

# LINC-COBOT Series

Collaborative Robot Partner



**LINCOLN**<sup>®</sup>  
**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.

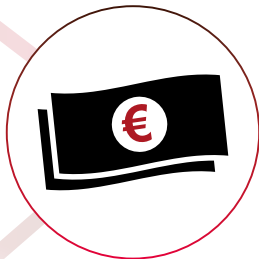


## Health and Safety

- 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

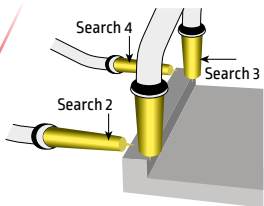
Tablet teach pendant, featuring icon-based, timeline programming, reduces the learning curve. Simply swipe icons in the timeline. Including the Lincoln Arc Welding Plug-in.



### 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



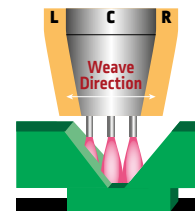
### Touch Sensing

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

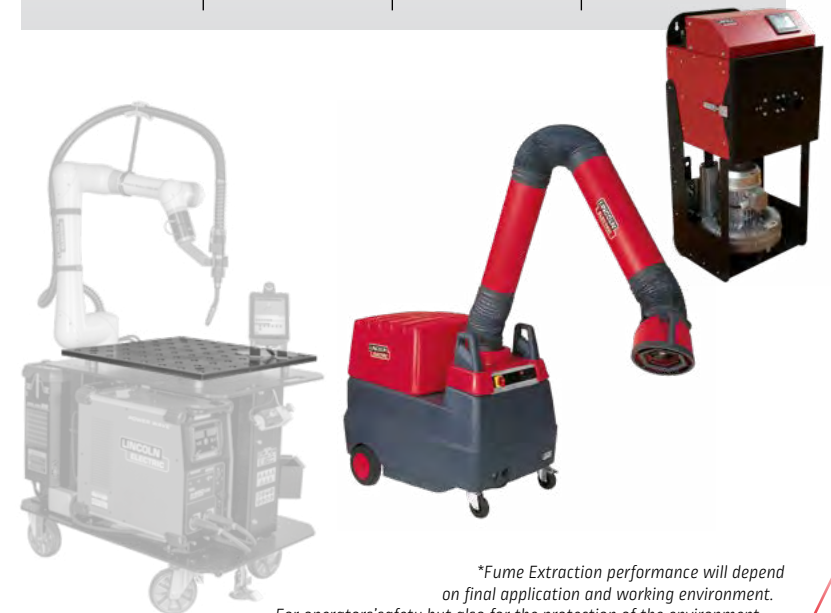


	Water Cooled	Air Cooled
Steel / Stainless	✓	✓
Aluminium	✓	✗
Conventional Gun	✓	✓
Fume extraction Gun	✓ (No aluminium)	✗
Application	Intensive - 450A@100%	Conventiional - 380A@100%
Cart weight	500 Kg	470 Kg
Cart dimension	1672 x 800 mm	
Cart payload	226 Kg	
Optional table dimension	800 x 800 mm	
Optional 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 BW500	WATER FX500
Cart alone	AS-RM-2461-3	AS-RM-91506096	AS-RM-91506098
Cart + Software Pack	AS-RM-91506401	AS-RM-91506421	AS-RM-91506441
Cart + Table	AS-RM-91506402	AS-RM-91506422	AS-RM-91506442
Cart + Table + Software Pack	AS-RM-91506403	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
- AutoDrive® 4R100 Wire Feeder
- Robotic torch
- Coolarc 50 [for cooling package]
- Ethernet Hub
- Plug & Play single power input
- Utility Drawer & Tablet Tray
- Arc visual protection



## Optional system

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

## 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.

## Adaptation to your job



Using your table or Tooling.



Directly with a large part.

To order	AIR LE550	WATER BW500	WATER FX500
<b>Platform</b>	AS-RM-91506100	AS-RM-91506106	AS-RM-91506110
<b>Platform + Software Pack</b>	AS-RM-91506501	AS-RM-91506521	AS-RM-91506541
<b>Platform + Advance Module</b>	AS-RM-91506502	AS-RM-91506522	AS-RM-91506542
<b>Platform + Advance Module + Software Pack</b>	AS-RM-91506503	AS-RM-91506523	AS-RM-91506543



\*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.

	Water Cooled	Air Cooled
<b>Steel / Stainless</b>	✓	✓
<b>Aluminium</b>	✓	X
<b>Conventional Gun</b>	✓	✓
<b>Fume extraction Gun</b>	✓ (No aluminium)	X
<b>Application</b>	Intensive - 450A@100%	Conventiional - 300A@100%
<b>Weight</b>	670 Kg	640 Kg
<b>Dimension</b>	1480 x 1000 mm	

# 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	BW500	FX500
		
Conventiønnal	Conventiønnal	Fume extraction
380A@100%	500A@100%	
Air Cooled	Water cooled	
Steel / Stainless	Steel / Stainless Aluminium	Steel / Stainless
0.8 - 1.2 mm	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 : Steel1.2 mm  
Gas : ArCO2

Change Weld Mode

Current :	185.0 Amps
Trim :	0.9
UltimArc :	0.0
Travel Speed :	55.0 cm/min

### Robotic feeder

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



### Power Wave® Advance module

Available on Linc-Cobot Platform, giving aoppportunity 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.



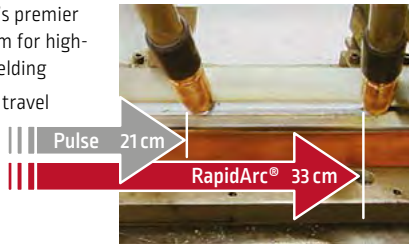
# OPTIMIZE YOUR ARC PERFORMANCE THE RIGHT PROCESS FOR ANY APPLICATION

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

## Power Wave® R450

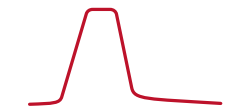
### RapidArc® Maximizing weld travel speeds

- 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

- 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

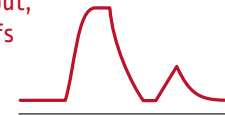
- Excellent heat input control especially on thin materials (less than 7 mm thick)
- Eliminates in-line weaving
- Improve operator appeal for any skill level
- Use when appearance and productivity matter using aluminium



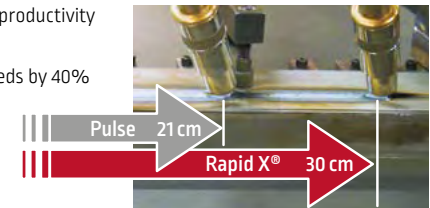
## With Advance module

### Rapid X®

High speed, low spatter, low heat input, no trade-offs

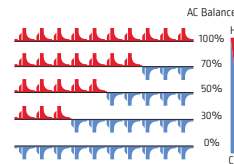


- Revolutionises the productivity of welding
- Increase travel speeds by 40%
- Reduce spatter by 30%

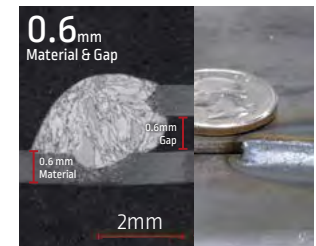


### AC-STT™

Industry's superior thin gauge solution



- Proven STT® waveform with controlled AC balance
- Excellent heat-input control
- No burn through, no spatter



### STT®

Industry proven root pass solution



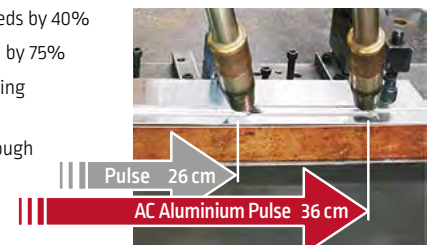
- Simplify open root welding for any operator skill level
- Eliminates common burn-through & lack of fusion issues.
- Larger bead, flat face, perfect back bead, excellent fusion



### AC Aluminium Pulse

Improved Aluminium productivity and quality

- Increase travel speeds by 40%
- Increase deposition by 75%
- Improves gap bridging capabilities
- Decrease burn-through



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**