



Selectarc Inox 318

*Stainless Steel Electrode
Niobium stabilised*

Classification

AWS A5.4 : E318-17

EN 1600 : E 19 12 3 Nb R 3 2

ISO 3581-A : E 19 12 3 Nb R 3 2

Description & Applications

Rutile-basic coated electrode Niobium (Columbium) - stabilised 18Cr 12Ni 3Mo austenitic stainless steel deposit with approx. 8% delta ferrite. The electrode is suited to weld Ti or Nb (Cb) stabilised CrNiMo austenitic stainless steels. Soft fusion without spatters, easy strike and restrike, in most cases self peeling slag, moisture resistant coating. Deposit resistant against intercrystalline corrosion, and highly corrosion resistant against different attacks. Used for service temperatures from -120°C up to +400°C in petrochemical industries and for sea water applications, refineries, tanks, heat exchangers...

Base materials

Stainless steels for general use:

UNS	Alloy	EN 10088	Mat. N°	UGINE
S31600	316	X5CrNiMo17-12-2	1.4401	UGINOX 17-10 M
S31603	316L	X2CrNiMo17-12-2	1.4404	UGINOX 18-11 ML
J92900		G-X5CrNiMo19-11-2	1.4408	
S31635	316Ti	X6CrNiMoTi17-12-2	1.4571	UGINOX 17-11 MT
S31635	316Ti	X10CrNiMoTi18-12	1.4573	
S31640	316Cb	X6NiCrMoNb17-12-2	1.4580	
		G-X5CrNiMoNb19-11-2	1.4581	

Typical Weld Metal Composition (%)

C	Si	Mn	Cr	Ni	Mo	Nb	Fe
<0.03	0.8	0.7	18.0	12.0	2.7	0.3	Rem.

All Weld Metal Mechanical Properties

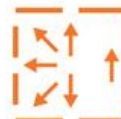
R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
>350	>550	>30	+20°C >60

Welding Current & Instructions

Electrode	ØxL (mm)	2,0x300	2,5x300	3,2x350	4,0x350	5,0x450
Current	(A)	45	70	100	135	180

Redrying at 250°C during 1h, if necessary. Interpass temperature : < 150°C.

ind.12



= + ~ 70V

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