

Cor-A-Rosta P309L

Stainless rutile cored wire

Classification

AWS A5.22-95 : E309LT1-1/-4
EN 12073-99 : T 23 12 L P C/M 2

General description

Gasshielded flux cored high CrNi alloyed wire electrode for positional welding
For welding stainless to mild steel and buffer layers in clad steel
Excellent weldability and slag release
High resistance to embrittlement

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	DNV	GL	LR
M21	309L	4332S	SS/CMn
C1	309LMS		

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

Shielding gas	C	Mn	Si	Cr	Ni	FN
M21/C1	0.03	1.2	0.6	23.3	12.6	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
Required:	AWS A5.22-95 EN 12073-99		not required min. 320	min. 520 min. 510	min. 30 min. 25	
Typical values	M21/C1	AW	430	565	38	45

Packaging and available sizes

Unit	Net weight (kg)	Size (mm)
		1.2
Plastic spool S200	5	X
Plastic spool S300	12.5	X

Cor-A-Rosta P309L: rev. EN 15

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Materials to be welded

Steel grades	EN 10088-11-2	W.Nr.	ASTM/ACI A240/A312/A351	UNS
Corrosion resisting	X2 CrNiN 18-10	1.4311	(TP)304LN	S30453
Cladsteel	X2 CrNi 19-11	1.4306	(TP)304L CF-3	S30403 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

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 309L