

Classification

AWS A5.9 : ER347

ISO 14343-A : S 19 9 Nb

Description & Applications

Solid wire for submerged arc welding (SAW) of stainless steels stabilised with Niobium like 347, with Titanium like 321 or low carbon content stainless steels like 304L and controlled Carbon content like 304H. Good intergranular resistant corrosion.

Main applications: Aeronautical industry, petrochemistry, power plant.

Base materials:

Stainless steels for general use and for high temperature applications:

UNS	Alloy	EN 10088	Material N°
S30409	304H	X6CrNi18-11	1.4948
S30400	304	X5CrNi18-10	1.4301
S32100	321	X6CrNiTi18-10	1.4541
		X10CrNiTi18-10	1.6903
		X10CrNi18-8	1.4310
S30403	304L	X2CrNi19-11	1.4306

Typical Chemical Composition (%)

	C	Si	Mn	Cr	Ni	Mo	Cu	Nb	P	S	Co	N	Fe
Min		0.30	1.0	19.0	9.0			12 x C					
Max	0.08	0.65	2.5	21.0	11.0	0.5	0.5	1.0	0.03	0.02	-	-	Rem.
Type	0.045	0.40	1.5	19.4	9.3	0.10	0.10	0.60	0.02	0.01	0.06	0.06	Rem.

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters				Flux
		Current (A)	Voltage (V)	Stick out (mm)	Speed (cm/min)	
SAW AC / = +	2.4	200 - 400	25 - 30	18	40 - 60	UP WP380 UP WP380M
	3.2	300 - 500	28 - 32	20	40 - 60	
				22	50 - 60	