

# POWER WAVE® 300C

## ADVANCED PROCESS WELDER



### THE ULTIMATE ALL-IN-ONE MACHINE

From technical training to industrial fabrication, the Power Wave 300C delivers the ultimate 300 amp- “Do-Everything” welder. Packed with all the arc performance and technology you expect from a Power Wave system, this compact machine takes the industrial “all-in-one” class of welders to the next level.

#### Processes »

SMAW, GTAW, GMAW, GMAW-P, FCAW  
SMAW-AC\*, GTAW-AC\*, GTAW-HF\*, STT MIG\*

#### Applications »

General Fabrication, Education

#### Output »



#### Input »



#### Product Numbers »

POWER WAVE 300C STANDARD

**K4487-1**

POWER WAVE 300C ADVANCED

**K4488-1**

POWER WAVE 300C ADVANCED EDUCATIONAL ONE-PAK®

**K4934-1**

\*Available on Power Wave 300C Advanced Model

For full waveform list please visit  
[www.PowerWaveSoftware.com](http://www.PowerWaveSoftware.com)

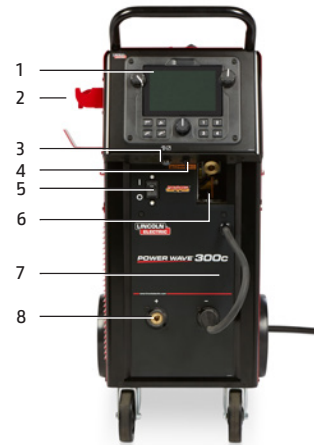
## KEY FEATURES

- **Best-in-Class Performance** Industry's only true 300Amp, 100% Duty Cycle, All-Process Machine.
- **All-Process Versatility** Stick, TIG, MIG, Flux-Cored, Arc Gouging processes, with advanced weld modes and integrated High Frequency and AC/DC capabilities\*.
- **Intelligent Connectivity** Intelligent, operator-focused interface and powerful Industry 4.0 capabilities including CheckPoint® Production Monitoring.
- **Flexible Input Power** PowerConnect® Technology allows for 200V-600V input power while maintaining consistent and reliable arc performance.
- **Ready-to-Run™ Design** Standard features for simple and straightforward operation, including cable management hooks, integrated cart with tilting bottle rack, and TIG solenoid.

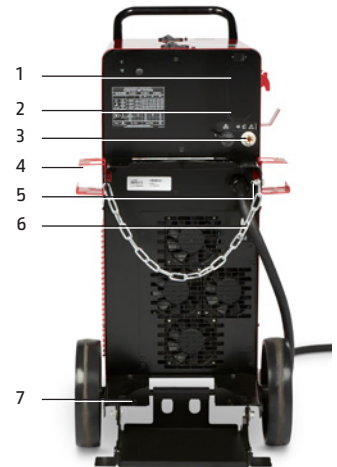
\* Available on Power Wave 300C Advanced Model

## KEY CONTROLS - POWER SOURCE

1. User Interface / Controls w/USB Port
2. Cable / Torch Hanger
3. Remote Connection, 12 pin
4. Gun Trigger Connection, 4 pin
5. Power Source ON/OFF
6. MIG/FCAW Gun Connection
7. Sense Lead Connection (if required)
8. Twist Mate™ Connections w/ integrated TIG gas solenoid



1. Auxiliary 115V Outlet (optional K2829-1)
2. Ethernet Connection
3. MIG/FCAW Shielding Gas Input
4. Tool Holder
5. Power Cable Input
6. TIG Shielding Gas Input
7. Tilting Bottle Rack



## KEY CONTROLS - USER INTERFACE



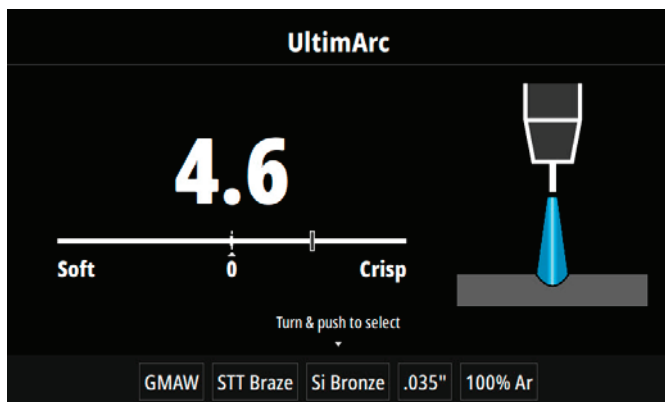
## NEXT GENERATION OF SIMPLICITY & CONTROL

The Power Wave 300c user interface helps maximize arc time and allow operators of all skill levels to focus more on making great welds.

- One-button process changes
- Straightforward, easy-to-understand navigation
- Memory buttons for preferred settings
- ArcFX® Technology for visual arc settings feedback
- Single point of use – all controls in one location on the feeder
- Multilingual options for true global compatibility



Power Wave 300C - Home Screen



Power Wave 300C - process configuration screen with ArcFX® Technology



Power Wave 300C - language option screen

## FINE-TUNED ARC PERFORMANCE

The Power Wave 300C comes loaded with an expansive list of weld modes optimized for maximum performance with the industry's most common filler metals, wire diameters, and gas mixtures offered by Lincoln's Waveform Control Technology®.

- Stick modes optimized for cellulosic and low hydrogen electrodes
- MIG modes optimized for 0.035-0.052 in. for steel, 0.035-0.045 in. for stainless, 0.045-0.052 in. for metal cored, and 0.035, 3/64, and 1/16 in. for aluminum
- MIG modes optimized for simplicity (Smart Pulse™) and fume management (Low Fume Pulse™)\*
- Flux-cored modes optimized for 0.045 in., 0.052 in., 1/16 in
- High-Frequency and AC/DC TIG Modes\*

\* Available on the Power Wave 300C Advanced Model

## MODELS & PACKAGES AVAILABLE



### K4487-1 Power Wave 300C Standard

- DC Output
- Multi-Process Capabilities

#### What's Included

- Magnum® PRO Curve™ 300 Gun Ready-Pak (K2951-2-6-45)
- Harris Flowmeter/Regulator and Hose Kit (310021)
- 10 ft. (3 m) Work Lead
- 0.035/0.045 in. (0.9/1.2 mm) Combination V-Groove Drive Rolls (Included in Wire Drive Assembly) (KP1696-1)



### K4488-1 Power Wave 300C Advanced

- AC/DC Output
- Multi-Process Capabilities, with Advanced Waveforms:
  - Smart Pulse™, Low Fume Pulse™, and STT®
  - HF TIG including AC Aluminum Modes

#### What's Included

- Magnum PRO Curve 300 Gun Ready-Pak (K2951-2-6-45)
- Harris Flowmeter/Regulator and Hose Kit (310021)
- 10 ft. (3 m) Work Lead
- 0.035/0.045 in. (0.9/1.2 mm) Combination V-Groove Drive Rolls (Included in Wire Drive Assembly) (KP1696-1)



### K4934-1 Power Wave 300C Advanced Educational One-Pak

#### What's Included

- Power Wave 300C Advanced (K4488-1)
- Magnum PRO Curve 300 Gun Ready-Pak (K2951-2-6-45)
- Harris Flowmeter/Regulator and Hose Kit (310021)
- 10 ft. (3 m) Work Lead
- PTA-17F TIG Torch Ready-Pak (12.5 ft, 1 pc.) (K1782-14)
- Foot Amptrol™ - 25 ft (7.6 m), 12-pin (K870-2)
- Stick Electrode Holder, Cable (w/ Twist Mate) (K2374-1)
- 0.035/0.045 in. (0.9/1.2 mm) Combination V-Groove Drive Rolls (Included in Wire Drive Assembly) (KP1696-1)

## ADDITIONAL POWER WAVE 300C ACCESSORIES



### K4866-1 Power Wave 300C Dual Gas Bottle Upgrade Kit

Allows for the use of multiple gas bottles or a combination of a gas bottle and water cooler on the rear of a Power Wave 300C



### K4898-1 Power Wave 300C Water Cooler Adapter Kit

Allows Cool Arc® 40 Water Cooler to be installed in place of a gas bottle on the 300C single or dual bottle rack. Kit Includes: (1) 300C Cool Arc 40 Mounting Assembly and Hardware Kit, (1) Cool Arc 40 CGA to QD Water Hose Extension Kit, and (2) Quick Disconnect Adapters (KP4642-1).



### K1813-1 Cool Arc 40 Water Cooler

Industrial water cooler that can function in both horizontal and vertical orientation for minimized footprint

\* For use of Lincoln Electric Magnum PRO semi-automatic water cooled guns, order K466-6 connector kit.

## CONSUMABLES

### CONTACT TIPS AND LINERS

Wire Diameter - in. (mm)	Description	Order No.
<b>FOR STEEL / STAINLESS STEEL / SILICON BRONZE</b>		
0.045 [1.2]	350A Contact Tips (10)	KP2744-045
0.035 [0.9]	350A Contact Tips (10)	KP2744-035
0.030 [0.8]	350A Contact Tips (10)	KP2744-030
0.025 [0.6]	350A Contact Tips (10)	KP2744-025
0.035 - 0.045 [0.9 - 1.2]	Magnum PRO Curve 15 ft (4.5 m) Liner Solid Wire (1)	KP44-3545-15



Shown:  
KP2744-045, Contact Tip

### NOZZLES AND DIFFUSERS

Nozzle Diameter - in. (mm)	Description	Order No.
<b>350A</b>		
0.375 [9.5]	Thread-on Flush Nozzle	KP2742-1-38F
0.5 [12.7]	Thread-on Flush Nozzle	KP2742-1-50F
0.375 [9.5]	Thread-on Recessed Nozzle	KP2742-1-38R
0.5 [12.7]	Thread-on Recessed Nozzle	KP2742-1-50R
—	Steel Thread-on Nozzle	KP2746-1
<b>550A</b>		
0.625 [15.9]	Thread-on Flush Nozzle	KP2743-1-62F
0.75 [19.0]	Thread-on Flush Nozzle	KP2743-1-75F
0.625 [15.9]	AL Thread-on Recessed Nozzle	KP2743-1-62RA
0.75 [19.0]	Thread-on Recessed Nozzle	KP2743-1-75R
—	Steel Thread-on Diffuser	KP2747-1



Shown:  
KP2742-1-38F, Thread-on Nozzel



Shown:  
KP2746-1, Steel Thread-on Diffuser



Shown:  
KP2747-1, Steel Thread-on Diffuser

For more options, please refer to the Magnum PRO Instruction Manual.

### DRIVE ROLL KITS

Wire Type	Wire Diameter - in. (mm)	Order No.
Solid	0.023-0.030 [0.6-0.8]	KP1696-030S
	0.035 [0.9]	KP1696-035S
	0.035/0.045 Combination	KP1696-1
	0.040 [1.0]	KP1696-2
	0.045 [1.2]	KP1696-045S
Cored	0.035 [0.9]	KP1697-035C
	0.045 [1.2]	KP1697-045C
Aluminum	0.035 [0.9]	KP1695-035A
	3/64 [1.2]	KP1695-3/64A
	1/16 [1.6]	KP1695-1/16A



Shown:  
KP1697-035C, Cored Drive Roll Kit

## RECOMMENDED ACCESSORIES

### GENERAL OPTIONS



**Power Wave 300C 115V Auxiliary Kit**  
Adds a duplex 115v outlet to the rear of the machine. Includes harness and PC board.  
**Order K2829-1**

**Screen Protector**  
**Order KP4735-1**



**Remote Output Control with 12-pin Universal Connector**

Consists of a control box with choice of two cable lengths. Permits remote adjustment of output.  
**Order K857-2 (25 ft, 7.6 m)**  
**Order K857-3 (100 ft, 30.5 m)**

### WIRE FEEDER OPTIONS

**Magnum PRO Welding Guns**  
See publications E12.05 and E12.08.



**Gun Connector Kit**  
**Power Wave 300C / POWER MIG**  
Configures Lincoln Electric Magnum PRO guns to connect to Power Wave 300C and POWER MIG® power sources. For use with KP42 & KP44 series liners  
**Order K466-6**



**Magnum PRO Dual Procedure Adapter**  
Required to use Magnum PRO Dual Procedure or Dual Schedule guns with the Power Wave 300C  
**Order K3159-1**



**Magnum Curve 300 AL Push Gun**  
10 ft. \*The Magnum PRO AL Push Gun is a cost effective solution for welding 3/64-1/16 in. aluminum wire over distances up to 10 ft. This welding gun solution was designed with the soft wire in mind, and includes the proper expendables to ensure premium performance for the recommended applications  
**Order K4700-1-6-116A**



**Fast-Mate™ Adapter**  
Allows guns with a Fast-Mate™ style back end to connect into Power Wave 300C and POWER MIG power sources  
**Order K489-8**



**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**



**Spindle Adapter for 14lb Coils**  
Permits 14 lb. (6 kg) Innershield® coils to be mounted on 2 in (51mm) O.D. spindles  
**Order K435**



**Readi-Reel™ Adapter**  
Adapts 22-30 lb. (10-14 kg) Lincoln Readi-Reels® of electrode to 2 in (51mm) spindle  
**Order K363P**



**Magnum PRO AL Fixed Conduit Push-Pull Guns**  
The new, improved Magnum PRO AL Fixed Conduit Push-Pull Guns feature a new rigid liner which provides a smooth, premium aluminum welding solution. The enhanced feeding capabilities will reduce downtime and increase arc on time.  
**Order K4797-2 (Air Cooled) or K4798-2 (Water Cooled)**  
**E12.14**



**Magnum Pro 250LX GT Spool Gun**  
**With longer-lasting Magnum PRO Expendables and direct connect functionality**  
The Magnum PRO 250LX GT spool gun results in less downtime and hassle-free setup.  
\*Will need Lincoln 7-pin to 12-pin Adapter (K2910-1)  
**Order K3569-2 and K2910-1**  
**E12.28**

### TIG OPTIONS



**PTA-17 Air Cooled TIG Ready-Pak®**  
Flexible head and Ultra-Flex™ cables provide ultimate comfort and maneuverability. Pre-configured package with K1622-1 Twist-Mate™ adapter, cable cover. Includes: #7 nozzle, 1/16 in. (1.6 mm) and 3/32 in. (2.4 mm) collets, collet bodies and E3® Tungsten  
**Order: K1782-14 (12.5 ft 3.8 m)**  
**Order K1782-18 (25 ft, 7.6 m)**  
**Additional TIG torch options in E12.150**



**Arc Start Switch (00001862)**  
Attaches to TIG torch for convenient finger control. Comes equipped with 12-pin connector  
**Order K814-2**



**Hand Amptrol Rotary Track Style, 12-pin**  
Amphenol (25 ft) Remote current control for TIG welding  
**Order K963-4**



**Foot Amptrol (00002440)**  
Provides 25 ft. (7.6 m) of remote output control for TIG welding. (12-pin plug connection).  
**Order K870-2**



**TIG-Mate 20 Water-Cooled TIG Torch Starter Pack**  
Get everything you need for TIG welding in one complete easy to-order kit packaged in its own portable carrying case. Includes: PTW-20 torch, parts kit, Harris flowmeter/regulator, Twist-Mate adapter, 10 ft. (3.0 m) gas hose, water hose coupler and water hoses, work clamp and cable.  
**Order K2267-1**



## PRODUCT SPECIFICATIONS

Product Name	Product Number	Input Voltage / Phase / Hertz	Output Range	Rated Output / Voltage / Duty Cycle	Input Current @ Rated Output	Dimensions H x W x D in (mm)	Net Weight lb (kg)
Power Wave 300C Standard	K4487-1	200-208/220-230/380-415/460/575/1/3/50/60	5-350A	GMAW: 350A / 31.5 V / 40% GMAW: 300A / 29 V / 100%	3ph / 1ph / 40% Duty Cycle: 44/40/25/20/16.5	39.67 x 20.65 x 39.60 (1007.6 x 524.5 x 1005.8)	193 (87.5)
Power Wave 300C Advanced	K4488-1			SMAW: 325A / 33V / 40% SMAW: 280A / 31.2V/100%			226 (102.5)
Power Wave 300C Advanced Educational One-Pak	K4934-1			FCAW: 350A / 31.5 V / 40% FCAW: 300A / 29 V / 100%  GTAW: 325A / 23V / 40% GTAW: 300A / 22V / 100%	3ph / 1ph / 100% Duty Cycle: 35/32/19.5/16/14		

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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