

Big Blue® 350 PipePro®

**Diesel Engine-Driven
Welder/AC Generator** 

Quick Specs

Heavy Industrial Applications

Pipe welding
Mechanical contractor

Processes

Stick (SMAW)
MIG (GMAW)
Flux-cored (FCAW)
RMD®*
Pulsed MIG (GMAW-P)*
DC TIG (GTAW)
Air carbon arc (CAC-A)
Rated: 1/4-inch (6.4 mm) carbons

Output Range DC stick 20–400 A
FCAW/MIG 14–40 V
DC TIG 20–400 A

Generator Output Rated at 104°F (40°C)
12,000 watts peak, 10,000 watts continuous

**Accu-Rated™—Not Inflated
Generator Power**

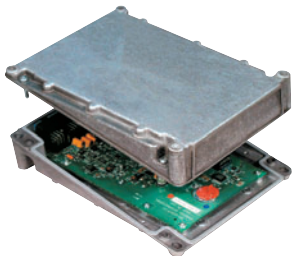
**Available only on Big Blue 350 PipePro SF models*

Big Blue 350 PipePro

Designed exclusively for transmission pipeline work, the Big Blue 350 PipePro offers stick as well as MIG/flux-cored welding capabilities to meet high-strength steel requirements and is ideal for the most demanding pipeline jobs.

NEW! Big Blue® 350 PipePro SF

Improve productivity and quality with advanced RMD® and pulsed MIG processes with the FieldPro Smart Feeder.



The vault—ultimate control board reliability.
See page 5.

Superior arc performance

- Adjustable arc control
- Adaptive Hot Start™ (stick)
- FCAW/MIG arc performance
- Lift-Arc™ TIG with Auto-Stop™

BUILT TOUGH

T4F COMPLIANT



Big Blue 350 PipePro



Big Blue 350 PipePro SF

Auto Remote Sense™ (ARS) detects if a remote control is plugged into the 14-pin receptacle and eliminates confusion of a remote/panel switch.

Low OCV stick (VRD) reduces the open-circuit voltage to 15 volts when the welding power source is not in use, increasing operator safety without compromising arc starts.

MITSUBISHI ENGINE NORTH AMERICA, INC.

Mitsubishi S4L2 four-cylinder diesel

Heavy-duty low-speed industrial engine is designed to operate over 10,000 hours before the first basic overhaul. Backed by worldwide support and service.

TRUE BLUE
3YR. WARRANTY

Welder/generator is warranted by Miller for three years, parts and labor.
Engine is warranted separately by engine manufacturer.



Miller Electric Mfg. Co.
An ITW Welding Company
1635 West Spencer Street
P.O. Box 1079
Appleton, WI 54912-1079 USA

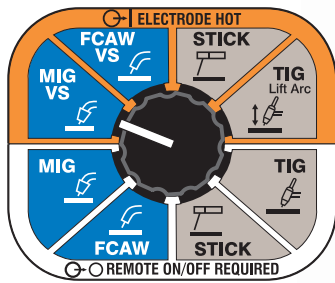
Equipment Sales US and Canada
Phone: 866-931-9730
FAX: 800-637-2315
International Phone: 920-735-4554
International FAX: 920-735-4125

MillerWelds.com




Models Overview

Base model



Simple-to-set controls require no elaborate procedure — just select process and weld!

Infinite arc control allows the arc characteristics to be changed for specific applications in stick and MIG.

HD powder coat with zinc-rich primer protects sheet metal from rust and corrosion.



LINE-X® cover is workbench tough and provides superior impact, corrosion and abrasion protection.

Engine coolant temperature gauge and meter maintenance displays

- Fuel gauge
- Hour meter function
- Oil change interval
- High coolant temperature and low oil pressure shutdowns
- Low fuel shutdown — engine shuts down before system runs out of fuel, making restarts easy

Standard features include digital preset weld meters, output contactor control, automatic idle and 120-volt block heater.

NEW! SF model additional features

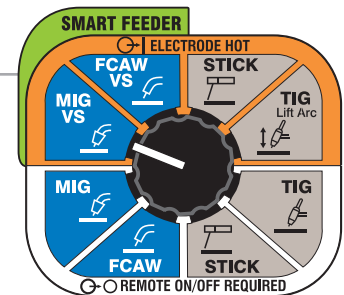
Advanced RMD® and pulsed MIG processes are now available in an engine driven welder/generator. Discover increased productivity, quality, and improved efficiency in field welding with the new Big Blue 350 PipePro SF with FieldPro™ Smart Feeder.

FieldPro Smart Feeder

FieldPro 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 help reduce weld failures and eliminate backing gas on some stainless and chrome-moly pipe-welding applications.

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

Full remote control at the weld joint. Simply connect standard weld cables in-line with the FieldPro Smart Feeder and you're ready to go!



Simple-to-set controls have integrated support for Smart Feeder, simply turn the knob to either MIG VS or FCAW VS for optimal performance.

Stainless steel appearance package provides additional exterior protection to withstand corrosive environments.

Big Blue 350 PipePro SF (907428002) shown with FieldPro Smart Feeder (**300935**) and Bernard™ PipeWorx 300 MIG gun (**195400**). Items sold separately.

Specifications (Subject to change without notice.)



Weld Mode/ Process	Weld Output Range	Weld Output Rated at 100% Duty Cycle at 104°F (40°C)	Max. Open-Circuit Voltage	Generator Power Output Rated at 104°F (40°C)	Sound Levels at Rated Output, 23 ft. (7 m)	Dimensions	Weight (without fuel)**
CC/DC (TIG)	20–400 A	300 A at 32 VDC 350 A at 27 VDC 400 A at 24 VDC	85 VDC 15 VDC*	12,000 watts peak, 10,000 watts continuous 1-phase, 84/42 A, 120/240 VAC, 60 Hz	Idle: 68.7 dB (93 Lwa) Weld: 72.1 dB (97 Lwa)	H: 32 in. (813 mm) W: 26.25 in. (667 mm) D: 56 in. (1,422 mm)	Net: 1,018 lb. (462 kg) Ship: 1,068 lb. (484 kg)
CC/DC (Stick)	20–400 A						
CV/DC (FCAW/MIG)	14–40 V						

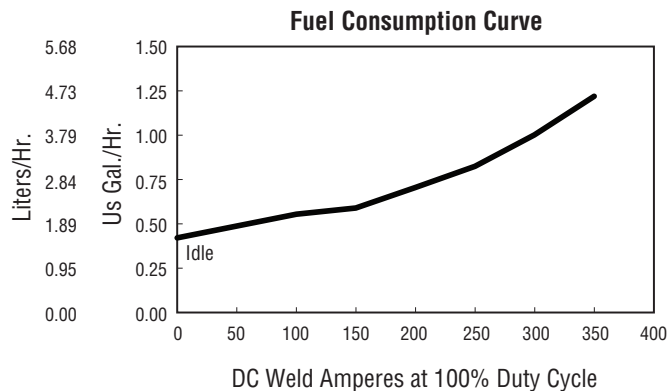
*Sense voltage for stick and Lift-Arc™ TIG. **Additional 82 lb. (37 kg) when fuel tank is full.

Certified by Canadian Standards Association to both the Canadian and U.S. Standards. Meets NEMA and IEC output ratings.

Engine Specifications (Engines warranted separately by the engine manufacturer.)

Engine Brand	Features	HP	Type	Engine Speeds	Capacities	Automatic Engine Shutdown
Mitsubishi S4L2	EPA Tier 4 Final compliant	24.7	Four-cylinder, liquid-cooled industrial diesel	Weld: 1,800 rpm Idle: 1,500 rpm	Fuel: 11.5 gal. (43.5 L) Oil: 5.8 qt. (5.5 L) Coolant: 10 qt. (9.5 L)	Low oil pressure, high coolant temperature, low fuel level

Performance Data



Simultaneous Welding And Power

Weld Amperes	Total Aux. Power Available (Watts)	120 V	240 V
25 A	10,000	83.3	41.6
75 A	10,000	83.3	41.6
125 A	10,000	83.3	41.6
175 A	9,000	75	37.5
225 A	7,500	62.5	31.3
300 A	4,500	37.5	18.8
350 A	1,000	8.3	4.2

Function Guide

1. Self-calibrating digital weld meters with fault code indication display preset or actual weld parameters.

2. Weatherproof Lexan® nameplate is super durable and resists cracking and fading. Color coded for ease of operation.

3. Hot Start™ provides positive stick electrode starts making it easy to start all types of electrodes and it also works great for bead tie-ins.

4. Smart Feeder setting (SF model only). Recommended for optimal Smart Feeder operation.

5. Great FCAW/MIG performance and arc starts make the Big Blue® 350 PipePro arc the best in its class. Easy to run all wires from .023-inch solid wires to large-diameter 5/64-inch flux-cored wires.

6. Lift-Arc™ TIG with Auto-Stop™

7. Adjustable arc control adjusts DIG when process control is in stick mode and adjusts inductance when process control is in FCAW or MIG mode. The amount of DIG determines how much amperage (heat) varies with stick arc length. Inductance determines the “wetness” of the weld puddle.

8. Standard 14-pin receptacle for simple connection of remote controls and wire feeders. It features **Auto Remote Sense™** which automatically switches from panel to remote amperage/voltage (A/V) control with remote connected. Eliminates confusion of a panel/remote switch.

9. Engine coolant temperature gauge displays coolant temperature. Engine stops if temperature exceeds 230°F (110°C).

10. Meter maintenance display shows fuel level, engine hours, oil change interval and high temp/low pressure/low fuel shutdown information.

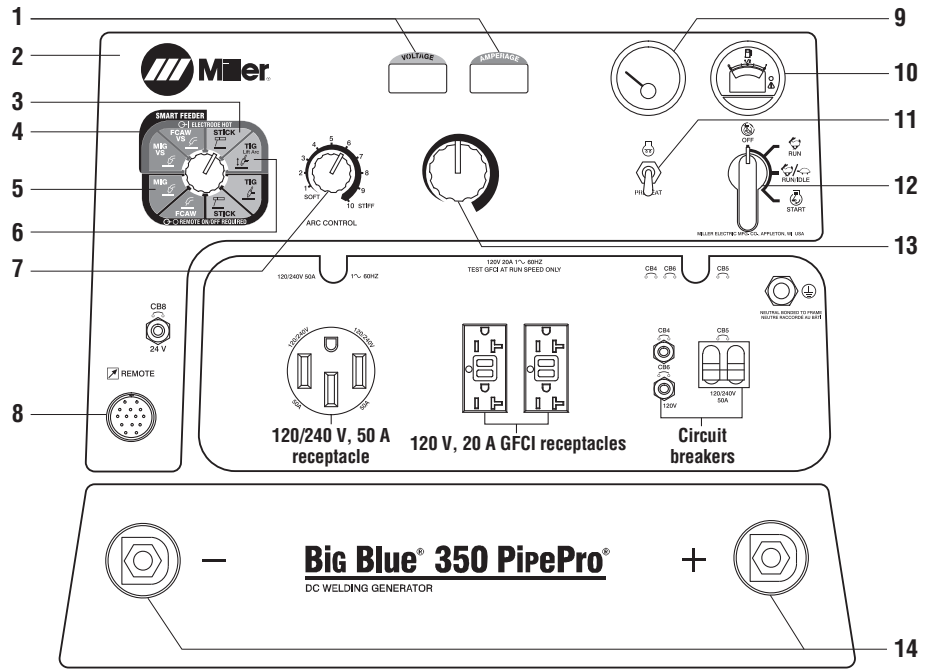
Low fuel shutdown shuts engine off prior to running out of fuel to prevent loss of fuel in the system, and make restarts easy. Display will read noFUEL. Turn the machine off, add fuel, and restart.

11. Glow plugs assist in cold weather starting.

12. Engine control switch is used to start the engine and then select between auto idle and high speed lock.

13. Amperage/voltage adjust control

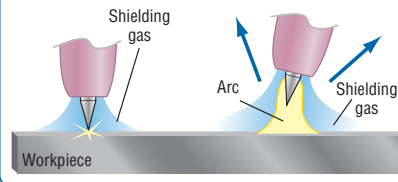
14. Weld output terminals



ARC START with Lift-Arc™

Touch or scratch

Lift at any angle

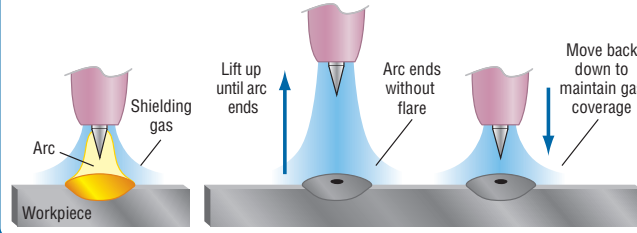


- Reduces or eliminates sticking
- Reduces or eliminates electrode/work contamination
- Low open-circuit voltage

ARC END with Auto-Stop™

While welding

For Auto-Stop, lift up to terminate arc

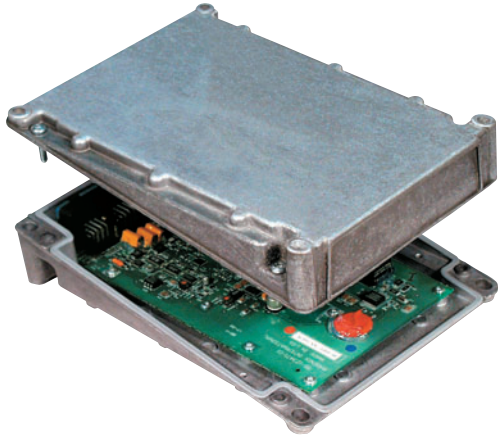


- Eliminates need for a remote control
- Maintains shielding gas coverage
- Eliminates tungsten and workpiece contamination
- Eliminates unwanted arc strikes outside the weld area

What Makes Miller® Industrial Engine Drives So **[TOUGH]**?

Superior circuit board design

Our critical circuit boards are engineered to carry *low power* and *low heat* to reduce thermal stress and minimize expansion and contraction. In contrast, our competitor's boards carry *high power* and *high heat*, making them more vulnerable to failure.



“The vault” makes upgrading to Miller CC/CV units worry-free

Concerns with circuit board reliability have resulted in some operators steering clear of CC/CV welder/generators — even though they offer a superior arc and multiple welding processes. Miller circuit board reliability isn't a concern since all Big Blue multiprocess industrial engine drives feature the vault.

Created out of two aluminum halves sealed with silicone, as well as watertight harness connections, the vault provides a clean circuit board environment, protecting the electronics — and controlling output — in heavy industrial applications. No other competitor protects their electronics with a sealed vault, leaving critical circuit boards exposed to harsh elements that can disrupt the machine's electronics, and therefore, its operation.



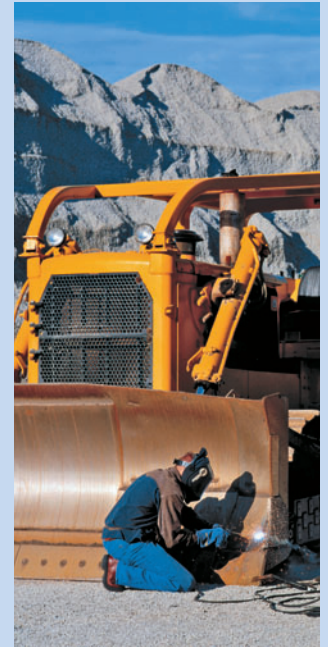
“The Miller 350 PipePro makes my job easier every day. It runs a 3/16 electrode downhill smoother and keeps it lit better than any machine I've used.”

*Jerry Morley, Gas Field Specialists Inc,
Plumbers and Steamfitters #267*

Rigorous testing for tough, real-world conditions

To prove our machines go to the limit, Miller industrial engine drives are put to the test in very extreme environmental conditions.

- **Airborne dust and sand.** Critical components are exposed to abusive airborne particles in a special testing chamber for weeks, helping make sure they'll operate while facing extreme levels of dirt, dust or sand on the jobsite.
- **Humidity and corrosion.** Inside our Houston testing room, critical components are subjected to extended moisture and corrosive salt exposure to ensure they'll run even when exposed to humid climates, corrosive coastal environments, and driving rain.
- **Temperature extremes.** Miller industrial engine drives are tested to ensure performance in scorching heat. All Miller engine-driven machines are weld rated at 104 degrees Fahrenheit, but actual tests are conducted up to 122 degrees Fahrenheit to assure peak performance.
- **Jobsite/over-the-road abuse.** Miller industrial engine drives are shaken for hours on transportation bed simulators, subjected to severe vibration, and test-dropped and jerked to ensure they'll withstand the stresses that can shut down competitive machines.
- **Continuous operation.** Miller industrial engine drives run day and night, in all weather conditions, to assure they'll perform without interruption in the field.



Why industrial engine drive customers choose Miller

The ultimate test of Miller reliability is how it performs in the field. The quote on the left provides a glimpse of how Miller industrial engine drives perform for customers. Read the full story, and many others demonstrating our superior reliability, at MillerWelds.com.



Genuine Miller® Accessories



Female Receptacle 

Full KVA Adapter Cord 300517 Field
NEMA 14-50P to NEMA 6-50R. Adapts engine drive 120/240 V plug to common Millermatic® and Spectrum® 240 V plug.



Full KVA Plug Kit 119172 Field
120/240 V, 50 A plug (NEMA 14-50P) to fit full KVA receptacle.

Engine Filter Kits

252782 Field. For Mitsubishi
Includes all filters required for proper engine maintenance. Oil filter, primary and secondary fuel filter, and primary air filter.

Spark Arrestor (Muffler) Kit 300585 Field
Prevents particles from leaving the muffler that could potentially start a fire. Mandatory when operating on California grasslands, brush, or forest-covered land, and all national forests. For other areas, check your state and local laws. Meets U.S. Forest Service Standard 5100-1B.



FA-1D Lockable Flame Arrestor Fuel Cap 043947 Field
Fuel cap can be padlocked to prevent vandalism. A built-in flame arrestor prevents flames or sparks from entering the fuel tank.



Protective Cover 195301 Field
Blue water-resistant cover with Miller logo resists stains and mildew, and protects the finish of your welder.

MIG (GMAW) or Flux-Cored (FCAW)



SuitCase® X-TREME™ 8VS Wire Feeder 951583 With Bernard™ BTB Gun 300 A

SuitCase® X-TREME™ 12VS Wire Feeder 951544 With Bernard™ Dura-Flux™ gun

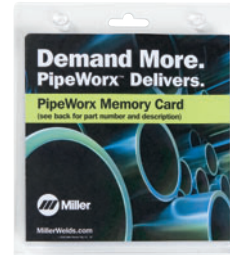
Lightweight, voltage-sensing wire feeders include secondary contactor, gas valve, drive roll kit and gun. See literature M/6.42.



SuitCase® 12RC Wire Feeder 951580
Lightweight and flexible enough to run a variety of wires up to .062-inch diameter. Includes remote voltage control, drive roll kit and Bernard™ BTB Gun 300 A. See literature M/6.5.



FieldPro™ Smart Feeder 300935
For use with Big Blue 350 PipePro SF model only. See page 2 for more information.



PipeWorx Memory Cards
For use with FieldPro Smart Feeder only.

301230 System Software
For free download, visit MillerWelds.com

300557 Calibration
Used to calibrate the PipeWorx System. For free download, visit MillerWelds.com

300744 Inconel
Pulsed MIG, .045-inch diameter wire, 100% argon

300460 Range Locks
Provides ability to set nominal parameter values and ranges for wire feed processes.

300667 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).

301035 Trigger Select/Hold Option
Enables trigger select while welding to change processes and parameters without stopping.

TIG (GTAW) Welding



Dynasty® 210 Series 907685, 907686
For premium portable AC/DC TIG arc quality. See literature AD/4.81.



HF-251D-1 042388
115 V. High-frequency arc starter and stabilizer. See accessory literature AY/5.0.

Genuine Miller® Accessories (Continued)

Plasma Cutting



Spectrum 375 X-TREME and 625 X-TREME shown.

Spectrum® 375 X-TREME™ 907529

See literature PC/9.2.

Spectrum® 625 X-TREME™ 907579

See literature PC/9.6.

Spectrum® 875 907583

See literature PC/9.8.

The Spectrum 375 X-TREME and 625 X-TREME come complete with protective X-CASE™ (not shown).

Remote Controls



Wireless Remote Hand Control 300430

For remote current, voltage and contactor control.

Receiver plugs directly into the 14-pin receptacle of Miller machine. 300-foot (91.4 m) operating range. Requires Wireless Antenna Kit 300749.

Wireless Antenna Kit 300749

Required for Pro Series engine drives. Optional on other compatible Miller products where improved reception is desired.



PRHC-14 Hand Control 195511

Complete current or voltage control brings 120 V GFCI power to work area in a single cord. Housed in durable aluminum case and includes 125-foot (38 m) cord with plugs.

Extension Cables for 14-Pin Remote Controls or 24 VAC Wire Feeders

242208025 25 ft. (7.6 m)

242208050 50 ft. (15.2 m)

242208080 80 ft. (24.4 m)

Trailers and Hitches (Note: Trailers are shipped unassembled.)



HWY-224 Trailer 043805

A 2,650-pound (1,202 kg) capacity trailer for highway use. Welded steel tubing frame, heavy-duty axle with roller bearing hubs and leaf-spring suspension. Includes jack stand, 2-inch (50 mm) ball hitch, fenders and lights.

Cable Tree 043826

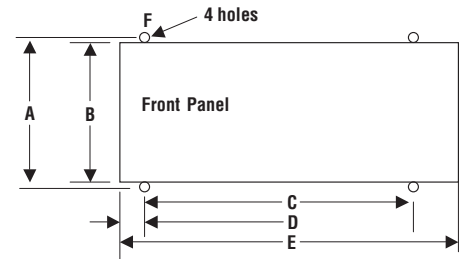
Provides an area to conveniently wrap weld cables and extension cords.



Dual Hitch 300831

2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye in one reversible assembly.

Mounting Specifications



A. 27.75 in. (705 mm)

B. 26.25 in. (667 mm)

C. 52.25 in. (1,327 mm)

D. 2 in. (51 mm)

E. 56 in. (1,422 mm)

F. .562 in. (14 mm) diameter

Height: 32 in. (813 mm)

Width: 26.25 in. (667 mm)

Depth: 56 in. (1,422 mm)

Trailer Specifications (Subject to change without notice.)

Model	Gross Axle Weight Rating	Gross Vehicle Weight Rating	Net Payload	Height of Bed	Road Clearance	Track (Center to center of tires)	Standard Tires (Standard rating or P-size rating)	Dimensions	Net Weight
HWY-224	3,500 lb. (1,588 kg)	2,960 lb. (1,343 kg)	2,650 lb. (1,202 kg)	18.5 in. (470 mm)	7.25 in. (184 mm)	52 in. (1,321 mm)	B78-13	Length: 105 in. (2,667 mm) Width: 59.5 in. (1,511 mm)*	320 lb. (145 kg)

*Width at outside of fenders.

Ordering Information

Equipment and Options	Stock No.	Description	Qty.	Price
Big Blue® 350 PipePro®	907428	Base model with Mitsubishi		
Big Blue® 350 PipePro® SF	907428002	Smart Feeder compatible model with Mitsubishi and stainless steel package		
Field Accessories				
Full KVA Adapter Cord	300517	See page 6		
Full KVA Plug Kit	119172	1-phase, 120/240 V, 50 A		
Engine Filter Kit	252782	For Mitsubishi. Includes air, oil and fuel filters		
Spark Arrestor (Muffler) Kit	300585	See page 6		
FA-1D Lockable Flame Arrestor Fuel Cap	043947	See page 6		
Protective Cover	195301	See page 6		
MIG/Flux-Cored Welding				
SuitCase® X-TREME™ 8VS	951583	With Bernard BTB Gun 300 A. See literature M/6.42		
SuitCase® X-TREME™ 12VS	951544	With Bernard Dura-Flux gun. See literature M/6.42		
SuitCase® 12RC	951188	With Bernard BTB Gun 300 A. See literature M/6.5		
FieldPro™ Smart Feeder	300935	See literature PWS/6.0		
Bernard™ PipeWorx 300 MIG Gun	195400	See literature PWS/6.0		
TIG Welding				
Dynasty® 210	907685	Basic controls for AC/DC TIG/stick, 120–480 V. See literature AD/4.81		
Dynasty® 210 DX	907686	Full feature controls for AC/DC TIG/stick, 120–480 V. See literature AD/4.81		
HF-251D-1	042388	115 V. See literature AY/5.0		
Plasma Cutting				
Spectrum® 375 X-TREME™	907529	Includes X-CASE™. See literature PC/9.2		
Spectrum® 625 X-TREME™	907579	Includes X-CASE™. See literature PC/9.6		
Spectrum® 875	907583	See literature PC/9.8		
Remote Controls				
		See page 7		
Trailers and Hitches				
HWY-224 Trailer	043805	Trailer with lights, fenders and 2-inch (50 mm) ball hitch. For highway use		
Cable Tree	043826	Trailer-mounted cable holder for HWY-224		
Dual Hitch	300831	Combination 2-inch (50 mm) ball hitch and 3-inch (76 mm) lunette eye in one reversible assembly for HWY-224		

Date:

Total Quoted Price:

Distributed by:

