

# 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® (Modified Short Circuit)  
Pulsed MIG (GMAW-P)  
Flux-Cored (FCAW)  
Air Carbon Arc (CAC-A) Cutting and Gouging (1/4 in. 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

**Weight** **Power Source:** 95 lb. (43 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 chromoly applications.

### New Durability Standard for Field Construction

- Designed and built to withstand the harshest field environments.



Power source is warranted for 3 years, parts and labor.



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**MillerWelds.com**  
f t y



# Stick and TIG Welding Processes



PipeWorx 350 FieldPro



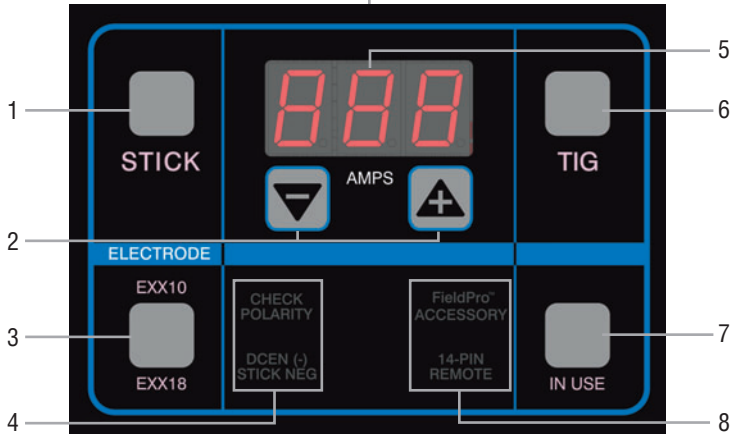
FieldPro Remote

**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*.

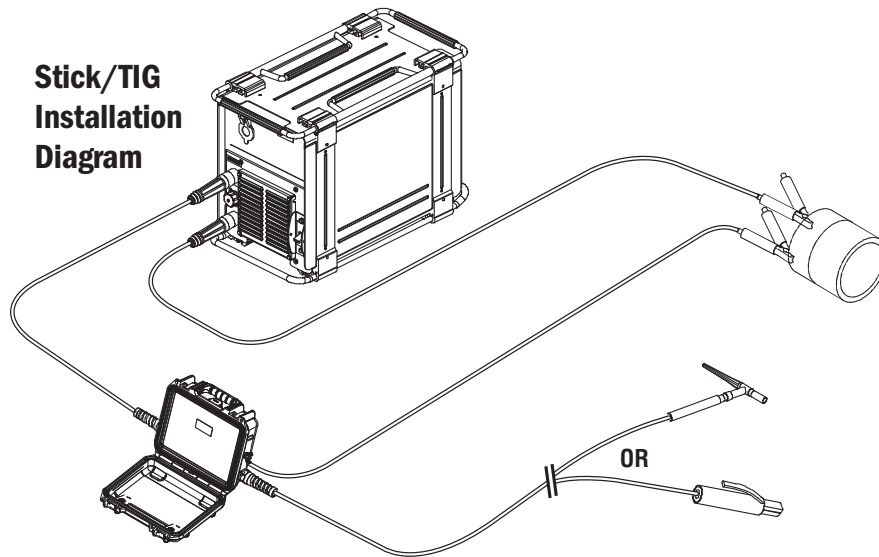
**Superior arc performance.** The optimized Stick and TIG performance specifically meets the needs of open root pipe welding and helps reduce training time and increases quality. Starts maintain root opening and prepared edge and stops limit arc marks outside of the heat-affected zone.

**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	Rated Welding Output	Voltage Range in CV Mode	Amperage Range in CC Mode	Max. Open-Circuit Voltage	RMS Amps Input at Rated Load Output, 60 Hz, 3-Phase at NEMA Load Voltages and Class 1 Rating			KVA	KW	Dimensions	Weight
					230 V	460 V	575 V				
3-Phase	350 A at 34 VDC, 60% Duty Cycle	10–44 V	10–350 A	75 VDC	36.1	17.8	14.1	15.0	14.4	H: 17 in. (432 mm) W: 12 in. (305 mm) D: 22 in. (559 mm)	95 lb. (43.1 kg)
1-Phase	300 A at 32 VDC, 60% Duty Cycle				54.6	25.4	19.9	11.7	11.2		

# 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.

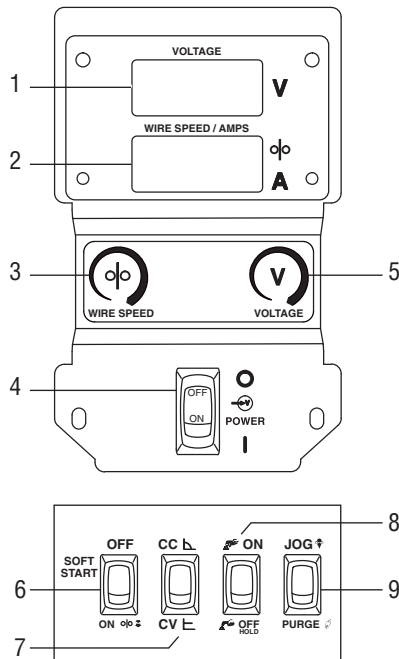
**Easy process changeover.** Simply connect the FieldPro feeder to your weld lead and you are ready to go. The power source automatically switches settings to run conventional wire processes.



**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.

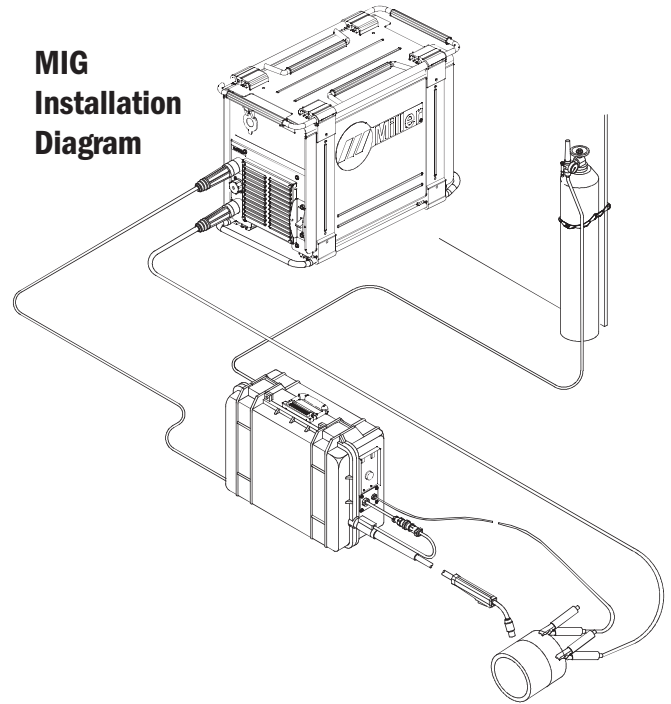
## FieldPro™ Feeder Control Panel



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.)

Input Power	Welding Power Source Type	Input Welding Circuit Rating	Wire Diameter Capacity	Max. Spool Size Capacity	Wire Speed	Dimensions	Weight
Operates on open-circuit voltage and arc voltage: 14–48 VDC/ 110 Max OCV	CC/CV DC power sources. AC type not recommended.	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)	50–780 IPM (1.3–19.8 m/min.) dependent on arc voltage	H: 21 in. (533 mm) W: 9 in. (229 mm) D: 15.5 in. (394 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 chromoly applications.

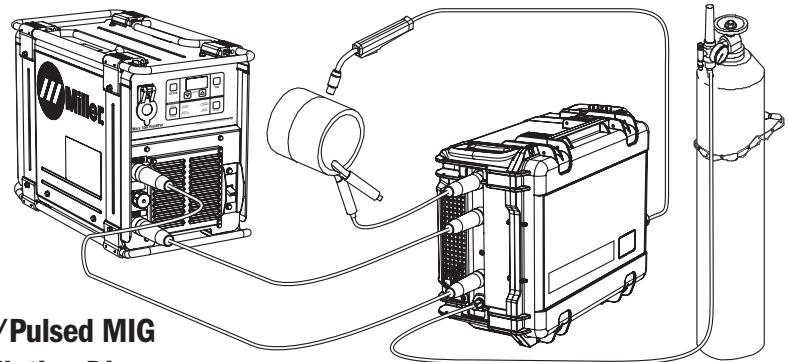
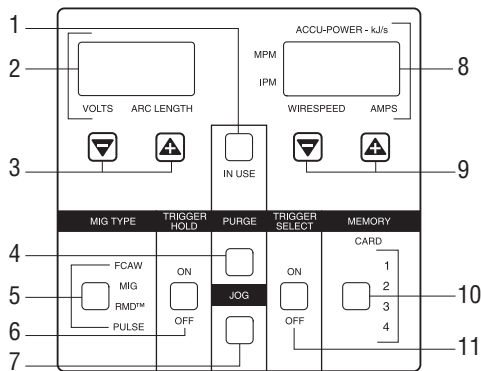
**Durable design reduces downtime.** Impact-resistant case and the elimination of feeder control cables provide a solid solution to last in harsh environments.



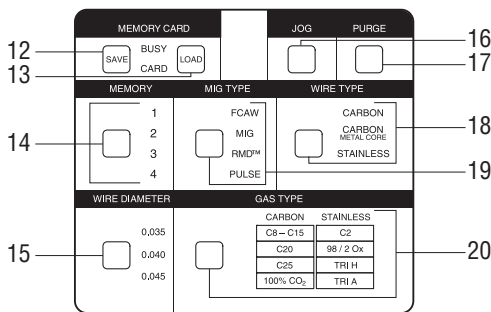
**Synergic processes.** RMD and Pulsed MIG welding permits procedures with one wire and one gas to eliminate process switch-over time.

**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.)

Input Power	Welding Power Source Type	Input Welding Circuit Rating	Wire Diameter Capacity	Max. Spool Size Capacity	Wire Speed	Dimensions	Weight
Operates on open-circuit voltage and arc voltage: 14–110 VDC	CC/CV DC power sources only	275 A at 60% Duty Cycle	.035–.045 in. (0.9–1.1 mm)	12 in. (305 mm) Up to 33 lb. (15 kg)	50–500 IPM (1.3–12.7 m/min.) dependent on arc voltage	H: 21.5 in. (546 mm) W: 18 in. (457 mm) D: 13 in. (330 mm)	50 lb. (23 kg)



## 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 work cable and clamp (#195 458), weld cable extension (#195 456), TIG torch (WP26V122) and cable cover (WC310).

- 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 work sense lead and clamp, and PipeWorx 300 MIG gun. The system is shown with work cable and clamp (#195 458) and 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, and PipeWorx 300 MIG gun. The system is shown with work cable and clamp (#195 458), and 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 Roll Kits for FieldPro™ Feeders (One kit required, order from Miller Service Parts.)

Select drive roll kits from chart below according to type and wire size being used. Drive roll kits include two drive rolls.

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)
.023/.025 in. (0.6 mm)	#087 131	—	—	—
.030 in. (0.8 mm)	#079 594	—	—	—
.035 in. (0.9 mm)	#079 595	#044 749	#079 606	—
.040 in. (1.0 mm)	#161 189	—	—	—
.045 in. (1.1/1.2 mm)	#079 596	#079 599	#079 607	#083 318
.052 in. (1.3/1.4 mm)	#079 597	#079 600	#079 608	#083 317
1/16 in. (1.6 mm)	#079 598	#079 601	#079 609	#079 614
.068/.072 in. (1.8 mm)	—	—	#089 984	—
5/64 in. (2.0 mm)	—	#079 602	#079 610	#079 615

## 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 PipeWorx 300-15 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.

<b>Versatility</b>	Can be used for MIG, Pulsed MIG, and Flux-Cored.
<b>Ergonomics</b>	Compact, lightweight gun with high-amperage capability reduces operator fatigue improving productivity.
<b>Visibility</b>	The combination of tapered tips and nozzles and 60° neck provides excellent visibility on root passes in pipe joints.
<b>Centerfire™ Tip</b>	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
<b>PipeWorx 250-15</b> #195 399 (root pass only)	300 A	250 A	300 A	365 A	100% CO <sub>2</sub>	15 ft. (4.6 m)	9 lb. (4.1 kg)
	—	210 A	250 A	300 A	80% Argon/20% CO <sub>2</sub>		
<b>PipeWorx 300-15</b> #195 400	350 A	320 A	370 A	470 A	CO <sub>2</sub> Gas	15 ft. (4.6 m)	10 lb. (4.6 kg)
	—	270 A	270 A	390 A	80% Argon/20% CO <sub>2</sub>		

### Key Gun Consumables

Description	Part Number	Package Quantity
.035-in. Tapered Tip	TT-035 <sup>1</sup>	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 <sup>2</sup>	10
.052-in. Tip	T-052	10
1/16-in. Tip	T-062	10
.035 – .045 in. Liner	43115 <sup>1,2</sup>	1
.045 – .062 in. Liner	44215	1

Description	Part Number	Package Quantity
Nozzle 5/8-in. ID	NS-5818C <sup>2</sup>	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 <sup>1</sup>	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
O-Ring	4929	10

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

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

## Weldcraft® TIG Torches



Weldcraft.com 1-800-752-7620

Complete your PipeWorx Welding System with a Weldcraft TIG torch. Weldcraft torches use high-quality, durable components combined with innovative designs to ensure long, trouble-free performance, better productivity and lower costs. That's what makes Weldcraft the "TIG Welder's Choice."

Torch	Torch Type	Connector
WP-17V-25-2	Air-Cooled (Two Cable) 150 Amp	Tweco connector #191 981
WP-26V-25-2	Air-Cooled (Two Cable) 200 Amp	Tweco 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.

- #300 538 **Blank Card** — Used to store weld programs
- #300 557 **Calibration** — Used to calibrate the PipeWorx System. For free download, visit MillerWelds.com
- #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.

## 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 ft. (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	Rated Range*	Battery Life	Temperature	Radio Frequency	RF Power	Antenna	Dimensions	Weight
Hand Control (Transmitter)	Three AA Batteries	300 ft. (91 m)	250 hrs.	-13° F to +158° F (-25° C to +70° C)	2.4 Ghz. (ISM Band)	<3 mW	Internal	H: 5 in. (127 mm) W: 2.75 in. (70 mm) D: 1.375 in. (35 mm)	0.6 lb. (0.27 kg) w/Batteries
14-Pin Receiver	10–35 V AC or DC		N/A					D: 3.5 in. (89 mm) Dia: 1.5 in. (38 mm)	0.16 lb. (0.07 kg)

\*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
208–575 VAC, 50/60 Hz, 3-Phase, with Auto-Line*	4 or 6 Units	H: 64 in. (1626 mm) W: 43 in. (1092 mm) D: 34.375 in. (873 mm)	<b>4-Rack:</b> 671 lb. (304 kg) <b>6-Rack:</b> 867 lb. (393 kg)

\*Fuses included for 460 or 575 (if applicable) operation. Only for empty rack orders is it required to order 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
208 VAC, 230 VAC	45 amps	#220 764	#220 763	#220 075	TCF-45
460 VAC, 575 VAC	20 amps	#220 766	#220 765	#220 074	TCF-20

## Ordering Information

PipeWorx FieldPro Packages	Stock No.	Description	Qty.	Price
<b>PipeWorx FieldPro™ Stick/TIG System</b> <i>(Does not include stick electrode holder, TIG torch, welding cables, or work cable and clamp)</i>	<b>#951 547</b>	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		
<b>PipeWorx FieldPro™ MIG/Flux-Cored System</b> <i>(Does not include welding cables or work cable and clamp)</i>	<b>#951 572</b>	230–575 V, 50/60 Hz, Tweco-style connectors MIG/Flux-Cored systems include PipeWorx 350 FieldPro power source, FieldPro Feeder and one PipeWorx 300 MIG gun		
<b>PipeWorx FieldPro™ RMD/Pulse System</b> <i>(Does not include welding cables or work cable and clamp)</i>	<b>#951 573</b>	230–575 V, 50/60 Hz, Tweco-style connectors RMD®/Pulse systems include PipeWorx 350 FieldPro power source, FieldPro Smart Feeder and one PipeWorx 300 MIG gun		
PipeWorx FieldPro™ 4-Pack Rack	<b>#907 588</b>	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	<b>#907 589</b>	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		
<b>System Components</b>				
PipeWorx 350 FieldPro™ Power Source	<b>#907 533</b>	230–575 V, 50/60 Hz, Tweco-style connectors		
FieldPro™ Feeder	<b>#301 058 001</b>	MIG/FCAW feeder, Tweco-style connectors		
FieldPro™ Smart Feeder	<b>#300 935</b>	MIG/FCAW/RMD/Pulse feeder, Tweco-style connectors		
FieldPro™ Remote with Stick/TIG Interface	<b>#300 934</b>	Tweco-style connectors		
<b>Accessories</b>				
Feeder Drive Rolls, MIG Guns and Consumables		See page 6		
TIG Torches and PipeWorx Memory Cards		See page 7		
Wireless Remote Hand Control w/14-Pin Receiver	<b>#300 430</b>	Hand control with wireless 300 ft. (91.4 m) operating range		
Empty Rack	<b>#195 466</b>	Empty XMT-style rack		
FieldPro™ Rack Mounting Kit	<b>#301 100</b>	Kit to mount single units in rack		
Rack Running Gear	<b>#195 114</b>	For all XMT- and CST-style racks		
Rack Fuses (see chart above for recommended fuses)	<b>#220 768</b>	30 A, individual fuse		

Date:

Total Quoted Price:

Distributed by:

