

SM-309MoL



❖ Specification

AWS A5.9	ER309LMo
JIS	Z3321 YS309LMo
EN	ISO 14343-B 309LMo

❖ Applications

Mig Welding of dissimilar metals such as stainless steels and carbon steels

❖ Characteristics on Usage

This wire contains a high ferrite level in its austenitic structure thus providing superior heat and corrosion resistance. SM-309MoL is suitable for the build up on low alloy or mild steel and welding of STS 316, 316L clad steel

❖ Note on Usage

Use 100% Ar or Ar + 2%O₂ gas.

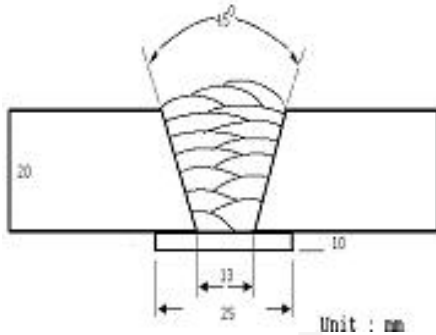
❖ Packing

Dia.	0.8mm (0.033in)	0.9mm (0.035in)	1.0mm (0.040in)	1.2mm (0.045in)	1.6mm (1/16in)
Spool	12.5kg (28lbs)				



Mechanical Properties & Chemical Composition of All Weld Metal

❖ Welding Conditions



[Joint Preparation & Layer Details]

Diameter(mm)	: 1.2mm
Shielding Gas	: Ar + 2%O ₂
Flow Rate(ℓ /min.)	: 15~20
Amp./ Volt.	: 230/27
Stick-Out(mm)	: 20
Pre-Heat(°C)	: R.T.
Interpass Temp.(°C)	: 150 ± 15
Polarity	: DC(+)

❖ Mechanical Properties of All weld metal(wt%)

Consumable	Tensile Test		CVN Impact test Joule (ft·lbs)	
	T.S. MPA (ksi)	EL. (%)	-60°C (-76°F)	-196°C (-320.8°F)
SM-309MoL	735 (107)	29.6	99 (73.0)	52 (38.4)

❖ Chemical Analysis of the wire

Consumable	C	Si	Mn	Ni	Cr	Mo
SM-309MoL	0.028	0.47	1.83	13.67	23.16	2.22

❖ Chemical Analysis of the weld metal

Consumable	C	Si	Mn	Ni	Cr	Mo
SM-309MoL	0.030	0.46	1.68	13.17	22.13	2.20

This information is provided solely for the purpose of confirming product conformance with applicable standards. The serviceability of a product or structure utilizing this type of information is and must be the sole responsibility of the builder/user. Many variables beyond the control of HYUNDAI WELDING CO., LTD. affect the results obtained in applying this type of information. These variables include, but are not limited to, welding procedure, shielding gas, plate chemistry and temperature, weldment design, fabrication methods and service requirements.