Selectarc B91

Highly corrosion resistant
high recovery NiCrMo-Electrode

Classification

AWS A5.11 : ENiCrMo-3
UNS : W86112

ISO 14172 : E-Ni 6625 (NiCr22Mo9Nb)

Description & Applications

Rutile-basic coated electrode with a high recovery (170%) for welding of Nickel-Chromium-Molybdenum alloys to themselves and to lower alloyed steels as well as for welding of special austenitic stainless steels. Often used for butt-welding and surfacing on low alloyed and high strength steels as well as for dissimilar joints, buffer layers and for difficult to weld steels. Crack resistant buffer layers on machine parts in earth movement and steel-industries subject to impact and pressure.

Base materials

UNS	Alloy	DIN	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

Typical Weld Metal Composition (%)

C	Si	Mn	Cr	Nb	Fe	Mo	Ni
0.04	0.6	0.8	21.0	3.3	4.0	8.5	Rem.

All Weld Metal Mechanical Properties

$R_{p0.2}$ (MPa)	R_m (MPa)	A_5 (%)	Hardness
>450	>760	>30	Approx. 240HB

Welding Current & Instructions

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

Redrying 1 h 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). For repair welding a preheating, depending on the carbon equivalent of the base material, in the range of 100-250°C is recommended.

ind.12

= +	~ 70V