

# Cor-A-Rosta 309MoL

## Stainless steel rutile cored wire

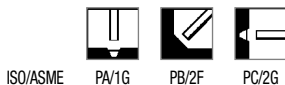
### Classification

AWS A5.22 : E309LMoT0-1/-4  
 ISO 17663-A : T 23 12 2 L R C/M 3

### 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



### Current type/Shielding gas (ISO 14175)

DC +  
 M21 : Mixed gas Ar+ (>15-25%) CO<sub>2</sub>  
 C1 : Active Gas 100% CO<sub>2</sub>  
 Amount : 15-25 l/min

### Approvals

Shielding gas	BV	DNV	GL	LR	TÜV
M21		308LMS	4550S		+
C1	UP	309MoLMS		SS/CMn	+

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

Shielding gas	C	Mn	Si	Cr	Ni	Mo	FN (acc. WRC 192)
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 <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J) +20°C
Required: AWS A5.22 ISO 17663-A			not required min. 350	min. 520 min. 550	min. 25 min. 25	
Typical values	M21/C1	AW	550	700	30	50

### Packaging and available sizes

Unit type	Diameter (mm)	
	1.2	1.6
15 kg spool S300	X	X

Cor-A-Rosta 309MoL: rev. EN 24

**Liability:** All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request

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## Materials to be welded

Steel grades	EN 10088-1/-2	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
<b>Corrosion resistant cladsteels</b>				
	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 and low alloyed steel

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

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

## Remarks/ Application advice

Use for positional welding Cor-A-Rosta P309MoL