INERTFIL 309LSi



MIG/MAG solid wires-TIG rods Stainless and Heat resistant steels

INERTFIL 309LSi is a G 23 12 LSi/ER 309LSi type solid MAG welding wire, supplied precision layer wound, depositing a low C-23Cr12Ni weld metal. Suitable for use with Ar+2%02 or Ar+0.5...5%CO2 mixed shielding gases.

INERTFIL 309LSi is used for the welding of stainless steels to mild and medium tensile steels. It is used for depositing intermediate layers on steel prior to depositing 308 grade stainless steel. Also used for the welding of clad steels where service temperatures are below 300°C.

The weld metal has a delta-ferrite content of \sim 12% resulting in a high resistance to hot cracking. The increased silicon content results in increased weld pool fluidity to give a smooth deposit appearance.

Solid wire for welding 25% CR and 12% Ni steels with low carbon content. The silicon content makes for excellent weldability.

Classif	ication
EN ISO	14343-A: G 23 12 L Si
AWS	A5.9: ER 309LSi

Approvals	Grade
DB	•
ΤÜV	•

Chemical analysis (Typical values in %)

	C	Mn	Si	P	S	Cr	Ni
Wire	0.020	1.8	0.85	≤ 0.025	≤ 0.020	24	13

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength Tensile Strength		Elongation	Impact Energy ISO - V (J)	
neat Heatinem	(MPa)	(MPa)	A5 (%)	+20 °C	-120 °C
As Welded	≥350	≥520	≥30	≥ 100	≥32

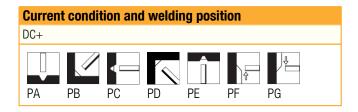
Gas test: 98% Ar+2% CO2

Shielding Gas - EN ISO 14175 : M12, M13

Materials

A312 TP309S; carbon steel to stainless steels joint

Storage	
Keep dry and avoid condensation	



Packaging data

Packaging Type	BS300
Diam(mm) / weight(kg)	15
0.8	W000283093
1.0	W000283094
1.2	W000283095

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