OK Tigrod 309L

Bare corrosion resisting chromium-nickel welding rod for welding of similar steels of 24% Cr, 13% Ni types. The alloy is also used for welding of buffer layers on CMn steels and welding of dissimilar joints. When using the wire for buffer layers and dissimilar joints it is necessary to control the dilution of the weld. OK Tigrod 309L has a good general corrosion resistance. When used for joining dissimilar materials the corrosion resistance is of secondary importance.

Classifications Wire Electrode	SFA/AWS A5.9 : ER309L EN ISO 14343-A : W 23 12 L
Approvals	CE EN 13479 CWB ER309L NAKS/HAKC 1.6-2.4 mm VdTÜV 10021

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

Alloy Type	Austenitic (with approx. 10 % ferrite) 24 % Cr - 13 % Ni - Low C
Shielding Gas	I1 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	430 MPa (62 ksi)	590 MPa (86 ksi)	32 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C (68 °F)	160 J (118 ft-lb)
As Welded	-60 °C (-76 °F)	130 J (96 ft-lb)
As Welded	-110 °C (-166 °F)	90 J (66 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.015	1.7	0.4	0.015	0.020	13.0	24.0	0.1	0.1

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	N	FN WRC-92
0.02	1.8	0.4	13.4	23.2	0.10	0.05	10

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