

Shield-Bright NiCrMo-3

A positional rutile wire for the welding of Ni-Cr-Mo-Nb alloys super stainless steels and 9% Ni steels for cryogenic service. It has <1% Fe for higher corrosion resistance. For use with Ar/15-25%CO₂ shielding gas.

Specifications

Classifications	AWS A5.34 : ENiCrMo3T1-4 EN ISO 12153 : T Ni 6625 P M21 2
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Welding Current	DC+
Alloy Type	Ni-Cr-Mo-Nb
Shielding Gas	M21 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
M21 (Ar/15-25% CO₂)			
As Welded	501 MPa (73 ksi)	788 MPa (114 ksi)	42 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
M21 (Ar/15-25% CO₂)		
As Welded	0 °C (32 °F)	75 J (56 ft-lb)
As Welded	-196 °C (-321 °F)	70 J (52 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Cr	Mo	Cu	Ti	Fe
M21 (Ar/15-25% CO₂)									
0.02	0.12	0.35	0.003	0.003	21	8.5	0.02	0.1	0.5

Typical Weld Metal Analysis %

Nb+Ta
M21 (Ar/15-25% CO₂)
3.3

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.2 mm (0.045 in.)	130-210 A	23-32 V	5.8-13.8 m/min (228-543 in./min)	1.9-4.2 kg/h (4.2-9.3 lbs/h)