

309 LMo Tig

CATEGORY GMAW-GTAW Solid wires

TYPE Stainless steel Tig welding wire for dissimilar welding and cladding.

APPLICATIONS A continuous, solid, corrosion-resistant wire of the "309LMo" type. 309MoL is used for the overlay welding of unalloyed and low-alloyed steels and for welding dissimilar steels, such as 316L, to unalloyed and low-alloyed steels when Mo is essential.

PROPERTIES Excelent corrosion resistance against oxidising air upto 950°C. Good resistance against hot cracking due to the high Mo. content.

CLASSIFICATION

AWS	A 5.9: ER 309 LMo
EN ISO	14343-A: W 23 12 3 L
DIN: W.Nr.	1.4459
DIN	8556: SG X12CrNiMo 24 12 3

SUITABLE FOR Buffer layers before hard facing, dissimilar joints between ferritic and austenitic steels and or other stainless steel types to standard carbon steel. Recommended for cladding on low alloyed steel in case AISI 316 is required as first layer.

APPROVALS CE approved

WELDING POSITIONS:



WELD METAL ANALYSIS %

C	Cr	Ni	Mo	Mn	Si	P	S	Cu
<0.03	23.0-25.0	12.0-14.0	2.0-3.0	1.0-2.5	0.3-0.65	<0.03	<0.03	<0.75

MECHANICAL PROPERTIES

Heat Treatment	R _{p0,2} (N/mm ²)	R _m (N/mm ²)	A ₅ (%)	Impact Energy (J) ISO-V			Hardness HRC / HV
				+20°C	-40°C	-60°C	
AW	400	600	31	110	>60		

AW: as welded

WELDING PARAMETERS / PACKING

D (mm)	Welding Parameters		Packing (kg)	
	Current (A) DC-		single	master
1.6 x 1000	50-80		5	25
2.0 x 1000	70-110		5	25
2.4 x 1000	110-180		5	25
3.2 x 1000	150-250		5	25

REDRYING TEMPERATURE not required

GAS ACC. EN ISO 14175: I1