

INERTFIL 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
- Dissimilar joints
- Cladding

CLASSIFICATION

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

SHIELDING GASES (ACC. EN ISO 14175)

M12	Mixed gas Ar+ 0.5-5% CO ₂
M13	Mixed gas Ar+ 0.5-3% O ₂

APPROVALS

TÜV	CE
+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

C	Mn	Si	P	S	Cr	Ni
0.020	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
Typical values	M13	AW	≥350	≥520	≥30	≥55	≥32

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
0.8	SPOOL (BS300)	15.0	W000283090
1.0	SPOOL (BS300)	15.0	W000283091
1.2	SPOOL (BS300)	15.0	W000283092

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 for any updated information.