

OK Tigrod 312

Bare corrosion resisting chromium-nickel welding rods for welding of materials of the 29% Cr, 9% Ni types. OK Tigrod 312 has a good oxidation resistance at high temperatures due to its high content of Cr. The alloy is widely used for joining dissimilar steels especially if one of the component is fully austenitic and steels that are difficult to weld, i.e. machine components, tools and austenitic manganese steels.

Specifications

Classifications	EN ISO 14343-A : W 29 9 SFA/AWS A5.9 : ER312
Approvals	CE : EN 13479 UKCA : EN 13479

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

Alloy Type	Ferritic-austenitic (29 % Cr - 9 % Ni)
Shielding Gas	I1, I2, I3 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	610 MPa (88 ksi)	770 MPa (112 ksi)	20 %

Typical Charpy V-Notch Properties

Testing Temperature	Impact Value
20 °C (68 °F)	50 J (37 ft-lb)

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu	N
0.10	1.7	0.41	0.001	0.020	8.8	30.4	0.15	0.11	0.05

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr
0.1	1.7	0.5	0.010	0.020	9	29