



ADVANTAGE

✓ Multi process

As standard the machine is supplied with Pulse, standard CV but also advanced processes like Rapid Arc®, Power Mode™ and Pulse on Pulse™ more than 60 weld modes inside

✓ Premium welding

A complete set of advanced premium weld modes will support high productivity with a smooth Arc at low spatter levels

✓ Free product updates

Free Software Updates. Free product updates welding and system improvements via powerwavesoftware.com.

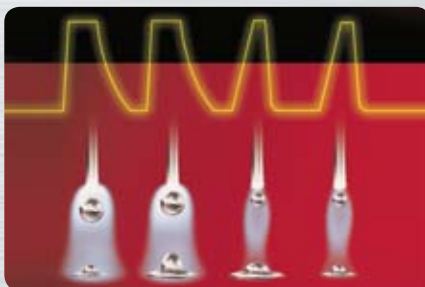
✓ Robustness

Built according to the Lincoln Electric Industrial standard for in and outside use and difficult environmental conditions. Overrated components and potted PC boards. Three Year Warranty

OUTSTANDING OPERATION, MODULAR CONFIGURATION

The Power Wave® C300 and S350 are part of a modular concept offering many different configurations allowing you to adjust the machine to your welding application. The new platforms all communicate with Arlink allowing you to work with all our digital feeders from the LF45 to PF10.

All Power Waves® come complete with an Ethernet connection. You can get access to the machine by using this connection and our free available software. Software updates are free, our Web site powerwavesoftware.com contains the latest version of software including weldmodes. By updating the machine you can be sure that your machine is "up to date" and has a welding performance equal to a new one with the last improvements and additions included.



On one side advanced technology but on the other side robustness, the Power Wave has it all. The machines are built according to our Industrial standard and prepared to work day in day out as well as two shift operations. The components inside the machine are all protected and all PC boards are encapsulated. The Three Year warranty is standard and confirms the quality of the product.

FEATURES

- ✓ Procedure Selection (JOB), all your specific weld settings stored in different memory locations.
- ✓ Easy recall, visible Procedure Selection content on the display and easy to recall on the feeder or on the gun joy stick or the gun trigger.
- ✓ Ultim Arc allows you fine tune the Arc Cone to suit your application.
- ✓ Run In, Hot and Soft Start, Pre and Post Flow Crater and many more features in addition as standard.
- ✓ Remote Options, all machines and feeders are prepared for remote control on the gun, separated remotes and Push Pull guns also with remote.

LINCOLN®
ELECTRIC

MODULAR BUILD



POWER WAVE C300
AIRCOOLED



POWER WAVE C300
+ COOL ARC 50



POWER WAVE S350
AIRCOOLED + LF 45

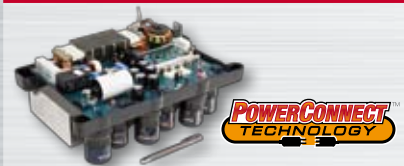


POWER WAVE S350
+ LF 45 + COOL ARC 50

FEATURES / BENEFITS

Feature	Function	Customer benefit
Run-In		Adjustable Wire Feed Speed prior to the start supporting smooth starting.
Hot/Soft Start		High or Low weld procedures at the start, a high setting may "pre-heat" the material at the beginning of the weld. (ALU)
Inductance		Adjustable inductance with Short Arc for a more "soft" or "harsh" Arc.
Ultim Arc™		Adjust the Arc characteristics in advanced mode and change the Arc cone to meet individual preferences.
Crater		Ramping the output down for a defined time to prevent crater cracks.
Job/Memory		Store up to 8 customised weld procedures for multiple operators processes and settings.
Memory lock		The procedures stored in the memory can be secured with a password
Limits		Will limit the changes you can make on a procedure stored in the memory
Dual procedure		Switch from one procedure to another while welding
True Energy™		Shows the precise amount of power delivered to the weld in kJ. Customers can use this value to calculate the Heat Input.

Tribrid™ Power Module



Includes Lincoln's **PowerConnect™** technology, **Planar Transformer™** technology providing Exceptional welding performance allowing high input variations at Industry leading (max output):

- 0.95 Power factor
- 85% efficiency



Our **iARC™** High Speed Digital Controls are Lincoln's next generation of digital welding controls. It is 90 times faster than previous generations. Ethernet on board as standard.

All PC board's are "potted" for maximum protection and a long life time.

POWER WAVE® SOFTWARE

Each Power Wave has a full duplex 100Mhz Ethernet on board allowing you to connect the machine with a PC and run our free available software.

The Lincoln Electric website powerwavesoftware.com will allow you to download a software package to upgrade your machine. Our ready to go software bundle contains an upgrade kit of the complete machine including weld modes. Welding is the purpose of the machine therefore we constantly improve our weld set with more files or Arc improvements of existing modes. After running the package upgrades your machine is brand new!

Power Wave manager is for servicing and adjustments

on the standard machine. You may change network settings, customize the feeder, or use one of the diagnostic tools.

Power Waves can run in a network with a unique IP address to identify each machine. After installing Production monitoring™ 2 you will be able to see each machine in the network and extract data about the production with each machine in particular. Not only welding data is recorder also details about the consumables telling you how much wire is left.



Power Wave® Monitoring



Power Wave® Manager



Power Wave® Update

Free available at www.powerwavesoftware.com

POWER WAVE® PROCESSES

Standard processes

- CV MIG
- Pulse MIG Stainless
- Pulse MIG Aluminium
- Pulse MIG Steel
- Stick Soft / Crisp
- TIG (Pulse)

Special processes

- Power Mode®
- Rapid Arc®
- Pulse on Pulse® (ALU)

Power Mode®

- Excellent starting characteristics
- A stable Arc despite stick-out fluctuations even at very low current levels
- Consistency of weld penetration in axial spray transfer
- Low spatter

Rapid Arc®

- High Travel Speed compared to CV spray and Pulse
- High penetration
- Low heat input, less distortion
- Position welding possible

Pulse on Pulse®

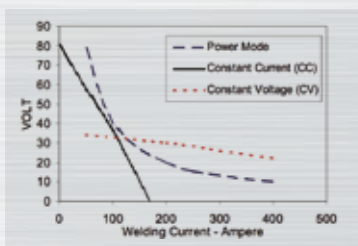
- Easy control of the Arc at low Amperage levels
- Nice bead appearance (ripple effect)
- Possible replacement of TIG on certain applications
- Increased cleaning action

POWER MODE®

What is Power Mode®?

A new GMAW process that combines the benefits of the Wave Form Control Technology with the output characteristics of traditional constant current equipment.

The benefit of this type of control is best demonstrated in applications where energy and penetration must be closely monitored and consistent. The controlled response of the Power Mode® enables the power source to maintain a stable arc despite stick-out fluctuation, even at very low current levels.



APPLICATION

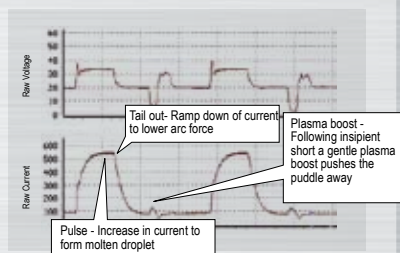
- Thin material Steel and Stainless (even below 1.0 mm)
- Root Pass welding
- ALU Spray Arc
- Metal case corner welds



RAPID ARC®

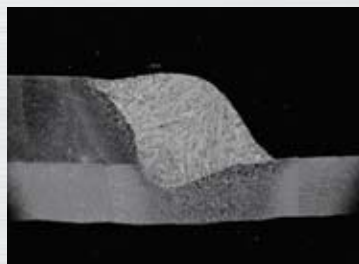
What is Rapid Arc®?

A pulsed GMAW process solution designed to increase productivity by reducing cycle time. Rapid Arc® improves low voltage welding at high speeds, as it stabilizes the process for shorter arc length. With traditional Waveforms, the arc length is longer to avoid spatter, limiting the travel speed. With Rapid Arc®, the arc length is kept short and tight, and spatter is avoided with precise control of the short circuit cycle. Rapid Arc® stabilizes the shortened arc length with controlled short circuit cycles.



APPLICATION

- Fillet welds
- Lap welds
- Wheels
- Tanks

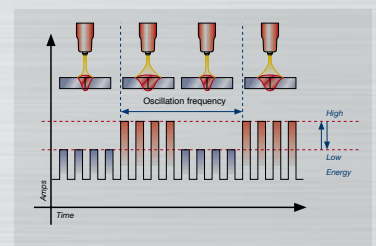


PULSE ON PULSE®

What is Pulse on Pulse®?

Pulse-on-Pulse® is a patented solution from Lincoln Electric that uses a sequence of pulse wave shapes to tightly control the arc length and the heat input while welding aluminum. The pulse sequences also result in a GTAW-like bead appearance.

The high energy pulses provide a hotter arc (longer arc duration), which improves cleaning action at the base material. The low energy pulses allow the weld puddle to cool, which controls the heat input for good penetration.



APPLICATION

- Thin Aluminium applications
- Alu applications where a nice bead appearance is needed.
- Boats, semitrailers, caravans, ladders



TECHNICAL SPECIFICATIONS POWER SOURCES

Product	Item number	Voltage/Power factor	Input Power @ Rated Output	Fuse size	Weight	Dimensions HxWxD (mm)	Protection Class	Compliance
POWER WAVE C300 CE (COMPACT)	K2865-1	230/400V3Ph 50/60Hz (208-575V)*0,95	11,1 kVA@40%	40/25A	50,4 kg	478x356x610	IP 23	EN 60974-1; -10
POWER WAVE S350 CE (SOURCE)*	K2823-2	230/400V3Ph 50/60Hz (208-575V)*0,95	14 kVA@40%	40/25A	46,6 kg	518x356x640	IP 23	EN 60974-1; -10

* Without Cool Arc 50

TECHNICAL SPECIFICATIONS WIRE FEEDERS

Product	Item number	Drive rolls	Wire size (mm)	Weight	Dimensions HxWxD (mm)
POWER WAVE C300 CE MAXTRAC™ DRIVE	built-in	MAXTRAC 2 rolls Ø 44,5 mm	0,8-1,6	-	-
LF45 - RECOMMENDED FOR POWER WAVE S350	K14072-1	4 rolls Ø 37 mm	0,8-1,6	17 kg	440x270x636

WELDING OUTPUT

Product	Process	Output current range	Rated Output	Max. O.C.V.
POWER WAVE C300 CE	GMAW, GMAW-Pulse, FCAW	5-300A	300A/29V@40% 250A/26,5V@100%	70V
	SMAW		280A/31,2V@40% 225A/29V@100%	
	GTAW-DC		300A/22V@40% 250A/22V@100%	
POWER WAVE S350 CE	GMAW, GMAW-Pulse, FCAW	5-350A	350A/31,5V@40% 300A/29V@100%	70V
	SMAW		325A/33V@40% 250A/31V@100%	60V
	GTAW-DC		350A/24V@40% 300A/22V@100%	24V

ACCESSORIES

Item number	Description	PW C300	PW S350
K14087-1	CART PW C CE	√	-
K14085-1	CART PW S CE	-	√
K14050-1	Coolarc-50	√	√
K14072-1	LF-45	-	√
K14083-1	LF-45S	-	√
K10349-PGW-XM	Cable IC Water Cooled 3,5,10,15m	-	√
K10349-PG-3M	Cable IC Air Cooled 3,5,10,15m	-	√
K2921-1	STT module CE (comming soon)	-	√
K10420-1	Coolant Acorox (2X5L)	√	√
K10095-1-15M	Remote control 6-pins, 15m	√	√
K870	Foot Amptrol	√	√
K2909-1	Adapter 6/12-Pins for Remote Applications - 0,5m	√	√
KP10519-8	Adapter TIG Euro	-	√
K10413-360GC-4M	LG360GC 4meter with cross switch	√	√
K10413-420GC-4M	LG420GC 4meter with cross switch	-	√
K10413-505WC-4M	LG505WC 4meter with cross switch	√	√
K10514-P-8	Push Pull gun Panther CE 8 meter	√	√
K10514-C-8	Push Pull gun Cougar CE 8 meter	√	√
K14091-1	Remote MIG LF45PWC300-7M	√	√

For other GMAW, GTAW, SMAW options see LG,LT brochures, Instruction Manuals and Price Book

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