

Power MIG™ 300

Power MIG. The Professional's Choice.

The Power MIG 300—a single phase, multi-process, synergic wire feeder welding package for the professional welder.

This ready-to-weld package is unbeatable when it comes to superior multi-process welding. The synergic design, traditionally only available in more expensive welders, gives you ultimate control over the arc by automatically aligning wire feed speed and voltage. It also offers top quality aluminum welds with push-pull wire feed capability, not usually available in competitive models. True MIG pulsing and Pulse-on-Pulse™ capabilities ensure that superior feeding is matched by high quality arc performance.



Processes

Stick TIG MIG Pulsed MIG Flux-Cored

Advantage Lincoln

- Superior starting complements the soft, stable welding arc and very low spatter.
- Three ways to weld aluminum – standard push gun, spool gun, or push-pull aluminum feeding capability for high-quality feeding with thinner aluminum wires. No PC board add-on required!
- Synergic alignment of wire feed speed & voltage allows you to set weld procedures with only one control for simplicity and ease of use.
- Capable of “true” pulse MIG welding. Competitive models pass off globular transfer methods as pulse.
- Creates aluminum welds with a “TIG welding appearance” using the Pulse-on-Pulse™ MIG welding.
- Lincoln Chopper Technology™ delivers high quality welds by increasing the control over the welding arc.
- One model runs single-phase from 208–575 volts for plug-in virtually anywhere!
- 5-350 amps deliver the power you need for a wide range of materials.
- Built-in D-Shell Connector for future weld program upgrades.

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Description



Unit Includes

- Heavy duty Magnum 300 MIG/flux-cored gun, 12 ft. cable for .023-.045 wire feeding.
- Lockable storage compartment with tool tray.
- Gas regulator and hose kit for Argon blend gases.
- Work clamp and 10 ft. cable.
- Dual driven drive rolls and split wire guides to support the wire 100%.
- Factory installed drive rolls and split wire guide to feed .035 and .045 wire.
- 230V input cord and plug.

Recommended Stick Options

Accessory Kit, Remote Output Control

Recommended TIG Options

Magnum Pro-Torch TIG Torch, Foot Amptrol, Hand Amptrol, Arc Start Switch

Recommended Wire Feed Options

Spool Gun, Spool Gun Holder, Prince® XL Push-Pull Torch, Cobra® Gold Push-Pull Torch, Push-Pull Gun Connection Kit, Aluminum Feeding Kit, Dual Cylinder Mounting Kit, Readi-Reel® Adapter, Magnum Connection Kit, Drive Roll Kits

Order

K1694-1 Power MIG™ 300 208/230/460/575/1/50/60

Technical Specifications

Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Input Current @ Rated Output				Output Range	Dimensions H x W x D inches (mm)	Net Weight lbs.(kg)
				208	230	460	575			
Power MIG 300	K1694-1	208/230/460/575/1/50/60	230A / 29V / 100% 300A / 32V / 60%	48 72	43 62	22 31	17 25	5-350 Amps DC 50-700 ipm WFS (1.3 – 17.7 m/min) Max. OCV 76	31.8 x 18.9 x 38.8 (808 x 408 x 985)	255 (116)



Advantage Lincoln con't.

- Designed with the professional welder in mind:
 - lockable storage compartment with tool tray.
 - easy load gas cylinder platform.
 - easy load wire compartment.
 - first-rate welds with simple to use controls.
- Electronic and thermostatic protection from current overload and excessive temperatures.

- Large input voltage reconnect panel with clear door to easily change input voltages.
- Standard remote connector for remote amperage control in Stick, or Hand/Foot Amptrol in TIG mode.
- Manufactured under a quality system certified ISO 9001 requirements.
- 3 year warranty on parts and labor. (90 days warranty on torch).

A Closer Look

Easy to use controls for high productivity, forgivable reaction speed, and accurate settings.

- Continuous WFS/Amps Control – In wire feed welding, adjusts wire feed speed. In stick or TIG modes, adjusts amperage.
- Continuous Volts/Trim Control – Adjusts voltage when MIG welding. Adjusts the arc length (trim) when Pulse-MIG welding.



Professional 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) Preweld – 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 & 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.
- 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.

Professional Wire Drive

New rugged cast alloy drive system includes:

- 1) Reliable brass-to-brass connection from gun to wire drive system for reliable conductivity.
- 2) Dual driven drive rolls and split wire guide system that delivers the most reliable wire feeding capability in the market.
- 3) Truly tool-less drive roll changeover—simply requires a quick quarter turn of the lock.

- 4) Easy turn numeric tension indicator.

- Excellent for feeding steel, stainless steel, aluminum, and cored wires.
- Tachometer feedback drive system allows you to maintain constant wire feed speed for consistent welds.

Drive Roll Kits

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

⁽¹⁾Included with Power MIG 300.

⁽²⁾Included in the K2153-1 Aluminum Feeding Kit.



Recommended Options



Accessory Kit

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

Order K875 for 200 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. (7.6m) or K857-1 for 100 ft. (30.5m).



Magnum Pro-Torch TIG Torches

Magnum Pro-Torch air-cooled torches with built-in gas valves are recommended.

For a full line of TIG torch accessories request Lincoln publication E12.150.

PTA-17V 150 Amp air-cooled TIG torch with built-in gas valve.

K1782-6 12.5' length, 1-cable⁽¹⁾
K1782-7 12.5' length, 2-cable
K1782-8 25' length, 1-cable⁽¹⁾
K1782-9 25' length, 2-cable

⁽¹⁾Requires S19257-3 Power Cable adapter and KP506 Gas Hose.

PTA-26V 200 Amp air-cooled TIG torch with built-in gas valve.

K1783-6 12.5' length, 1-cable⁽²⁾
K1783-7 12.5' length, 2-cable
K1783-8 25' length, 1-cable⁽²⁾
K1783-9 25' length, 2-cable

⁽²⁾Requires S19257-2 Power Cable adapter and KP506 Gas Hose.

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-17V.
Order KP509 for PTA-26V

Amptrol™

Varies current while welding for making critical TIG welds and crater filling. Unit comes with 25 ft. (7.6m) cable. Two types are available:



Foot Amptrol

Depress pedal to increase current. Depressing pedal fully achieves maximum set current. Fully raising the pedal finishes the weld and starts the afterflow cycle.
Order K870.



Hand Amptrol

May be used in place of the Foot Amptrol. Fastens to the torch for convenient thumb control. Comes with a 25 ft. (7.6m) cable. Fully extend the knob forward to achieve maximum set current. Retract the knob to reduce the current. Returning to the start position finishes the weld and

starts the afterflow cycle.
Order K963-1 (For smaller handle 9, 17, or 20 series torches).
Order K963-2 (For larger handle 18 or 26 series torches).



Arc Start Switch

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

Order K814.



Prince® Spool Gun

With remote wire feed speed control. 25 ft. cable.

Order K1692-2.

Spool Gun Holder

Provides neat storage of spool gun cable, and gas hose on Power MIG.

Order K1738-1.



Prince® XL Push-Pull Torches

Air-cooled, for quality aluminum welding.

Order K1591-1 for 15 ft.
Order K1591-2 for 25 ft.
Order K1591-3 for 50 ft.



Cobra® Gold Push-Pull Torches

Air-cooled. Superior design. Well balanced with comfortable grip for difficult applications.

Order K1589-1 for 15 ft.
Order K1589-2 for 25 ft.
Order K1589-3 for 50 ft.



Push-Pull Torch Connection Kit

For aluminum welding with the Cobra Gold & Prince XL torches. Includes power block, gun bushing, gas hose adapter, torch gas bypass valve, and wire reel brake limiter. Requires aluminum drive roll kit.

Order K2154-1.



Aluminum Feeding Kit

Conversion kit for welding with 3/64" (1.2mm) aluminum wire. Includes drive rolls, contact tips (qty. 2), polished wire guides and cable liner.

Order K2153-1.

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.



Readi-Reel® Adapter

Allows Power MIG to be used with 30 lbs. (13.6 kg) Lincoln Readi-Reels.

Order K363P.



Magnum Connection Kit

Permits use of Magnum 200, 300 & 400 gun and cable assemblies on the Power MIG 300. Included with Power MIG 300.

Power MIG 300 Order Form

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
POWER MIG™ 300	K1694-1		
Stick Welding			
Accessory Kit, 200 amps	K875		
Accessory Kit, 400 amps	K704		
Remote Output Control, 25 ft.	K857		
Remote Output Control, 100 ft.	K857-1		
TIG Welding			
Pro-Torch TIG Torches	see publication E12.150		
Foot Amptrol	K870		
Hand Amptrol – For smaller handle 9, 17, or 20 series torches	K963-1		
Hand Amptrol – For larger handle 18 or 26 series torches	K963-2		
Arc Start Switch	K814		
Cut Length Consumables	see publication C9.10		
Wire Feed Welding			
Prince® Spool Gun	K1692-2		
Spool Gun Holder	K1738-1		
Prince® XL Push-Pull Torches, 15 ft.	K1591-1		
25 ft.	K1591-2		
50 ft.	K1591-3		
Cobra® Gold Push-Pull Torches, 15 ft.	K1589-1		
25 ft.	K1589-2		
50 ft.	K1589-3		
Push-Pull Torch Connection Kit	K2154-1		
Aluminum Feeding Kit	K2153-1		
Dual Cylinder Mounting Kit	K1702-1		
Readi-Reel® Adapter	K363P		
Magnum Connection Kit	K466-6		
	TOTAL:		

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 advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customer's particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

Lincoln Electric is a responsive manufacturer, but 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 this type of fabrication methods and service requirements.

