

Cor-A-Rosta P316L

Stainless steel rutile cored wire

Classification

AWS A5.22 : E316LT1-1/-4
 ISO 17663-A : T 19 12 3 L P C/M 2

General description

Gas shielded flux cored stainless steel wire electrode for positional welding
 Stable arc, low spatter and good slag removal
 Excellent wire feeding and operator appeal
 Bright appearance of weld metal

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	DNV	GL	TÜV
M21	308LMS	4550S	+
C1	316LMS		pending

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	0.5	19	12	2.7	6

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 -110°C	
Required: AWS A5.22 ISO 17663-A			not required min. 320	min. 485 min. 510	min. 30 min. 25		
Typical values	M21/C1	AW	440	580	38	70	40

Packaging and available sizes

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

Cor-A-Rosta P316L: rev. EN 23

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	EN 10213-4	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
Extra low carbon (C <0.03%)					
	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		
Medium carbon (C >0.03%)					
	X4 CrNiMo 17-12-2		1.4401	(TP)316	S31600
	X4 CrNiMo 17-13-3		1.4436		
Ti-, Nb stabilized					
	X6 CrNiMoTi 17-12-2		1.4571	316Ti	S31635
	X6 CrNiMoNb 17-12-2		1.4580	316Cb	S31640
	X6 CrNiNb 18-10		1.4550	(TP)347	S34700
	GX5 CrNiNb 19-10		1.4552	CF-8C	J92710

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

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

Remarks/ Application advice

Use for downhand welding: Cor-A-Rosta 316L