

OK Autrod 410NiMo

A continuous solid welding wire of 12% Cr, 4,5% Ni, 0,5% Mo type. OK Autrod 410NiMo is used for welding of martensitic and martensitic-ferritic stainless steels in applications such as hydro turbines.

Specifications

Classifications	EN ISO 14343-A : G 13 4
Alloy Type	Martensitic-ferritic (12 % Cr - 4.5 % Ni - 0.5 % Mo)
Shielding Gas	M12, M13 (EN ISO 14175)

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
As Welded	860 MPa	1050 MPa	13 %
Stress Relieved 2 hour(s) 600 °C	850 MPa	900 MPa	17 %
Stress Relieved 8 hour(s) 600 °C	750 MPa	850 MPa	20 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
As Welded	0 °C	35 J
As Welded	-20 °C	30 J
Stress Relieved	0 °C	70 J
Stress Relieved	-20 °C	55 J
Stress Relieved	0 °C	75 J
Stress Relieved	-20 °C	75 J

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.02	0.43	0.37	0.004	0.017	4.5	12.2	0.4	0.07

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.02	0.38	0.37	0.003	0.019	4.5	12	0.4	0.1

Deposition Data

Diameter	Amps	Volts	Wire Feed Speed	Deposition Rate
1.2 mm	180-280 A	20-28 V	4.9-8.5 m/min	2.6-4.5 kg/h

Welding Parameters

Wire Diameter
0.9 mm