

Cor-A-Rosta® P316L

CLASSIFICATION

AWS A5.22	E316LT1-1/ -4	A-Nr	8	Mat-Nr	1.4430
ISO 17633-A	T 19 12 3 L P C/M 2	F-Nr	6		
		9606 FM	5		

GENERAL DESCRIPTION

Gas shielded flux cored stainless steel wire electrode for downhand welding

Stable arc, low spatter and good slag removal

Excellent wire feeding and operator appeal

Bright appearance of weld metal

WELDING POSITIONS (ISO/ASME)



CURRENT TYPE / SHIELDING GAS (ISO 14175)

DC +	
M2	Mixed gas Ar+ (>15-25%) CO ₂
C1	Active gas 100%
Flow rate	15-25 l/min

APPROVALS

Shielding gas	ABS	DNV	TÜV	LRS
M21	+	+	+	+
C1	+	+		+

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

Shielding gas	C	Mn	Si	Cr	Ni	Mo	FN [acc.WRC 1992]
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			not required	min.485	min. 30		
ISO 17633-A			min. 320	min. 510	min. 25		
Typical values	M21/C1	AW	440	580	38	70	40

PACKAGING AND AVAILABLE SIZES

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

Cor-A-Rosta® P316L.: rev. C-EN27-20/08/20

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EXAMPLES OF 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%]	X2CrNiMo17-12-2	-	1.4404	(TP)316 CF-3M	S31603 J92800
	X2CrNiMo18-14-3		1.4435	(TP)316L	S31603
	X2CrNiMoN17-11-2		1.4406	(TP)316LN	S31653
	X2CrNiMoN17-13-3		1.4429		
	X4CrNiMo17-12-2		1.4401	(TP)316	S31600
Medium carbon [C > 0.03%]	X4CrNiMo17-13-3		1.4436		
		G-X5CrNiMo19-11	1.4408	CF 8M	J9290
Ti-,Nb stabilized	X6CrNiMoTi17-12-2		1.4571	316Ti	S31635
	X6CrNiMoNb17-12-2		1.4580	316Cb	S31640
	X6CrNiNb18-10		1.4550	(TP)347	S34700
		G-X5CrNiNb19-10	1.4552	CF-8C	J92710

WELDING PARAMETERS, OPTIMUM FILL PASSES

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

For downhand welding, use Cor-A-Rosta 316L