

AK E309LMoT1-1

Description: E309LMoT1-1/4 is an all position flux-cored stainless steel wire designed to run with 75% Ar-25% CO₂ or 100% CO₂. This wire has a smooth spray like arc transfer at higher amperages and at lower amperages a globular transfer. The slag is easily removed at all amperages.

Application: Requiring high strength and resistance to pitting and stress corrosion for use in marine, chemical and petroleum industries. Can be used to weld 22%Cr duplex's (UNS S31803) and 25Cr duplex's to type 316/316L and to carbon steel.

Typical Chemical Composition(%):

	C	Si	Mn	S	P	Ni	Cr	Mo	Cu
Requirement	0.04	1.00	0.50-2.50	0.03	0.04	12.0-16.0	21.0-25.0	2.0-3.0	0.75
Actual Result	0.025	0.60	1.30	0.005	0.020	12.50	23.68	2.5	0.02

Typical Mechanical Properties:

	Tensile Strength (MPa)	Yield Stress (MPa)	Elongation (%)	Impact values (J)
Requirement	≥ 520	—	≥25	—
Actual Result	600	—	30	—

Recommended welding parameters:

Diameter/ mm	1.2	1.6		
Welding voltage/V	22-36	26-38	—	—
Welding current/A	120-260	200-300	—	—