

LINC-COBOT Series

Collaborative Robot Partner



LINCOLN[®]
ELECTRIC

GLOBAL INDUSTRY CHALLENGES



Skills Shortage

- Across many industries, finding skilled welders is a challenge.

Quality

- Quality components require more and more control.
- Welded parts require welders qualified for the job.



Health and Safety

- Repetitive tasks increasing musculoskeletal disorders.
- Keep qualified personal comfortable.
- Fume level exposure, remove the welder away from the torch.



Cost

- High-mix, low-volume shops struggle to justify automation investments.
- Wrong impression of Automation cost.
- Very large parts require too much investment, floor space.



LINC-COBOT SERIES THE RANGE SOLUTIONS

- Alternative to the welder shortage
- Weld quality under control
- Reduction of painful and repetitive tasks
- Reduction of exposure to welding fumes
- Robotisation with ease
- Simplified programming



Ideal for:

- High-Mix Job Shops
- Repair & Re-manufacturing
- Mechanical Contractors & Pipe Shops
- Steel Fabricators & Metal Service Centres
- Structural & Agricultural
- Training & Educational Programs

LINC-COBOT SERIES / ROBOTIZE WITH EASE

Intuitive Programming



Intelligent Torch System

Guide the cobot into the correct position by hand, using the torch-mounted enabling device.



Icon-base

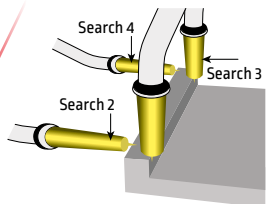
Tablet teach pendant, featuring icon-based, timeline programming, reduces the learning curve. Simply swipe icons in the timeline. Including the Lincoln Arc Welding Plug-in.



Dual-Action Pushbutton Interface

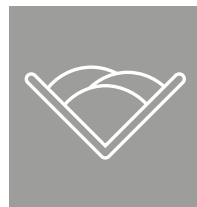
Record points directly at the torch, reducing the cumbersome part of programming. The push-button interface, designed directly into the torch, allows the operator to record approach and weld start/end points, as well as change robot motion.

Advance software options



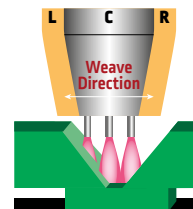
Touch Sensing

Re localise your part to ensure the correct wire placement.



Multi-Pass

Simplify programming of multi-pass welding sequencing, thanks to an ergonomic menu.



Seam tracking

Through Arc Seam Tracking (TAST) will track weld joints. Adjusting torch position laterally and vertically.

Versatility



Mobile and adaptable

Easily deployed and programmed to weld in minutes. You can quickly automate tasks for improved productivity and throughput. Choose your Cart or Platform version to perfectly fit to your job.

Safe and reliable cobot



Highest Safety

Truly Collaborative Environment thanks to Cobot the design and its intelligent contact-sensing technology allowing the Linc-Cobot to safely work side-by-side with welding operator.



Maintenance free

Reliability is everything. The Cobot is designed for eight years ZERO maintenance on motors, reducers, sensors, cables, and grease – delivering peace of mind, you can trust.

LINC-COBOT CART / COMPACT SOLUTION

LINC-COBOT CART

- Fanuc CRX 10iA/L with Tablet-Based TP
- Integrated Push-button Torch Control
- Power Wave® R450 Robotic Power Source
- AutoDrive® 4R100 Wire Feeder
- Robotic torch
- Coolarc 26
[for cooling package]
- Plug & Play single power input
- Fixed Welding Table
- Heavy Duty Casters
- Stabilizing Kickstand
- Utility Drawer & Tablet Tray
- Arc visual protection

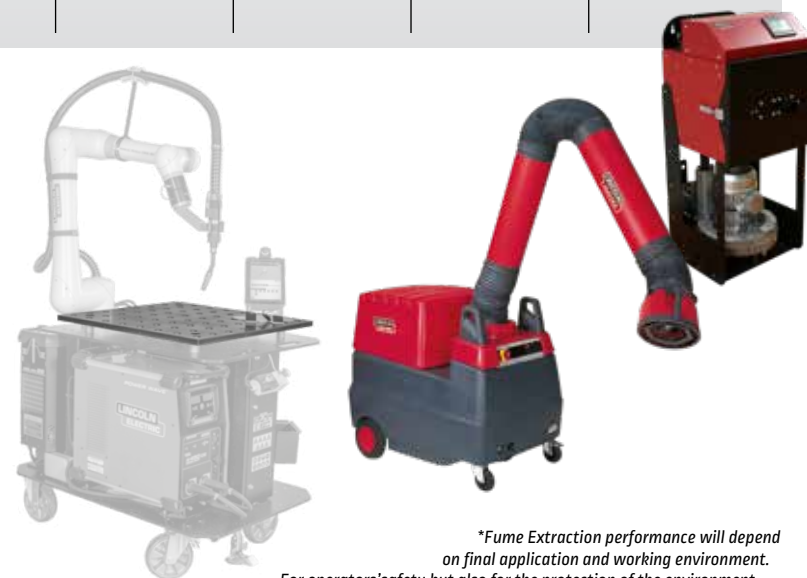


	Water Cooled			Air Cooled LE550
	LE550	BW500	FX500	
Steel / Stainless		✓		✓
Aluminium	X	✓	X	X
Fume extraction	X	X	✓	X
Application	Intensive - 450A@100%			Conventionnal - 300A@100%
Cart weight	500 Kg			470 Kg
Cart dimension	1672 x 800 mm			
Cart payload	226 Kg			
Optional table dimension	800 x 800 mm			
Optional table weight	120 Kg			

Optional system

- Software pack Touch sensing + Multi-pass + Seam tracking
- Tooling H28 Table 800 x 800 x 25 mm
- MOBIFILTER Fume Extractor for conventional gun*
- Linc-Extractor for fume extraction gun*

To order	AIR LE550	WATER LE550	WATER BW500	WATER FX500
Cart alone	AS-RM-2461-3	AS-RM-91506460	AS-RM-91506096	AS-RM-91506098
Cart + Software Pack	AS-RM-91506401	AS-RM-91506461	AS-RM-91506421	AS-RM-91506441
Cart + Table	AS-RM-91506402	AS-RM-91506462	AS-RM-91506422	AS-RM-91506442
Cart + Table + Software Pack	AS-RM-91506403	AS-RM-91506463	AS-RM-91506423	AS-RM-91506443



*Fume Extraction performance will depend on final application and working environment. For operators' safety but also for the protection of the environment, user has to collect and filter welding fumes. Consult us to see the possible options.

LINC-COBOT PLATFORM / CUSTOMIZE YOUR TOOL

LINC-COBOT PLATFORM

- Fanuc CRX 10iA/L with Tablet-Based TP
- Integrated Push-button Torch Control
- Power Wave® R450 Robotic Power Source
- Wire Feeder AutoDrive® 4R100 (4R220 for HYPERFILL™)
- Robotic torch
- Coolarc 50 [for cooling package]
- Ethernet Hub
- Plug & Play single power input
- Utility Drawer & Tablet Tray
- Arc visual protection

Adaptation to your job



Mobile



Hand Pallet trucks

Crane

Forklift

Open working zone for more flexibility

Plug and Play platform with air or water cooled torch, conventional or fume extraction. Free zone in front of Linc-cobot to customize your welding zone.

Optional system

- Advance Module
- Software pack
Touch sensing + Multi-pass
+ Seam tracking
- MOBIFILTER Fume Extractor for conventional gun*
- Linc-Extractor for fume extraction gun*



Using your table or Tooling.



Directly with a large part.

	Water Cooled				Air Cooled
	LE550	BW500	FX500	HYPERFILL™	LE550
Steel / Stainless			✓		✓
Aluminium	X	✓	X	X	X
Fume extraction	X	X	✓	X	X
Application	Intensive - 450A@100%				Conventionnal 300A@100%
Weight	670 Kg		710 Kg		640 Kg
Dimension	1480 x 1000 mm				

To order	AIR LE550	WATER LE550	WATER BW500	WATER FX500	HYPERFILL™
Platform	AS-RM-91506100	AS-RM-91506560	AS-RM-91506106	AS-RM-91506110	AS-RM-91506580
Platform + Software Pack	AS-RM-91506501	AS-RM-91506561	AS-RM-91506521	AS-RM-91506541	AS-RM-91506581
Platform + Advance Module	AS-RM-91506502	AS-RM-91506562	AS-RM-91506522	AS-RM-91506542	AS-RM-91506582
Platform + Advance Module + Software Pack	AS-RM-91506503	AS-RM-91506563	AS-RM-91506523	AS-RM-91506543	AS-RM-91506583

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HIGH PERFORMANCE WELDING SYSTEM

PROVEN PERFORMANCES

Welding system

- 450A at 100% duty cycle
- Output range: 5-500A



INDUSTRY LEADING
5-YEAR
STANDARD
WARRANTY

Proven performance in the industry, the Power Wave® range is offering the industry leading 5 Year Standard Warranty.

Gun range

Semi-Automatic MIG welding gun, designed to tackle high-heat applications.

Magnum PRO		W500	FX500
			
Conventional			Fume extraction
300A@100%	500A@100%		
Air Cooled	Water cooled		
Steel / Stainless		Steel / Stainless Aluminium	Steel / Stainless
0.8 - 1.2 mm	HYPERFILL™	0.8 - 1.6 mm	

Fully interfaced

Power Wave® R450 is interfaced with the Linc-Cobot Teach Pendant Tablet, giving access to the complete process control platform.



	Weld Mode Number : #18 RapidArc ArMix
	Wire : Steel 1.2 mm
	Gas : ArCO2
Change Weld Mode	
Current :	185.0 Amps
Trim :	0.9
UltimArc :	0.0
Travel Speed :	55.0 cm/min

Robotic feeder

4R100 For Single wire
4R220 For HYPERFILL™

- Powerful wire feeders
- MAXTRAC® 4-roll drive system
- Precise speed control



Power Wave® Advance module

Available on Linc-Cobot Platform, giving opportunity to expand welding capabilities.

- Ideal for: Adding AC polarity, STT®



Cooling system

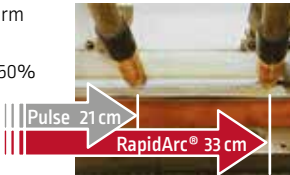


Efficient cooling system.
COOLARC 26 for Linc-Cobot Cart.
COOLARC 50 for Linc-Cobot Platform.



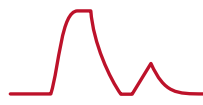
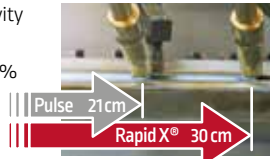
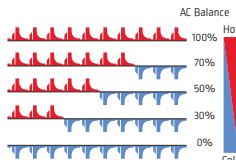

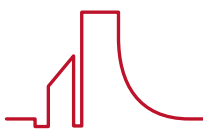

OPTIMIZE YOUR ARC PERFORMANCE THE RIGHT PROCESS FOR ANY APPLICATION

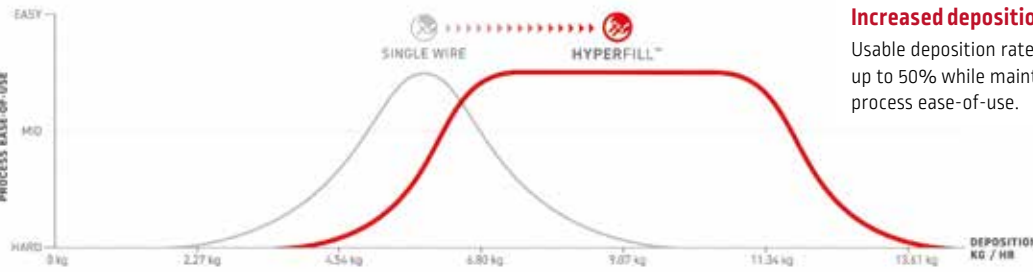

Beyond conventional CV or Pulsed modes, Power Wave® R450 integrates unique process.

Power Wave® R450

STEEL & STAINLESS STEEL	RapidArc® Maximizing weld travel speeds	<ul style="list-style-type: none"> Industry's premier waveform for high-speed welding Increase travel speeds by 50% Reduce spatter by 15% 	
	Precision Pulse™ Pulse performance for jobs demanding flexibility	<ul style="list-style-type: none"> Improved out of position welds over standard pulse Enhanced puddle control for improved operator confidence Controlled heat input Improves welds in tight joints 	
	Pulse-on-Pulse® TIG appearance. MIG productivity	<ul style="list-style-type: none"> Excellent heat input control especially on thin materials [less than 7 mm thick] Eliminates in-line weaving Improve operator appeal for any skill level Use when appearance and productivity matter using aluminium 	

With Advance module

STEEL	Rapid X® High speed, low spatter, low heat input, no trade-offs		<ul style="list-style-type: none"> Revolutionises the productivity of welding Increase travel speeds by 40% Reduce spatter by 30% 	
	AC-STT™ Industry's superior thin gauge solution		<ul style="list-style-type: none"> Proven STT® waveform with controlled AC balance Excellent heat-input control No burn through, no spatter 	
	STT® Industry proven root pass solution		<ul style="list-style-type: none"> Simplify open root welding for any operator skill level Eliminates common burn-through & lack of fusion issues. Larger bead, flat face, perfect back bead, excellent fusion 	

STEEL & STAINLESS STEEL	HYPERFILL™ Bigger welds Faster, easier	<p>HYPERFILL™ redefines high deposition welding, making larger welds, faster and more easily.</p> <p>The HYPERFILL™ twin-wire MIG solution revolutionizes the heavy fabrication productivity, pushing the limits of the single wire without changing.</p>		Increased deposition rates Usable deposition rates increase up to 50% while maintaining process ease-of-use.	
	AC Aluminium Pulse Improved Aluminium productivity and quality UltimArc® Control				



ARC FACILITIES

Application Resource Centers

Application Resource Centers, also known as ARC facilities, house Lincoln Electric's latest technologies and professionals, who help develop and deliver productivity solutions that create new opportunities for our current and future customers.

ARC facilities include dedicated spaces and equipment to demonstrate and test welding, cutting, virtual welding, and automation solutions. In addition, each ARC includes classroom areas for instruction on the processes, machines and consumables solutions available to them.



**REQUEST
A DEMO**