

Cor-A-Rosta P309MoL

Stainless rutile cored wire

Classification

AWS A5.22-95 : E309LMoT1-1/-4
EN 12073-99 : T 23 12 2 L P C/M 2

General description

Gas shielded flux cored high CrNi alloyed wire electrode for welding in position

High corrosion resistant deposit

Specially developed for welding stainless steel to mild steel and buffer layers in cladding
max. plate thickness in butt welds ~ 12 mm.

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

Welding positions



Current type/Shielding gas

DC +
Ar+ (>5-25%) CO₂ (EN 439: M21)
100% CO₂ (EN 439: C1)
15-25 l/min

Approvals

Shielding gas	BV	DNV	LR
M21	309LMo	309MoLMS	SS/CMn

Chemical composition (w%) and Ferrite Number (FN), typical, all weld metal

Shielding gas	C	Mn	Si	Cr	Ni	Mo	FN
M21/C1	0.03	0.8	0.6	22.7	12.5	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 A5.22-95 EN 12073-99		not required min. 350	min. 520 min. 550	min. 25 min. 25	
Typical values	M21/C1	AW	525	675	34	45

Packaging and available sizes

Unit	Net weight (kg)	Size (mm)
Plastic spool S300	12.5	X

Cor-A-Rosta P309MoL: rev. EN 15

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Materials to be welded

EN 10088-11-2	EN 102 13-4	W.Nr.	ASTM/ACI A240/A312/A351	UNS
X2 CrNiMo 17-12-2		1.4404	(TP)316L CF-3M	S31603 J92800
X2 CrNiMo 18-14-3		1.4435	(TP)316L	S31603
X2 CrNiMoN 17-11-2		1.4406	(TP)316LN	S31653
X2 CrNiMoN 17-13-3		1.4429		
X4 CrNiMo 17-13-3		1.4436		
X6 CrNiMoTi 17-12-2		1.4571	316Ti	S31635
X10 CrNiMoTi 17-3		1.4573	316Ti	S31635
X6 CrNiMoNb 17-12-2		1.4580	316Cb	S31640

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

Welding parameters, optimum fill passes in shielding gas M21/C1

Welding position	PA/1G	PB/2F	PC/2G	PF/3G up
Diameter (mm)	Current (A)			
1.2	100-250	100-250	100-200	100-200

Remarks/ Application advice

Use for downhand welding Cor-A-Rosta 309MoL