

ITR 309L Mo

Stainless steel rod

Classification

AWS A 5.9 : ER 309LMo EN 12070 : W 23 12 2 L

Typical weld metal chemical composition (%)

C	Mn	Si	Cr	Ni	Mo	Cu	S	P
0.03 max.	1.00-2.50	0.30-0.65	23.00-25.00	12.00-14.00	2.00-3.00	0.50 max.	≤ 0.020	≤ 0.025

All weld metal mechanical properties (typical)

Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Impact energy ISO-V(J) 20°C
≥ 350	≥ 550	≥ 30	≥ 45

Description

ITR 309L Mo is a stainless TIG rod with 25% Cr 12% Ni low C and high Mo suitable for welding austenitic stainless steels such as AISI 309. SUPERTIG 309LMo is also used for welding of dissimilar steels and also used for buffer layers prior to surfacing, when Mo is a required alloying element. SUPERTIG 309LMo is used for the welding of stainless steels to mild and medium tensile steels. It is also used for intermediate layers on structural steel prior to depositing 316L grade stainless steel cladding. SUPERTIG 309LMo suitable for use mainly with Ar shielding gas. The weld metal has a delta-ferrite content of ~15% resulting in good resistance to hot cracking.

Materials to be welded

Ferrite-Austenite heterogeneous joints ("Black-White")
Cladding of carbon steel and low alloy steel
Corrosion resistance surfacing

Current conditions

DC (-)

Storage

Keep dry and avoid condensation

Packing data

Size (mm) DxL	0.80 x 1000	0.90 x 1000	1.00 x 1000	1.20 x 1000	1.60 x 1000	2.00 x 1000	2.40 x 1000	3.20 x 1000	4.00 x 1000
Net wt. per tube (kg)	5	5	5	5	5	5	5	5	5
Net wt. per box (kg)	20	20	20	20	20	20	20	20	20

Welding positions

