



# Techalloy 309LMo

## Description

This product is similar to 309: except for the addition of 2.0 to 3.0 percent molybdenum to increase its pitting corrosion resistance in halide-containing environments. The primary application for this filler metal is surfacing of base metals to improve their resistance to corrosion. The 309LMo is used to achieve a single-layer overlay with a chemical composition similar to that of a 316L stainless steel. It is also used for the first layer of a multilayer overlays with filler metals such as 316I OR 317I stainless steel.

## Specifications & Approvals:

ISO 14343:2009 23 12 2 L

## Typical Chemical Composition

C	Mn	Si	Cr	Mo	Ni	Nb	N	S	P	Cu	FN (WRC)
.01	1.40	.40	22.30	2.60	15.00		.05	.01	.02	.10	9

## Typical Mechanical Properties

Tensile Strength	85,000 PSI	585 MPA
Yield Strength	45,000 PSI	310 MPA
Elongation	40%	

## Welding Parameters

	Shielding	Gas Flow	Diameter	Voltage	Amperage
Mig Welding	98/99% Argon + 2/1% Oxygen 97% Argon + 3% CO2	30 to 50 CFH	.035" (0.9mm)	26 to 29	160/210
			.045" (1.14mm)	28 TO 32	180/250
			.062" (1.6mm))	29 TO 33	200/280
Tig Welding	100% Argon				
Sub Arc Welding	Suitable flux may be used		3/32" (2.5mm)	28 to 33	275/350
			1/8" (3.14mm)	29 TO 32	350/450
			5/32" (4.0mm)	30 TO 33	400/550

## Standard Packages:

Mig Wire– 33# wire basket	Tig Wire– 10# tube/30# Master Carton	SAW– 60# Coil
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