

# POWER MIG<sup>®</sup> 215 MPI<sup>™</sup>

## MULTI-PROCESS WELDER



Shown:  
POWER MIG 215 MPI, K4876-1

### SIMPLE, VERSATILE, RELIABLE

The POWER MIG 215 MPI multi-process welder is a reliable, easy-to-use machine for the general fabricator, small contractor or repair personnel. The sleek and solid ergonomic design with multiple lift points maximizes mobility around the shop, and user-friendly technology makes the setup process and selection of weld settings incredibly simple. Take on any job – MIG, TIG, Stick or Flux-Cored – with the versatile POWER MIG 215 MPI welder.

#### Processes »

MIG, Flux-Cored, DC Stick, DC TIG

#### Applications »

Metal Fabrication, Maintenance and Repair, Autobody/Farm, Light Industrial

#### Output »



#### Input »



#### Product Numbers »

POWER MIG 215 MPI  
K4876-1

POWER MIG 215 MPI Aluminum One-Pak<sup>®</sup>  
K4877-1

POWER MIG 215 MPI TIG One-Pak  
K4878-1

## VALUE-ADDED FEATURES

- **Multi-Process Capable** - Welds MIG, Flux-Cored, Stick, and DC TIG.
- **Dual Input Voltage** - 120V and 230V inputs so you can plug into any common power supply.
- **Ergonomic Case** - Sleek and robust case design with multiple lift points for ease of mobility around the shop.
- **Built in TIG Solenoid and Foot Pedal Adapter**  
The POWER MIG 215 MPi welder is designed to accept a TIG torch, no install required.
- **Robust and Reliable Wire Drive** - Ensures proper and consistent feeding for optimal welding experience.
- **Ready.Set.Weld® Technology** - Simplifies setup by recommending optimal welding parameters for each welding procedure.
- **ArcFX® Technology** - Provides instant visual feedback on how settings affect the weld outcome.
- **Memory Capability** - Easily recall saved settings to get welding faster.
- **Lightweight and Portable** - Only 48 lbs.

## KEY CONTROLS

1. Ergonomic front Handle
2. User Interface
3. Twist Mate™ Receptacles
4. On/Off Switch
5. Angled Gun Connection For Improved Feedability
6. 4-Pin MIG gun adapter
7. 6-Pin Amphenol



## INNOVATIVE USER INTERFACE

1. Settings Summary
2. Wire Feed Speed
3. Main Control Knob
4. Menu Button
5. Voltage
6. Back Button



## ADVANCED OPTIONS



**Run-In:** Adjusts initial wire feed speed for smooth arc starting.



**Thickness:** Adjusts thickness, the display is to scale.



**Pre Flow:** Allows a time to be selected for shielding gas to flow after the trigger is pulled, prior to establishing an arc.



**Spot Timer:** Adjusts arc time for tack and spot welds.



**Trigger:** Choose between 2 and 4 step.



**Post Flow:** Allows a time to be selected for shielding gas to continue to flow after the trigger is released and output current is turned off.



**Burn Back:** Provides manual adjustment of the burnback time for any selected welding mode.



**Save:** Save settings to memory.



**Menu:** Takes you to Process Selection.



**Hot Start:** Increases amperage at arc start initialization.



**Arc Force:** Controls penetration profile from soft arc to crisp arc.



**Gas Purge:** Purge air line for specified time without activating output.



**Load:** Load settings from memory.

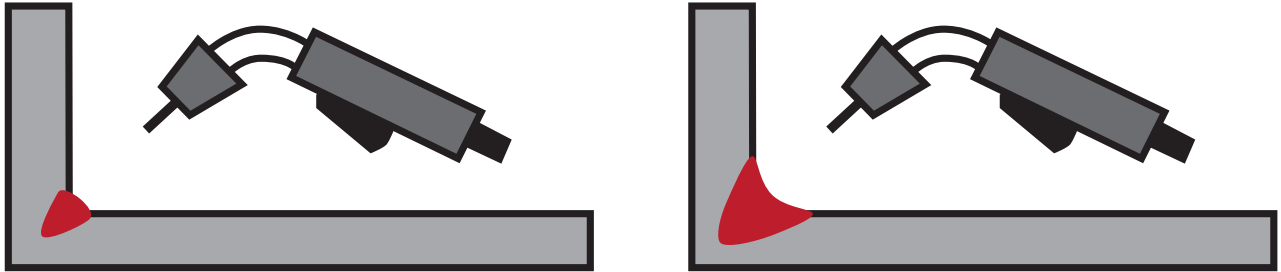


**Inductance:** Controls how fast the machine responds to shorts while welding.

## What is ArcFX™ Technology?

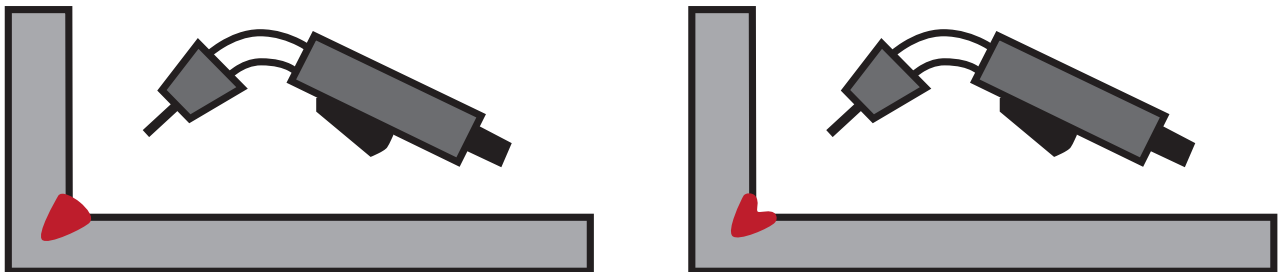
Lincoln Electric's patented technology provides instant graphical feedback on the user interface illustrating how a welder's settings affect the weld outcome.

### How does wire feed speed affect my weld?



**Wire Feed Speed** - As your wire feed speed is increased the weld penetration increases, and as your wire feed speed is decreased, the weld penetration decreases. Notice the changes to the weld puddle in the image shown above.

### How does voltage affect my weld?



**Voltage** - Arc voltage affects the arc length. At the same wire feed speed, as voltage increases, the arc length gets longer and as voltage decreases, the arc length gets shorter. The length of the arc in turn determines the width and size of the arc cone. Notice the changes to the weld puddle in the image shown above.

## MAGNUM PRO 175L WELDING GUN

The over-molded handle design offers key benefits to the operator:

- Increased Comfort
- Enhanced Grip
- Reduced Hand Fatigue
- Improved Control



## MAGNUM PRO EXPENDABLES

Lincoln Electric's long-lasting Magnum PRO expendables are designed with welding arc performance in mind. Using Magnum PRO expendables result in more time welding and less time wasted.

### Copper Plus Technology

With a larger diameter to disperse heat and keep tips cooler



### Anti-Seize Threads

To prevent the contact tips from melting, fusing, and seizing in the diffuser



### Easy to Clean

Nickel plating keeps spatter from sticking to the nozzle

### Easy to Unscrew

With coarse threads that prevent seizing

## CONTACT TIPS

Wire Diameter in (mm)	Tapered Tip	
	Pkg. Qty. -10	Pkg. Qty. -100
0.025 (0.6)	KP2744-025T	KP2744-025T-B100
0.030 (0.8)	KP2744-030T	KP2744-030T-B100
0.035 (0.9)	KP2744-035T	KP2744-035T-B100
0.040 (1.0)	KP2744-040T	KP2744-040T-B100
0.045 (1.1)	KP2744-045T	KP2744-045T-B100

## GAS DIFFUSER

Pkg. Qty.	Part Number
1	KP3076-1
25	KP3076-1-B25

## GASLESS NOZZLE

Pkg. Qty.	Part Number
1	KP3084-1
25	KP3084-1-B25

## GUN TUBE

Degree	Part Number
60	KP4087-1

## GAS NOZZLE<sup>1</sup>

Nozzle	Pkg. Qty.	Gas Nozzle Diameter	
		0.375 in (9.5 mm)	0.5 in (12.7 mm)
Flush	1	KP3075-1-38F	KP3075-1-50F
	25	KP3075-1-38F-B25	KP3075-1-50F-B25
1/4 in (6.4 mm) Stickout	1	KP3075-1-38S	KP3075-1-50S
	25	KP3075-1-38S-B25	KP3075-1-50S-B25

## GUN LINER

Cable Length	Pkg Qty	Steel	Steel	Aluminum
		0.023-0.035 in (0.6-0.9 mm)	0.035-0.045 in (0.9-1.2 mm)	0.035 in (0.9 mm)
15 ft (4.5 m)	1	KP35-40-15 <sup>3</sup>	KP45-40-15	KP1959-1 <sup>2</sup>
	10	KP35-40-15-B10	KP45-40-15-B10	-

<sup>1</sup> When using nozzle sizes less than 5/8 in. (15.9 mm), tapered tips are recommended.

<sup>2</sup> Recommended for aluminum wire welding, recommended maximum cable length for aluminum is 10 ft. (3.0 m)

<sup>3</sup> Standard on Magnum PRO 175L

## ACCESSORIES

ACCESSORIES	Product Number	Base Unit [K4876-1]	Aluminum One-Pak® [K4877-1]	TIG One-Pak® [K4878-1]
Magnum® PRO 175L Gun, 10 ft (3.0 m)	K4529-1	●	●	●
230V to 120V power cord adapter	–	●	●	●
Work Cable and Clamp	–	●	●	●
Electrode Holder and Lead Assembly	–	●	●	●
Adjustable Gas Regulator and Hose	–	●	●	●
Gun Cable Liner (pre-installed in gun)	–	●	●	●
Spindle Adapter	–	●	●	●
Sample 1 lb (0.45 kg) 0.030 in (0.8 mm) Spool of SuperArc® L-56® Mild Steel MIG Wire	–	●	●	●
0.030 in (0.8 mm) Contact Tip (Installed)	–	●	●	●
0.030 - 0.035 in (0.8 - 0.9 mm) Drive Roll (Installed)	–	●	●	●
0.030 - 0.045 in (0.8 - 1.1 mm) Knurled Drive Rolls	–	●	●	●
0.025 - 0.035 in (0.6 - 0.9 mm) Wire Guide (Installed)	–	●	●	●
<b>GENERAL</b>				
Welding Cart (150 cu ft Bottle Capacity)	K520-1	●	●	●
Replacement Screen Shield	KP4140-1	●	●	●
Small Medium Canvas Cover	K2377-2	●	●	●
Magnum PRO 100SG Spool Gun	K3269-1	●	●	●
PTA-17 Ultra-Flex™ TIG Torch 12.5 ft (3.8 m)	K1782-1	●	●	●
Twist Mate™ TIG Torch Adapter	K1622-1	●	●	●
Foot Amptrol™	K870	●	●	●
Welding Fume Extractors	See Publication MC08-70	●	●	●

● Included      ● Optional

## RECOMMENDED ACCESSORIES

### STICK OPTIONS



#### Accessory Kit

Complete kit for stick welding. Includes 30 ft. (9.1 m) electrode cable, 25 ft. (7.6 m) work cable, headshield, work clamp and electrode holder.

**Order K875** for 150 amps  
**Order K704** for 400 amps

### TIG OPTIONS



#### PTA-17 150 Amp Air-Cooled TIG Torch

**Order K1782-1** for 12.5 ft. (3.8 m) length, 1-cable  
**Order K1782-3** for 25 ft. (7.6 m) length, 1-cable



#### Small-Medium Canvas Cover

Protect your welder when not in use. Made from attractive red canvas that is flame retardant, mildew resistant and water repellent.

**Order K2377-2**



### Parts Kits

Magnum Parts Kits provide all the torch accessories you need to start welding. Parts kits provide collets, collet bodies, a back cap, alumina nozzles and tungstens in a variety of sizes, all packaged in an easy to carry reclosable box.

**Order KP508** for PTA-17  
**Order KP509** for PTA-26



### Foot Amptrol

Provides 25 ft. (7.6 m) of remote current control for TIG welding. (6-pin plug connection).

**Order K870**



### Hand Amptrol KP508

Provides 25 ft. (7.6 m) of remote current control for TIG welding. (6-pin plug connection)

**Order K963-3**



### Arc Start Switch

Needed if an Amptrol is not used when TIG welding. Comes with a 25 ft. (7.6 m) cable. Attaches to the TIG torch for convenient finger control.

**Order K814**



### Harris® Aluminum Flow/Regulator

355-2CD 100-580

**Order 3100546**



### Utility Cart (150 cu. ft bottle capacity)

Accommodates power source, gas cylinder, tools and welding accessories.

**Order K520-1**

## PACKAGES AVAILABLE



### K4877-1 POWER MIG 215 MPI Aluminum One-Pak package includes everything in

K4876-1 POWER MIG 215 MPI base model and:

- Magnum PRO 100SG Spool Gun (K3269-1)



### K4878-1 POWER MIG 215 MPI TIG One-Pak package includes everything in K4876-1 POWER MIG 215 MPI base model and:

- PTA-17 Ultra-Flex TIG Torch 12.5 ft. (3.8 m) (K1782-1)
- Twist Mate TIG Torch Adapter (K1622-1)
- Foot Amptrol (K870)
- Parts Kit for PTA-17V TIG Torch (KP508)

## PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage/ Duty Cycle	Input Current @ Rated Output	Output Range	Wire Feed Speed Range	Dimensions H x W x D in (mm)	Net Weight lb (kg)
POWER MIG 215 MPi	K4876-1	120/230/1/60	215A/24.8V/30%	120VAC: eff 15A max 22A	120V: 20-140 Amps DC	50-500 ipm (1.3-12.7 m/min)	15.08 x 10.88 x 23.14 (383.03 x 276.35 x 587.75)	48 (21.8)
Aluminum One-Pak	K4877-1			230VAC: eff 15.9A max 29A	230V: 20-220 Amps DC			
TIG One-Pak	K4878 -1				Max OCV: 56V			

For best welding results with Lincoln Electric® equipment, always use Lincoln Electric consumables. Visit [www.lincolnelectric.com](http://www.lincolnelectric.com) for more details.

### CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment, or to provide engineering advice in relation to a specific situation. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

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