

Cor-A-Rosta® 309MoL

CLASSIFICATION

AWS A5.22	E309LMoT0-1/-4	A-Nr	8
ISO 17633-A	T 23 12 2 L R C/M 3	F-Nr	6
		9606 FM	5

GENERAL DESCRIPTION

Gas shielded flux cored high CrNiMo alloyed wire electrode for downhand welding

High Corrosion resistant deposit

Specially developed for welding stainless steel to mild steel and buffer layers in cladding

Maximum plate thickness in butt welds ~ 12 mm

Suitable for repair welding in dissimilar joints and steels difficult to weld

WELDING POSITIONS (ISO/ASME)



PA/1G PB/2F PC/2G

CURRENT TYPE / SHIELDING GAS (ISO 14175)

DC +
 M21 : Mixed gas Ar+ (>15-25%) CO₂
 C1 : Active gas 100% CO₂
 Flow rate: 15-25 l/min

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

Shielding gas	C	Mn	Si	Cr	Ni	Mo	FN (acc.WRC 1992)
M21/C1	0.03	1.3	0.7	23	12.8	2.3	20

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition	Yield strength [N/mm ²]	Tensile strength [N/mm ²]	Elongation [%]	Impact ISO-V(J) +20°C
Required: AWS A5.22			not required	min. 520	min. 25	
ISO 17633-A			min. 350	min. 550	min. 25	
Typical values	M21/C1	AW	550	700	30	50

PACKAGING AND AVAILABLE SIZES

Diameter (mm)	1.2
15 kg spool S300	X

Cor-A-Rosta® 309MoL : rev. C-EN28-19/05/16

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EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
Corrosion resistant cladsteels				
	X2CrNiMo17-12-2	1.4404	(TP)316L CF-3M	S31603 J92800
	X2CrNiMo18-14-3	1.4435	(TP)316L	S31603
	X2CrNiMoN17-11-2	1.4406	(TP)316LN	S31653
	X2CrNiMoN17-13-3	1.4429		
	X4CrNiMo17-13-3	1.4436		
	X6CrNiMoTi17-12-2	1.4571	316Ti	S31635
	X10CrNiMoTi17-3	1.4573	316Ti	S31635
	X6CrNiMoNb17-12-2	1.4580	316Cb	S31640

Welding dissimilar metals: mild steel or low alloy steel to stainless CrNi or CrNiMo-steel up to max. thickness of 12 mm.

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions		
	PA/1G	PB/2F	PC/G
1.2	100-250A	100-250A	100-200A

REMARKS/APPLICATION ADVICE

For positional welding, use Cor-A-Rosta P309MoL