

Cryo-Shield Ni9

Flux cored wire for welding of 9% Ni steel. Cryo-Shield Ni9 is a gas shielded flux cored wire that can be used for welding in all positions using 100% CO₂ shielding gas. This weld metal is a Nickel-based with excellent crack resistance and less sensitive to weld bead surface porosity.

Specifications

Approvals	ABS : Manufacturer Guarantee
	BV : Equivalent to N90
	CCS : 9Ni
	DNV-GL : - MS
	KR : L 91SG(C)
	LR : 9Ni

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

Welding Current	DC+
Alloy Type	Ni Cr Mo
Shielding Gas	C1 (EN ISO 14175)

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
C1			
As Welded	440 MPa (64 ksi)	730 MPa (106 ksi)	44 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
C1		
As Welded	-196 °C (-321 °F)	65 J (48 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	Ti
CO₂ Shielding gas									
0.02	1.45	0.45	0.002	0.01	58.5	19.0	8.15	0.01	0.12

Typical Weld Metal Analysis %

Fe	Nb+Ta
CO₂ Shielding gas	
9.0	3.00

Deposition Data

Diameter	Amps	Volts	Wire Feed Speed	Deposition Rate
1.2 mm (0.045 in.)	130-220 A	24-29 V	5.8-14.4 m/min (228-567 in./min)	1.9-4.6 kg/h (4.2-10. lbs/h)