

# ALTIG 309L

## TOP FEATURES

- The weld metal has a delta-ferrite content of ~12% resulting in a high resistance to hot cracking.
- Also used for the welding of clad steels where service temperatures are below 300°C.
- 300°C maximum operating temperature.

## TYPICAL APPLICATIONS

- Petrochemical
- Nuclear Power generation
- Shipbuilding

## CLASSIFICATION

AWS A5.9 ER309L  
EN ISO 14343-A W 23 12L

## SHIELDING GASES (ACC. EN ISO 14175)

I1 Inert gas Ar (100%)

## CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

C	Mn	Si	P	S	Cr	Ni
0.02	1.8	0.45	≤0.025	≤0.020	24	13

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
					+20 °C	-80 °C
I1	AW	≥350	≥520	≥30	≥47	≥32

\* AW = As welded

## PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Weight (kg)	Item number
1.6	PE Tube	5.0	W000283480
2.0	PE Tube	5.0	W000283481
2.4	PE Tube	5.0	W000283482

## 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

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing. Please refer to [www.lincolnelectric.eu](http://www.lincolnelectric.eu) for any updated information.