

INERTFIL 318SI

TOP FEATURES

- High resistance to intergranular corrosion and general corrosion conditions
- The increased silicon results in increased weld pool fluidity to give a smooth deposit appearance.
- The presence of the stabilizer improves resistance to precipitation of chromium carbides.

TYPICAL APPLICATIONS

- Fabrication of pipes, plates, vessels

CLASSIFICATION

AWS A5.9 ER318*
EN ISO 14343-A G 19 12 3 Nb Si

*Nearest classification

SHIELDING GASES (ACC. EN ISO 14175)

M12 Mixed gas Ar+ 0.5-5% CO₂
M13 Mixed gas Ar+ 0.5-3% O₂

APPROVALS

TÜV	DB	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

C	Mn	Si	P	S	Cr	Ni	Mo	Nb
0.04	1.4	0.85	≤0.025	≤0.020	19	12	2.7	0.5

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
						+20°C	-110°C
Typical values	M13	AW	≥400	≥550	≥30	≥65	≥32

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
0.8	SPOOL (BS300)	15.0	W000378425
1.0	SPOOL (BS300)	15.0	W000283088
1.2	SPOOL (B300)	15.0	W000283089

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.