

Multimatic® 235

**MIG/Multiprocess Power Source,
Wire Feeder and Gun Package**



Quick Specs

Industrial Applications

Manufacturing and fabrication
Plant maintenance shops
Construction fabrication
Education

Processes

MIG (GMAW)
Flux-cored (FCAW)
DC stick (SMAW)
DC Lift-Arc™ TIG (GTAW)
Pulsed TIG (GTAW-P)

Input Power 240 V, single-phase

Rated Output **MIG:** 170 A at 22.5 V, 60% duty cycle
Stick: 150 A at 26 V, 60% duty cycle
TIG: 180 A at 17.2 V, 60% duty cycle

Amperage Range 20–235 A

Net Weight **Machine only:** 63 lb. (29 kg)
Machine with running gear: 127 lb. (58 kg)

Easy to Use. Versatility. Portability.

THINK SIMPLY. WELD SMARTER.

Built for professionals in the manufacturing/fabrication, MRO and construction

fabrication segments, the Multimatic 235 allows welders of all skill levels to be more efficient for all their MIG, flux-cored, stick and DC TIG welding needs. Setup is quick and easy, letting operators have faster uptime and weld with confidence.



Machine only

Machine with running gear

Easy to Use



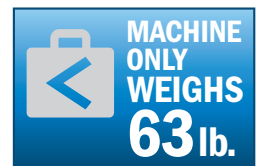
Quick and easy setup

Versatility



Multiple processes with only one machine

Portability



Easier to get to the work



Welder is warrantied for three years, parts and labor.
Gun warrantied for 90 days, parts only.



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An ITW Welding Company
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f t y i n



Multimatic® 235 Features and Benefits

All in One



Multiprocess capabilities include MIG, flux cored, DC stick, DC Lift-Arc™ TIG and pulsed TIG welding.



- MIG:** 24 ga.–3/8 in. steel
18 ga.–3/8 in. aluminum
- DC stick:** 16 ga.–3/8 in. steel
- DC Lift-Arc™ TIG:** 24 ga.–1/4 in. steel

Easy to Use



Auto-Set™ Elite offers predefined weld settings to increase ease of use and ensure that the job is done right for operators of all skill levels.

- Available for MIG, stick and DC TIG processes with the ability to fine-tune your settings.
- Set weld parameters by selecting:
MIG (shown) — wire and gas type, wire diameter and material thickness
Stick — electrode type, electrode diameter and material thickness
DC Lift-Arc™ TIG — remote on/off, tungsten diameter and material thickness



Large wire drive compartment to house **12-inch wire spool** to increase productivity by reducing frequency of changing smaller wire spools.



Angled heavy-duty aluminum two-drive-roll system significantly improves wire feeding through a 15-foot gun from a 12-inch spool of wire.



Two shielding gas connections so both gases can be left connected to the machine, no switching needed. One connection for MIG gas and one for TIG gas.



Easy-to-understand interface with 4.3-inch color LCD display and intuitive connection setup images.



MDX™-250 MIG gun with AccuLock™ MDX consumable system features a dual-locked, front-loading liner that optimizes wire feedability.

- Install AccuLock contact tips with a single turn.
- AccuLock liner locks at front and back of gun to align with contact tip and power pin for a flawless wire feed path.
- Durable, ergonomic handle with overmolding improves grip and comfort.
- Ball-and-socket handle with rear swivel for increased gun maneuverability while reducing welder fatigue.

AccuLock™

Multimatic® 235 Features and Benefits

Versatility



Auto-Gun Detect™ automatically adjusts voltage, wire speed for faster switching between MIG and spool guns.



Optional wireless foot control shown.

14-pin controlled operator alternatives. Using the 10-pin connector on your Multimatic 235 in conjunction with the 10-pin to 14-pin adapter cord lets you choose your control for a customized experience, whether it's a foot control, fingertip control or wireless foot control.

Note: Multimatic 235 is not compatible with wireless hand control.



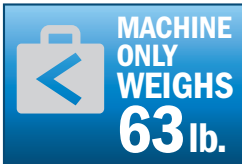
Wide range of TIG adjustability.

- DC Pulse – adjustable from Off–150 pulses per second (PPS)
- TIG Post-Flow – adjustable from Auto–25 seconds (accessible through service menu screen 13)
- DC Lift-Arc™
- Tungsten size selection



Generator compatible. The Multimatic 235 will be able to operate and provide full output when powered by generators with 10,000-watt (10 kW) output or higher, such as a Miller Bobcat™ or Trailblazer® series generator. Limited output will occur when used with smaller generators.

Portability



Weighing only 63 pounds, the Multimatic 235 can go where the work is, plus the added convenience of one machine versus two or more.

Optional EZ-Latch™ running gear

EZ-Latch running gears are available in single cylinder and dual cylinder models (included with package or can be ordered separately). Operators no longer need to lift machine AND running gear into the truck. Latches secure machine to running gear. Simply loosen the latch retaining knob and rotate latches to disengage machine from running gear for easy portability. Cylinder racks feature bottle forward technology for increased stability when moving along an incline and running gears have built-in storage for accessories. Dual cylinder model includes an elevated gun and cable rack to keep cables off the floor and tangle free.



Storage solution

Single cylinder running gear



Latches shown in open position without machine and in closed position securing the machine

Bottle forward technology



Dual cylinder running gear

Dual cylinder model includes elevated gun and cable rack



Specifications (Subject to change without notice.)

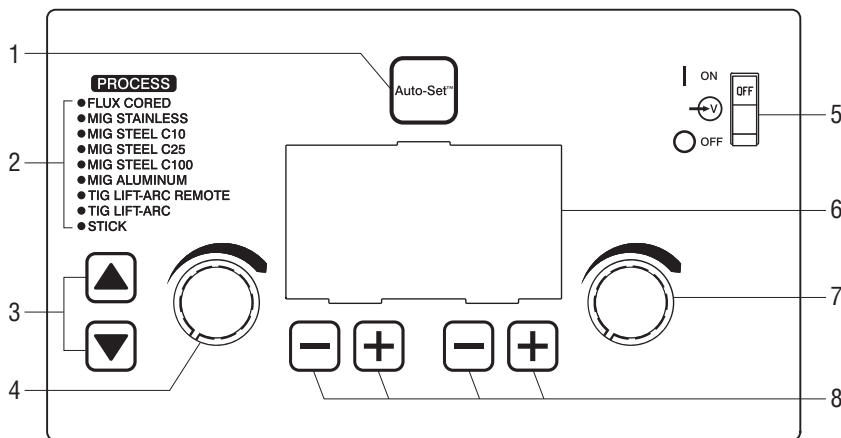


| Welding Process | Welding Amperage Range | Rated Output | Amps Input at Rated Output, 50/60 Hz 240 V* | | | Wire Feed Speed | Max. Open-Circuit Voltage | Dimensions | Net Weight |
|--------------------|------------------------|---------------------------------|---|-----|-----|------------------------------|---|--|------------|
| | | | 240 V* | KVA | KW | | | | |
| CV: MIG/flux-cored | 30–235 A | 170 A at 22.5 V, 60% duty cycle | 20.0 | 5.0 | 4.9 | 60–600 ipm (1.5–15.2 m/min.) | 54 VDC Machine only H: 19.24 in. (489 mm) W: 13.75 in. (349 mm) D: 24.25 in. (616 mm) Machine with running gear H: 32 in. (813 mm) W: 13.75 in. (349 mm) D: 45 in. (1,143 mm) | Machine only 63 lb. (29 kg) Machine with running gear 127 lb. (58 kg) | |
| CC: Stick | 30–200 A | 150 A at 26 V, 60% duty cycle | 20.2 | 5.0 | 4.8 | — | | | |
| CC: DC TIG | 20–210 A | 180 A at 17.2 V, 60% duty cycle | 17.0 | 4.2 | 4.1 | — | | | |

*Input voltage range for the Multimatic 235 is 204–276 V.

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

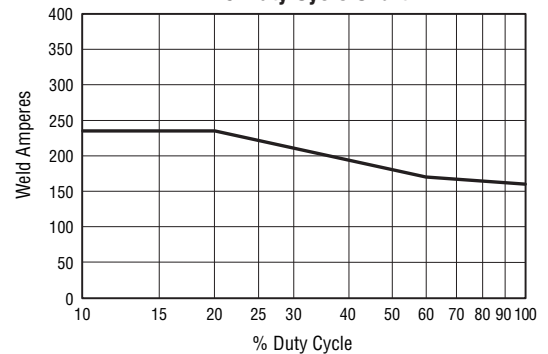
Control Panel



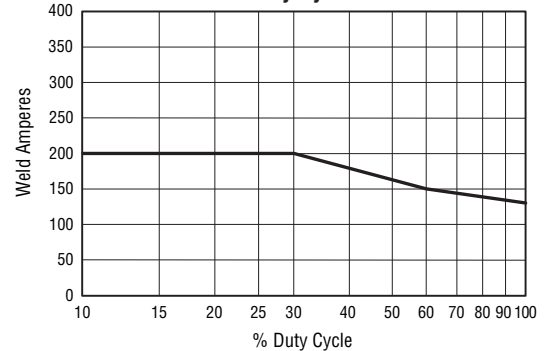
1. Auto-Set Button
2. Process Indicator Lights
3. Process Selection Button
4. Left Adjustment Knob
(Adjusts voltage, pulse frequency or parameter values depending on mode.)
5. Power Switch
6. Color LCD Display
7. Right Adjustment Knob
(Adjusts wire feed speed, amperage or parameter values depending on mode.)
8. Soft Keys

Performance Data

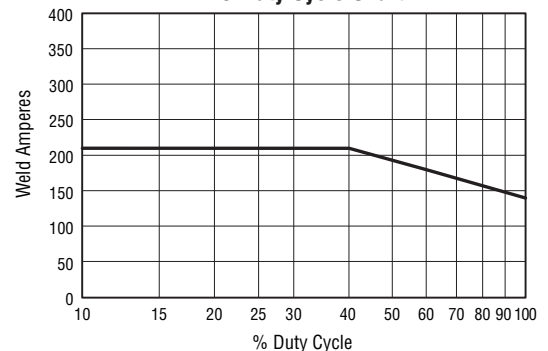
MIG Duty Cycle Chart



Stick Duty Cycle Chart



TIG Duty Cycle Chart



Multimatic® 235 Packages



Machine only comes complete with:

- Power source with 7 ft. (2.1 m) industrial power cord
- 15 ft. (4.5 m) 250-amp MDX™-250 MIG gun with AccuLock™ MDX consumables for .030/.035 in. (0.8/0.9 mm) wire
- 10 ft. (3 m) cable with electrode holder and 50 mm Dinse-style connector
- 10 ft. (3 m) work cable with clamp and 50 mm Dinse-style connector
- Flow gauge regulator and gas hose for argon or AR/CO₂ mix
- .030/.035 in. (0.8/0.9 mm) reversible drive rolls
- Extra contact tips
- Material thickness gauge



Machine with running gear package comes complete with:

- Power source with 7 ft. (2.1 m) industrial power cord
- 15 ft. (4.5 m) 250-amp MDX™-250 MIG gun with AccuLock™ MDX consumables for .030/.035 in. (0.8/0.9 mm) wire
- 10 ft. (3 m) cable with electrode holder and 50 mm Dinse-style connector
- 10 ft. (3 m) work cable with clamp and 50 mm Dinse-style connector
- Flow gauge regulator and gas hose for argon or AR/CO₂ mix
- .030/.035 in. (0.8/0.9 mm) reversible drive rolls
- Extra contact tips
- Material thickness gauge
- EZ-Latch™ single cylinder running gear
- Chain to secure gas cylinder



Machine with dual cylinder/TIG kit package comes complete with:

- Power source with 7 ft. (2.1 m) industrial power cord
- 15 ft. (4.5 m) 250-amp MDX™-250 MIG gun with AccuLock™ MDX consumables for .030/.035 in. (0.8/0.9 mm) wire
- 10 ft. (3 m) cable with electrode holder and 50 mm Dinse-style connector
- 10 ft. (3 m) work cable with clamp and 50 mm Dinse-style connector
- Two flow gauge regulators and gas hoses for argon or AR/CO₂ mix
- .030/.035 in. (0.8/0.9 mm) reversible drive rolls
- Extra contact tips
- Material thickness gauge
- EZ-Latch™ dual cylinder running gear with elevated gun and cable rack
- Multimatic 235/255 TIG kit
- Two chains to secure gas cylinders

Genuine Miller® Accessories



EZ-Latch™ Single Cylinder Running Gear 301449

Running gear with a single cylinder rack and storage compartment. Latches secure

machine to cart. Simply rotate latches to disengage machine from cart for easy portability.

EZ-Latch™ Dual Cylinder Running Gear 951769

Similar to above, but with dual cylinder rack which allows operator to easily store two gas cylinders. Includes elevated gun and cable rack (shown at right) to keep cables off the floor and tangle free.



EZ-Latch™ Dual Cylinder Rack with Elevated Gun and Cable Rack 301481

Converts an EZ-Latch single cylinder running gear into a dual cylinder rack to easily store two gas cylinders. Gun and cable rack keeps cables off the floor and tangle free. (Included with EZ-Latch dual cylinder running gear.)



Protective Cover 301521

Features side pocket.

Argon/Mixed Gas Regulator and Gas Hose 195050

Genuine Miller® Accessories

MIG Gun

MDX™-250 MIG Gun with AccuLock™ MDX Consumables
1770035 10 ft. (3 m)
1770036 12 ft. (3.7 m)
1770037 15 ft. (4.6 m)
 Industrial 250-amp MIG gun with consumables for .030/.035 in. (0.8/0.9 mm) wire.

MDX™-250 MIG Gun with AccuLock™ S Consumables
1770041 10 ft. (3 m)
1770042 12 ft. (3.7 m)
1770043 15 ft. (4.6 m), standard
 Industrial 250-amp MIG gun with consumables for .035/.045 in. (0.9/1.2 mm) wire.

Spool Guns



Spoolmatic® 15A Spool Gun 195156
Spoolmatic® 30A Spool Gun 130831
 Ideal for aluminum welding jobs. Air-cooled, one-pound spool gun with 15-foot (4.6 m) or 30-foot (9.1 m) cable assembly. Rated at 200 amps at 100 percent duty cycle. For detailed information, see Spoolmatic literature M/1.73.



Spoolmate™ 200 Spool Gun 300497
 Reliable and economical spool gun perfect for hobbyists and light fabricators who weld aluminum. Handles .030–.035 inch (0.8–0.9 mm) aluminum wires and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 160 amps, 60 percent duty cycle with 20-foot cable assembly. For detailed information, see Spoolmate literature M/1.47.

Optional Spoolmate™ 200 Head Tubes
300591 45-degree head tube
300592 9-inch extension head tube
243385 5-inch head tube



Spoolmate™ 150 Spool Gun 301272
 Direct-connect spool gun handles .030–.035 inch (0.8–0.9 mm) 4000/5000 series aluminum and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 150 amps, 60 percent duty cycle. Includes 20-foot (6.1 m) cable assembly.



Spoolmate™ 100 Spool Gun 300371
 Direct-connect spool gun handles .030–.035 inch (0.8–0.9 mm) aluminum (4043 only) and .023–.035 inch (0.6–0.9 mm) steel/stainless steel wires. Rated at 135 amps, 30 percent duty cycle. Includes 12-foot (3.7 m) cable assembly and custom carrying case.

Remote Controls



14-pin receptacle of Miller machine. 90-foot (27.4 m) operating range.

Note: Multimatic 235 is not compatible with wireless hand control.



RFCS-14 HD Foot Control 301589
 Heavy-duty foot pedal current and contactor control provides increased stability and durability from larger base and heavier cord. Includes 20-foot (6 m) cord with plug.



RHC-14 Hand Control 24221020

Miniature hand control for remote current and contactor control. Dimensions: 4 x 4 x 3.25 inches (102 x 102 x 82 mm). Includes 20-foot (6 m) cord with 14-pin plug.



RCC-14 Remote Contactor and Current Control 151086

East/west rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord with 14-pin plug.



RCCS-14 Remote Contactor and Current Control 043688

North/south rotary-motion fingertip control attaches to TIG torch using two hook-and-loop fasteners. Includes 26.5-foot (8 m) cord with 14-pin plug.



10-Pin to 14-Pin Adapter Cord 301545

Allows standard 14-pin TIG remote controls to be used with the Multimatic 235.



Multimatic® 235/255 TIG Kit 301518

Kits comes complete with everything needed to TIG weld with the Multimatic 235. Includes 25-foot (7.6 m) Weldcraft™ A-150 TIG torch, RFCS-14 HD foot control, 10-pin to 14-pin adapter cord, flow gauge regulator with 5-foot (1.5 m) gas hose, and AK3C torch accessory kit.

Gas Hose 269816

5-foot (1.5 m) reinforced PVC gas hose with fittings.

TIG Torch Connector 195378

50 mm Dinse-style for one-piece air-cooled TIG torch.

Consumables

For MDX™-250 MIG Guns

Standard AccuLock™ MDX Consumables

Smaller consumables and components to access hard-to-reach weldments.

Contact Tips (10 per package)

| | |
|---------------|-------------------|
| T-M023 | .023 in. (0.6 mm) |
| T-M030 | .030 in. (0.8 mm) |
| T-M035 | .035 in. (0.9 mm) |
| T-M045 | .045 in. (1.2 mm) |
| T-M047 | 3/64 in. (1.2 mm) |

Nozzles

| | |
|-----------------|--------------------------------------|
| N-M1200C | Copper, 1/2 in. ID, flush, standard |
| N-M1218C | Copper, 1/2 in. ID, 1/8 in. recess |
| N-M5800C | Copper, 5/8 in. ID, flush |
| N-M5818C | Copper, 5/8 in. ID, 1/8 in. recess |
| N-M58XTC | Copper, 5/8 in. ID, 1/8 in. stickout |

Diffuser **D-M250**

Monocoil Replacement Liners

10 ft. Liner

| | |
|----------------|----------------------------|
| LM1A-10 | .023/.025 in. (0.6 mm) |
| LM2A-10 | .030/.035 in. (0.8/0.9 mm) |
| LM3A-10 | .035/.045 in. (0.9/1.2 mm) |

12 ft. Liner

| | |
|----------------|----------------------------|
| LM1A-12 | .023/.025 in. (0.6 mm) |
| LM2A-12 | .030/.035 in. (0.8/0.9 mm) |
| LM3A-12 | .035/.045 in. (0.9/1.2 mm) |

15 ft. Liner

| | |
|----------------|----------------------------|
| LM1A-15 | .023/.025 in. (0.6 mm) |
| LM2A-15 | .030/.035 in. (0.8/0.9 mm) |
| LM3A-15 | .035/.045 in. (0.9/1.2 mm) |

Optional AccuLock™ S Consumables

Consumables for increased durability and longer life when guns are used in industrial applications.

Contact Tips (10 per package)

| | |
|------------------|-------------------|
| T-A023CHM | .023 in. (0.6 mm) |
| T-A030CHM | .030 in. (0.8 mm) |
| T-A035CHM | .035 in. (0.9 mm) |
| T-A039CHM | .039 in. (1.0 mm) |
| T-A045CHM | .045 in. (1.2 mm) |

Nozzles

| | |
|------------------|-------------------------------------|
| N-A5800CM | Copper, 5/8 in. ID, flush, standard |
| N-A5818CM | Copper, 5/8 in. ID, 1/8 in. recess |
| N-A5814CM | Copper, 5/8 in. ID, 1/4 in. recess |

Diffuser **D-MA250M**

Note: Miller® FasTip™, M-Series and Bernard Centerfire™ diffusers and consumables are NOT compatible with MDX Series guns.

For Spoolmatic® Spool Guns

For Aluminum Wire

FasTip™ Contact Tips (25 per package)

| | |
|---------------|-------------------------------|
| 206186 | Heavy-duty, .030 in. (0.8 mm) |
| 206187 | Heavy-duty, .035 in. (0.9 mm) |
| 206188 | Heavy-duty, .040 in. (1.0 mm) |
| 206189 | Heavy-duty, 3/64 in. (1.2 mm) |
| 206191 | Heavy-duty, 1/16 in. (1.6 mm) |
| 209026 | Tapered, .030 in. (0.8 mm) |
| 209027 | Tapered, .035 in. (0.9 mm) |
| 209029 | Tapered, 3/64 in. (1.2 mm) |
| 209030 | Tapered, 1/16 in. (1.6 mm) |

Screw-On Nozzles

| | |
|---------------|---|
| 199610 | Brass, 1/2 in. orifice, tapered |
| 199613 | Brass, 5/8 in. orifice, tapered |
| 199614 | Brass, 5/8 in. orifice, tapered HD |
| 199611 | Brass, 3/4 in. orifice, straight |
| 199612 | Brass, 3/4 in. orifice, straight HD |
| 209035 | Copper, 3/8 in. orifice, tapered |
| 199615 | Copper, 1/2 in. orifice, tapered |
| 209036 | Copper, 1/2 in. orifice, tapered HD |
| 198855 | Copper, 5/8 in. orifice, tapered |
| 199618 | Copper, 5/8 in. orifice, tapered HD |
| 207313 | Copper, 5/8 in. orifice, tapered 15/16 OD |
| 199616 | Copper, 3/4 in. orifice, straight |
| 199617 | Copper, 3/4 in. orifice, straight HD |

For Spoolmate™ 200 Spool Gun

For Standard Heavy-Duty Head Tube

Contact Tips (5 per package)

| | |
|---------------|-------------------|
| 199387 | .030 in. (0.8 mm) |
| 199388 | .035 in. (0.9 mm) |

Nozzle **050622**

For Optional Head Tubes

Note: The same consumables are used on 45-degree, 5-inch, and 9-inch extension head tubes.

Contact Tips (5 per package)

| | |
|---------------|---|
| 199730 | .024 in. (0.6 mm) (requires V-knurled drive roll 136135) |
| 186419 | .030 in. (0.8 mm) |
| 186406 | .035 in. (0.9 mm) |

Nozzle **186405**

For Spoolmate™ 150 Spool Gun

Contact Tips (5 per package)

| | |
|---------------|-------------------|
| 199387 | .030 in. (0.8 mm) |
| 199388 | .035 in. (0.9 mm) |

Nozzle **050622**

For Spoolmate™ 100 Spool Gun

Contact Tips (5 per package)

| | |
|---------------|-------------------|
| 199730 | .024 in. (0.6 mm) |
| 186419 | .030 in. (0.8 mm) |
| 186406 | .035 in. (0.9 mm) |

Nozzle **186405**

For Multimatic® 235

Note: Machine drive roll kits include two drive rolls and an inlet guide.

V-Grooved Drive Roll Kits (solid wire)

| | |
|---------------|--|
| 204579 | .030 and .035 in. (0.8 and 0.9 mm) combination (reversible) |
| 087131 | .024 in. (0.6 mm) |
| 079594 | .030 in. (0.8 mm) |
| 079595 | .035 in. (0.9 mm) |
| 079596 | .045 in. (1.2 mm) |

V-Knurled Drive Roll Kits (flux-cored or difficult-to-feed wire)

| | |
|---------------|-------------------|
| 079606 | .035 in. (0.9 mm) |
| 079607 | .045 in. (1.2 mm) |
| 079608 | .052 in. (1.3 mm) |

U-Grooved Drive Roll Kits (aluminum wire)

| | |
|---------------|-------------------|
| 044749 | .035 in. (0.9 mm) |
| 079599 | .047 in. (1.2 mm) |

Ordering Information

| Power Source and Options | Stock No. | Description | Qty. | Price |
|---|------------------|--|------|-------|
| Multimatic® 235 | 907780 | 240 V, 50/60 Hz | | |
| Multimatic® 235 with Running Gear | 951846 | 240 V, 50/60 Hz with single cylinder running gear | | |
| Multimatic® 235 with Dual Cylinder/TIG Kit | 951847 | 240 V, 50/60 Hz with dual cylinder running gear and TIG kit | | |
| Accessories | | | | |
| EZ-Latch™ Single Cylinder Running Gear | 301449 | Running gear with single cylinder rack | | |
| EZ-Latch™ Dual Cylinder Running Gear | 951769 | Running gear with dual cylinder rack and elevated gun and cable rack | | |
| EZ-Latch™ Dual Cylinder Rack with Elevated Gun and Cable Rack | 301481 | Upgrade single cylinder rack to dual (included with EZ-Latch dual cylinder running gear) | | |
| Protective Cover | 301521 | Features side pocket | | |
| Argon/Mixed Gas Regulator and Gas Hose | 195050 | | | |
| Guns | | | | |
| MDX™-250 MIG Gun with AccuLock™ MDX Consumables | 1770035 | 10 ft. (3 m), 250 A, .030/.035 in. (0.8/0.9 mm) wire | | |
| | 1770036 | 12 ft. (3.7 m), 250 A, .030/.035 in. (0.8/0.9 mm) wire | | |
| | 1770037 | 15 ft. (4.6 m), 250 A, .030/.035 in. (0.8/0.9 mm) wire | | |
| MDX™-250 MIG Gun with AccuLock™ S Consumables | 1770041 | 10 ft. (3 m), 250 A, .035/.045 in. (0.9/1.2 mm) wire | | |
| | 1770042 | 12 ft. (3.7 m), 250 A, .035/.045 in. (0.9/1.2 mm) wire | | |
| | 1770043 | 15 ft. (4.6 m), 250 A, .035/.045 in. (0.9/1.2 mm) wire | | |
| Spoolmatic® 15A Spool Gun | 195156 | 15 ft. (4.6 m), 200 A, .030-.047 in. (0.8-1.2 mm) for aluminum wire | | |
| Spoolmatic® 30A Spool Gun | 130831 | 30 ft. (9 m), 200 A, .030-.047 in. (0.8-1.2 mm) for aluminum wire | | |
| Spoolmate™ 200 Spool Gun | 300497 | 20 ft. (6 m), 160 A, .030-.035 in. (0.8-0.9 mm) for aluminum wire, .023-.035 in. (0.6-0.9 mm) for steel/stainless steel wire | | |
| Optional Spoolmate™ 200 Head Tubes | | See page 6 | | |
| Spoolmate™ 150 Spool Gun | 301272 | 20 ft. (6.1 m) | | |
| Spoolmate™ 100 Spool Gun | 300371 | 12 ft. (3.7 m). Includes custom carrying case | | |
| TIG Accessories | | | | |
| Wireless Remote Foot Control | 301580 | Foot control with wireless 90 ft. (27.4 m) operating range | | |
| RFC-14 HD | 301589 | Heavy-duty foot control (included with TIG kit and TIG package) | | |
| RHC-14 | 242211020 | Hand control with 20 ft. (6 m) cord | | |
| RCC-14 | 151086 | Fingertip control | | |
| RCCS-14 | 043688 | Fingertip control | | |
| 10-Pin to 14-Pin Adapter Cord | 301545 | Allows standard 14-pin TIG remote controls to be used with the Multimatic 235 | | |
| Multimatic 235/255 TIG Kit | 301518 | See page 6 for contents | | |
| Gas Hose | 269816 | 5 ft. (1.5 m) | | |
| TIG Torch Connector | 195378 | 50 mm Dinse-style for one-piece air-cooled TIG torch | | |
| Consumables | | | | |
| Contact Tips | | See page 7 | | |
| Replacement Liners | | See page 7 | | |
| Nozzles | | See page 7 | | |
| Drive Rolls | | See page 7 | | |

Date:

Total Quoted Price:

Distributed by:

