# Multimatic<sup>®</sup> 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.



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.



#### **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.



#### Miller Electric Mfg. LLC

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







## Multimatic® 235 Features and Benefits



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 finetune 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



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.



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.



### Multimatic<sup>®</sup> 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<sup>™</sup>
- · 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.







## **Specifications** (Subject to change without notice.)







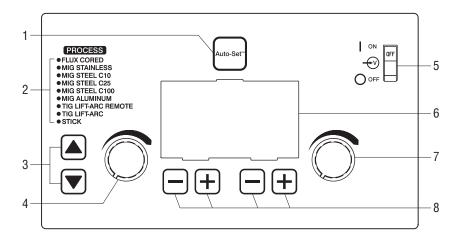
Welding Process	Welding Amperage Range	Rated Output	Amps Input at 240 V*	Rated Output, ! KVA	50/60 Hz KW	Wire Feed Speed	Max. Open- Circuit Voltage	Dimensions	Net Weight
CV: MIG/ flux-cored	30-235 A	170 A at 22.5 V, 60% duty cycle	20.0	5.0	4.9	60-600 ipm (1.5-15.2 m/min.)	54 VDC	Machine only H: 19.24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

<sup>\*</sup>Input voltage range for the Multimatic 235 is 204-276 V.



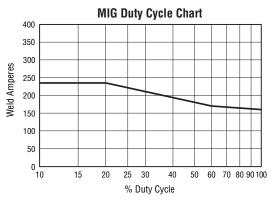
Certified by Canadian Standards Association to both the Canadian and U.S. Standards.

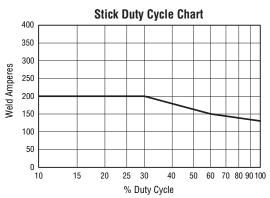
## **Control Panel**

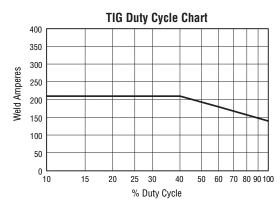


- 1. Auto-Set Button
- 2. Process Indicator Lights
- 3. Process Selection Button
- 4. Left Adjustment Knob (Adjusts voltage, pulse frequency or parameter values depending on mode.)
- 5. Power Switch
- 6. Color LCD Display
- 7. Right Adjustment Knob (Adjusts wire feed speed, amperage or parameter values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

## **Performance Data**









## Multimatic<sup>®</sup> 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<sup>™</sup>-250 MIG gun with AccuLock<sup>™</sup> 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/CO<sub>2</sub> 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/CO<sub>2</sub> 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<sup>™</sup>-250 MIG gun with AccuLock<sup>™</sup> 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/CO<sub>2</sub> 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**



Wireless Remote Foot Control 301580 For remote current

and contactor control. Receiver plugs directly into the

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 242211020

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

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-A030CHM .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)
206191 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 HD
207313 Copper, 5/8 in. orifice, tapered HD
207314 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)*  .024 in. (0.6 mm) .030 in. (0.8 mm) 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	301481	Upgrade single cylinder rack to dual		
with Elevated Gun and Cable Rack		(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	1770035	10 ft. (3 m), 250 A, .030/.035 in. (0.8/0.9 mm) wire		
with AccuLock™ MDX Consumables	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	1770041	10 ft. (3 m), 250 A, .035/.045 in. (0.9/1.2 mm) wire		
with AccuLock™ S Consumables	1770042 1770043	12 ft. (3.7 m), 250 A, .035/.045 in. (0.9/1.2 mm) wire 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 <sup>™</sup> 200 Spool Gun	300497	20 ft. (6 m), 160 A, .030–.047 in. (0.8–0.9 mm) for aluminum wire,		
Spoolinate 200 Spool Guil	300497	.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		
RFCS-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		1
Replacement Liners		See page 7		
Nozzles		See page 7		
Drive Rolls		See page 7		

Date: Total Quoted Price:

Distributed by:

