

TASETO Welding Materials

Stainless Steel Electrodes

For Flux Cored Arc Welding

MC309MoL

Applicable Specification

JIS Z 3323 TS309LMo-MM0
AWS A5.22 EC309LMo

● Applications and Characteristics

TASETO MC309MoL is a metal type flux cored wire and used for welding of dissimilar metals such as stainless steel to carbon steel or to low alloy steel, welding first layer of Type 316L side in joining clad steel, and welding first layer of overlay welding on carbon steel or low alloy steel. It makes less slag and produces a beautiful bead form. It also has good usability that cannot be obtained from bare electrodes.

As its all weld metal contains less carbon, the resistibility to intergranular corrosion in an as-welded is excellent.

As MC309MoL can be used with higher current compared to slag type flux cored wires, the rate of deposition is high, and enable efficient high speed welding.

● Notes on Usage

* Please refer "MC Wires".

* Use mixed gas (Ar+20%CO₂) as shielding gas and control the flow rate at 20L/min.

* Avoid placing the unsealed wire in humidified location.

* Perform welding in an environment where the wind velocity is no more than 1 m/sec.

● Chemical Composition of All Weld Metal (%)

	C	Si	Mn	P	S	Ni	Cr	Mo	Cu
Typical	0.035	0.44	1.68	0.027	0.003	12.26	22.84	2.45	0.01

● Mechanical Properties of All Weld Metal

	0.2% Proof Stress (MPa)	Tensile Strength (MPa)	5D Elongation (%)
Typical	455	695	32.0

● Ferrite Content of All Weld Metal

* Typical Ferrite Content: 18.3% (Schaeffler's Diagram)

● Corrosion Resistance of All Weld Metal

* Typical Corrosion Resistance 180° bend without any defects
(Copper Sulfate-Sulfuric Acid Test : PWHT650°C × 2h)

● Sizes Available and Recommended Welding Conditions(DCEP)

Size (mm)	Welding Current (A)	Arc Voltage (V)	Shielding Gas
1.2	160~280	29~39	Ar+20%CO ₂ , 20L/min
1.6	200~340	31~42	Ar+20%CO ₂ , 20L/min