

PipeWorx FieldPro™ System

Multiprocess Pipe Welding Systems



Quick Specs

Pipe Welding Field Operations

Process piping
Refinery
Petrochemical
Power
HVAC and water pipe

Processes

Stick (SMAW)
DC TIG (GTAW)
MIG (GMAW)
RMD®
Pulsed MIG (GMAW-P)
Flux-cored (FCAW)
Air carbon arc (CAC-A)
(1/4-inch carbons)

Rated Output 350 A at 34 VDC, 60% duty cycle

Output Range **Stick:** 40–350 A
DC TIG: 10–350 A
MIG/Flux-cored: 10–44 V

Net Weight **Power source:** 100 lb. (45.4 kg)
FieldPro remote: 10 lb. (4.5 kg)
FieldPro feeder: 35 lb. (16 kg)
FieldPro smart feeder: 50 lb. (23 kg)

Simplicity-driven performance for your construction site.

Designed exclusively for onsite pipe welding.



PipeWorx 350 FieldPro shown with optional FieldPro remote, FieldPro feeder, and FieldPro smart feeder.



Simplified cable management

- Save time by eliminating the need to trace cables back to change welding parameters and processes.
- No control cables to string and manage on the jobsite.

Complete control at the weld joint

- FieldPro remote reduces weld defects by automatically setting correct polarity for each welding process — without the need to manually swap cables.
- Eliminates the need to “get by” with less than optimal settings without control cables, and allows for easy setup of a new weld process with the touch of a button.
- Total remote control of welding processes and parameters improves safety by limiting jobsite movement and reducing slip, trip and fall hazards.

Arc performance optimized for critical pipe welding

- Industry-leading arc performance like the PipeWorx 400 welding system, but in a field-ready package.
- True multiprocess system provides conventional stick, TIG, FCAW, and MIG welding as well as the advanced technologies of RMD and pulse.
- Smart feeder delivers excellent RMD and pulse welding up to 200 feet away from the power source with no control cables. RMD and pulse processes also help reduce weld failures and eliminate backing gas on some stainless and chrome-moly applications.

New durability standard for field construction

- Designed and built to withstand the harshest field environments.



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



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f t y i



Stick and TIG Welding Processes



PipeWorx 350 FieldPro

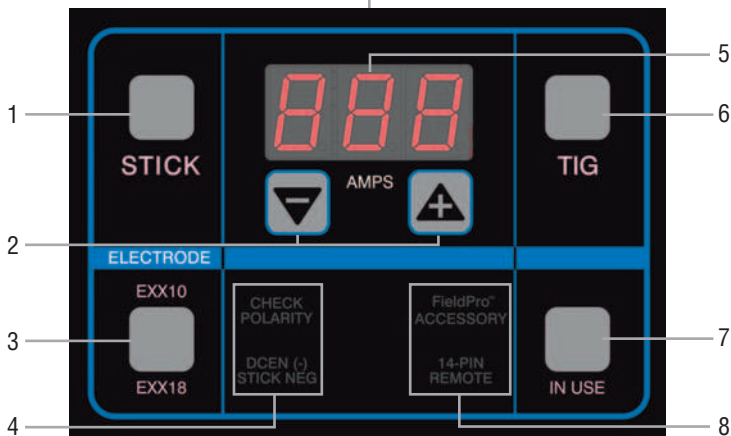


FieldPro remote

Complete remote control. The FieldPro™ remote provides all the same functionality of the PipeWorx 350 FieldPro hundreds of feet from the power source, including process changeover, and amperage adjustment with no special cables. Connect the FieldPro remote in line with the electrode holder or TIG torch with standard welding cables and have *complete remote control*.

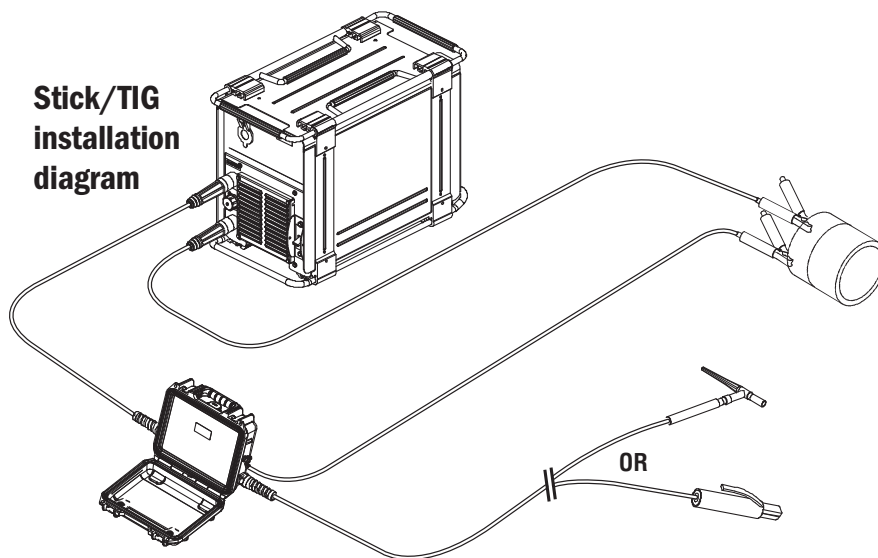
Superior arc performance. The optimized stick and TIG performance specifically meets the needs of open root pipe welding and helps reduce training time and increases quality. Starts maintain root opening and prepared edge and stops limit arc marks outside of the heat-affected zone.

Easy to use. The PipeWorx 350 FieldPro is streamlined and simplified to reduce setup time and potential weld defects. Pushbutton process changeover eliminates the need for swapping cables. The robust design will withstand harsh environments common in the field.



1. Stick Process Selection Button
2. Amperage Output Adjustment
3. Stick Electrode Type Selection
4. Polarity Indicators
5. Digital Meter
6. TIG Process Selection Button
7. In Use Indicator
8. Remote Indicators

Stick/TIG installation diagram



PipeWorx 350 FieldPro™ Specifications (Subject to change without notice.)



Input Power	Amperage/Voltage Ranges	Rated Welding Output	RMS Amps Input at Rated Load Output, 60 Hz, at NEMA Load Voltages and Class 1 Rating			KVA	KW	Max. Open-Circuit Voltage	Dimensions	Net Weight
			230 V	460 V	575 V					
Three-phase	10–350 A in CC mode 10–44 V in CV mode	350 A at 34 VDC, 60% duty cycle	36.1	17.8	14.1	15.0	14.4	75 VDC	H: 17 in. (432 mm) W: 12 in. (305 mm) D: 22 in. (559 mm)	100 lb. (45.4 kg)
Single-phase*	10–350 A in CC mode 10–44 V in CV mode	300 A at 32 VDC, 60% duty cycle	54.6	25.4	19.9	11.7	11.2			

*Welding with the smart feeder requires the PipeWorx 350 FieldPro to be hooked up to three-phase power.

Solid Wire and Flux-Cored Welding Processes

Set volts and wire feed speed remotely. The simple interface on the feeder allows operators to adjust parameters at the point of use with no control cables.

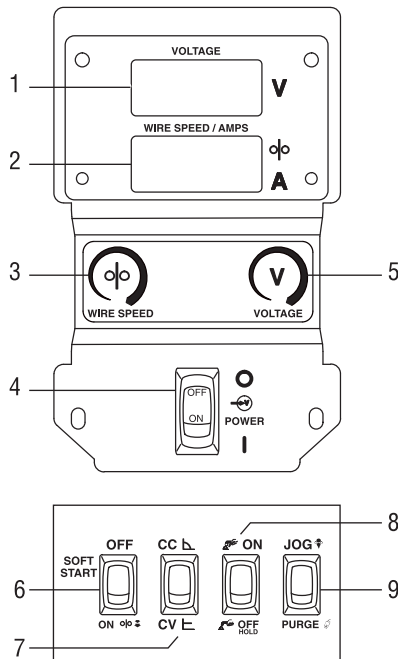
Easy process changeover. Simply connect the FieldPro feeder to your weld lead and you are ready to go. The power source automatically switches settings to run conventional wire processes.



Easy solution for traditional wire process. Add the flux-cored capability of the PipeWorx 350 FieldPro™ for fill and cap passes for increased productivity.

Durable design reduces downtime. Impact-resistant case and the elimination of feeder control cables provides a solid solution to last in harsh environments.

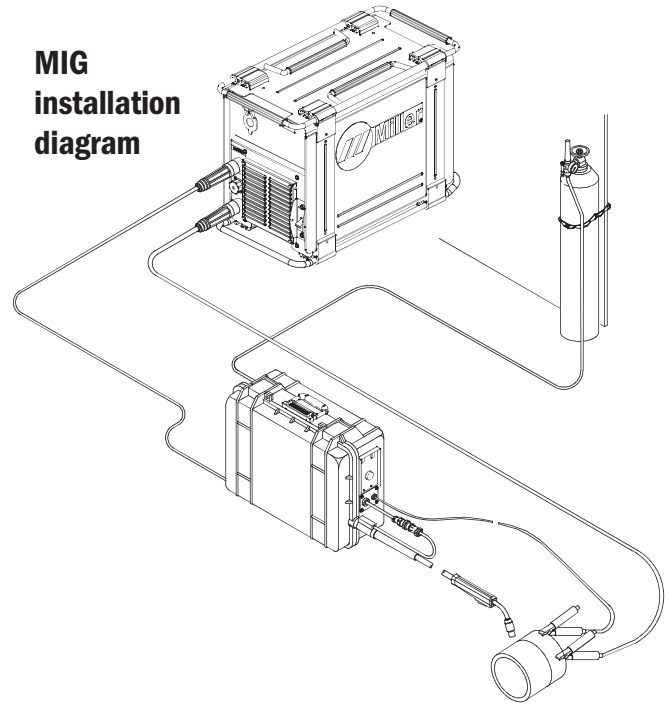
FieldPro™ Feeder Control Panel



Internal control panel

1. Voltmeter
2. Wire Speed/ Amperage Meter
3. Wire Speed Control
4. Power Control Switch
5. Voltage Control
6. Soft Start Switch
7. CC/CV Switch
8. Trigger Hold Switch
9. Jog/Purge Switch

MIG installation diagram



FieldPro™ Feeder Specifications (Subject to change without notice.)

CC CV **DC** (Use with CC or CV, DC power sources.)

Input Power	Input Welding Circuit Rating	Wire Speed	Wire Diameter Capacity	Max. Spool Size Capacity	Dimensions	Net Weight
Operates on open-circuit voltage and arc voltage: 14–110 VDC	425 A at 60% duty cycle	50–800 ipm (1.3–20.3 m/min.) dependent on arc voltage	Solid wire: .023–5/64 in. (0.6–2.0 mm) Flux-cored: .030–5/64 in. (0.8–2.0 mm)	12 in. (305 mm), 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)

RMD® and Pulsed MIG Welding Processes

Smart feeder delivers excellent RMD and pulsed MIG welding up to 200 feet away from the power source with no control cables — twice the distance previously possible. RMD and pulsed MIG processes also help reduce weld failures and eliminate backing gas on some stainless and chrome-moly applications.

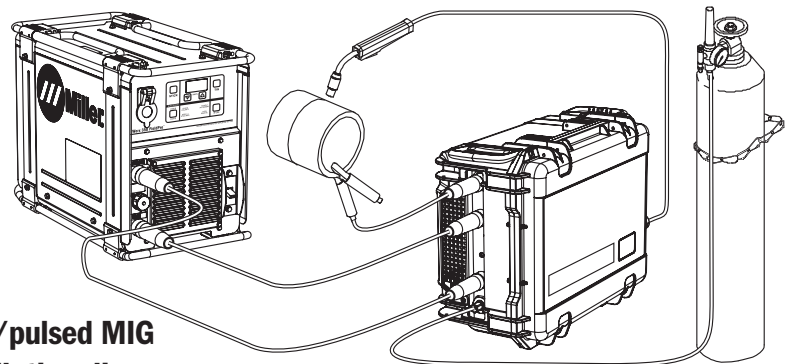
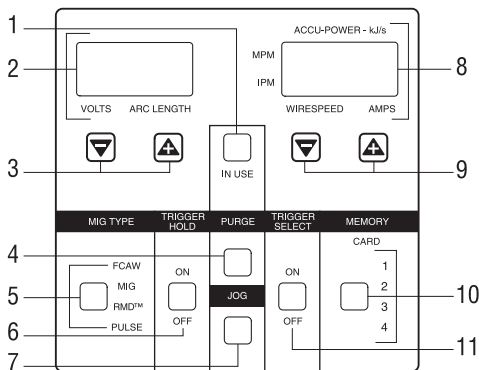
Durable design reduces downtime. Impact-resistant case and the elimination of feeder control cables provide a solid solution to last in harsh environments.



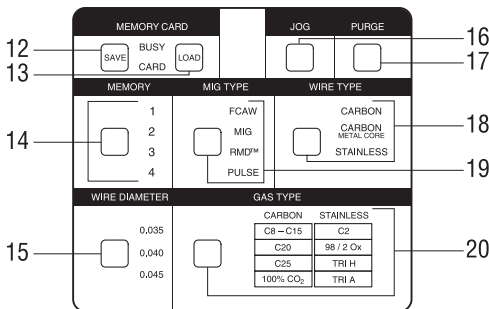
Synergic processes. RMD and pulsed MIG welding permits procedures with one wire and one gas to eliminate process switch-over time.

Easy process changeover. Simply connect the FieldPro smart feeder to your leads and you are ready to go. All controls automatically shift to the FieldPro smart feeder.

FieldPro™ Smart Feeder Control Panel



RMD/pulsed MIG installation diagram



Internal control panel

1. In-Use Button and Indicator
2. Arc Length/Volts Display and Indicators
3. Arc Length/Volts Decrease and Increase Buttons
4. Purge Button
5. MIG Type Select Button and Indicator
6. Trigger Hold On/Off Button
7. Jog Button
8. Amps/Wire Feed Speed Display and Indicators
9. Amps/Wire Feed Speed Decrease and Increase Buttons
10. Memory Select Button and Location Indicator
11. Trigger Select On/Off Button
12. Memory Card Button
13. Memory Card Load Button
14. Memory Select Button and Location Indicator
15. Wire Diameter Select Button and Indicator
16. Jog Button
17. Purge Button
18. Wire Type Select Button and Indicator
19. MIG Type Select Button and Indicator
20. Gas Type Select Button and Indicator

FieldPro™ Smart Feeder Specifications (Subject to change without notice.)



(Use with PipeWorx 350 FieldPro only)

Input Power	Input Welding Circuit Rating	Wire Speed	Wire Diameter Capacity	Max. Spool Size Capacity	Dimensions	Net Weight
Operates on open-circuit voltage and arc voltage: 14–110 VDC*	275 A at 60% duty cycle	50–500 ipm (1.3–12.7 m/min.) dependent on arc voltage	.035–.045 in. (0.9–1.1 mm)	12 in. (305 mm), 33 lb. (15 kg)	H: 13 in. (330 mm) W: 18 in. (457 mm) D: 21.5 in. (546 mm)	50 lb. (23 kg)

*Welding with the smart feeder requires the PipeWorx 350 FieldPro to be hooked up to three-phase power.

PipeWorx 350 FieldPro™ Packages

Stick/TIG system

PipeWorx FieldPro stick/TIG welding system package (#951 547) includes PipeWorx 350 FieldPro power source, FieldPro remote, and work sense lead with clamp. The system is shown with 2/0 work cable and clamp (#195 458), 2/0 weld cable extension (#195 456), TIG torch (WP26V122), cable cover (WC310) and connector (#191 981).

- Remotely change process and polarity
- Set actual amperage
- No need to swap weld cables
- Detects improper connection



MIG/flux-cored system

PipeWorx FieldPro MIG/flux-cored welding system package (#951 572) includes PipeWorx 350 FieldPro power source, FieldPro feeder with drive rolls, work sense lead and clamp, and Bernard™ 300-amp MIG gun. The system is shown with 2/0 work cable and clamp (#195 458) and 2/0 weld cable extension (#195 456).

- No feeder control cables
- Eliminates trips back to power source
- Total remote control
- Automatically changes to CV output when feeder is connected



RMD®/pulse system






PipeWorx FieldPro RMD/pulse welding system package (#951 573) includes PipeWorx 350 FieldPro power source, FieldPro smart feeder with drive rolls and Bernard™ 300-amp MIG gun. The system is shown with 2/0 work cable and clamp (#195 458) and two 2/0 weld cable extensions (#195 456).

- Offers traditional MIG and flux-cored processes, as well as advanced RMD and pulse programs.
- Weld up to 200 feet away from the power source with no special cables
- Save welding parameters for later use on SD memory card
- Complete remote control at the weld joint



Drive Rolls for FieldPro™ Feeders (Feeders require two drive rolls, order from Miller Service Parts.)

FieldPro feeders include two .035-inch V-groove / .045-inch V-knurled drive rolls (#269 480) and one wire inlet guide (#221 030).

Wire size	 "V" groove for hard wire	 "U" groove for soft wire or soft-shelled cored wires	 "V" knurled for hard-shelled cored wires	 "U" clogged for extremely soft wire or soft-shelled cored wires (i.e., hard facing types)	 Recommended Wire Inlet Guide
.023/.025 in. (0.6 mm)	#087 130	—	—	—	#221 030
.030 in. (0.8 mm)	#053 695	—	—	—	
.035 in. (0.9 mm)	#053 700	#072 000	#132 958	—	
.040 in. (1.0 mm)	#053 696	—	—	—	
.045 in. (1.1/1.2 mm)	#053 697	#053 701	#132 957	#083 489	
.052 in. (1.3/1.4 mm)	#053 698	#053 702	#132 956	#083 490	
1/16 in. (1.6 mm)	#053 699	#053 706	#132 955	#053 708	
.068/.072 in. (1.8 mm)	—	—	#132 959	—	
5/64 in. (2.0 mm)	—	#053 704	#132 960	#053 710	

Bernard™ PipeWorx Guns Features



As the preferred hand-held MIG gun and consumable manufacturer of Miller, Bernard is proud to provide its durable and innovative products for use with Miller® wire feeders and machines. Each Bernard product is versatile, dependable and built with the goal in mind of improving your welding productivity and performance.

The Bernard Q-Gun™ with a tapered tip and nozzle is recommended for root pass welding, especially in fixed-position applications where visibility is difficult. Switch to a standard tip and nozzle for fill and cap pass welding with flux-cored or pulsed MIG welding processes. This allows one gas and one wire to make the weld.

Versatility	Can be used for MIG, pulsed MIG, and flux-cored.
Ergonomics	Compact, lightweight gun with high-amperage capability reduces operator fatigue improving productivity.
Visibility	The combination of tapered tips and nozzles and 60-degree neck provides excellent visibility on root passes in pipe joints.
Centerfire™ Tip	Provides "drop-in" tip with no threads providing quick changeover. No tools are required.

Specifications (Subject to change without notice.)

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 #195 399 (root pass only)	300 A	250 A	300 A	365 A	100% CO ₂	15 ft. (4.6 m)	9 lb. (4.1 kg)
	—	210 A	250 A	300 A	80% Argon/20% CO ₂		
PipeWorx 300-15 #195 400	350 A	320 A	370 A	470 A	CO ₂ gas	15 ft. (4.6 m)	10 lb. (4.6 kg)
	—	270 A	310 A	390 A	80% Argon/20% CO ₂		

Key Gun Consumables

Description	Part Number	Package Quantity
.035 in. tapered tip	TT-035 ¹	10
.040 in. tapered tip	TT-039	10
.045 in. tapered tip	TT-045	10
.035 in. tip	T-035	10
.040 in. tip	T-039	10
.045 in. tip	T-045 ²	10
.052 in. tip	T-052	10
1/16 in. tip	T-062	10
.035—.045 in. liner	43115 ^{1,2}	1
.045—.062 in. liner	44215	1

Description	Part Number	Package Quantity
Nozzle 5/8 in. ID	NS-5818C ²	10
Nozzle 5/8 in. ID	N-5818C	10
Nozzle 1/2 in. ID	NS-1218C	10
Nozzle 3/4 in. ID	N-3418C	10
Nozzle 3/8 in. ID tapered tip	NT-3800C	10
Nozzle 3/8 in. ID tapered tip	NST-3800B	10
Nozzle 3/8 in. ID extended tapered tip	NST-38XTB ¹	10
Diffuser	D-1	10
Diffuser	DS-1 ^{1,2}	10
Q tube assembly 60°	QT2-60 ^{1,2}	1
Q tube assembly 80°	QT2-80	1
O-ring	4929	10

¹Standard part on PipeWorx 250-15.

²Standard part on PipeWorx 300-15.

Weldcraft® TIG Torches



Complete your PipeWorx welding system with a Weldcraft TIG torch. These torches use high-quality, durable components combined with innovative designs to ensure long, trouble-free performance, better productivity and lower costs.

Model	Stock No.	Description	Connector
A-150	WP-17V-25-2	Air-cooled (two cable), 150 amp	Tweco®-style connector #191 981
A-200	WP-26V-25-2	Air-cooled (two cable), 200 amp	Tweco®-style connector #191 981
Cable Cover: WC-3-22			

PipeWorx Memory Cards



Note: Other non-standard programs are optionally available for unique welding applications. These programs are available on commercial memory cards and operate through the PipeWorx card reader on the operator interface. Contact Miller for more information on less common materials and gases.

- #301 080 **Blank Card** — Used to store weld programs
- #301 230 **System Software** — For free download, visit MillerWelds.com
- #300 557 **Calibration** — Used to calibrate the PipeWorx system. For free download, visit MillerWelds.com (smart feeder only).
- #300 744 **Inconel** — Pulsed MIG, .045-inch diameter wire, 100% argon
- #300 460 **Range Locks** — Provides ability to set nominal parameter values and ranges for wire feed processes.
- #300 667 **Accu-Power™** — Displays instantaneous power during welding to meet the new ASME requirement for calculating heat input on complex waveform processes (RMD® and pulsed MIG).
- #301 035 **Trigger Select/Hold Option** — Enables trigger select while welding to change processes and parameters without stopping.
- #301 116 **VRD** — Voltage Reduction Device (VRD) lowers open-circuit voltage (OCV) to 15 VDC.

Wireless Remote Hand Control



Wireless Remote Hand Control #300 430
For remote current and contactor control. Receiver plugs directly into the 14-pin receptacle of Miller® machine. See Lit. Index No. AY/6.6 for more information.

- **Improves safety** by eliminating control cord and reducing potential trip hazard.
- **Improves weld quality.** Operators can easily adjust their machines to optimize the parameters for different joint configurations, electrodes, and wire types and sizes.
- **Improves productivity** by allowing parameter adjustments up to 300 feet (91 m) away from welder without returning to the machine or calling for assistance.
- **Reduces maintenance time and cost.** No cord repairs.
- **Digital meter display** allows presetting of machine output before welding, and viewing amperage and voltage while welding.

Comes complete with:

- Wireless hand control transmitter
- Wireless 14-pin receiver
- Battery box with three AA batteries
- Belt clip
- Owner's manual

Specifications (Subject to change without notice.)

Component	Power Supply	Battery Life	Rated Range*	Temperature	Radio Frequency	RF Power	Antenna	Dimensions	Weight
Hand control (transmitter)	Three AA batteries	250 hours	300 ft. (91 m)	-13°F to +158°F (-25°C to +70°C)	2.4 Ghz (ISM band)	<3 mW	Internal	H: 5 in. (127 mm)	0.6 lb. (0.27 kg) w/batteries
14-pin receiver	10–35 V AC or DC	N/A						W: 2.75 in. (70 mm)	
								D: 3.5 in. (89 mm)	0.16 lb. (0.07 kg)
								Dia: 1.5 in. (38 mm)	

**Some applications are not suitable for wireless communication. Keep in mind that the rated range is subjective, and depends on factors such as obstructions, frequency interference, transmission technology, and weather. The figures listed assume ideal conditions are present.*

FCC ID: LW9-Miller-HC (hand control) and LW9-Miller-RX (receiver) Canada IC: 2119B-MillerHC (hand control) and 2119B-MillerRX (receiver)

PipeWorx 350 FieldPro™ Racks



Optimal system. The PipeWorx 350 FieldPro rack provides all the same benefits of the individual PipeWorx 350 FieldPro systems in an easy to transport package for multiple arcs in the field.

Flexible solution. The flexibility of the PipeWorx 350 FieldPro makes it ideal for multiple system racks. Every system in a rack can be used for different tasks on-site, increasing fleet utilization and making the best use of equipment budgets.

Easy installation. The power distribution system on the rack allows the entire rack to be wired into a single power drop, isolating high-voltage power in the field.

Specifications (Subject to change without notice.)

Input Power to Rack	Rack Capacity	Dimensions	Weight
230–575 V, 50/60 Hz, 3-phase, with Auto-Line*	4 or 6 units	H: 59 in. (1,500 mm) W: 43 in. (1,092 mm) D: 34.375 in. (873 mm)	4 units: 679 lb. (308 kg) 6 units: 879 lb. (399 kg)

*Fuses included for 460 or 575 (if applicable) operation. Only empty rack orders require ordering the appropriate fuse kit.

Line Fuse Requirements

Input Voltage (3-Phase)	Recommended Line Fuse Size	Miller Replacement Parts			Bussman
		4-Pack Rack Fuse Kit	6-Pack Rack Fuse Kit	Individual Fuse	Individual Fuse
230 V	45 amps	#220 764	#220 763	#220 075	TCF-45
460 V, 575 V	20 amps	#220 766	#220 765	#220 074	TCF-20

Ordering Information

PipeWorx FieldPro Packages	Stock No.	Description	Qty.	Price
PipeWorx FieldPro™ Stick/TIG System <i>(Does not include stick electrode holder, TIG torch, welding cables, or work cable and clamp)</i>	#951 547	230–575 V, 50/60 Hz, Tweco®-style connectors Stick/TIG systems include PipeWorx 350 FieldPro power source, FieldPro remote and work sense lead with clamp		
PipeWorx FieldPro™ MIG/Flux-Cored System <i>(Does not include welding cables or work cable and clamp)</i>	#951 572	230–575 V, 50/60 Hz, Tweco-style connectors MIG/flux-cored systems include PipeWorx 350 FieldPro power source, FieldPro feeder and one Bernard™ 300-amp MIG gun		
PipeWorx FieldPro™ RMD/Pulse System <i>(Does not include welding cables or work cable and clamp)</i>	#951 573	230–575 V, 50/60 Hz, Tweco-style connectors RMD®/pulse systems include PipeWorx 350 FieldPro power source, FieldPro smart feeder and one Bernard™ 300-amp MIG gun		
PipeWorx FieldPro™ 4-Pack Rack	#907 588	230–575 V, 50/60 Hz, Tweco-style connectors Rack includes (4) PipeWorx 350 FieldPro power sources, (4) FieldPro rack mounting kits and (1) rack		
PipeWorx FieldPro™ 6-Pack Rack	#907 589	230–575 V, 50/60 Hz, Tweco-style connectors Rack includes (6) PipeWorx 350 FieldPro power sources, (6) FieldPro rack mounting kits and (1) rack		
System Components				
PipeWorx 350 FieldPro™ Power Source	#907 533 #907 533 001	230–575 V, 50/60 Hz, Tweco-style connectors 230–575 V, 50/60 Hz, Dinse-style connectors		
FieldPro™ Feeder	#301 228	MIG/FCAW feeder, Tweco-style connectors		
FieldPro™ Smart Feeder	#300 935 #300 935 001	MIG/FCAW/RMD/pulse feeder, Tweco-style connectors MIG/FCAW/RMD/pulse feeder, Dinse-style connectors		
FieldPro™ Remote with Stick/TIG Interface	#300 934 #300 934 001	Tweco-style connectors Dinse-style connectors		
Accessories				
Wireless Remote Hand Control w/14-Pin Receiver	#300 430	Hand control with wireless 300 ft. (91.4 m) operating range		
Empty Rack	#195 466	Empty XMT-style rack		
FieldPro™ Rack Mounting Kit	#301 100	Kit to mount single units in rack		
Rack Running Gear	#195 114	For all XMT- and CST-style racks		
Rack Fuses (see chart above for recommended fuses)	#220 768	30 A, individual fuse		

Date:

Total Quoted Price:

Distributed by:

