YR. WARRANTY

Power source is warranted for 3 years, parts and labor.
Original main power rectified parts are warranted for 5 years.
Gun warranted for 90 days, parts and labor.

MADE IN USA
APPLETON, WI

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

Web Site
www.MillerWelds.com

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

ITW Welding Italy srl
Via privata Iseo 6/e
20098 San Giuliano Milanese
(Milan) - Italy
Phone: +39 02 982901
FAX: +39 02 98281552
Email: itw@itw-welding.it

ISO 9001:2000 REGISTERED QUALITY SYSTEM

# XMT® 350/450 MPa Specifications (Subject to change without notice.)

(XMT 450 MPa is 3-Phase only.)

| Model	Input Power	Rated Output	Voltage Range in CV Mode	Amperage Range in CC Mode	Max. Open-Circuit Voltage	Amps Input at Rated Load Output, 60 Hz							Dimensions	Weight
						208 V	230 V	400 V	460 V	575 V	KVA	KW		
XMT 350 MPa	Three-Phase	350 A at 34 VDC, 60% Duty Cycle	10−38 V	15−425 A	75 VDC	40.4	36.1	20.6	17.8	14.1	14.2	13.6	H: 17 in (432 mm) W: 12-1/2 in (318 mm) D: 24 in (610 mm)	80 lb (36.3 kg)
	Single-Phase	300 A at 32 VDC, 60% Duty Cycle	10−38 V	15−425 A	75 VDC	60.8	54.6	29.7	24.5	19.9	11.7	11.2		
XMT 450 MPa	Three-Phase	450 A at 38 VDC, 100% Duty Cycle	10−38 V	15−600 A	90 VDC	—	51	—	27.6	—	22	18.9	H: 17-1/4 in (438 mm) W: 14-1/2 in (368 mm) D: 27-1/8 in (689 mm)	122 lb (55.3 kg)

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

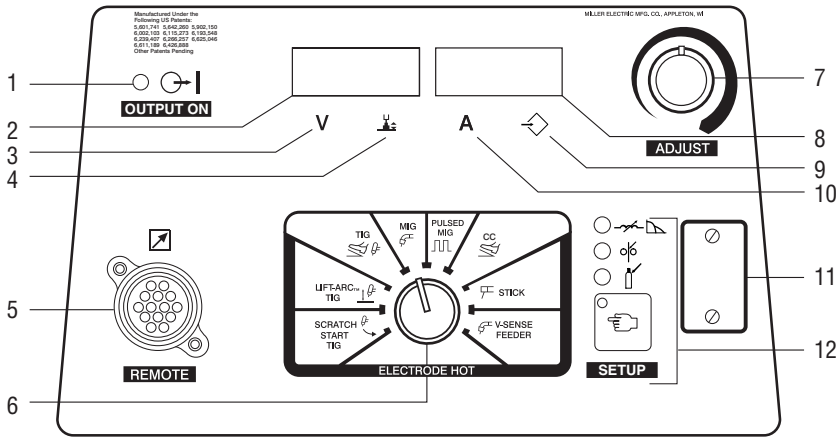# XMT® 350/450 MPa Performance Data

XMT 350 MPa DUTY CYCLE CHART
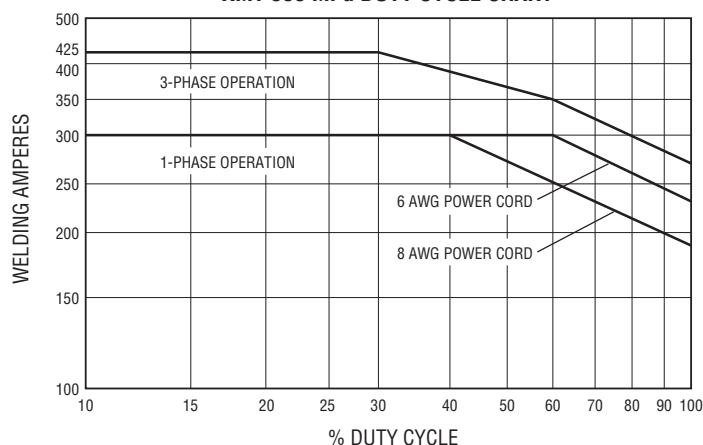
XMT 450 MPa DUTY CYCLE CHART

Miller
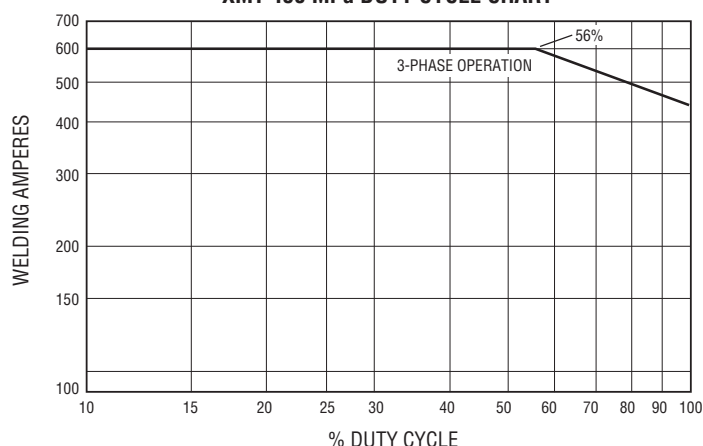
XMT® 350/450 MPa Control Panel

The simple, powerful XMT MPa models can handle almost any portable welding application. Add the S-74 MPa or XR-AlumaFeed™ feeder for a synergic system that simplifies Pulsed MIG welding applications.

1. Output ON Indicator Light
2. Left Display
3. Voltage Display
4. Arc Length Indicator
5. Remote Control Receptacle
6. Process Selector Switch (Rotary Switch)
7. Adjustment Control
8. Right Display
9. Setup Indicator
10. Amperage Indicator
11. Remote PC Interface
12. Setup Indicator Lights
   • Arc Control Indicator
   • Wire Type Indicator
   • Gas Type Indicator
   • Setup Button

Built-In Pulsed MIG Programs

The XMT MPa models have built-in Pulsed MIG programs. See the table below for the wide range of Pulsed MIG (GMAW-P) welding applications the XMT MPa models can handle.

| Wire Types		Gas Types
Steel	.035 STL, .045 STL	90% ARGN / 10% CO_2 (Argon/Carbon Dioxide) 95% ARGN / 5% OXY (Argon/Oxygen)
	.052 STL (450 model only) 1/16 STL (450 model only)	90% ARGN / 10% CO_2 (Argon/Carbon Dioxide) 95% ARGN / 5% OXY (Argon/Oxygen)
Metal Core	.035 MCOR .045 MCOR .052 MCOR 1/16 MCOR (450 model only)	90% ARGN / 10% CO_2 (Argon/Carbon Dioxide)
Stainless Steel	.035 SSTL, .045 SSTL	TRI MIX (Tri-gas mixture: 81% ARGN / 18% HE / 1% CO_2 [Argon/Helium/Carbon Dioxide]) 98% ARGN / 2% OXY (Argon/Oxygen) 98% ARGN / 2% CO_2 (Argon/Carbon Dioxide)
Aluminum	.035 AL4X (4000 Series) .040 AL4X (4000 Series) 3/64 AL4X (4000 Series) 1/16 AL4X (4000 Series)	100% ARGN (Argon)
	.035 AL5X (5000 Series) .040 AL5X (5000 Series) 3/64 AL5X (5000 Series) 1/16 AL5X (5000 Series)	100% ARGN (Argon) 75% HE / 25% ARGN (Helium/Argon)
Nickel	.035 NI, .045 NI	75% ARGN / 25% HE (Argon/Helium)
Silicon Bronze	.035 SIBR	100% ARGN (Argon)
Copper Nickel	.045 CUNI	75% HE / 25% ARGN (Helium/Argon)

MPa

MPa: M (MIG), P (Pulse), a (Advanced Arc Control). 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.

What are some benefits of Synergic Pulsed MIG?
1. Easy to setup
2. No more changing wire speed and then having to go back to reset the weld output.

SharpArc™

SharpArc controls welding arc cone width in Pulsed MIG (GMAW-P) welding mode.

(0 setting)   (50 setting)

Low Setting   High Setting
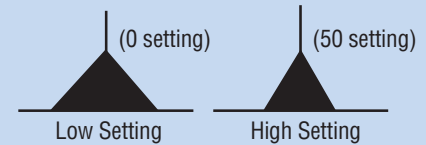
If a gas is used other than what is listed on the Pulsed MIG welding program chart (below left), the SharpArc™ can be adjusted to help customize your arc to the gas being used.

Lower SharpArc™ settings widen the arc cone, increase puddle fluidity and flattens the weld bead.

Additional Features

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

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

Synergic Pulsed MIG — Adding the S-74 MPa Plus feeder or the XR-AlumaFeed™ feeder gives you the benefit of a Synergic Pulsed MIG system. 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.

Genuine Miller Accessories

Protective Cover

#195 478
Mildew and water resistant, odor-free cover protects your machine's finish. For 300/350 A inverters: XMT, Maxstar and Dynasty.

Remote Controls

Wireless Remote Foot Control   #300 429
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 90 ft (27.4 m) operating range.

Wireless Remote Hand Control   #300 430
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller machine. 300 ft (91.4 m) operating range.

**RFCS-14
Foot Control
#043 554**
Heavy-duty foot current and contactor control.

Includes 20 ft (6 m) cord and 14-pin plug.

RMLS-14   #129 337 14-pin plug
Momentary- and maintained-contact rocker switch for contactor control. Push forward for maintained contact and back for momentary contact. Includes 20 ft (6 m) cord.

RHC-14
Hand Control*
#242 211 020
20 ft (6 m) cord
#242 211 100
100 ft (30.5 m) cord

Miniature hand control for remote current and contactor control. Dimensions: 4 x 4 x 3-1/4 in (102 x 102 x 82 mm). Includes cord and 14-pin plug.

*Custom lengths available in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

RCC-14 Remote Contactor and Current Control   #151 086 14-pin plug
Rotary-motion fingertip control fastens to TIG torch using two Velcro® straps. Includes 26.5 ft (8 m) control cord.

RCCS-14 Remote Contactor and Current Control   #043 688 14-pin plug
Up-and-down rotary-motion fingertip control. Great for applications that require a finer amperage control. Includes 26.5 ft (8 m) control cord.

Extension Cables for Remote Controls and 24 VAC Wire Feeders*
#242 208 025 25 ft (7.6 m)
#242 208 050 50 ft (15 m)
#242 208 080 80 ft (24.3 m)
14-pin plug to 14-pin socket. Not for use with XR-AlumaFeed or 70 Series MPa feeder.
*Custom lengths available in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

Arc Striking Device

**HF 5000
High-Frequency Arc Starter #V29012345**
Arc starting for DC TIG welding on thin stainless steel, brass, copper, and a range of ferrous and non-ferrous alloys.

Running Gear

MT-1 Main Assembly

**MT-1 Running Gear kit
#058066101**
Use with MT Running Gear to get MIG configuration. Easily to assembly

**MT Running Gear
#018035025**
Small footprint and easily maneuverable with cylinder rack low enough that you do not have to lift bottles. Used for TIG configuration.

MT-1 with turntable kit

MT-1 Main Assembly

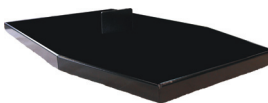**MT-2 Turntable kit
#058066291**
Use with MT-1 Running Gear allows for easy movement of wire feeder.

RG-60 Single Gas Cylinder Cart #018035021

**RG Cart Rotating Baseplate
#057094054**

RG-75 Double Gas Cylinder Cart #018035022

Miller.

Wire Feeders/Guns

SuitCase® X-TREME™ 8VS   #951 181
SuitCase® X-TREME™ 12VS   #951 184
Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8VS) or 12 in (12VS) spool of wire. Operates on open-circuit voltage eliminating the need for a control/power cord. See Lit. Index No. M/6.41.

SuitCase® 8RC   #951 186
SuitCase® 12RC   #951 188
Lightweight, portable wire feeder for a variety of wires up to .062 in. Holds up to an 8 in (8RC) or 12 in (12RC) spool of wire. Operates using 14-pin control receptacle. See Lit. Index No. M/6.5.

XR™-S Control   #300 601
XR™-D Control   #300 687
The updated XR Controls offer unsurpassed performance and reliability for feeding aluminum and other difficult-to-feed wire types. Models include .035 in and factory-installed 3/64 in drive rolls. See Lit. Index No. M/1.7.

70 Series MPa Plus
S-74 MPa Plus   #300 577
D-74 MPa Plus   #300 578
Same features as traditional 70 Series plus more. Handles a variety of wires up to 5/64 in. Comes with FREE Bernard® Q™-Gun. Works synergically with MPa power sources. See Lit. Index No. M/3.0.

XR-AlumaFeed™
#300 509
Advanced push-pull wire feeder designed for high-volume, high-production aluminum MIG welding where quality and consistency is a high priority. Works synergically with XMT MPa models. See Lit. Index No. DC/34.

Extension Cables*
#247 831 025 25 ft (7.6 m)
#247 831 050 50 ft (15.2 m)
#247 831 080 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 include Synergic Pulsed MIG, remote process select and side select capabilities when using MPa power sources with 70 Series MPa Plus feeder or XR-AlumaFeed feeder.

Custom lengths available in 5 ft increments up to 50 ft and 10 ft increments up to 100 ft.

ST-44 Wire Feeder
#029 007 406
#029 007 404
Basic and digital no synergic wire feeder completed with water kit . See Lit. MN/51.2

ST-24 Wire Feeder
#029 007 395
#029 007 396
#029 007 397
Basic and digital no synergic wire feeder completed with water kit and RVC. See Lit. WFM/4.0.

Spoolmatic® 30A   #130 831
A 1-lb, air-cooled spool gun that extends the weld process range by adding a handy portable system for small wire MIG. Rated 200 A at 100% duty cycle. Includes 30 ft (9.1 m) cable assembly. WC-24 (#137 549) required for use with 14-pin receptacles, order separately.

Ironmate™ Flux Cored Guns
See Lit. Index No. AY/16.0.
FC-1260
#195 732 10 ft (3 m)
#195 729 15 ft (4.6 m)
FC-1260LM
#194 912 10 ft (3 m)
#194 911 15 ft (4.6 m)
FC-1150
#194 864 10 ft (3 m)
#194 863 15 ft (4.6 m)

Genuine Miller Accessories (continued)

Water Coolant Systems

For more information, see the Miller Coolant Systems literature sheet, Index No.

Hydracool 1

Hydracool 2

Hydracool 1
#028042103 115VAC
#028042104 230VAC

With 8L coolant tank capacity and 1670 Watts (5698 BTU/h) at 1 L/m (1.1 qt/min) maximum coolant capacity.

Hydracool 2
#028042105 115VAC
#028042106 230VAC

With 8L coolant tank capacity and 1760 Watts (6005 BTU/h) at 1 L/m (1.1 qt/min) maximum coolant capacity.

Blu-Liquid Coolant #050024004

Sold in cases of four 10-litre recyclable plastic bottles. Blu-Liquid coolants contain a base of propane-1,2-diol and deionized water to protect against freezing to -16°C (3.2°F) or boiling to 190°C (374°F).

Notes

Ordering Information

Power Source and Options	Stock No.	Description	Qty.	Price
XMT® 350 MPa	#907 366	208−575 VAC with Auto-Line™		
	#907 366-01-1	208−575 VAC with Auto-Line™ and Auxiliary Power		
	#907 558	230−460 VAC with Auto-Line™ and Auxiliary Power and **CE**		
	#907 366-01-4	208−575 VAC with Auto-Line™ and Tweco connectors		
XMT® 450 MPa	#907 479	230−460 VAC		
	#907 479 001	230−460 VAC with Auxiliary Power		
	#907 468	400 VAC with Auto-Line™ and Auxiliary Power and **CE**		
Inverter Racks (full or empty)		See Lit. Index No. DC/18.81		
Accessories				
WC-24 Weld Control	#137 549	For use with Spoolmatic® 30A and power sources with 14-pin		
HF-5000 HF Starter	#V29012345	See Lit. Index No. AYM/5.1		
Wireless Remote Foot Control	#300 429	Foot control with wireless 90 ft (27.4 m) operating range		
Wireless Remote Hand Control	#300 430	Hand control with wireless 300 ft (91.4 m) operating range		
RFCS-14	#043 554	Foot control		
RHC-14	#242 211 020	Hand control with 20 ft (6 m) cord Hand		
	#242 211 100	control with 100 ft (30.5 m) cord		
RMLS-14	#129 337	Rocker switch		
RCC-14	#151 086	Fingertip control		
RCCS-14	#043 688	Fingertip control		
Extension Cables		See pages 4 and 5		
Running Gear				
MT Running Gear	#018035025	See page 4		
MT-1 Running Gear Kit	#058066101	See page 4		
MT-2 Wire Feeder Turntable Kit	#058066291	See page 4		
Single Gas Cylinder Cart	#018035021	See page 4. RG 60 with single gas cylinder support bracket		
Double Gas Cylinder Cart	#018035022	See page 4. RG 75 with double gas cylinder support bracket		
Rotating Baseplate	#057094054	See page 4. Rotating baseplate for RG control		
Protective Cover	#195 478			
Wire Feeders/Guns				
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		
SuitCase® 8RC	#951 186	See Lit. Index No. M/6.5		
SuitCase® 12RC	#951 188	See Lit. Index No. M/6.5		
XR™-S Control	#300 601	Standard model with wire feed speed digital display, jog/purge, run-in control, and trigger hold. See Lit. Index No. M/1.7		
XR™-D Control	#300 687	Enhanced model has same features as XR-S model plus advanced digital and programming capabilities. See Lit. Index No. M/1.7		
70 Series MPa Plus	#300 577	S-74 MPa (single-wire). Works synergically with MPa power sources D-74		
	#300 578	MPa (dual-wire). Works synergically with MPa power sources		
XR-AlumaFeed™	#300 509	Advanced model adds Profile Pulse™, synergic control, trigger schedule select, lock capabilities and flow meter		
ST-44	#029007406	Basic no-synergic wire feeder		
	#029007404	Digital meter no-synergic wire feeder c/w water kit		
ST-24	#029007395	Basic no-synergic wire feeder		
	#029007396	Basic no-synergic wire feeder c/w water kit & RVC		
	#029007397	Digital meter no-synergic wire feeder c/w water kit & RVC		
Spoolmatic® 30A Spool Gun	#130 831	Requires WC-24 for use with 14-pin receptacles		
Ironmate™ Flux Cored Guns		See Lit. Index No. AY/16.0 See		
Water Coolant Systems		page 6. See Lit. Index No.		
Hydracool 1	#028042103	Water cooling system, 115VAC		
	#028042104	Water cooling system, 230VAC		
Hydracool 2	#028042105	Water cooling system, 115VAC		
	#028042106	Water cooling system, 230VAC		
Blu-Liquid	#050024004	Liquid for coolant systems, 10L		

Date:

Total Quoted Price:

Miller®

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