

# INVERTEC® 175TP

Leading technology in TIG DC welding  
with a user friendly interface

## SINGLE PHASE INVERTERS TIG

The Invertec® 175TP TIG welders combine a rugged industrial construction with excellent arc characteristics. They are full function DC TIG inverters with excellent arc control and perfect Arc Start in any welding conditions. Their portable rugged design makes them ideal for both in shop or field use. They feature Power Factor Correction (PFC) circuitry that allows TIG welding up to 175A with 16A single phase input voltage. They are designed to operate on engine driven generators.



## Why INVERTEC® 175TP ?

- » **Advanced inverter technology**  
for superior TIG performance
- » **Full function user-friendly control panel layout**  
with graph and numeric display make it easy to set all welding parameters
- » **Generator compatible**  
ideal for site use
- » **HF and Lift TIG ignition**
- » **Power Factor Correction (PFC)**  
PFC gives low current consumption, energy saving, low current harmonics and reduction of the total CO<sub>2</sub> produced by the welding process
- » **Rugged construction electrical safety (IP23)**  
varnished PC boards and optimum airflow reduce contamination to extend the equipments life in the harshest environmental conditions

## SPECIFICATIONS

Product	Item Number	Primary Voltage (50-60Hz)	Current Range (A)	Rated Output	Fuse Size (A) (slow)	Effective consumption (A)	Weight (kg)	Dimensions WxLxD (mm)	Protection Class
175TP	K14169-1	230V/1Ph +/- 20%	5-175	175A@25% 140A@60% 130A@100%	16A	15,6	10,2	210 x 330 x 480	IP23

**LINCOLN  
ELECTRIC**

## FRONT CONTROLS



- |                                        |                            |
|----------------------------------------|----------------------------|
| 1 Digital display                      | 7 Complete welding cycle   |
| 2 Welding mode (MMA, Lift TIG, TIG HF) | 8 Primary cable (3m shuko) |
| 3 TIG welding: 2 / 4 Times, Spot       | 9 TIG torch connector      |
| 4 Pulsed - DC selection mode           | 10 Gas connection          |
| 5 Remote/Local control                 | 11 Remote socket           |
| 6 Programs storage and recall          | 12 Output fitting          |

- Complete welding cycle is straightforward to set: Initial, final current, up-slope, down-slope, spot-time, pre-pass, post-pass, reduced current, pulsed frequency regulation
- Program storage capability (30)

## APPLICATIONS

- » Boiler making
- » Industrial plants, pipeline
- » Metal and gantry construction
- » Maintenance and repair

## TUNGSTEN ELECTRODES

A complete range of tungsten electrodes:

- Pure tungsten,
- Tungsten + cerium,
- Tungsten + lanthanum,
- Tungsten + rare earths <sup>(1)</sup>.

### Product advantages:

- Very high life cycle
- Very stable arc
- Perfect arc ignition
- Tip longevity

## Choice criteria

Type	Metal		Arc stability	Striking	Lasting	Thermal resistance
	Aluminium	Steel & Stainless steel				
WP - Pure tungsten	*		**	*	*	*
WC 20 - Cerium 2%		*	**	*	**	**
WL 15 - Lanthanum 1,5%	**	***	**	***	***	***
WL 20 - Lanthanum 2%	*	***	**	***	***	***
WS 20 - Rare earths <sup>(1)</sup> 2%	*	*	**	***	***	***

NEW

\*\*\* Excellent \*\* Good \* Average

(1) Rare earths = any of the abundant metallic elements, including scandium (atomic number 21), yttrium (39), and the 15 elements from 57 to 71 (lanthanide series include lanthanum and cerium) in the Mendeleyev classification.

## SELECTION

