

Exaton Ni60

Exaton Ni60 is a nickel-chromium-molybdenum covered electrode for welding of Ni/Cr/Mo nickel alloys, highalloy stainless steels and 5-9%Ni steels in cryogenic applications. It can used in many variants of dissimilar joining of nickel alloys, stainless steels and low alloyed steels. Exaton Ni60 can also be used for overlay welding on low alloyed steels. The electrode combines good welding properties in all positions with very low impurity levels, high impact strength and excellent corrosion resistance to pitting in chloride containing media and stress corrosion cracking. Typical applications for Exaton Ni60 include components in the chemical and petrochemical industries often in connection with sea-water cooling where pitting corrosion and stress corrosion cracking are a risk, pressure vessels, heat exchangers etc. It is also used in sour gas service where it is approved by ISO 15156/NACE MR0175. Common base materials welded are ASTM UNS: S31254, N06625, N08825 and N08020.

Specifications

Classifications	SFA/AWS A5.11 : ENiCrMo-3 EN ISO 14172 : E Ni 6625 (NiCr22Mo9Nb)
Approvals	VdTÜV : 04796

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current	DC+
Alloy Type	Ni-based CrMoNb
Coating Type	Basic

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	520 MPa	820 MPa	38 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
ISO		
As Welded	-196 °C	65 J
As Welded	20 °C	70 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	Nb
0.03	0.23	0.4	<=0.01	<=0.015	63	22	9	0.01	3.4

Typical Weld Metal Analysis %

Others tot	Fe	Nb+Ta
<=0.50	<=2	3.4

Deposition Data

Diameter	Amps	Volts	Efficiency (Per)	Fusion time per electrode at 90Per I max	Deposition rate at 90Per
2.5 x 300.0 mm	55-75 A	23 V	55 %	40 sec	0.9 kg/h
3.2 x 350.0 mm	65-100 A	25 V	56 %	52 sec	1.4 kg/h
4.0 x 350.0 mm	80-140 A	27 V	58 %	57 sec	1.9 kg/h
5.0 x 350.0 mm	120-170 A	24 V	58 %	72 sec	2.1 kg/h