

Cor-A-Rosta 309L

Stainless steel rutile cored wire

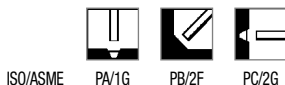
Classification

AWS A5.22 : E309LT0-1/-4
ISO 17663-A : T 23 12 L R C/M 3

General description

Gas shielded flux cored high CrNi alloyed wire electrode for downhand welding
For welding stainless to mild steel and buffer layers in clad steel
Excellent weldability and self releasing slag
High resistance to embrittlement

Welding positions



Current type/Shielding gas (ISO 14175)

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

Approvals

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

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

Shielding gas	C	Mn	Si	Cr	Ni	FN (acc. WRC 192)
M21/C1	0.03	1.4	0.6	24	12.5	15

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	-20°C
Required: AWS A5.22			not required	min. 520	min. 30		
ISO 17663-A			min. 320	min. 510	min. 25		
Typical values	M21/C1	AW	445	560	36	45	40

Packaging and available sizes

Unit type	Diameter (mm)	
	1.2	1.6
5 kg plastic spool S200	X	
15 kg spool S300	X	X

Cor-A-Rosta 309L: 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
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Corrosion resistant cladsteels

X2 CrNiN 18-10	1.4311	(TP)304LN	S30453
X2 CrNi 19-11	1.4306	(TP)304L	S30403
		CF-3	J92500
X4 CrNi 18-10	1.4301	(TP)304	S30400

Dissimilar metals (mild and low alloyed steel to CrNi or CrNiMo stainless steel)

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
1.6	140-300A	140-300A	140-200A

Remarks/ Application advice

Use for positional welding: Cor-A-Rosta P309L