



INVERTEC[®] 275S

**THE STICK WELDING
EVOLUTION**

www.lincolnelectric.eu

**LINCOLN[®]
ELECTRIC**

THE STICK WELDING EVOLUTION

Processes

- SMAW
- GTAW Lift

Materials

- Steel
- Stainless steel
- Low alloy steel
- Aluminum alloys
- Nickel alloys
- Titanium alloys

Applications

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

The new **INVERTEC® 275S** is a next generation STICK inverter that offers excellent welding processes coupled with high performance, as well as increased productivity and is the next step in professional welding. The new INVERTEC® is designed with the latest energy-saving technology and is ready to work in the most difficult environments due to its unique design.

To achieve excellent welding results, the INVERTEC 275S comes complete with in-built communication devices and digital transmission systems, such as USB's, allowing the operator to monitor and track welding operations more easily.

Modular system: power sources 270A@25%, a 2-wheeled **CART 24** of solid metal construction with superior mobility and transportation, for the most demanding environments.



RUGGED RELIABILITY

Duty cycle 270A@25%.

- High production efficiency.
- Digital welding current control.
- True HD tested – made to withstand harsh environmental conditions.

Inverter engine technology – ECO Friendly.

- Low power consumption due to high efficiency – energy cost saving.
- Automatic power-saving modes [standby/shut-down function].
- **Product is compatible with EN50504 or 60974-14 [calibration].**
Operator can perform self calibration.
- Generator ready.

Lincoln Electric Industrial design – ready to use anywhere.

- **Fully potted PCB.**
- Metal construction.
- Protection class IP23.
- **3 year full parts and labour warranty.**



INVERTEC® 275S

Key technical data

- 400V ±15%, 3Ph 50/60Hz, generator ready
- **270A@25% / 250A@35% / 230A@60% / 180A@100%**
- Light weight – only 14.3 kg
- Inverter platform product
- Idle power 19W and efficiency > 85%
- **SMAW manual and Synergic – Pulse**
- STICK Pulse: 0.5-15 Hz
- Intelligent F.A.N. (Fan As Needed)
- Customer Support
- USB Key (software update, data collection)
- Voltage Reduce Device (VRD)
- Cellulosic 6010 stick capability
- **Industrial grade: IP23, 3 Years Warranty, no limitation**

Included as standard

- Input cable 3 m (no plug)
- USB key with user manual
- Quick Start papers



USB CONNECTIVITY

Analysis and quick decision making

- Full system update & diagnostics
- Transfer settings between machines
- Simple welding data collection on USB (start time, average current, average voltage, arc time, welding mode/job number, job name)
- Weld quality data monitoring (data on TFT user interface screen or CSV file transfer)
- Software updating

NEW ERGONOMIC DESIGN

- **Premium arc performance**
Stable, great dynamics, perfect start, limited spatters
- **Robust and reliable design**
Lincoln standard, True Heavy Duty, 3 year warranty
- **Innovative UI, intuitive and simple to use**
On-screen support and reduced training time
- **Customer Support**
for parts 'wear & tear' requirements and immediate operator support
- **More functions & features**
Auto-setting for instant 'ready to work' status
- **Improved ergonomics and operator safety**
for safer, more comfortable operation



Helmet rack



Remote control holder

Practical storage



SUPERIOR ERGONOMICS

Practical handle for effortless gripping even with gloves for safe movement of the machine

NEW



USB connectivity



New encoder for more precise adjustment. Simple navigation even when using welding gloves

Cable Management System
For easy transportation of the whole welding system, even with a very long connection cable

CART 24
Stable design of robust steel pipe construction

Holder for foot control pedal



INNOVATIVE & INTUITIVE INTERFACE

- Two buttons, one control knob for easy navigation
- Icon language for key commands
- Easy process and settings selection
- Locking function / Limits / Memories / Jobs
- Interface available in many languages



New encoders for more precise adjustment

EASY AND QUALITATIVE WELDING

STICK pulse

In pulsed MMA welding the current oscillates between the two levels at a frequency chosen by the operator. Both levels of selected current need to be in the operating range of the electrode when the average current is set near the centre of the working range. Normally, the base current level is set around 60-80% of nominal current. MMA pulse is optimal for basic electrodes and for welding application, such as root pass, fillet weld vertical up and fillet weld PB using higher frequency. Direct advantages of this function are less deformation with thinner material and reduced spatter.

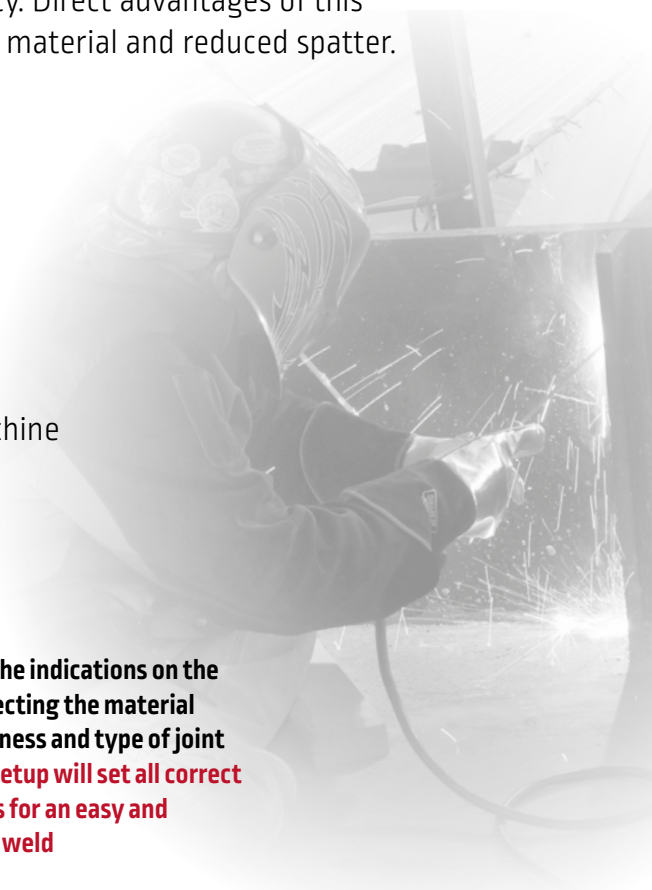
GUIDED SETUP

helps non-expert STICK welders to:

- Stabilise the arc
- Reduce the heat input
- Optimise the pulse
- Speed up the welding process
- Control the overall operation of the machine
- Save on current, filler material and gas
- Limit distortion on thin sheet metal



Following the indications on the screen, selecting the material type, thickness and type of joint the **Guide Setup** will set all correct parameters for an easy and qualitative weld



ACCESSORIES

OPTIONS	
Cart 24	K14191-1
Electrode holder CAĪMAN 400	W000010568
Kit 35C50	W000011139
Kit 35C50+	W000260682
Ground cable 300A – 50 mm ² – 5 m	GRD-300A-50-5M
Front cover	K14383-1
Cart's interface for power source	K14384-1
REMOTE CONTROLS	
Remote control	K10095-1-15M
Foot Amptrol™	K870



CART 24
K14191-1



CART'S INTERFACE FOR POWER SOURCE
K14384-1



FOOT AMPPTROL™
K870



REMOTE CONTROL
K10095-1-15M



GROUND CABLE



ELECTRODE HOLDER



FRONT COVER
K14383-1

TECHNICAL SPECIFICATION

POWER SOURCE

Product	Item number	Primary voltage	Fuse size (A)	I ₁ eff (A)	I ₁ max (A)	Max. input power (kW-kVA)	Rated output (A)	Welding current range (A)	Open circuit voltage (V)	Temperature range		EMC class	Weight (kg)	Dimensions H x W x D (mm)	Protection class
										Operating	Storage				
Invertec® 275S	K14242-1	400V +/- 15% 3Ph	16	13.3	15.3	9.7 kW 11 kVA	270A@25% 250A@35% 230A@60% 180A@100%	5-270	74 (11V VRD)	-10°C to +40°C	-25°C to +55°C	A	14.3	360 x 230 x 498	IP23

CART

Product	Item number	Max. gas cylinder diameter (mm)	Max. gas cylinder height (mm)	Wheels diameter (mm)	Weight (kg)	Dimensions H x W 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

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

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.

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