

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

INERTFIL 309LMo is a G 23 12 2 L/ER 309L Mo (similar) type solid MIG welding wire, supplied precision layer wound, depositing a low C-22Cr 12Ni 2.5Mo weld metal. Suitable for use with Ar+2%O₂ or Ar+0.5...5%CO₂ mixed shielding gases.

INERTFIL 309LMo is used for the welding of stainless steels to mild and medium tensile steels. Used for intermediate layers on steel prior to depositing 316L grade stainless steel cladding. Also used for buffer layers prior to surfacing, where the Mo is a required alloying element.

The weld metal has a delta-ferrite content of ~15% resulting in a high resistance to hot cracking.

Classification

EN ISO	14343-A: G 23 12 2 L
AWS	A5.9: ~ER 309LMo

Chemical analysis (Typical values in %)

C	Mn	Si	P	S	Cr	Ni	Mo	Ferrite
0.020	1.6	0.45	≤ 0.025	≤ 0.020	24	13	2.7	10-20

All-weld metal Mechanical Properties

Heat Treatment	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation A5 (%)	Impact Energy ISO - V (J)
				+20 °C
As Welded	≥350	≥550	≥30	≥55

Gas test: 98% Ar+2% O₂

Shielding Gas - EN ISO 14175 : M12, M13

Materials

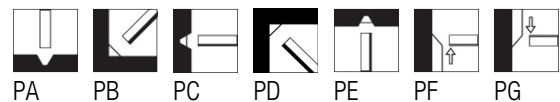
Ferrite-Austenite heterogeneous joints ("Black-White"),
Corrosion resistance surfacing

Storage

Keep dry and avoid condensation

Current condition and welding position

DC+



Packaging data

Packaging Type	BS300
Diam(mm) / weight(kg)	15
0.8	●
1.0	●
1.2	●