

Shield-Bright 309MoL

AWS A5.22 E309LMoT1-1(4) / JIS Z3323 TS309LMo-FB1

Flux
CORED
WIRES

Description and Application

- Shield-Bright 309MoL was designed for welding type 316 clad steels on the first pass in cladding steels or for welding dissimilar metals such as molybdenum-containing austenitic stainless steels to carbon steels. It is used in paper mills and in power plants to give greater corrosion resistance. This wire performs best when used out-of-position shielded with either Ar/CO₂ or 100%CO₂.

Shielding Gas : 100%CO₂ or 75%Ar/25%CO₂

Typical Mechanical Properties of All Weld Metal

Shielding gas	Yield Point N/mm ² {kgf/mm ² }	Tensile Strength N/mm ² {kgf/mm ² }	Elongation (%)
100%CO ₂	550 {56}	715 {73}	35
75%Ar/25%CO ₂	570 {58}	750 {76}	30

Typical Undiluted Weld Metal Analysis %

Shielding gas	C	Mn	Si	P	S	Cr	Ni	Mo	Ferrite No.
100%CO ₂	0.029	1.0	0.70	0.024	0.008	22.90	12.7	2.60	17-27
75%Ar/25%CO ₂	0.030	1.2	0.75	0.024	0.008	23.5	13.0	2.60	17-27

Approvals

DNV, JIS