

CLEAROSTA F 309L

CLASSIFICATION

AWS A5.22	E309LT1 – 1/4	A-Nr	8	Mat-Nr	1.4432
ISO 17633-A	T 23 12 L P C/M 1	F-Nr	6		
		9606 FM	5		

GENERAL DESCRIPTION

Rutile flux cored wire for joining high-alloyed Cr and Cr-Ni-(Mo) steels to unalloyed steels

Very good weld appearance and regularity

Reduced welding fume (up to -40%) and lower hexavalent Cr content (up to -60%) of the fume contribute to an improved working environment in the workshop, for all workers

Optimal slag system helps to achieve best results

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G

CURRENT TYPE / SHIELDING GAS (ISO 14175)

DC +

M2 Mixed gas Ar+ (>15-25%) CO₂

C1 Active gas 100%

Flow rate 15-25 l/min

APPROVALS

Shielding gas	BV	LRS	DNG-GL	TÜV
M21	pending	pending	pending	pending

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

Shielding gas	C	Mn	Si	Cr	Ni	FN (acc.WRC 1992)
M21 /C1	0.04	0.7	0.6	24.0	13	10-20

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	-60°C
Typical values	M21/C1	AW	≥320	≥520	≥30	≥40	≥27

PACKAGING AND AVAILABLE SIZES

Diameter (mm)	1.2
15 kg spool BS300	X

CLEAROSTA F309L : rev. C - EN01-2V/01/13

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EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
Corrosion resistant cladsteels	X2CrNi18-10	1.4311	[TP]304LN	S30453
	X2CrNi19-11	1.4306	[TP]304L	S30403
			CF-3	J92500
	X4CrNi 18-10	1.4301	[TP]304	S30400

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

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions					
	PA/1G	PB/2F	PC/2G	PF/3G up	PE/4G	
1.2	Current (A)	180-200A	180-200A	160-180A	160-180A	160-180A
	Voltage (V)	27-29V	27-29V	24-27V	24-27V	24-27V

REMARKS/APPLICATION ADVICE

Keep dry and avoid condensation