



# POWERTEC® i COMPACT RANGE

i250 · i320 STANDARD  
i250 · i320 · i380 · i450 ADVANCED

[www.lincolnelectric.eu](http://www.lincolnelectric.eu)

**LINCOLN**®  
**ELECTRIC**



**CHOOSE LINCOLN  
FOR EXCELLENT AND  
EFFICIENT MIG/MAG AND  
MMA WELDING**

# The Legend + MORE

**POWERTEC® iCOMPACTS RANGE** are built on latest Lincoln power source platform, ensuring optimal **MIG/MAG** and **MMA** welding performance with excellent power cost efficiency.

Six models are available: 250A, 320A, 380A and 450A power sources with a choice of either the **STANDARD** panel (i250 & i320) or the **ADVANCED** panel (i250, i320, i380 & i450), that meet most customer's needs and cover a wide range welding applications.

**POWERTEC® i380C & 450C ADVANCED** have the option of water cooling by simply adding the new **COOLARC® 26**.

STANDARD VERSION



250A

320A

ADVANCED VERSION



250A

320A

380A

450A

# PREMIUM ARC PERFORMANCE

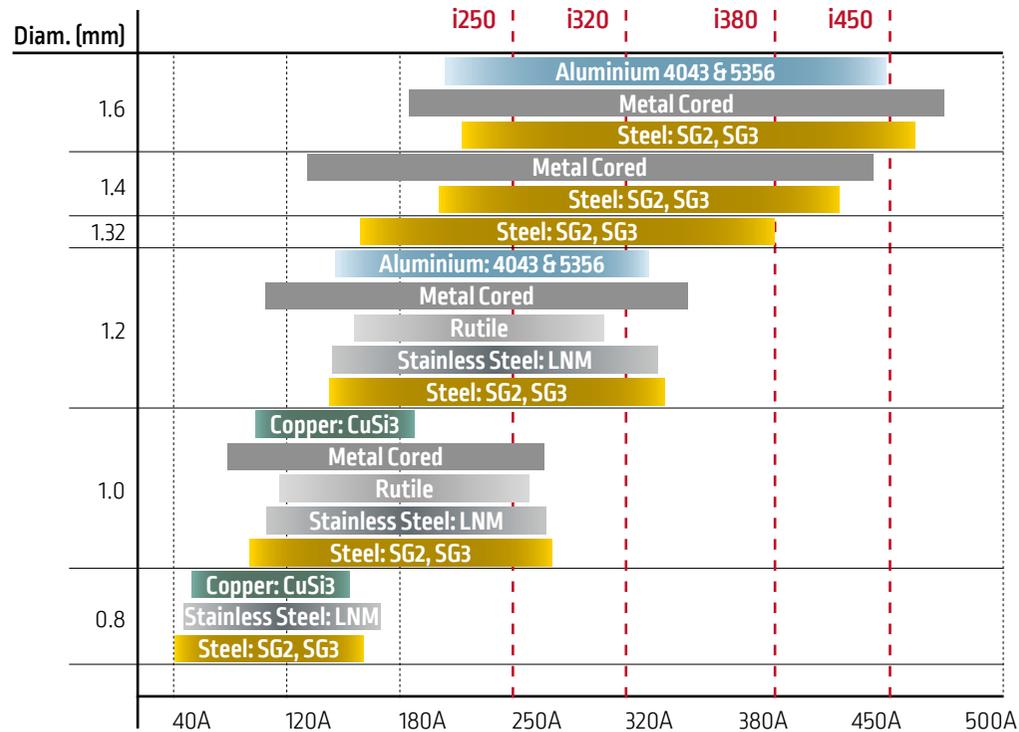
- **ARC INITIATION** – Repeatable arc ignition with outstanding arc characteristics.
- **ARC STABILITY** – Excellent arc stability, ensuring a smooth droplet transfer, with reduced spatter.
- **ARC DYNAMICS** – Rapid parameter adjustment allowing variability under welding conditions.



# SPECIFICATIONS

Product	Item Number	Version	Input (V)	Rated Output (A)			Weight (kg)	Dimensions W x L x D (mm)	Protection Class		
				100%	60%	40%					
Powertec i250C	K14157-1	Standard	400V 3Ph ± 15% 50/60 Hz	195	250	-	67	540 x 900 x 870	IP23		
Powertec i320C	K14158-1					320					
Powertec i250C	K14157-2	Advanced				240				320	380
Powertec i320C	K14158-2										320
Powertec i380C	K14180-1	Advanced		420	450 [80%]	-	80.4	560 x 900 x 870			
Powertec i450C	K14181-1					-					

## MIG/MAG Wire



## Stick Electrodes



## Processes

- GMAW
- FCAW-G
- FCAW-S
- SMAW
- CAG (only i450)

## Welding of:

- Steel
- Stainless Steel
- Low Alloy Steel
- Aluminium
- MIG Brazing

## Applications

- General Fabrication
- Construction site
- Maintenance and Repair
- Light Industrial

## Input



## Output



# INNOVATIVE INTUITIVE INTERFACES

Simple navigation also when using welding gloves

## STANDARD Version

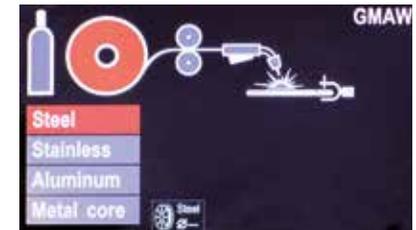
- Manual setup for voltage and wire feed speed
- Quick Welding Process & Shielding Gas selection button
- Quick access to the most commonly used welding parameters (Inductance, 2/4 Stroke, Run-in, Burn-back)



## ADVANCED Version

- Easy setting by selecting process & material thickness
- Synergic lines, Limits, Memories
- Visualisation of useful information (ARCFX™ joint configuration, welding defects...)
- Multi-language navigation menu
- Full Support Menu: technical data, accessories, instructions, safety

Easy Process Selection



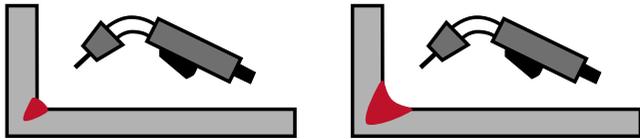
7" COLOR DISPLAY!

## MORE FUNCTIONS & FEATURES

- Auto** **AUTO-SETTINGS**  
Preset parameters to increase productivity
- USB CONNECTIVITY**  
Easy software update & diagnostics, weld log for quality monitoring

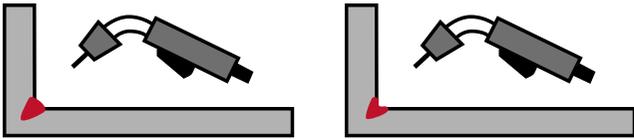
## ArcFX™ TECHNOLOGY

Patented technology providing instant graphical feedback on how Wire Feed Speed and Voltage affect the weld outcome.



### How does wire feed speed affect my weld?

**Wire Feed Speed** – As your wire feed speed is increased the weld penetration increases, and as your wire feed speed is decreased, the weld penetration decreases. Notice the changes to the weld puddle in the image shown above.



### How does voltage affect my weld?

**Voltage** – Arc voltage affects the arc length. At the same wire feed speed, as voltage increases, the arc length gets longer and as voltage decreases, the arc length gets shorter. The length of the arc in turn determines the width and size of the arc cone. Notice the changes to the weld puddle in the image shown above.



## PERFECT FEEDABILITY

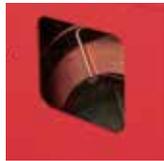


### 4 rolls/ all driven:

- eliminates wire slipping
- no wire deformation



**LED lights:**  
better visibility



**Inspection window:**  
easier notification for spool change

**Optimized wire positioning:**  
improved arc stability & reduced gun vibration



## READY FOR TOMORROW

The new European regulation for Welding Equipment will soon be implemented and will require a phase out of conventional equipment.

The new **POWERTEC® i** family complies with this regulation by having a minimum power source efficiency of 85% & an idle consumption which is below the new tolerated limit.

Depending on your application, welding parameters & duty cycle, **you can save up 3.700 kWh\*** (~480 €) per year and per equipment.



**BUY NOW,  
BE READY FOR  
TOMORROW AND  
START SAVING  
TODAY**

\* 350A, 2 shifts a day with 30% operator factor

**ALL MACHINES**

## BUILT FOR THE HEAVIEST INDUSTRIAL CONDITIONS

Developed and tested under the hardest conditions (**TRUE HD**) to grant the reliability you need.

- Fully encapsulated and vertical mounted
- Capable of surviving the harshest testing Conditions
- Varnished and potted electronic boards



# FUNCTIONALITIES & ERGONOMICS

## ERGONOMIC DESIGN

- Tilting gas bottle tray for ease of loading
- Ideal height for easy-to-view settings
- Easy maneuverability and small footprint
- Convenient top-mounted expendable parts compartment



Product	Model	Welding parameters	Setting	Synergic Modes	Support on screen <sup>(2)</sup>	ARCFX™	Memories / JOBS / Limits	Locking function	USB	Languages selection	Cooler connection	Others
Powertec i250C	Standard	LEDs meters	Manual	[7] <sup>(1)</sup>	-	-	-	-	-	-	-	-
Powertec i320C												
Powertec i250C	Advanced	7 TFT colour screen with ARCFX™	Auto / Manual	25	•	Joint visualization Work point in A/ mm	• [49]	•	• Software update Welding Data Collection	•	•	Procedure A/B Quick Trigger Push-Pull Gun Joystick Gun
Powertec i320C				28								
Powertec i380C				33								
Powertec i450C												

<sup>(1)</sup> Welding Process & Shielding Gas Selection: MIG / FCW Manual with MIX, CO<sub>2</sub>, Ar gas & STICK mode

<sup>(2)</sup> Technical data, list of accessories, instructions & safety information directly on the screen

# COOLARC® 26

## More functions and features



[Back side view]

**Built-in handle**  
for easy transportation

**Cooler fully controlled by power source:**  
AUTO/ON/OFF for better energy savings and extended service life



**Coolant filter**  
keep coolant clean

**LED lights inside reservoir**  
for better visibility of the coolant level

**Flow sensor inside**  
for gun protection



**Simple Connection and Easy Installation**

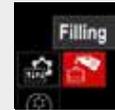
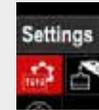


## New COOLARC® 26 cooler fully controlled by power source



Cooler Menu is available when cooler is connected

**Settings: 3 Modes of operation available:**

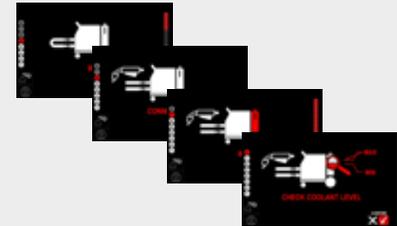


1. AUTO
2. OFF
3. ON



### Filling Procedure

step by step detail filling instruction



Product	Item Number	Input (V)	Cooling power @1L/min (kW)	Reservoir capacity (L)	Weight (kg)	Dimensions W x L x D (mm)	Protection Class
COOLARC® 26	K14182-1	230/400V ± 15% 50/60 Hz	0.84	4	18	260 x 150 x 680	IP23



# LGS2 TORCHES

Simple and reliable, this range is adapted to the most common applications.



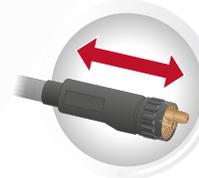
Wear parts compatible with the most common standard in Europe.



Easy pivoting handle.



Extra-flexible cable.



Extra length rear cable support ensures smooth and consistent wire feeding.



is the European norm requirement for MIG guns.

## Choose your gun

rating calculated using CO<sub>2</sub>

- Air cooled
- Water cooled

Series	Size	Rate	160A	180A	200A	230A	250A	270A	330A	350A	420A	500A
LGS2	150G	60%	█									
	250G		█									
	240G		█									
	360G		█									
	505W	100%	█									

## TO ORDER

3m	4m	5m
W10429-15-3M	W10429-15-4M	W10429-15-5M
W10429-25-3M	W10429-25-4M	W10429-25-5M
W10429-24-3M	W10429-24-4M	W10429-24-5M
W10429-36-3M	W10429-36-4M	W10429-36-5M
W10429-505-3M	W10429-505-4M	W10429-505-5M

MODEL	AIR COOLING				WATER COOLING
	LGS2-150G	LGS2-250G	LGS2-240G	LGS2-360G	LGS2-505W
Duty cycle (CO <sub>2</sub> shielding gas)	180 A @ 60%	230 A @ 60%	250 A @ 60%	330 A @ 60%	500 A @ 100%
Applications	Thin plates, automotive industry	Thin plates, light fabrication	Thin plates, light fabrication	Vessel manufacture, steel structures	Heavy duty, high production
Wire diameter	Up to 1.0 mm	Up to 1.2 mm	Up to 1.2 mm	Up to 1.6 mm	Up to 2.4 mm
Original equipment	Contact tip	0.8 mm	1.0 mm	1.0 mm	1.2 mm
	Conical nozzle	12 mm	15 mm	12.5 mm	16 mm

# ACCESORIES

• Optional    ✓ Included

		Powertec®					
		STANDARD		ADVANCED			
		i250C	i320C	i250C	i320C	i380C	i450C
		K14157-1	K14158-1	K14157-2	K14158-2	K14180-1	K14181-1
Control panel cover KIT	K14174-1			•			✓
Bumpers KIT	K14177-1			•			✓
Polarity change KIT	K14173-1			•			✓
Cooler COOLARC® 26	K14182-1			-			•
Coolant FREEZCOOL 9,6L	W000010167			-			•
Gas flow meter KIT	K14175-1				•		
Gas heater KIT	K14176-1				•		
12PIN Remote Control KIT	K14172-1		-			•	
6-PIN/12-PIN adapter	K2909-1		-			•	
Remote control (IPOT, required K14172-1 and K2909-1 adapter KITs)	K10095-1-15M		-			•	
Remote control MIG 7M (required K14172-1 KIT)	K14091-1		-			•	
Water cooled Push-Pull gun LG PPLG405WC 8m (required K14172-1 kit)	K10413-PPW405-8M			-			•
Cable with Electrode holder 400A/70mm <sup>2</sup> - 5m	E/H-400A-70-5M				•		
Adapter for spool type S300 (300mm)	K10158				•		
Adapter for spool type S300 (300mm)	K10158-1				•		
Adapter for spool S200 (200mm)	R-1019-125-1/08R				•		

**ADAPTER FOR SPOOL TYPE S300**  
K10158-1



**REMOTE CONTROL**  
K10095-1-15M



**ADAPTER FOR SPOOL TYPE S300**  
K10158

**ELECTRODE HOLDER**  
E/H-400A-70-5M



**6-PIN/12-PIN ADAPTER**  
K2909-1



**FREEZCOOL**  
W000010167



**COOLARC® 26**  
K14182-1



# ACCESORIES

## Roll Kit For Solid Wires

ROLL KIT 0.6/0.8VT FI37 4PCS GREEN/BLUE	<b>KP14150-V06/08</b>
ROLL KIT 0.8/1.0VT FI37 4PCS BLUE/RED	<b>KP14150-V08/10</b>
<b>ROLL KIT 1.0/1.2VT FI37 4PCS RED/ORANGE</b>	<b>KP14150-V10/12 *</b>
ROLL KIT 1.2/1.6VT FI37 4PCS ORANGE/YELL	<b>KP14150-V12/16</b>
ROLL KIT 1.6/2.4VT FI37 4PCS YELL/GREY	<b>KP14150-V16/24</b>
ROLL KIT 0.9/1.1VT FI37 4PCS	<b>KP14150-V09/11</b>
ROLL KIT 1.4/2.0VT FI37 4PCS	<b>KP14150-V14/20</b>

\* Included as standard in every product version

## Roll Kit For Aluminium Wires

ROLL KIT 0.6/0.8AT FI37 4PCS GREEN/BLUE	<b>KP14150-U06/08A</b>
ROLL KIT 0.8/1.0AT FI37 4PCS BLUE/RED	<b>KP14150-U08/10A</b>
ROLL KIT 1.0/1.2AT FI37 4PCS RED/ORANGE	<b>KP14150-U10/12A</b>
ROLL KIT 1.2/1.6AT FI37 4PCS ORANGE/YELL	<b>KP14150-U12/16A</b>
ROLL KIT 1.6/2.4AT FI37 4PCS YELL/GREY	<b>KP14150-U16/24A</b>

## Roll Kit For Cored Wires

ROLL KIT 1.2/1.6RT FI37 4PCS ORANGE/YELL	<b>KP14150-V12/16R</b>
ROLL KIT 1.4/2.0RT FI37 4PCS	<b>KP14150-V14/20R</b>
ROLL KIT 1.6/2.4RT FI37 4PCS YELL/GREY	<b>KP14150-V16/24R</b>
ROLL KIT 0.9/1.1RT FI37 4PCS	<b>KP14150-V09/11R</b>
ROLL KIT 1.0/1.2RT FI37 4PCS -/ORANGE	<b>KP14150-V10/12R</b>

## Wire Guides

Wire Guide Set Blue 0.6÷1.6	<b>0744-000-318R</b>
Wire Guide Set Red 1.8÷2.8	<b>0744-000-319R</b>

### Each item # contains:

- metal wire guide for Euro socket
- 4 rolls
- plastic wire guide set



### Color differentiation for wire diameter:

SOLID WIRES	0.6	0.8	1.0	1.2	1.6	2.4	0.9	1.1	1.4	2.0
KP14150-V06/08	Green	Blue								
KP14150-V08/10		Blue	Red							
KP14150-V10/12			Red	Orange						
KP14150-V12/16				Orange	Yellow					
KP14150-V16/24					Yellow	Grey				
KP14150-V09/11										
KP14150-V14/20										

ALUMINIUM WIRES	0.6	0.8	1.0	1.2	1.6	2.4	0.9	1.1	1.4	2.0
KP14150-U06/08A					Yellow	Grey				
KP14150-U08/10A				Orange	Yellow					
KP14150-U10/12A			Red	Orange						
KP14150-U12/16A		Blue	Red							
KP14150-U16/24A	Green	Blue								

CORED WIRES	0.6	0.8	1.0	1.2	1.6	2.4	0.9	1.1	1.4	2.0
KP14150-V12/16R				Orange						
KP14150-V14/20R				Orange	Yellow					
KP14150-V16/24R					Yellow	Grey				
KP14150-V09/11R										
KP14150-V10/12R										

#### **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 inquiries 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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