

Classification

AWS A5.14 : ERNiCrMo-3

ISO 18274 : S-Ni 6625 (NiCr22Mo9Nb)

Description & Applications

Solid wire for submerged arc welding of high nickel alloys as well as for special austenitic stainless steels. Excellent resistance to pitting, crevice and stress corrosion cracking in the presence of chlorides. Highly resistant at low temperatures, therefore also applied to weld 9% Ni steels.

Main applications: Construction of equipment submitted to oxidizing and corrosive attacks.

Base materials

UNS	Alloy	EN	Material N°
K81340	9%Ni	X8Ni9	1.5662
N06625	625	NiCr22Mo9Nb	2.4856
N08825	825	NiCr21Mo	2.4858
N08904	904L	X1NiCrMoCuN25 20 5	1.4539
N08926	254SMo	X1NiCrMoCuN25 20 6	1.4529

Typical Chemical Composition of wire (%)

	C	Si	Mn	Cr	Mo	Nb	Fe	Cu	Al	Ti	P	S	Ni
Min				20.0	8.0	3.2							58.0
Max	0.10	0.50	0.50	23.0	10.0	4.1	5.0	0.50	0.40	0.40	0.02	0.015	
Type	0.02	0.10	0.10	22.2	9.0	3.4	0.50	0.01	0.04	0.20	0.01	0.005	Rem.

Welding Current & Instructions

Welding mode	Wire Ø (mm)	Welding parameters				Flux
		Current (A)	Voltage (V)	Stick out (mm)	Speed (cm/min)	
SAW = +	2.4	300 - 360	27 - 30	18	40 - 60	UP WP380M UP Ni01 UP Ni682
	3.2	360 - 450	28 - 32	20	40 - 60	