POWER MIG® 220 AC/DC

MULTI-PROCESS WELDER



Shown:
POWER MIG 220 AC/DC K5379-1

BUILT TO OUTPERFORM

The Power MIG 220 AC/DC is the ultimate multi-process welder—engineered to deliver unmatched performance in MIG, TIG, Stick, and Flux-Cored applications.

Loaded with advanced features, the Power MIG 220 AC/DC delivers high-frequency TIG starts for smooth arc initiation, exceptional 6010 stick welding with anti-stick technology, and advanced MIG features like adjustable crater time and burn back settings for cleaner finishes. The dual gas inlets allow for quickly switching between MIG & TIG welding, making it perfect for everything from light fabrication to heavy-duty maintenance work.

With it's easy-to-use digital interface and cutting-edge capabilities, the Power MIG 220 AC/DC is everything you need in a welder.

Processes »
MIG, Flux-Cored, DC Stick, AC/DC TIG

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

Output »



Input »



Product Numbers »

POWER MIG 220 AC/DC
K5379-1



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VALUE-ADDED FEATURES

- **Aluminum Welding -** MIG or TIG weld aluminum (spool gun required for MIG aluminum - sold separately).
- **Dual Gas Inlets -** Quickly change between MIG and TIG welding.
- **Anti-Sticking Feature –** Senses when the electrode is stuck to the workpiece and disables output.
- **Dual Input Voltage** - 120V and 240V 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.
- **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 Capabilities** - Easily recall 10 different saved settings per process to get welding faster.

KEY CONTROLS

1. Ergonomic Front, Rear & Middle Handles
2. User Interface
3. Twist Mate™ Receptacles
4. 4-Pin MIG Connector
5. Angled Gun Connection for Improved Feedability
6. 6-Pin TIG Connector
7. Dual Gas Inlets





INNOVATIVE USER INTERFACE

1. 7 in. Full Color LCD Display
2. Wire Feed Speed / Amperage Knob
3. Menu Button
4. Voltage Knob



ADVANCED OPTIONS

Trigger Interlock: Toggles between 2 step and 4 step trigger activation.

Pinch: Increasing pinch results in a crisper arc with deeper penetration while decreasing pitch provides a softer, wider arc.

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

Crater Time: Adjusts time a reduced voltage and wire feed speed are applied after the trigger is released to fill craters.

Burnback: Allows a time to be selected for output to remain on after the trigger is released to prevent electrode from sticking to the workpiece.

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

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

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.

Starting Current: Adjusts the amperage at the start of the weld to improve arc starting performance.

Arc Force: Higher arc force results in a crisper arc with deeper penetration. Lower arc force results in a softer, wider arc.

Hot Start: Increasing hot start increases amperage at arc start initialization.

TIG Pulse

Pulse in TIG mode (GTAW) automatically switches the current between the set point current on the main welding screen and the background current. This feature can be used to reduce heat input and warping of parts.

Frequency: Adjusts the pulse frequency from 1-100 Hz. Lower pulse frequencies can help with weld consistency, whereas higher pulse frequencies can prevent burn through on holes, edges and thin materials.

Background: Adjusts the background current between 10% and 90% of the current set point. Lower background settings often require higher current set points.

Duty Cycle: Adjusts the portion of each cycle that the current is pulsed at its current set point between 10% and 90%.

AC TIG

AC TIG (GTAW) is used for non-ferrous alloys like Aluminum and Magnesium.

AC Frequency: Adjusts the frequency of the AC output from 50-200 Hz. Lower AC frequencies result in wider weld beads.

AC Balance: Adjusts the portion of each AC cycle that the output is negative between 60% and 90%. A lower AC balance improves cleaning action while a higher AC balance increases weld penetration.

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 results 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

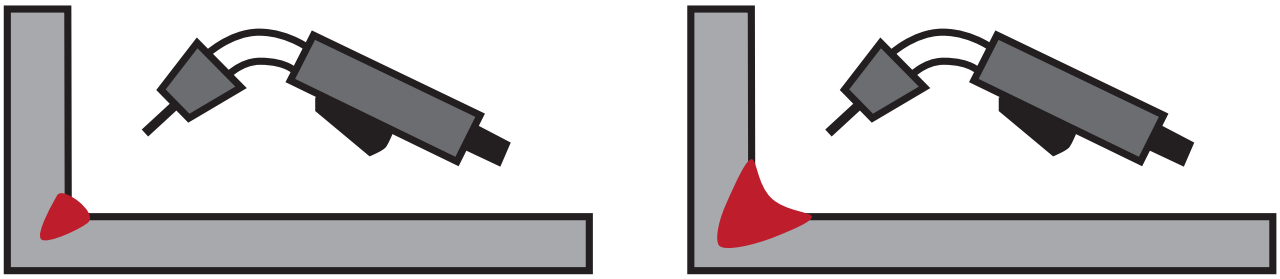
Easy to Unscrew

With coarse threads that prevent seizing

What is ArcFX™ Technology?

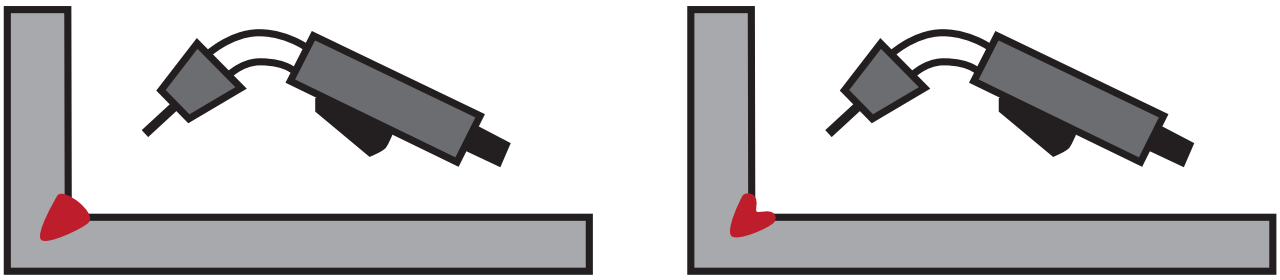
Lincoln Electric's patented technology provides instant graphical feedback on the user interface illustrating how a welder's settings affect the weld outcome.

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.

WHAT'S INCLUDED



INCLUDED	Product Number	Base Unit (K5379-1)
Magnum® PRO 175L MIG Gun 10 ft (3.0 m)	K4529-1	●
Gasless Nozzle	KP3084-1	●
0.025 in (0.6 mm) Tapered Contact Tip	KP2744-025T	●
0.030 in (0.8 mm) Tapered Contact Tip	KP2744-030T	●
0.035 in (0.9 mm) Tapered Contact Tip	KP2744-035T	●
0.025 - 0.030 in (0.6 - 0.8 mm) Smooth Drive Roll (Installed)	KP2529-1	●
0.035 in (0.9 mm) Smooth Drive Roll	KP2529-2	●
0.030 - 0.045 in (0.8 - 1.1 mm) Knurled Drive Roll	KP2529-3	●
0.025 - 0.035 in (0.6 - 0.9 mm) Wire Guide (Installed)	KP2531-1	●
0.045 in (1.1 mm) Wire Guide	KP2531-2	●
Sample 2 lb (0.91 kg) 0.030 in (0.8 mm) Spool of SuperArc® L-56® MIG Wire	ED030631	●
Caliber® 17 Series 150 Amp Air-cooled TIG Torch 12.5 ft (3.8 m)	K5339-17F-1	●
Caliber® 17/18/26 Series Medium Duty TIG Torch Parts Kit	KP4760-MD	●
Foot Amptrol™ 25 ft (7.6 m)	K870	●
Stick Electrode Holder and Lead Assembly 10 ft (3.0 m)		●
Work Cable and Clamp Assembly 10 ft (3.0 m)		●
240V to 120V Power Cord Adapter 20 in (0.5 m)		●
Adjustable Gas Regulators and Hoses		●
OPTIONAL ACCESSORIES		
Welding Cart (150 cu ft Bottle Capacity)	K520-1	●
Welding Fume Extractors	See Publication MC08-70	●
Magnum PRO 100SG Spool Gun	K3269-1	●

● Included ● Optional

RECOMMENDED ACCESSORIES



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



Magnum PRO 100SG Spool Gun
Spool gun is required for Aluminum MIG welding
Order K3269-1



Magnum PRO 150SG Spool Gun
Precise wire feeding performance for soft aluminum wire
Order K5471-1



Utility Cart
Upgrade your welding set up with this durable and versatile Utility Cart. This cart is designed to securely transport a power source, 150 cu. ft. gas cylinder, tools and welding accessories.
Order K520-1



Caliber® 26 Series TIG Torch - Flexible, 12.5 ft.
Premium Caliber® TIG Torch with a Flexible Torch Head and a 200A 60% Duty Cycle.
Order K5340-9F-1



Caliber® 9 Series TIG Torch - Flexible, 12.5 ft.
Premium Caliber® TIG Torch with a Flexible Torch Head and a 125A 60% Duty Cycle.
Order K4844-9F-1 & K1622-3 Adapter



Caliber® Stubby Torch Parts Kit - 17/18/26 Torches
Stubby torch parts for 17/18/26 TIG Kit using .040"-1/8" tungsten electrodes
Order KP4765-ST



Hand Amptrol™ Rotary Track Style 25 ft. (7.6m) (6-Pin)
Provides 25 ft. (7.6 m) of remote current control for TIG welding.
Order K963-3



Welding Table and Workbench
Heavy-duty steel welding accessory features a 21 x 44 in. (533 x 1,117 mm) work surface with strategically located 16mm holes for clamps and squaring blocks, along with multiple slots for cutting and clamping.
Order K5334-1

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 220 AC/DC	K5379-1	120/1/60	TIG: 125A/15.0V/40% TIG: 90A/13.6V/100% Stick: 85A/23.4V/40% Stick: 60A/22.4V/100% MIG: 95A/18.8V/40% MIG: 75A/17.8V/100%	Effective: 14.2A Max: 21.4A	TIG: 20 - 140A Stick: 30 - 90A MIG: 20 - 125A	79-512 ipm (2.0 - 13.0 m/min)	15 x 11 x 24 (381 x 279.4 x 609.6)	51 (23.1)
		240/1/60	TIG: 210A/18.4V/20% TIG: 130A/15.2V/100% Stick: 200A/28.0V/15% Stick: 120A/24.8V/100% MIG: 230A/25.5V/15% MIG: 120A/20.0V/100%	Effective: 14.3A Max: 32.5A	TIG: 20 - 210A Stick: 30 - 200A MIG: 20 - 230A			

For best welding results with Lincoln Electric® equipment, always use Lincoln Electric consumables. Visit 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, cutting equipment and EV charging systems. 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 or application. 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.

Lincoln Electric is a responsive manufacturer, but the definition of specifications, and the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

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