

Cor-A-Rosta® P309L

CLASSIFICATION

AWS A5.22 : E309LT1-1/-4
 ISO 17663-A : T 23 12 L P C/M 2

GENERAL DESCRIPTION

Gas shielded 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 self releasing slag
 High resistance to embrittlement

WELDING POSITIONS



CURRENT TYPE

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

APPROVALS

Shielding gas	DNV	GL	TÜV
M21	308LMS	4550S	+
C1	309LMS		pending

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

Shielding gas	C	Mn	Si	Cr	Ni	FN (acc.WRC 192)
M21 / C1	0.04	1.3	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

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

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MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
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 alloy steel to CrNi or CrNiMo stainless steel)

Build-up welding on mild and low alloy steel

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 downhand welding, use Cor-A-Rosta 309L