SPEEDTEC®
GEN4

UNSTOPPABLE

System Engineered to Evolve

NEW



www.lincolnelectric.com

LINCOLN ELECTRIC



BUILT TO EVOLVE
WITH YOUR PRODUCTION NEEDS

- Unlock advanced waveforms on demand
- Expand software and capabilities with ease
- Boost performance with faster welding and reduced downtime
- Enhance operator efficiency through ONE seamless, intuitive interface

SPEEDTEC® GEN4

Production demands don't stand still. New applications, higher expectations, workforce challenges, and changing customer requirements all put pressure on welding operations to do more.

The answer? Welding systems built to be unstoppable.

Meet the new **SPEEDTEC® GEN4** – a welding platform engineered to evolve with your production needs and challenges.

Designed for reliable performance, simplified operation, and future-ready flexibility, it helps you stay productive, adapt faster, and take on new challenges with confidence.

SPEEDTEC® GEN4 helps you increase productivity, take on more advanced applications, and scale with confidence.

EVOLVING SYSTEM
THAT ENHANCES OVER TIME

Processes

- MIG/MAG
- FCAW
- TIG Pulse
- STICK
- TIG
- CAG
- MIG brazing
- Advanced waveforms

Materials

- Steel
- Stainless steel
- Low-alloy steel
- Aluminium

Applications

- General fabrication
- Heavy fabrication
- Structural
- Transportation
- Chemical processing
- Maintenance and repair
- Shipbuilding

SPEEDTEC® GEN4

NEW

UNSTOPPABLE

System Engineered to Evolve



UNSTOPPABLE **WELDING PERFORMANCE**

- Optimized performance for **faster welding** and **less downtime**
- Possibility to unlock **additional waveforms** and **processes** to instantly extend welding capabilities

UNSTOPPABLE **TECHNOLOGY**

- **NEW** User Interface for intuitive navigation and faster setup
- **NEW** Connectivity Capabilities to access welding data and real-time process visibility

UNSTOPPABLE **DESIGN**

- **Intelligent design** approach for long-term performance
- **Continuously evolving** software for seamless integration with connectable accessories

AVAILABLE TODAY. EXPANDABLE TOMORROW.

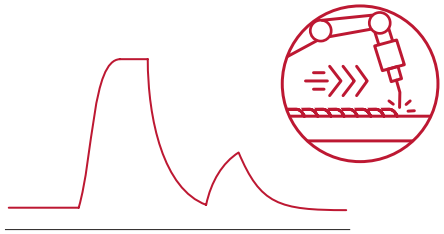
NEW

LICENSED ADVANCED PROCESSES

RapidArc®

Maximising weld travel speeds

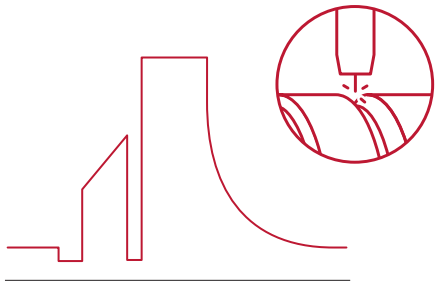
- Industry's premier waveform for high-speed welding
- Travel speeds increased by 50%
- Spatter reduced by 15%



STT®

Industry proven root pass solution

- Simplifies open root welding for any operator skill level
- Eliminates common burn-through & lack of fusion issues
- Delivers larger bead, flat face, perfect back bead and excellent fusion



START WITH WHAT YOU NEED NOW. ***EXPAND WHEN THE APPLICATION DEMANDS IT.***

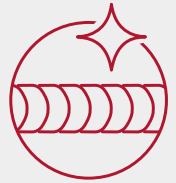
PROVEN PROCESS. ENHANCED RESULTS.

HIGH-PRODUCTIVITY MIG/MAG TRANSFERS

MECHAPULSE™

SIMPLIFIED & IMPROVED

TIG appearance with MIG/MAG Weld bead with TIG appearance productivity*



- Increases travel speed (up to 4x faster)
- Reduces heat input and distortion
- Eliminates in-line weaving
- Shorter training time
- Effortless welding in vertical up position
- Designed for Aluminium & Stainless Steel, all thicknesses

* based on side-by-side comparison of MECHAPULSE™ and standard TIG mode

MECHAPULSE™

IMPROVED

ALUMINIUM WELDING ABILITY

HIGH-PRODUCTIVITY MIG/MAG TRANSFERS

SSA™ – SPEED SHORT ARC™

IMPROVED

Faster travel speeds*



- Increases travel speed up to 50%**
- Reduces heat input up to 20%
- Reduces distortion
- Improves out of position welds
- Designed for Carbon & Stainless Steel, thin plates 2-5 mm

* based on side-by-side comparison of SSA™ and standard CV mode (Short Arc)
** in automated applications

HPS™ – HIGH PENETRATION SPEED™

IMPROVED

Increased penetration



- Increases penetration
- Reduces distortion
- Longer stick out applicable
- Reduces undercut effect
- Shorter preparation time
- Designed for Carbon Steel, thick plates > 6 mm

SSP™ – SOFT SILENCE PULSE™

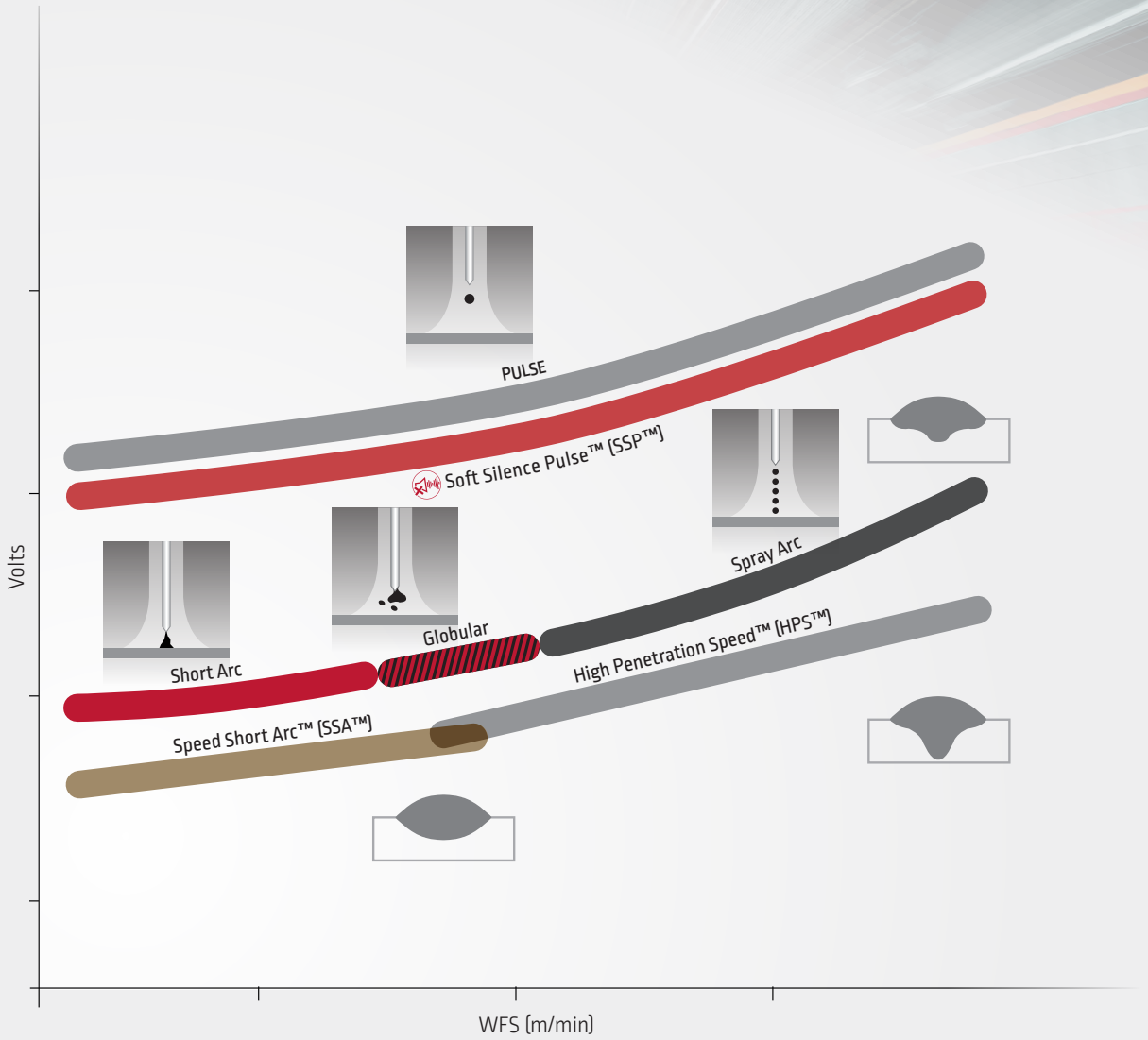
IMPROVED

Improved arc sound*



- Reduces arc noise up to 8 dB
- Clearly better wetting for Stainless Steel
- Reduces spatter levels
- Eliminates undercut effect
- High performance on Stainless Steel & Steel, all plate thicknesses

* based on side by side comparison of SSP™ and standard Pulse mode



WIRE CONDITIONING

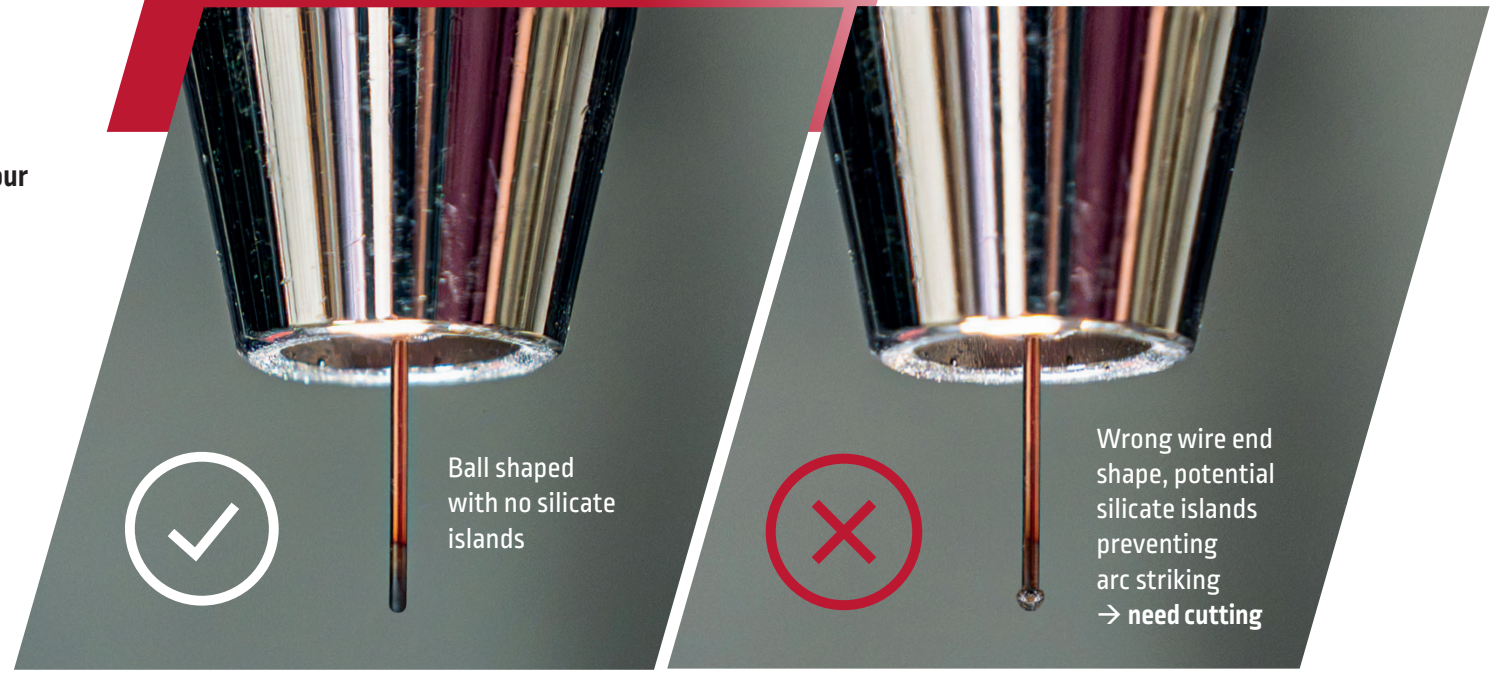
GET READY FOR YOUR NEXT WELD!

Wire Conditioning automatically prepares the wire tip after each weld, helping ensure a clean, repeatable arc start for the next weld.

- When in auto settings, Lincoln Electric Speedtec® Gen4 will help you by getting your wire ready for **the next weld = Wire conditioning.**
- Within the details and refinement of the weld modes, and the multiple steps within end of welding/arc sequence, Lincoln Electric weld modes engineer **specific conditions** to prepare **the end of the welding wire, getting you ready for your next weld without using cutting pliers.**

MAKES YOU MORE EFFICIENT
NO TIME WASTED CUTTING WIRE

IMPROVED ARC IGNITION WITH REDUCED SPATTER, ***THANKS TO THE WIRE CONDITIONING.***



Wire conditioning in Auto-settings

No wire conditioning

SPEEDTEC® GEN4 RANGE

ONE PLATFORM. ***EVERY WELDING CHALLENGE.***



NEW

ONE UNIFIED USER INTERFACE

DESIGNED TO REDUCE TRAINING EFFORT AND IMPROVE PRODUCTIVITY

A fully optimised, incredibly user-friendly interface that's simple to use. We're constantly developing it to ensure it's clear and intuitive, guiding you step by step and suggesting ready-made templates to help you avoid mistakes.

ADVANTAGES

✔ FAMILIAR INTERFACE

The same interface across Lincoln Electric systems reduces the learning curve from day one.

✔ FASTER ONBOARDING

Simplifies parameter selection and helps operators get up to speed quickly and start producing sooner.

✔ MINIMAL RETRAINING

Operators can move between machines with minimal additional training.

✔ LOWER COGNITIVE LOAD

Less time navigating settings. More time focused on welding quality and productivity.

INTERFACE AVAILABLE IN 22 LANGUAGES

EN, PL, IT, DE, ES, FR, NO, NL, SV, FI, PT, RU, CS, RO, SK, HU, ET, TR, DA, LV, LT, EL

Other language support to be added.



POWER FEED® 56

Enhanced process visibility and control

- Two controls, one button for easy navigation
- Icon language for key commands
- Easy process and settings selection
- ARCFX™ – joint visualization
- Work point in WFS / A
- Locking function / Limits / Memories / Jobs

INTEGRATED ECOSYSTEM

CONNECTED INSIGHT. BETTER DECISIONS.

The Speedtec® Gen4 ecosystem connects operators, equipment and production data to deliver the visibility you need to improve quality, consistency and performance across your operation.

WELDER ID

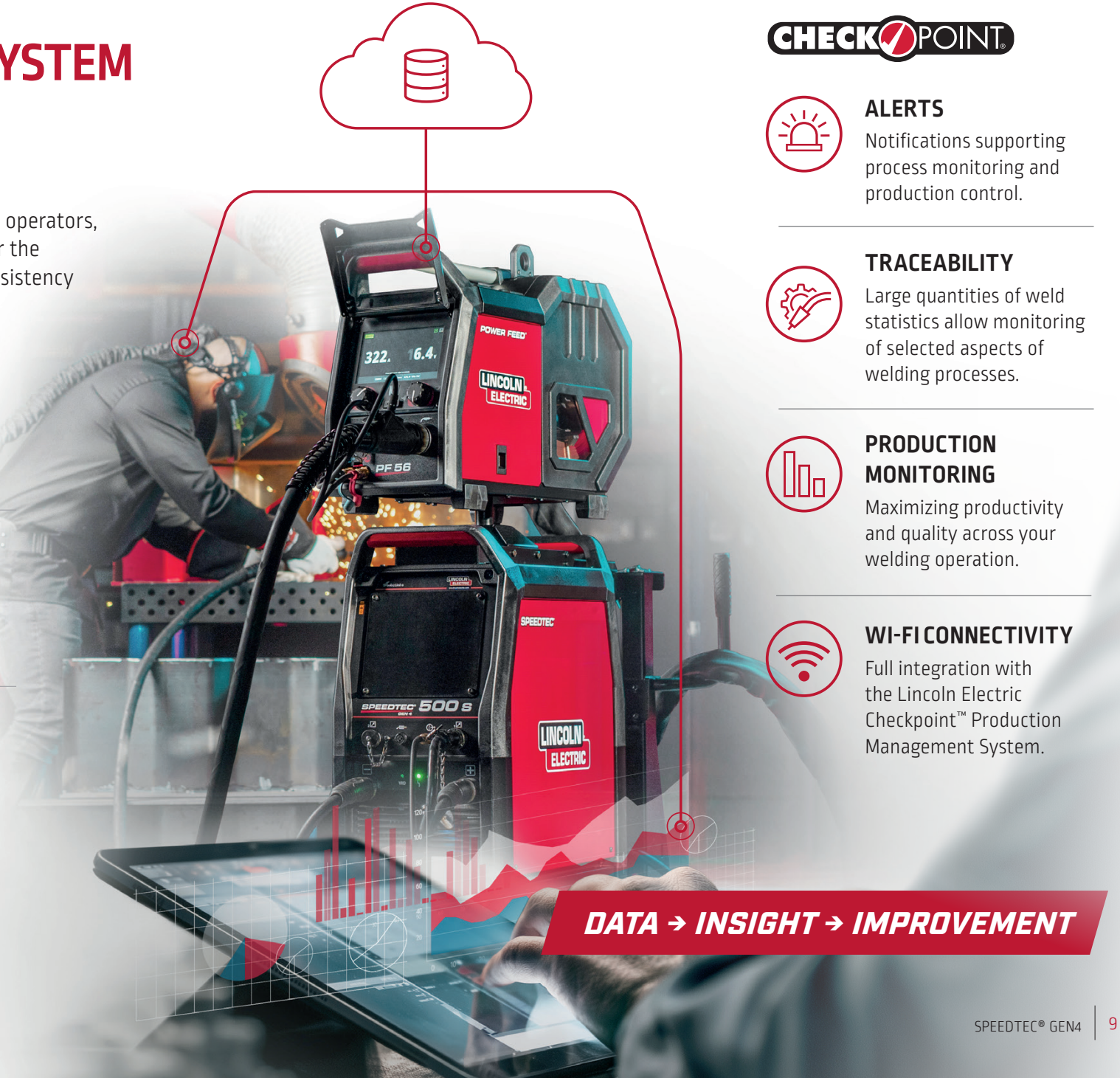
This is a digital signature. It's assigned to the specific operator performing the weld.

PROCESS CONTROL

It's optional NFC authorization / lockout. Operator access control via NFC authentication.

INSIGHT WHEN YOU NEED IT

Track performance, review reports and act on insights from **any device, anytime, anywhere**.



CHECKPOINT®

ALERTS

Notifications supporting process monitoring and production control.

TRACEABILITY

Large quantities of weld statistics allow monitoring of selected aspects of welding processes.

PRODUCTION MONITORING

Maximizing productivity and quality across your welding operation.

WI-FI CONNECTIVITY

Full integration with the Lincoln Electric Checkpoint™ Production Management System.



INVERTER ENGINE TECHNOLOGY – ECO FRIENDLY

Better efficiency index

85%
POWER EFFICIENCY
PREVIOUS GENERATION

91%
POWER EFFICIENCY
SPEEDTEC® GEN4

+6%
IMPROVEMENT
VS PREVIOUS GENERATION

Lower power consumption
Automatic power-saving modes

Generator ready

PERFECT SYNCHRONIZATION

Communication between power source and wire feeder ensures precise synchronization, enabling stable performance in advanced welding modes.

- Stable and repeatable welding performance
- Improved weld quality with reduced defects
- Optimized performance in advanced welding modes
- Higher productivity through smooth and synchronized system operation
- Greater confidence when welding demanding or critical applications

ENGINEERED PCB ARCHITECTURE

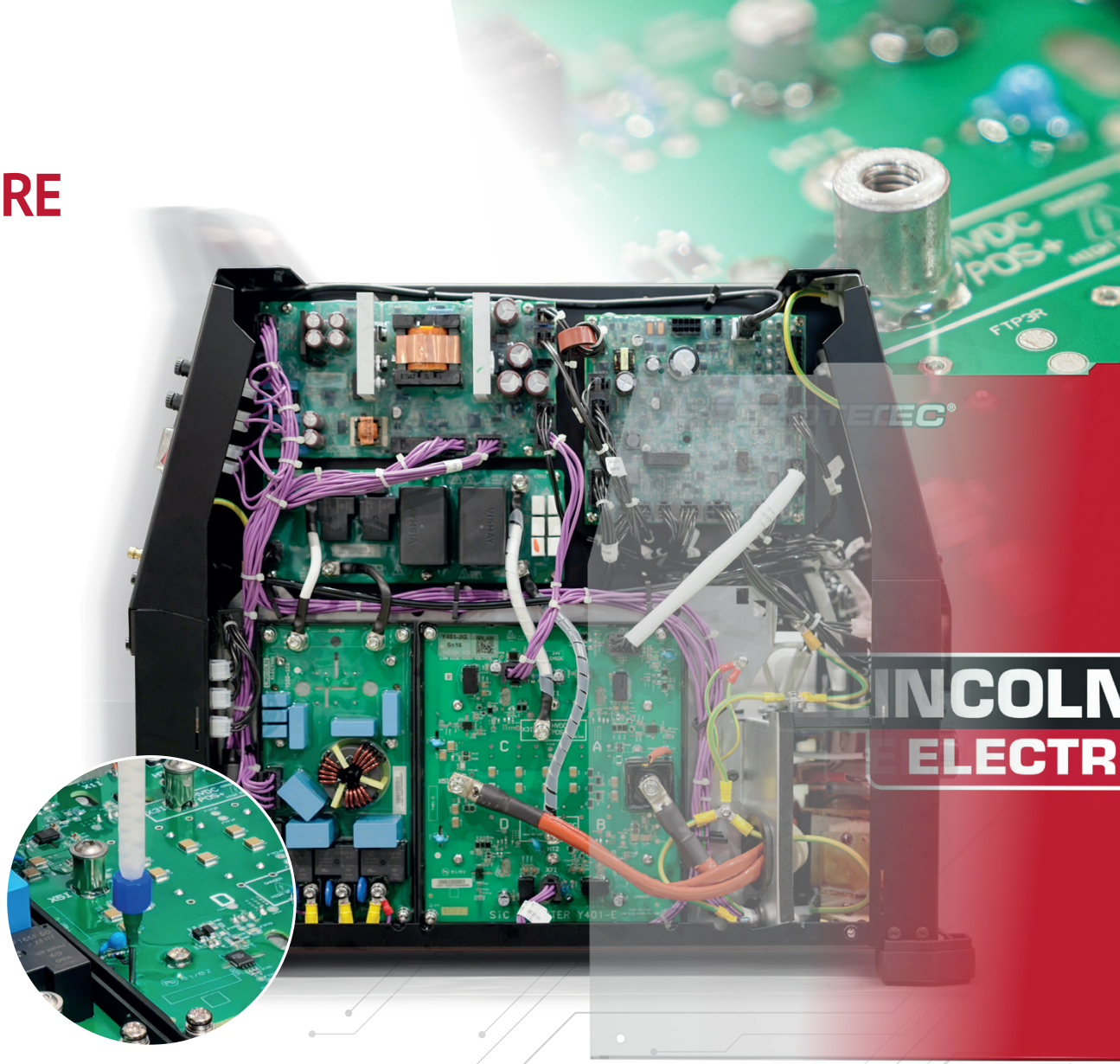
Built on a next-generation power platform enabling advanced arc control and future-ready performance. SiC-based power technology for improved efficiency, faster response, and enhanced arc performance. Advanced microcontroller for fast response and precise control of modern welding processes. Stable welding performance even in unstable power supply conditions.

BASED ON SiC TECHNOLOGY
Higher efficiency and improved system response

ADVANCED MICROCONTROLLER
Fast response and precise control

ENHANCED ARC CONTROL
For advanced waveforms and stable performance

RELIABLE OPERATION IN UNSTABLE NETWORKS
Maximum system stability in demanding conditions



NEXT-GENERATION POWER PLATFORM



INTELLIGENT DESIGN **ENABLES LONG-TERM PERFORMANCE**

ADVANCED MACHINE PROTECTION SYSTEMS ENSURE SAFE AND RELIABLE OPERATION UNDER HARSH WORKING CONDITIONS

TRUE HD HEAVY DUTY TEST

INDUSTRY LEADING 5-YEAR WARRANTY*

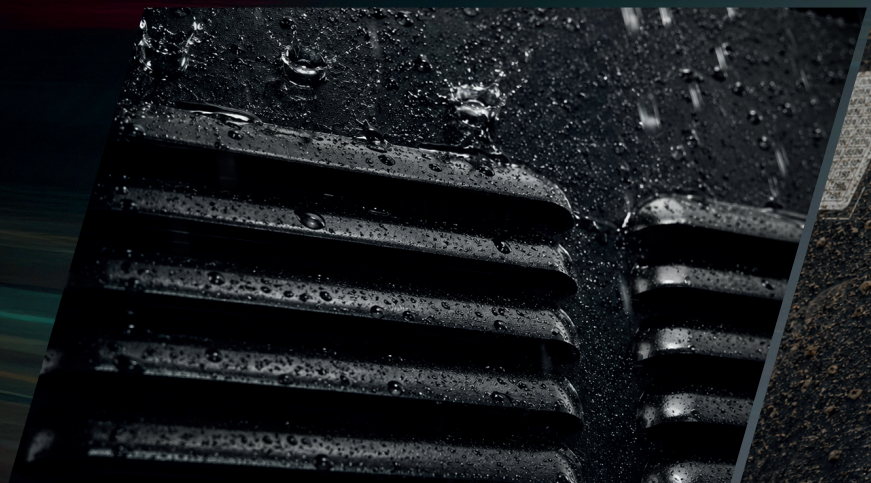
* 3+2 years with registration

HIGH DUTY CYCLE 420A/100%

High production efficiency

- Digital welding current control
- True HD tested – made for harsh environmental conditions
- New Heavy Duty undercarriage







CUSTOMIZABLE SOLUTION





POWER FEED® 52



POWER FEED® 56



SPEEDTEC® 400S
420A@100%



SPEEDTEC® 500S
500A@60%



COOLARC® 60s



DUAL CART



CART 4-WHEELS





SPEEDTEC® 350C

350A@100%



COOLARC® 60s



TOOLBOX





CART 4-WHEELS



CART 24

ACCESSORIES

		SPEEDTEC® 350C	SPEEDTEC® 400S	SPEEDTEC® 500S	POWER FEED® 52	POWER FEED® 56
		K14461-1	K14457-1	K14458-1	K14462-1	K14464-1
Ground Cable 400A – 70mm² – 5 / 10 / 15m	**GRD-400A-70-xM ***	•				
Ground Cable 600A – 95mm² – 5 / 10m	**GRD-600A-95-xM***		•	•		
Wheels Kit For Wire Feeder	**K14467-1**				•	•
Control Panel Cover Kit	**K14200-1**					•
Control Panel Cover Kit	**K14325-1**	•	•	•		
Gas Flow Regulator Kit	**K14468-1**	•			•	•
12 Pin Remote Control Kit Speedtec® Gen4	**K14471-1**		•	•		
Wire Feeder Drum Quick Connector	**K14204-1**	•			•	•
Air Cooled Interconnection Cable						
Cable Pack 5-PIN – 95mm² 2 / 5 / 10 / 15 / 20 / 25 / 30 m	**K14472-PG-xM***		•	•	•	•
Water Cooled Interconnection Cable						
Cable Pack 5-PIN W – 95mm² 2 / 5 / 10 / 15 / 20 / 25 / 30 m	**K14473-PGW-xM***		•	•	•	•
Adapter For Spool Type B300	**K10158-1**	•			•	•
Adapter For Spool Type B300	**K10158**	•			•	•
Adapter For Spool Type S200	**R-1019-125-1/08R**	•			•	•
Wire Feeder HD Cart	**K14475-1**				•	•
Mig Gun Balanced Arm Speedtec® Gen4**	**K14476-1**		•	•	•	•
4 Wheel Cart Dual Speedtec® Gen4	**K14477-1**		•	•	•	•
4 Wheel Cart Speedtec® Gen4	**K14479-1**	•	•	•	•	•
Cart 24 (2 Wheels cart)	**K14191-1**	•				
TIG Adapter	**KP10519-8**	•			•	•
Cooling Liquid Freezcool	**W000010167**					
Kit Arc 50C50 Plus	**W000260682**	•	•	•		
Flair® 600 Gouging Torch	**W000010136**			•		
Toolbox	**K14474-1**	•				

* x = length (m), ** MGBA – coming soon

IMPROVED WIRE FEEDER. CONSISTENT RESULTS.

IMPROVED

POWER FEED®

Compact and lightweight design

Improved ergonomics and handling due to a more compact system design and optimized weight distribution.



Optional robust wheels kit

Engineered for productivity and safety

- Self-centering assembly system enables fast, error-free feeder installation for quicker setup and consistent performance
- Configurable safety switch cuts welding current when the door is opened, ensuring operator safety and compliance



Reliable integrated harness connection – new bracket

More stable welding operation thanks to a redesigned harness connection that reduces the risk of interruptions.



High precision wire feed control for advanced waveforms

Precision wire feeding system engineered for maximum arc stability and repeatable welding performance in advanced waveforms.

2 channel encoder – high precision WFS control

Dual-channel encoder for precise and repeatable wire feeding.

Standardization of welding quality by reducing operator-dependent variation in wire feed control. Consistent welding results in serial production by reducing variation between operators and shifts.



Easy UI relocation through pendant box

Improves comfort, reduces walking between station and source, and speeds up adjustments during welding thanks to the 7-meter cable.

IMPROVED

CART 4-WHEELS

Wire feeder swivel on the cart enables rotation of the wire feeder and setting it in any position

Cable Management System





New Heavy Duty undercarriage

- Rubber bumpers protecting feet
- Large wheels to easily overcome obstacles such as cables or thresholds
- Extremely reliable and stable, passed incline stability tests on 15° incline
- Low gas cylinder entry makes loading easier
- Easy manoeuvrability and small footprint
- 4 lifting eyes for easy hook-in and safe transportation
- Quick and easy securing of the shielding gas cylinder

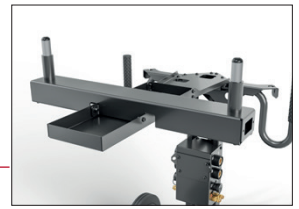


Low gas cylinder entry makes loading very easy

NEW

DUAL CART

Mounting provision for two Power Feed® 56





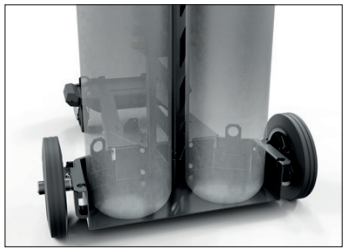
Ergonomic double-sided connection panel

Integrated wheel lock for secure positioning

Dual Cart

- Increase the mobility of your welding workstation and keep all equipment within easy reach.
- Accommodates two wire feeders and two gas cylinders, helping improve productivity.
- Rotating wire feeder mounts provide easy access to the wire spool.
- Low gas cylinder platform simplifies cylinder loading and daily handling.
- Ensures stability on uneven surfaces and on inclines up to 15°.
- Durable steel construction is designed for demanding industrial environments.
- Convenient cable holders allow for easy cable storage and cable management.

Space for two gas cylinders



CART 24





Storage for electrodes

Practical storage



Helmet rack



Cable Management System

Developed to store all accessories and makes everyday welding work easier

- Low gas cylinder entry
- Drawer for storage of consumables
- Integrated cable management allowing for a neat work area
- Remote control and TIG rod housings
- Vertical design to save space in shop environments



Holder for foot control pedal

NEW

COOLARC® 60s

- High cooling power 1.2kW@25°C
- Reservoir capacity 4.5 l
- Strong pump to support proper cooling (max. pressure 0.47MPa)
- Protection class IP23
- New external coolant filter

Coolant filter
keeps coolant clean





Simplified design with integrated filtration and improved control logic for higher reliability and easier maintenance. Reduced risk of leakage in demanding industrial environments.



AUTO mode for better energy savings and extended service life

POWER SOURCES

Product	Item number	Primary voltage	Fuse size (A)	Max. input power (kVA)	Rated output (A) at +40°C		Welding voltage range (V)	Welding current range (A)	Open circuit voltage (peak)	Temperature range		EMC class	Weight (kg)	Dimensions H x W x D (mm)	Protection class
					100%	60%	MIG/MAG			Operating	Storage				
Speedtec® 400S	K14457-1	400V/3Ph 50/60Hz ± 10%	32	20	420	–	15-45	20-420	65 Vdc	-10°C to +40°C	-25°C to +55°C	A	39	580 x 295 x 630	IP23
Speedtec® 500S	K14458-1		32	25		500		20-500							
Speedtec® 350C	K14461-1		25	17	300	350		20-350					45		

WIRE FEEDERS

Product	Item number	Gun connection	Wire feed mechanism	Feed rolls diameter (mm)	WFS (m/min)	Filler wires diameter (mm)				Wire spool weight (max) (kg)	Wire spool diameter (max) (mm)	Maximum shielding gas pressure	Temperature range		EMC class	Weight (kg)	Dimensions H x W x D (mm)	Protection class
						Fe	Ss	Mc/Fc	Al				Operating	Storage				
Power Feed® 52	K14462-1	Euro	4-rolls, All driven, single motor	37.2	1.5-22	0.8 to 1.6	0.8 to 1.6	0.9 to 1.6	1.0 to 1.6	18	300	0.5 MPa	-10°C to +40°C	-25°C to +55°C	A	17	460 x 245 x 600	IP23
Power Feed® 56	K14464-1																	

COOLER

Product	Item number	Cooling power @1l/min	Recommended coolant	Reservoir capacity (l)	Maximum pressure (MPa)	Temperature range		EMC class	Weight (kg)	Dimensions H x W x D (mm)	Protection class
						Operating	Storage				
Coolarc® 60s	K14469-1	1.2kW @+25°C	FREEZCOOL	4.5	0.505	-10°C to +40°C	-25°C to +55°C	A	18.2	663 x 291 x 224	IP23

CART

Product	Item number	Max. gas cylinder diameter (mm)	Max. gas cylinder height (mm)	Front wheels diameter (mm)	Rear wheels diameter (mm)	Weight (kg)	Dimensions W x L x D (mm)	Other features
Cart 24	K14191-1	240	1700	–	250	33.8	1180 x 540 x 600	Low gas cylinder entry · Drawer for storage of consumables · Integrated cable management allowing for a neat work area · Remote control and TIG rod housings · Vertical design to save space in shop environments
Cart 4 wheels	K14479-1	240	1700	125	250	34	530 x 1035 x 955	Low gas cylinder entry · Rubber bumpers for feet protection · 4 lifting eyes for easy transportation
Dual Cart	K14477-1	240	1700	125	250	50.1	759 × 1017.7 × 1015.5	Low gas cylinder entry · Space for two gas cylinders · Rubber bumpers for feet protection · 4 lifting eyes for easy transportation · Mounting provision for two wire feeders · Integrated wheel lock · Integrated connection panel

TOOLBOX

Product	Item number	Weight (kg)	Dimensions W x L x D (mm)
ToolBox	K14474-1	15	663 x 291 x 224

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 information or advice about their use of our products. Our employees respond to enquiries to the best of their ability based on information 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. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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 these types of fabrication methods and service requirements.

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