Power MIG® 350MP

Processes
MIG, Pulsed, Flux-Cored, Stick, TIG

Product Number
K2403-1

See back for complete specs

Input Power
208/230/460/575/1/60

Rated Output (Current/Voltage/Duty Cycle)
300A/32V/60% (40% on 208V)

Input Current at Rated Output
76/64/37/29A

Output Range
5-350 Amps, 50-700 ipm WFS
(1.3-17.7 m/min)
Max. OCV 67V

Weight/Dimensions (H x W x D)
255 lbs. (116 kg)
31.8 x 18.9 x 38.8 in.
(808 mm x 480 mm x 985 mm)

POWER MIG®
The Professional's Choice℠

When you need more than just a MIG machine, the Power MIG® 350MP is the choice for you. Lincoln CT Chopper Technology® delivers more welding processes – MIG and flux-cored, along with excellent stick welding, TIG and advanced processes such as Power Mode™ and Pulse-on-Pulse®.

FEATURES

- **Lincoln CT Chopper Technology®** - Delivers high quality welds by increasing the control over the welding arc.
- **Multi-Process capable** - Welds MIG, flux-cored, stick, TIG, pulsed MIG, and advanced processes like Pulse-On-Pulse® and Power Mode®.
- **Pulse-on-Pulse®** - Improves cleaning action when welding aluminum and delivers a TIG-like appearance to the weld bead.
- **Power Mode®** - Maintains a stable, smooth arc for short arc welding on thin material – great arc length control for aluminum welding.
- **Synergic control** - Allows you to set weld procedures with only one control for simplicity.
- **Rugged cast aluminum industrial wire drive** - Features dual driven rolls, easy-turn numeric tension indicator, brass-to-brass gun connections and Lincoln's 100% wire-supporting split wire guide system.
- **3 Ways to Feed Aluminum** - Choose a Push Gun, Spool Gun or Push-Pull Gun to feed aluminum. The POWER MIG® 350 has the electronics build-in for all three methods - no PC board add-ons are required.

APPLICATIONS

- Metal Fabrication
- Maintenance and Repair
- Autobody
- Light Industrial

Shown K2403-1

WHAT'S INCLUDED

K2403-1 Push Model Includes:

- Power MIG® 350MP
- Magnum® 300 Gun 15 ft. (4.5 m)
- .035/.045 in. (0.9/1.2 mm) Drive Rolls and Guide for Steel
- Gas Regulator and Hose
- Work Clamp and Cable
- 230V Input Cord and Plug
- 115V AC Auxiliary Power Receptacle
- Lockable Storage Compartment with Tool Tray

K2451-3 Push-Pull One-Pak® model includes all above AND:

- Panther™ Push-Pull Gun 25 ft (7.6 m)
- 3/64 in. (1.2 mm) Aluminum Drive Roll Kit

INPUT

1 PHASE · 60 Hz

OUTPUT

CC CV · DC

NEXTWELD®

LINCOLN ELECTRIC 3 YEAR WARRANTY AÑOS DE GARANTIA ANS DE GARANTIE

Two Year Extended Warranty Available in U.S.A. and Canada

MANUFACTURED AT AN ISO 9001:2000 14001:2004 CERTIFIED FACILITY

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LINCOLN ELECTRIC®
THE WELDING EXPERTS®

KEY CONTROLS

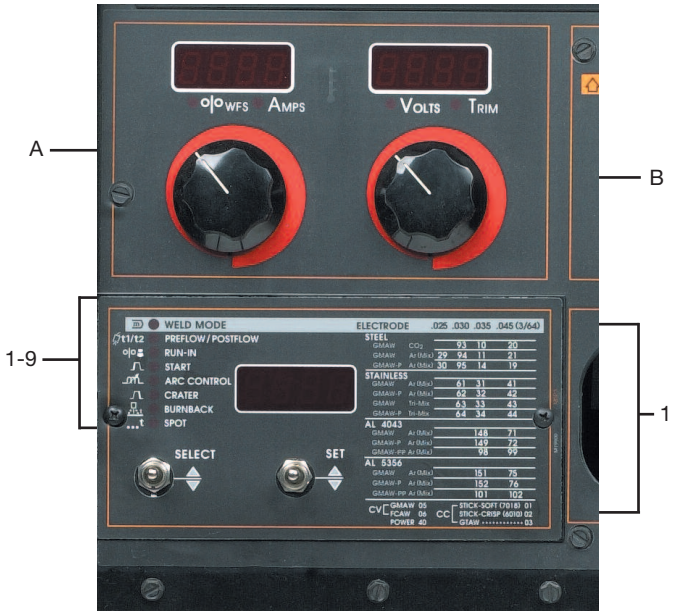
Easy to use controls for high productivity and accurate settings.

A. Continuous WFS/Amps Control – In wire feed welding, adjusts wire feed speed. In stick or TIG modes, adjusts amperage.

B. Continuous Volts/Trim Control – Adjusts voltage when MIG welding. Adjusts the arc length (trim) when Pulse-MIG welding.

Professional's Choice℠ – weld with traditional manual control or take advantage of the included MSP3 digital panel for high tech weld features:

1. Weld Mode – Many synergic modes to select from for simple one-knob control.
2. Preflow – Adjustable timer to initiate gas flow before the arc.
3. Post-Flow – Further protect your weld integrity by automatically setting the gas to run a few seconds after the trigger is released.
4. Run-In – Adjustable speed at which wire strikes the plate to enhance starting.
5. Start Procedure – Set start procedure, wire feed speed and volts for an adjustable starting time.
6. Arc Control – Set arc control to crisp or soft depending on your preference and application. In pulsed MIG, this control varies the pulse frequency and background current. In Stick mode, it adjusts the arc force.
7. Crater Control – Adjusts the ending weld procedure and ramp down time.

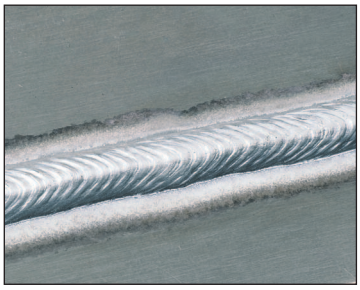


8. Burnback – Adjustable time delay between turning off the arc and the wire feed to prevent wire sticking to the puddle.
9. Spot Timer – Adjustable arc time for repetitive tack and spot welds.

ARC PERFORMANCE

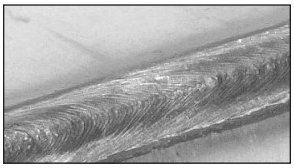
Lincoln Nextweld® Innovations for Challenging Applications

Waveform Control Technology® makes it possible to take advantage of Lincoln innovations like these patented processes:

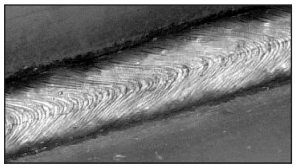


Pulse-On-Pulse® on 3 mm Aluminum

Pulse-On-Pulse® uses a sequence of varying pulse wave shapes to produce a TIG-like bead appearance and excellent weld properties when MIG welding aluminum. Pulse-On-Pulse® controls arc length and heat input together, making it easier to achieve good penetration. See NX-2.10

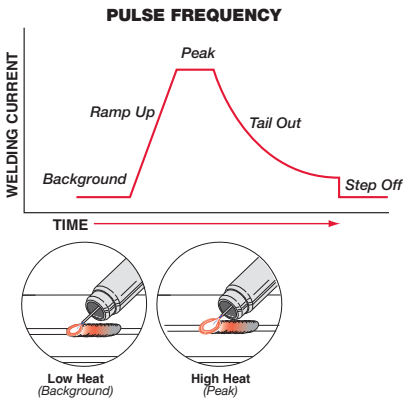


Power Mode® reduces spatter and improves bead appearance, even for low voltage procedures on stainless.

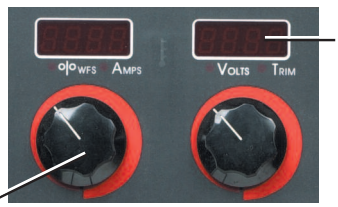


Power Mode® aids bead wetting and penetration on aluminum.

Power Mode® uses high-speed regulation of output power to deliver extremely fast response to changes in the arc, for example, when using a whip technique. The result is improved MIG welding performance, including low spatter, very uniform, consistent bead wetting and controlled penetration. Power Mode® benefits are especially apparent on low voltage applications on thin steel and stainless steel material less than 20 gauge (0.7 mm). See NX-2.60



Pulsed MIG varies weld current between peak (high heat) and background (low heat) current to provide better control of heat input, which minimizes warping and burnthrough on thin materials. Pulsed MIG also enables flat, horizontal, vertical up, or overhead welding without a slag system. Optimized GMAW-P waveforms are readily available to use on aluminum, carbon steel, high strength low alloy steel, stainless steel, and nickel alloys. See NX-2.70



2. Voltage is automatically set.

1. Use one knob to set procedures.

Synergic MIG
Synergic control of voltage and wire feed speed allows you to set weld procedures with only one control for simplicity and ease of use.

FEATURES

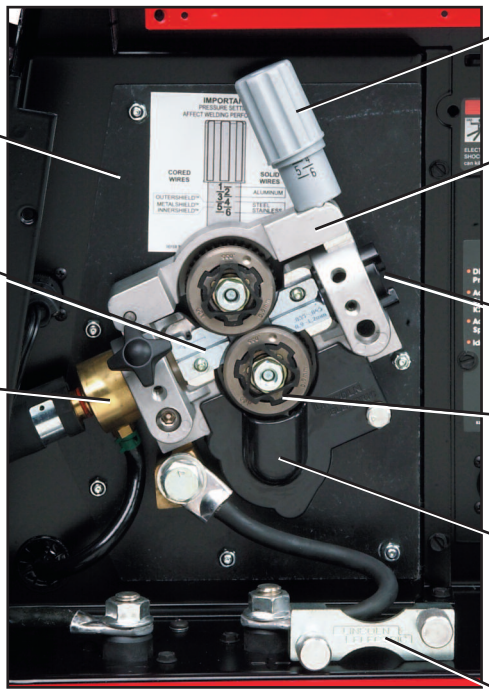
Professional Heavy Duty Wire Drive System

MAXTRAC® Wire Drive System

Internal tachometer feedback drive system allows you to maintain constant wire feed speed for consistent welds.

Split guides support the wire through the entire drive system to minimize feeding problems.

Reliable brass-to-brass gun receiver bushings provide connectivity to Magnum® or competitive guns. Easier interchangeability, better mechanical support and electrical current transfer.



Easy turn numeric tension indicator with optimized ranges for different wire types.

Wide idler arm hinge provides improved drive roll clamping pressure.

Input bushing protects the wire from damage.

Two gear driven rolls. No tools needed to swap rolls on or off.

Separate drive gear reduces pressure on motor shaft for long life.

Removable outer wire guide for easy access.

DRIVE ROLL KITS

Wire Type	Wire Size in. (mm)	Order Number
Solid	.023-.030 (0.6-0.8) .035 (0.9) .035/.045 Combination .040 (1.0) .045 (1.2)	KP1696-030S KP1696-035S KP1696-1(1) KP1696-2 KP1696-045S
Cored	.035 (0.9) .045 (1.2)	KP1697-035C KP1697-045C
Aluminum	.035 (0.9) 3/64" (1.2)	KP1695-035A KP1695-3/64A(2)

(1) Included with K2403-1 Push model and K2451-3 Push-Pull One-Pak® model.
(2) Included with K2451-3 Push-Pull One-Pak® model.

3 WAYS TO FEED ALUMINUM

GOOD

Push Gun
Good for occasional aluminum work

This popular Magnum gun is intended for most .035 - .045 in. (0.9 - 1.1 mm) wire diameter applications in job shops, production or manufacturing
Order K470-1 Magnum® 300 Gun 10 ft (3.0 m) 035-045
K470-2 Magnum® 300 Gun 15 ft (4.6 m) 035-045

BETTER

Spool Gun
Better feeding with integrated 2 lb. spools

Magnum® 250LX™ Spool Gun
280 amps, 60% duty cycle. Feeds .025 - 3/64 in. (0.6-1.2 mm) diameter aluminum wire on 2 lb. (0.9 kg) spools. With remote wire feed speed control. 25 ft. (7.6 m) cable.
Order K2490-1

BEST

Push-Pull Gun
Best performance for production aluminum welding - Use larger spools.

Panther™ Air-Cooled Push-Pull Guns
Features the same Magnum® back end as the Magnum® 300 gun, eliminating the need for the K2154-1 adapter. Effortless, fast changes between Magnum® 300 MIG gun and Panther™ push-pull gun.

- 15 ft. (4.5 m) **Order K2874-1**
- 25 ft. (7.6 m) **Order K2874-2**
- 50 ft. (15.2 m) **Order K2874-3**

LINCOLN® ELECTRIC
THE WELDING EXPERTS®

PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output	Output Range	H x W x D in. (mm)	Net Weight lbs. (kg)
Power MIG® 350MP Push-Pull One-Pak® Model	K2451-3	208/230/460/575/1/60	300A/32V/60% (40% on 208V)	76/64/37/29A	5-350 Amps 50-700 ipm WFS (1.3-17.7 m/min) Max. OCV 67V	31.8 x 18.9 x 38.8 (808 x 480 x 985)	255 (116)
Power MIG® 350MP Push Model	K2403-1						

RECOMMENDED ACCESSORIES TO EXPAND MACHINE CAPABILITIES

GENERAL OPTIONS

Dual Cylinder Mounting Kit Permits side-by-side mounting of two full size gas cylinders, with easy loading. Attaches easily to POWER MIG® undercarriage.
Order K1702-1

Canvas Cover
Protect your POWER MIG® when not in use. Made from red canvas that is flame retardant, mildew resistant and water repellent. Fits any POWER MIG® machine with or without a gas cylinder in the cylinder rack. Will not fit if spool gun holder is attached to the machine.
Order K2378-1

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

Remote Output Control
Consists of a control box with choice of two cable lengths. Permits remote adjustment of output.
Order K857 for 25 ft. (7.6 m)
Order K857-1 for 100 ft. (30.5 m)

TIG OPTIONS

PTA-17 150 Amp Air-Cooled TIG Torch
Order K1782-2
for 12.5 ft. (3.8 m) length, 2-cable
Order K1782-4
for 25 ft. (7.6 m) length, 2-cable

PTA-26 200 Amp Air-Cooled TIG Torch
Order K1783-2
for 12.5 ft. (3.8 m) length, 2-cable
Order K1783-4
for 25 ft. (7.6 m) length, 2-cable

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®
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

WIRE FEEDER OPTIONS

Fast-Mate™ Adapter
Allows guns with a Fast-Mate™ type back end to plug into a Power MIG®.
Order K489-8

Magnum® 250LX™ Spool Gun
280 amps, 60% duty cycle. Feeds .025-3/64 in. (0.6-1.2 mm) diameter aluminum wire on 2 lb. (0.9 kg) spools. With remote wire feed speed control. 25 ft. (7.6 m) cable.
Order K2490-1

Magnum® 250LX™ Spool Gun Control Cable Extension
Extend your spool gun reach with a 25 ft. (7.6 m) Control Cable Extension. Features a 7-pin female MS-type connector on the spool gun end and a 7-pin male MS-type connector on the power source end.
Order K2519-1

Spool Gun Holder
Provides neat storage of spool gun cable, and gas hose on Power MIG®.
Order K1738-1

Panther™ Gooseneck-style Air-Cooled or Water-Cooled Push-Pull Guns
Select Panther™ gooseneck-style guns for advanced aluminum welding applications. Feature dual-driven rolls, full-length conduit, innovative ball & socket strain relief and precise multi-turn WFS control. Air-cooled rated 300A @ 60% duty cycle w/Argon. Water-cooled rated 400A @100% duty-cycle w/Argon.
Order
K2874-1 Air Cooled, 15 ft. (4.5 m)
K2874-2 Air Cooled, 25 ft. (7.6 m)
K2874-3 Air Cooled, 50 ft. (15.2 m)
K2875-2 Water Cooled, 25 ft. (7.6 m)

Cougar™ Pistol-Grip Air-Cooled Push-Pull Guns
Cougar™ push-pull guns are intended for those operators who prefer an upright pistol-grip design for aluminum welding fabrication or production. Feature Sure-Grip™ handle, integrated strain relief and multi-turn potentiometer. Rated 300A @ 60% duty cycle w/Argon.
Order
K2704-2 Air Cooled, 25 ft. (7.6 m)
K2704-3 Air Cooled, 50 ft. (15.2 m)

Spindle Adapter for Small Spools
Permits 8 in. (200 mm) O.D. spools to be mounted on 2 in. (51 mm) O.D. spindles.
Order K468

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 The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information 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. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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