

309 Mo

SPECIAL WELDING ROD WITH MOLYBDENUM CONTENT TO WELD STAINLESS STEEL TYPE AISI: 301, 302, 304, 308, 309,347 AND 321, SUBMITTED TO HIGH TEMPERATURES OF UP TO 1100°C

CLASSIFICATON: E-309 Mo-16

APPLICATIONS: This is a stainless steel welding rod type 309 with molybdenum to increase its corrosion and high temperature resistance as well as its traction resistance. It can withstand corrosion at temperatures of up to 1,100°C. It is ideal to weld the rotary kilns in the cement industry, sieves, troughs, bulk cargo tanks, domes, furnaces, heat exchangers, reactor pipes, acid fume extractors, fuel oil burners, boilers, etc.

CHARACTERISTICS AND PROCEDURE: 309Mo is an electrode whose filler metal is stainless steel type 25/12-- i.e. 25% Chromium and 12 % Nickel. It also contains 2.0% Molybdenum to increase its corrosion and high temperature resistance. Its granular structure corresponds to that of an austenitic stainless steel. Slag is easily controllable and does not hamper the arc. Weld seams are smooth, ductile, highly resistant to corrosion and they have an excellent look. The joint area has to be cleaned as much as possible. Keep the arc short and do not let the electrode contact the surface. Best results are obtained by using enough amperage to achieve good fusion. Avoid excessive weaving. Stringer beads (straight) are the right choice. When welding vertically and overhead, set the amperage as close to the lowest values in the chart below as possible.

TENSILE RESISTANCE:	6,327 KG./CM2 (90,000 PSI)
BRINELL HARDNESS:	205 BHN
ELONGATION:	40%
FERRITE No.:	8
POSITIONS:	ALL
CURRENT:	AC or DC REVERSE POLARITY

FILLER METAL CHEMICAL ANALYSIS %						SIZES	AMPERAGE
C	Mn	Si	Cr	Ni	Mo	2.38 mm-3/32"	50-70
0.08	1.70	0.90	25.2	13.3	2.20	3.25 mm - 1/8"	80-100
						4.0 mm - 5/32"	110-130
						5.0 mm - 3/16"	140-170