

# PipePro<sup>®</sup> XC

## Welding System

**Multiprocess Pipe Welding Systems** 

### Quick Specs



**Pipe Welding Applications**  
Pipeline construction

**Processes\***  
MMA (SMAW)  
MIG (GMAW)  
RMD<sup>®</sup>  
Metal-cored (MCAW)  
Flux-cored (FCAW)

**Rated Output** 400 A at 34 V, 100% duty cycle  
**Amp/Volt Range** 40–350 A, 10–39 V  
**Net Weight** PipePro 400XC: 56.7 kg (125 lb.)  
PipePro XC Feeder: 15.2 kg (33.5 lb.)  
PipePro XC RMD Feeder: 15.2 kg (33.5 lb.)

\*Processes available depend on PipePro feeder selected.

Designed specifically to meet the rugged demands of pipeline welding applications.

#### Fill and Cap Pass System Components (order separately)

- PipePro 400XC power source
- PipePro XC suitcase-style feeder
- Bernard™ PipePro Dura-Flux™ gun (self-shielded FCAW)

#### PipePro 400XC Power Source

Able to perform simple MMA welding to advanced MIG RMD welding. The arc performance and ease-of-use is optimized to provide quality and productivity, while simplifying welding training.

#### Root-Fill-Cap Pass System Components (order separately)

- PipePro 400XC power source
- PipePro XC RMD suitcase-style feeder
- Bernard™ PipePro Dura-Flux™ gun (self-shielded FCAW)
- Bernard™ PipeWorx gun (gas-shielded)

#### PipePro XC Feeder

Uniquely designed to operate with the PipePro XC power source to perform FCAW self-shielded weld process for fill and cap pass welding on pipelines.



#### PipePro XC RMD Feeder

This feeder provides the most versatile welding solution when used with the PipePro XC power source. It provides MIG, RMD, MCAW, and FCAW (self-shielded or gas-shielded wire). All welding processes are optimized for pipe welding.

#### Bernard PipePro Dura-Flux Gun

Uniquely designed to perform self-shielded FCAW with the PipePro XC System for onshore pipeline applications. The gun features a dual schedule switch to enable two sets of welding parameters — wire feed speed and voltage.

#### Bernard PipeWorx 250-15 Gun

Designed by welders to reduce fatigue and improve visibility of the puddle on the root pass.

#### Bernard PipeWorx 300-15 Gun

Provides a heavy-duty solution for producing root, fill and cap welds on pipe.



Power source is warranted for three years, parts and labour.



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# PipePro® XC Welding System Features and Benefits

## PipePro 400XC Power Source (One power source — MMA to RMD® — optimized for pipeline welding applications.)



**Durability.** Specifically designed for the rugged environments of pipeline construction, reducing downtime and service requirements.

- Temperature — power source rating is based on 50°C ambient.
- Shock and vibration — the power source base is designed with shock mounts to reduce vibration when mounted on tractors.
- Dust — Wind Tunnel Technology™ circulates air over components that require cooling (not electronic circuitry).

**Weld performance.** Designed to provide optimum weld performance using either the standard PipePro XC suitcase-style feeder (for self-shielded FCAW) or the more versatile PipePro XC RMD suitcase-style feeder. The excellent arc performance reduces training time and promotes weld quality using all welding processes.

**Ease of use.** Designed to be simple to understand and operate. The operator interface on the power source is limited to the MMA (SMAW) welding process. All MIG and FCAW process controls are located on the feeders. Requires minimal training to set up and use the PipePro XC System.



**Memory card.** Equipped with a memory card reader to provide new capabilities into the future.

- Stores weld parameters for all welding processes. Any PipePro 400XC can be loaded with personal settings.
- Enables the use of custom programs for future applications.
- Provides range locks to be sure PipePro can be limited to the procedure range for wire feed speed and voltage to comply with quality requirements.
- Provides Accu-Power (instantaneous power display) to comply with new ASME Requirements for Complex Wave Form Welding Processes.
- Provides diagnostic information and operational information (arc hours and arc cycles by welding process type) in a text file format.

## PipePro XC Feeder (Designed to perform self-shielded FCAW for fill and cap passes.)



**Durability.** Specifically designed for the rugged environments of pipeline construction. The totally enclosed and impact-resistant case provides strength and durability while protecting internal components and filler metal from moisture and dust.

**Ease of use.** Provides wire feed speed and voltage control with digital meters to enable total process control and monitoring remotely from the power source.

**Dual schedule.** Provides two sets of weld parameters (wire feed speed and voltage) through the actuation of the dual schedule switch built into the PipePro Dura-Flux™ gun.

**Portability.** Lightweight and ergonomically designed to carry.

## PipePro XC RMD Feeder (Designed to perform MIG, RMD, MCAW, and FCAW (self-shielded or gas-shielded wire.)



**This feeder adds the following features/benefits to those listed above.**

**Gas controls.** Equipped with a gas solenoid, purge button and gas control settings for preflow and postflow. This enables this feeder to be used for gas-shielded MIG and FCAW welding processes.

**Weld performance.** Welding processes have been optimized for pipe welding applications. This includes the weld start and stop.

**RMD.** This process is uniquely designed for root pass welding on pipe using either solid or metal-cored wire. See below for additional information.

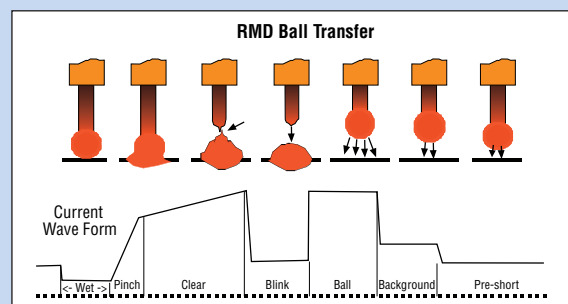
**Ease of use.** Simply select the welding process and wire diameter. The feeder is preset at the factory to provide nominal settings for the process.

- Conventional MIG, MCAW and FCAW — adjust the wire feed speed and voltage, as normal.
- RMD — adjust the wire feed speed and the voltage is automatically set by the weld program.

**Future flexibility.** Can operate with custom programs available through the PipeWorx memory card.

## RMD® (Regulated Metal Deposition)

A precisely controlled short-circuit metal transfer algorithm that provides a calm and stable arc with a well-controlled weld puddle. This provides less chance of cold lap or lack of fusion, less spatter and a higher quality root pass on pipe. The stability of the weld process lessens the puddle manipulation required by the welder and is more tolerant to hi-lo conditions, reducing training requirements. Weld bead profiles are thicker than in conventional root pass welds which can eliminate the need for a hot pass, improving weld productivity. In some stainless steel applications, it may be possible to eliminate the backing (purge) gas to further improve productivity and reduce welding costs.



## PipePro 400XC Power Source

Welding Mode	Amp/Volt Range	Rated Output	IP Rating	Amperes Input at Rated Output, 50/60 Hz	KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
CC: MMA	40–350 A	350 A at 34 V, 100% duty cycle	IP23	380 V 23.5 400 V 22.7	380 V 15.7 400 V 15.9	380 V 13.2 400 V 13.2	80 VDC	H: 375 mm (14.75 in.) W: 464 mm (18.25 in.) D: 686 mm (27 in.)	56.7 kg (125 lb.)
CV: MIG/FCAW	10–39 V	400 A at 34 V, 100% duty cycle		380 V 27.1 400 V 25.7	380 V 18.0 400 V 18.0	380 V 15.5 400 V 15.6			

## PipePro XC Feeders

Input Power	Welding Power Source Type	Input Welding Circuit Rating	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Capacity	IP Rating	Dimensions	Net Weight
24 VAC, 9 A	PipePro 400XC	100 V, 500 A at 100% duty cycle	1.3–12.7 m/min. (50–500 ipm)	0.9–2.0 mm (.035–5/64 in.)	15 kg (33 lb.)	IP23	H: 438 mm (17.25 in.) W: 203 mm (8 in.) D: 508 mm (20 in.)	15.2 kg (33.5 lb.)

## Bernard<sup>™</sup> MIG/FCAW Guns

Bernard Model	100% Duty Cycle NEMA	100% Duty Cycle CE	60% Duty Cycle CE	35% Duty Cycle CE	Gas Type	Cable Length	Net Weight
PipeWorx 250-15	300 A	250 A	300 A	365 A	100% CO <sub>2</sub>	4.6 m (15 ft.)	4.1 kg (9 lb.)
	—	210 A	250 A	300 A	80% argon/20% CO <sub>2</sub>		
PipeWorx 300-15	350 A	320 A	370 A	470 A	CO <sub>2</sub> gas	4.6 m (15 ft.)	4.6 kg (10 lb.)
	—	270 A	310 A	390 A	80% argon/20% CO <sub>2</sub>		
PipePro Dura-Flux <sup>™</sup>	—	—	350 A	—	—	3 m (10 ft.)	4.5 kg (10 lb.)

## Gun Consumables

### Bernard PipeWorx Guns

Description	Part Number	Package Quantity
O-Ring	4478	10
0.9 mm Tapered Tip	TT-035 <sup>1</sup>	10
1.0 mm Tapered Tip	TT-039	10
1.2 mm Tapered Tip	TT-045	10
0.9 mm Tip	T-035	10
1.0 mm Tip	T-039	10
1.2 mm Tip	T-045 <sup>2</sup>	10
1.4 mm Tip	T-052	10
1.6 mm Tip	T-062	10
Nozzle 10 mm ID Tapered Tip	NT-3800C	10
Nozzle 10 mm ID Tapered Tip	NST-3800B <sup>1</sup>	10
Nozzle 10 mm ID Extended Tapered Tip	NST-38XTB	10

Description	Part Number	Package Quantity
0.9–1.2 mm Liner	43115 <sup>1,2</sup>	1
1.2–1.6 mm Liner	44215	1
Nozzle 13 mm ID	NS-1218C	10
Nozzle 16 mm ID	NS-5818C <sup>2</sup>	10
Nozzle 16 mm ID	N-5818C	10
Nozzle 19 mm ID	N-3418C	10
Diffuser	D-1	10
Diffuser	DS-1 <sup>1,2</sup>	10
Q Tube Assembly 60°	QT2-60 <sup>1,2</sup>	1
Q Tube Assembly 80°	QT2-80	1

<sup>1</sup>Standard on PipeWorx 250-15

<sup>2</sup>Standard on PipeWorx 300-15

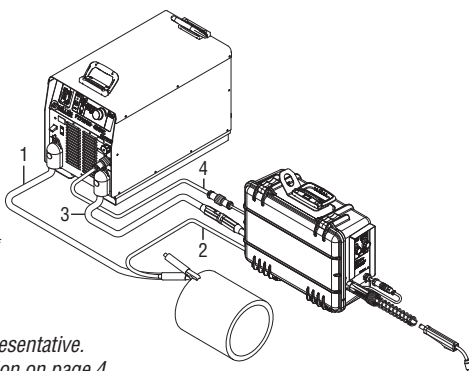
### Bernard Dura-Flux Gun

Description	Part Number	Package Quantity
Tip Insulator	7010062	1
1.4 mm Quik Tip	T1052	25
1.6 mm Quik Tip	T1116	25
2.0 mm Quik Tip	T1564	25
1.2–1.6 mm Jump Liner	QJL-116	10
2.0 mm Jump Liner	QJL-564	10
1.2–1.6 mm Liner	444710	1
2.0 mm Liner	444815	1

## Installation Diagrams

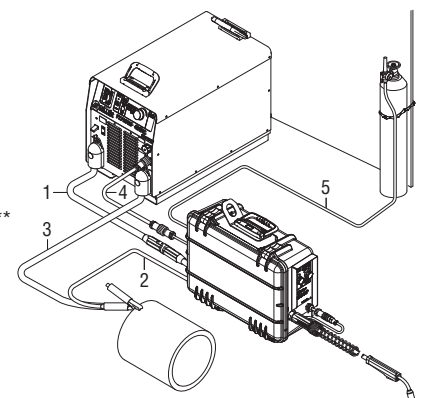
### FCAW (Self-Shielded)

1. Work Cable\*
2. Work Sense Lead\*\*
3. Weld Cable (Electrode Negative)\*
4. Feeder Control Cable\*\*



### MIG/FCAW (Gas-Shielded)

1. Weld Cable\*
2. Work Sense Lead\*\*
3. Work Cable\*
4. Feeder Control Cable\*\*
5. Gas Hose\*



\*Contact your Miller representative.

\*\*See Ordering Information on page 4.

Note: Size 70 mm<sup>2</sup> (2/0) weld cable is recommended with PipePro power sources.

# Ordering Information

Power Source	Stock No.	Description	Qty.	Price
<b>PipePro® 400XC Power Source</b> <i>(Add a wire feeder, gun and cables to create a system)</i>	<b>907675</b>	380–400 V, three-phase		
<b>Wire Feeder</b>				
PipePro XC Feeder	<b>300794</b>	Suitcase-style feeder for FCAW (self-shielded wire)		
PipePro XC RMD® Feeder	<b>300844</b>	Suitcase-style feeder for MIG, RMD, MCAW, and FCAW (self-shielded or gas-shielded wire)		
Filter Inline Shielding Gas	<b>211989</b>			
Spool Adapter	<b>047141</b>	For 6.4 kg (14 lb.) spools		
<b>Wire Feeder Drive Roll Kits</b>				
V-groove for solid wire <i>(Includes two drive rolls, necessary guides and features an anti-wear sleeve for the inlet guide)</i>	<b>079595</b> <b>161189</b> <b>079596</b> <b>079597</b>	0.9 mm (.035 in.) 1.0 mm (.040 in.) 1.1/1.2 mm (.045 in.) — included w/PipePro XC RMD feeder <b>300844</b> 1.3/1.4 mm (.052 in.)		
V-knurled for flux-cored wire <i>(Includes two drive rolls, necessary guides and features an anti-wear sleeve for the inlet guide)</i>	<b>079607</b> <b>079608</b> <b>079609</b> <b>089984</b> <b>079610</b>	1.1/1.2 mm (.045 in.) 1.3/1.4 mm (.052 in.) 1.6 mm (1/16 in.) 1.8 mm (.068/.072 in.) 2.0 mm (5/64 in.) — included with PipePro XC feeder <b>300794</b>		
<b>MIG/FCAW Welding Guns</b>				
Bernard™ PipeWorx 250-15 Gun	<b>195399</b>	250 A air-cooled MIG gun with 4.6 m (15 ft.) cable. Recommended for root pass welding with MIG RMD, especially fixed-position applications		
Bernard™ PipeWorx 300-15 Gun	<b>195400</b>	300 A air-cooled MIG gun with 4.6 m (15 ft.) cable. Recommended for fill and cap pass welding with FCAW		
Bernard™ PipePro Dura-Flux™ Gun	<b>301011</b>	Self-shielded FCAW gun with 3 m (10 ft.) cable and dual schedule switch. 1.4, 1.6, and 2.0 mm (.052, 1/16, and 5/64 in.) consumables		
Gun Consumables		See page 3		
<b>System Cables for Typical Installations</b>				
Feeder Control Cable <i>(One required per system)</i>	<b>300845</b> <b>301039</b>	10 m (32 ft.) 25 m (82 ft.)		
Work-Sense Lead	<b>300947</b> <b>300461</b> <b>300462</b>	5 m (16 ft.) 7.6 m (25 ft.) 15.2 m (50 ft.)		
Air-cooled Interconnecting Cable	<b>058019329</b> <b>058019330</b>	10 m (32 ft.) 70 mmq weld cable, control cable, gas hose 25 m (82 ft.) 70 mmq weld cable, control cable, gas hose		
<b>Remote Controls</b>				
Wireless Remote Hand Control with 14-Pin Receiver	<b>300430</b>	System. See literature AY/6.6		
Wireless Remote Hand Control	<b>300723</b>	Sold individually		
Wireless 14-Pin Receiver	<b>300722</b>	Sold individually		
Belt Clip	<b>249233</b>	Replacement. <i>Order from Miller Service Parts</i>		
Battery Box	<b>249297</b>	Replacement. <i>Order from Miller Service Parts</i>		
RHC-14	<b>242211020</b> <b>242211100</b>	6 m (20 ft.). Hand current control and contactor 30.5 m (100 ft.). Hand current control and contactor		
<b>PipePro Memory Cards</b> <i>(Free software upgrades and calibration software available on MillerWelds.com)</i>				
	<b>301080</b>	Blank card — Used to store weld programs		
	<b>300460</b>	Range locks — Provides ability to set nominal parameter values and ranges for wire feeder processes		
	<b>300667</b>	Accu-Power — Displays instantaneous power during welding to meet the new ASME requirement for calculating heat input on Complex Welding Waveform Processes (RMD)		

Date:

Total Quoted Price:

Miller recommends  consumables

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