

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

Alloy Type	Austenitic (with approx. 10 % ferrite) 24 % Cr - 13 % Ni - Low C
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	430 MPa	590 MPa	32 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	20 °C	160 J
As Welded	-60 °C	130 J
As Welded	-110 °C	90 J

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

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