

UGIWELD 309LMo (MIG 309LMo)

AWS A5.9 ER 309LMo (mod)

EN ISO 14343-A 23 12 2 L



MIG wire for stainless steel welding and dissimilar materials.

General description:

UGIWELD 309LMo is a solid wire designed for gas metal arc welding (GMAW/MIG) intended for welding corrosion-resistant stainless steels of similar composition, as well as for dissimilar welding between stainless steels to carbon steels and cladding applications.

UGIWELD 309LMo is of the same composition as UGIWELD 309L, with the addition of 2.5% of Molybdenum to improve pitting corrosion properties in chloride containing environments

Purity is a critical factor when welding high-alloyed materials. The weld zone shall be kept completely free from contamination to avoid defects and to preserve corrosion resistance.

When cladding carbon steel, the chemical composition of the first weld layer will typically correspond to AISI 304, due to dilution from the base material.

The interpass temperature shall not exceed 150 °C, and the heat input should be limited to a maximum of 2.0 kJ/mm to ensure proper weld metal properties and microstructure.

Welding positions:



Welding current:

DC+

Gas flow:

14 -18 l/min.

Chemical composition of welding wire:

C	Si	Mn	Ni	Cr	Mo	Cu			
Max 0.03	0.30-0.65	1.0-2.5	12.0-14.0	21.0-23.0	2.5-3.0	Max 0.50			

Shielding gas:

Argon + CO₂ (1 to 2.5%) or Argon + Helium (30%)

Nitrogen and hydrogen are prohibited in shielding gases

Mechanical properties of all-weld-metal:

Yield and Tensile Strengths				
Yield Mpa(Rp0.2)	Tensile Mpa(Rm)	Elongation %		
465 Mpa	630 Mpa	35		

Packaging information:

0,8 mm: 5kg spool / 15kg spool / 250kg drum

1,0 mm: 5kg spool / 15kg spool / 250kg drum

1,2 mm: 5kg spool / 15kg spool / 250kg drum

1,6 mm: 15kg spool / 250kg drum

Approvals:

CE

Reference / date:

UGIWELD 309LMo (MIG 309LMo),
English, 15.04.2026