

## 309LMo

**CATEGORY** GMAW-GTAW Solid wires

**TYPE** Solid stainless steel 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: G 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 <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	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		
	Voltage (V)	Current (A) DC+	spool type	kg / spool / Drum	kg / pallet	
0.8	16-22	50-140	K-300 / Drum	15 / 250	1080 / 1000	
1.0	16-24	80-190	K-300 / Drum	15 / 250	1080 / 1000	
1.2	20-28	180-280	K-300 / Drum	15 / 250	1080 / 1000	
1.6	24-28	230-350	K-300 / Drum	15 / 250	1080 / 1000	

**REDRYING TEMPERATURE** not required

**GAS ACC. EN ISO 14175:** M12, M13