

selectarc**Ni825****Nickel base Electrode
Highly corrosion resistant**


FSH WELDING GROUP
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Classification

AWS A5.11 : ISO 14172 : E-Ni8165 (NiFe30Cr25Mo)
UNS :

Description & Applications

Basic coated electrode for welding of Ni-Fe-Cr-Mo-Cu alloys (alloy 825) and other highly corrosion resistant Ni- Fe- Cr-Mo alloys as well as special austenitic stainless steel types. Stable arc, regular drop transfer, easy to watch weld pool, nice aspect of the weld beads. The weld deposit is resistant against pitting, crevice and stress corrosion cracking in chloride containing media and has also a very good resistant against sulphuric- and phosphoric acid.

Main applications: Welding of Off-shore components, containers/ tanks, piping systems in the chemical and petrochemical industries.

Base materials

UNS	Alloy	EN	Material N°
N08904	904L	X1NiCrMoCu25-20-5	1.4539
N08028	28	X1NiCrMoCu31-27-4	1.4564
N08825	825	NiCr21Mo	2.4858
N08926	254SMo	X1NiCrMoCuN25 20 6	1.4529

Typical Weld Metal Composition (%)

C	Si	Mn	Cr	Ni	Mo	Cu	Nb	Fe
<0.04	0.4	2.8	24.0	38.0	5.0	1.6	<0.4	Rem.

All Weld Metal Mechanical Properties

R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
400	620	36	+20°C 85

Welding Current & Instructions

Electrode	ØxL (mm)	2,5x350	3,2x350	4,0x350
Current	(A)	50-70	90-110	120-140

Redrying 1h at 250-300°C. Joints to weld must be clean, exempt from grease, cracks. Guide electrodes with a slight declination, weld with a short arc and prevent a high heat input by applying the stringer bead technique (weaving max. 2 times core wire diameter). Welding with slight or without preheating and an interpass temperature <150°C.

