



Selectarc Ni59

*Nickel base Electrode
Highly corrosion resistant*

Classification

AWS A5.11 : ENiCrMo-13
UNS : W86059

ISO 14172 : E-Ni 6059 (NiCr23Mo16)

Description & Applications

Basic coated electrode with an alloyed core wire for welding of Nickel-Base alloys (alloy 59) and other highly corrosion resistant Ni-Cr-Mo, Ni-Cr-Mo-W alloys as well as special stainless steel types. Stable arc, regular drop transfer, easy to watch weld pool, nice aspect of the weld beads. Very resistant in sulfurous acid environment, highly concentrated with chlorides and also in the presence of oxidizing solutions (FeCl, CuCl).

Main applications: Welding of Off-shore components, boilers, containers, piping systems in the chemical and petrochemical industries as well as components of flue gas de-sulphuring plants.

Base materials

UNS	Alloy	DIN	Material N°
N06022	C-22	NiCr21Mo14W	2.4602
N06059	59	NiCr23Mo16Al	2.4605
N10276	C-276	NiMo16Cr15W	2.4819
N06455	C-4	NiMo16Cr16Ti	2.4610
N06625	625	NiCr22Mo9Nb	2.4856
N08825	825	NiCr21Mo	2.4858
N08926	254SMo	X1NiCrMoCuN25 20 6	1.4529

Typical Weld Metal Composition (%)

C	Si	Mn	Cr	Mo	Fe	Cu	Ni
<0.02	<0.2	0.2	23.0	15.8	<1.5	0.1	Rem.

All Weld Metal Mechanical Properties

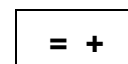
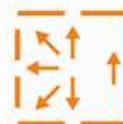
R _{p0.2} (MPa)	R _m (MPa)	A ₅ (%)	KV (J)
>470	>720	>30	+20°C >70

Welding Current & Instructions

Electrode	ØxL (mm)	2,5x350	3,2x350	4,0x350
Current	(A)	50-70	70-100	90-120

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). Nickel base alloys are welded without preheating and an interpass temperature <150°C.

ind.12



Liability: This document is intended to assist the user in choosing the product. It is up to the user to verify that the chosen product is suitable for applications for which it is intended. The company FSH Welding Group reserves the right to alter specifications without prior notice of its products. The descriptions, illustrations and specifications are for reference only and cannot be held liable for FSH Welding Group. **Fumes:** Consult information on MSDS, available upon request.