

# XMT<sup>®</sup> ArcReach<sup>™</sup> System

**Multiprocess  
Welding System** 

## Quick Specs

### Heavy Industrial Applications

Construction and Shipbuilding

### Processes

MIG (GMAW)  
Stick (SMAW)  
TIG (GTAW)  
Flux-Cored (FCAW)  
Air Carbon Arc (CAC-A)  
**350:** 5/16-inch (8 mm) carbons  
**450:** 3/8-inch (9.5 mm) carbons

### XMT Power Sources

**Input Power** **350:** 3- or 1-Phase Power  
**450:** 3-Phase Power  
**Output Power** **350:** 10–38 V, 10–425 A  
**450:** 10–38 V, 10–600 A  
**Net Weight** **350:** 80 lb. (36.3 kg)  
**450:** 122 lb. (55.3 kg)

### SuitCase X-TREME 8VS ArcReach/12VS ArcReach

**Input Power**  
Open Circuit/Arc Voltage, 14–110 VDC  
**Wire Feed Speed**  
50–780 IPM (1.3–19.8 m/min.)  
**Net Weight**  
**8VS:** 28 lb. (13 kg) **12VS:** 35 lb. (15.9 kg)

## ArcReach<sup>™</sup> Remote control of the power source without a cord.

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



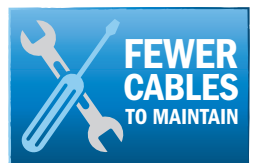
System shown: XMT 450 VS ArcReach and SuitCase<sup>®</sup> X-TREME<sup>™</sup> 12VS ArcReach feeder with Bernard<sup>™</sup> S-Gun<sup>™</sup>.



Increased productivity



Improved weld quality



Reduced maintenance



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



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# ArcReach™ System Advantages

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.

**Automatic process select** to MIG/FCAW (with gas) if DCEP is detected or FCAW (no gas) if DCEN is detected, when ArcReach communication is established between the feeder and the power supply. Reduces need to access power supply.

**Automatic return to panel settings** on power supply when ArcReach communication is terminated, permits the power supply controls to act as a second weld schedule without needing to access the welding power supply. For example, if the power supply is set for gouging, the system can weld FCAW via ArcReach, and as soon as the feeder is disconnected the operator can return to gouging, saving a trip back to the welding power supply.

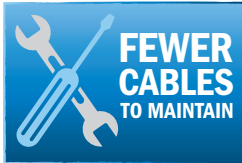
**Less operator fatigue** by not needing to move or reposition both heavy secondary weld leads bundled with control cords on the worksite. Control cables are not used.



Improved weld quality

**Remote override of weld process and arc voltage** enables the operator to have maximum control over the arc. This prevents setting changes from being made at the power supply when the feeder and power supply are in communication.

**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 guess work when it comes to adhering to weld procedures.



Reduced maintenance

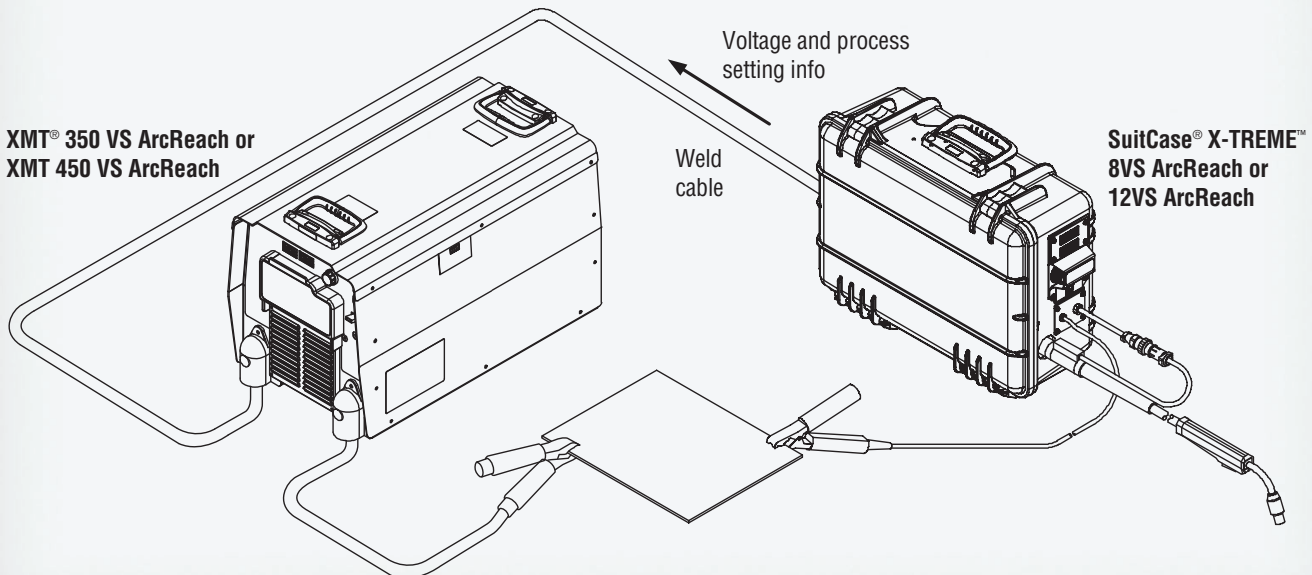
**Save time** by no longer needing to troubleshoot welding system problems that result from damaged control cords.

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

## Tech Talk

### ArcReach Technology

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



# Choosing the Correct System

## Select an XMT

- Two models available:
- XMT 350 VS ArcReach
  - XMT 450 VS ArcReach

### XMT® 350 VS ArcReach™



### XMT® 450 VS ArcReach™



Input Power	3- or 1-Phase Power	3-Phase Power
Primary Operating Range	Auto-Line™ (208–575 V)	Manual Link (230 or 460 V)
Net Weight	80 lb. (36.3 kg)	122 lb. (55.3 kg)
Carbon Arc Gouging	Rated: 5/16-in. Carbons	Rated: 3/8-in. Carbons
Secondary Output Termination	Tweco®	1/2-in. Stud

## Select a Feeder

- Two models are recommended:
- SuitCase X-TREME 8VS ArcReach
  - SuitCase X-TREME 12VS ArcReach

### SuitCase® X-TREME™ VS

*Note: Though compatible, these models do not offer feeder-based voltage control or process selection.*



### SuitCase® X-TREME™ VS ArcReach™



**RECOMMENDED**

Wire Speed Control	Yes		Yes
Voltage Control	No	<b>UPGRADE</b>	Yes
Amperage Control	No		No
Net Weight	8VS: 28 lb. (13 kg) 12VS: 35 lb. (15.9 kg)		8VS: 28 lb. (13 kg) 12VS: 35 lb. (15.9 kg)
Spool Size/Capacity	8VS: 8 in./14 lb. 12VS: 8 in./14 lb. or 12 in./45 lb.		8VS: 8 in./14 lb. 12VS: 8 in./14 lb. or 12 in./45 lb.
Trigger Hold	Yes		Yes
Remote Process Selection	No	<b>UPGRADE</b>	Partial (MIG/FCAW)
Program Memory	No		No
Arc Control	No		No
Weld Sequencing	Soft Start		Soft Start
Polarity Indication on Feeder	No		No
Cumulative Weld Timer	Yes		Yes

# XMT<sup>®</sup> ArcReach<sup>™</sup> System



**Remote In Use indicator** provides convenient feedback indicating an ArcReach wire feeder is controlling the power source. While under

ArcReach control, process and V/A adjustments are locked out, preventing accidental changes by personnel other than the welding operator.



**Digital meters** with SunVision<sup>™</sup> technology enable welding parameters to be viewed and changed with improved resolution over analog meters, and at virtually any angle. Meters can be seen clearly even in direct sunlight.



**Ez-Bind<sup>™</sup> feature.** Easily establishes an exclusive connection between the power source and the wire feeder, using only the weld cable. When a connection is established, other ArcReach wire feeders are prevented from gaining control of the power source. The connection is made by holding the gun trigger two to five seconds prior to initiating the first weld.



**Tweco<sup>®</sup> versus studs.** The XMT 350 is equipped with Tweco-style weld connections (left) while the XMT 450 (see page 1) is equipped with studs (right) for ring-lug output connections.



**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.



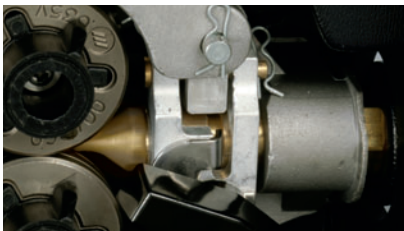
**Scaled wire pressure knob** provides easy adjustment and consistent pressure on the drive rolls and wire.

**Wire drive and motor assembly** is specifically designed for mobile welding applications to provide smooth and consistent wire delivery. Improved motor torque and drive roll system are designed to feed small-diameter solid wire (.023 inch) to large-diameter cored wire (5/64 inch).

**Ultra-low drag inlet guide pins** make loading the wire easy and do not deform the wire on the way into the drive rolls. Simply thread the wire through the pins and into drive rolls.

**Electronic wire feed speed control with integrated tachometer** ensures best-in-class wire feed speed accuracy.

**Process recall.** When an Ez-Bind™ connection is established between the power source and feeder the process will automatically change to MIG/FCAW (with gas) if DCEP is detected, or FCAW (no gas) if DCEN is detected at the feeder. When disconnected you will return to the last process set at the power source.

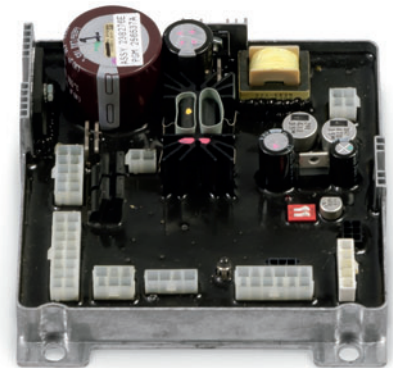


**Gun locking tab** works with guns having corresponding locking grooves to prevent gun from being pulled out if the feeder is dragged by the gun.



**Digital meters with SunVision™ technology** display voltage and wire speed, and amperage if desired. Meters can be seen clearly even in direct sunlight.

**Voltage/wirefeed speed control** allows adjustment of the welding power source preset when used in an ArcReach system.



**Potted and trayed main printed circuit board** for the harshest environments adds exceptional reliability. Board has full-trigger isolation so a shorted gun trigger will not affect feeder operation.

# XMT® Power Source Additional Features

**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.

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

**Line voltage compensation** keeps welding output constant even if input power varies by +/-10% (XMT 450). Line voltage compensation further expands to +37% and -59% when operating on 460 VAC with Auto-Line™ (XMT 350).

**Lightweight, aerospace-grade aluminum case** offers protection and reduced weight. **Ultra-tough, polycarbonate-blended cover for control panel** protects front controls from damage.

**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.

**Optional gas solenoid for TIG welding.**

## XMT 350-Specific Features

**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.

**Tweco-style weld disconnects** provide high-quality weld cable connections.

## XMT 450-Specific Features

**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.

**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!

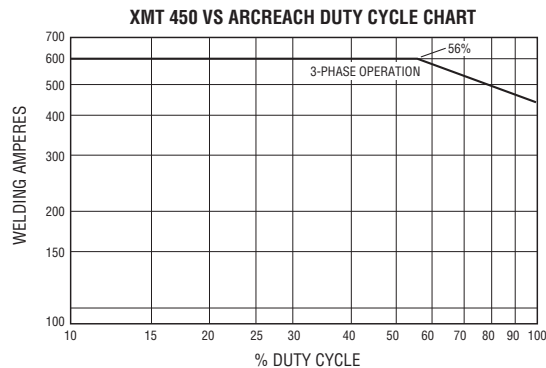
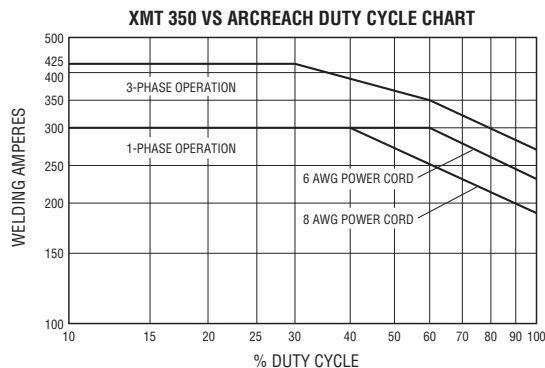
# XMT® Power Source Specifications (Subject to change without notice.)



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	Net Weight
						208 V	230 V	400 V	460 V	575 V	KVA	KW			
350 VS ArcReach™	Three-Phase	350 A at 34 VDC, 60% Duty Cycle	10–38 V	5–425 A	75 VDC	40.4	36.1	20.6	17.8	14.1	14.2	13.6	H: 17 in. (432 mm) W: 12.5 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	5–425 A	75 VDC	60.8	54.6	29.7	24.5	19.9	11.7	11.2			
450 VS ArcReach™	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: 17.25 in. (438 mm) W: 14.5 in. (368 mm) D: 27.125 in. (689 mm)	122 lb. (55.3 kg)	

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

# XMT® Power Source Performance Data



## SuitCase® X-TREME™ VS ArcReach™ Additional Features

**Improved contactor** for high-amperage, high duty cycle applications (8VS: 330 A at 60%, 12VS: 425 A at 60%).

**Polypropylene case with built-in slide rails** and the ability to open the door to change wire with feeder in vertical position.

**Double-filtered gas valve** helps keep dirt from clogging and affecting gas flow.

**Excellent starts and superior arc performance** for all types and sizes of wires using a CV or CC power supply.

## SuitCase® X-TREME™ VS ArcReach™ Specifications (Subject to change without notice.)



Model	Input Power	Welding Power Source Type	Input Welding Circuit Rating	Electrode Wire Diameter Capacity	Max. Spool Size Capacity	Wire Speed	Dimensions	Net Weight
8VS	Operates on open-circuit voltage and arc voltage: 14–48 VDC/110 Max OCV	CC/CV DC power sources. AC type not recommended.	330 A at 60% Duty Cycle	<b>Solid Wire:</b> .023–.062 in. (0.6–1.6 mm) <b>Flux-Cored:</b> .030–.062 in. (0.8–1.6 mm)	8 in. (203 mm) 14 lb. (6.4 kg)	50–780 IPM (1.3–19.8 m/min.) dependent on arc voltage	H: 12.75 in. (324 mm) W: 7.25 in. (184 mm) D: 18 in. (457 mm)	28 lb. (13 kg)
12VS			425 A at 60% Duty Cycle	<b>Solid Wire:</b> .023–5/64 in. (0.6–2.0 mm) <b>Flux-Cored:</b> .030–5/64 in. (0.8–2.0 mm)	12 in. (305 mm) Up to 45 lb. (20.4 kg)		H: 15.5 in. (394 mm) W: 9 in. (229 mm) D: 21 in. (533 mm)	35 lb. (15.9 kg)

## Bernard™ S-Gun™ 250-Amp MIG Gun

The Bernard S-Gun is versatile, dependable and built with the goal of improving your welding productivity and performance. The **15-foot (4.6 m) 250-amp MIG gun** together with an ArcReach System helps optimize weld quality while increasing productivity.



### Locked Rotatable Neck

- Cannot be easily removed by operator, but can be serviced by maintenance
- Eliminates downtime at start of shift caused by missing neck
- Reduces replacement neck purchases, thereby reducing operator costs



### Handle

- Constructed of high-impact glass-reinforced composite to endure the roughest conditions. Ergonomically designed for control and extended use

### Trigger

- Designed and built to last more than one million cycles

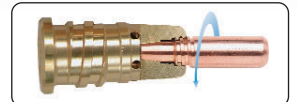
### NEW! 250 Steel Monocoil Power Cable

- Lightweight steel coils create an exceptional conduit for gas flow and wire feed
- Engineered to run commonly used wire sizes (.045–1/16 in.) with optimal flexibility and weight



### Quik Tip™ Series Consumables

- Designed with threaded taper lock that increases tip life by providing excellent heat transfer and electrical conductivity



# Genuine Miller® Accessories

## Cable Connectors and Adapters

Note: ArcReach Control is equipped with either Dinse- or Tweco-style connectors for secondary connections.



**Dinse/Tweco® Adapter  
#042 465**

**Dinse/Cam-Lok  
Adapter #042 466**

One-piece adapter with Dinse-style male plug (to power source) on one end and female receptacle (Tweco or Cam-Lok for weld cable connection) on other end.

## Dinse-Style Connector

**#042 418**  
Accepts #4 AWG to #1/0 cable size.

**#042 533**  
Accepts #1/0 to #2/0 AWG cable size.

Kit includes one Dinse-style male plug which attaches to the work and/or weld cables and plugs into the Dinse-style receptacles on the power source.

## Extension Kit for Dinse-Style Cable Connectors

**#042 419**  
Accepts #4 AWG to #1/0 cable size.

**#042 534**  
Accepts #1/0 to #2/0 AWG cable size.

Used to adapt or extend weld and/or work cables. Kit includes one male Dinse-style plug and one in-line female Dinse-style receptacle.

## Ordering Information

Equipment	Stock No.	Description	Qty.	Price
<b>Power Sources</b>				
XMT® 350 VS ArcReach™	#907 224 002	XMT with Tweco connections (208–575 V, 50/60 Hz)		
XMT® 450 VS ArcReach™	#907 481 002	XMT with ring lugs (230/460 V, 60 Hz)		
<b>Wire Feeders</b>				
SuitCase® X-TREME™ 8VS ArcReach™	#951 588	With Bernard® S-Gun™		
	#951 584	With Bernard® Q300 Gun		
SuitCase® X-TREME™ 12VS ArcReach™	#951 589	With Bernard® S-Gun™		
	#951 581	With Bernard® Q300 Gun		
SuitCase® X-TREME™ 8VS and 12VS		See Lit. Index No. AY/6.42		
Flowmeter Kit	#300 343			
Inline Filter	#195 189			
Spool Adapter	#047 141	For 14-lb. spools. X-TREME 12VS only		
<b>Guns</b>				
Bernard™ S-Gun™ (GMAW)	#S2515TE5EM	250 A, 15 ft. (4.6 m). See page 7		
Bernard™ Q300 (GMAW)		See Welding Components and Parts Guide		
Bernard™ Dura-Flux™ (FCAW)		See Welding Components and Parts Guide		
Ironmate™ 1260 (FCAW)		See Lit. Index No. AY/16.0		
Roughneck® C-Series (GMAW)		See Lit. Index No. AY/17.0		
Inverter Racks (full or empty)		See Lit. Index No. DC/18.81		
Cable Connectors and Adapters		See above		

Date:

Total Quoted Price:

Distributed by:

