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.

Specifications	
Classifications	EN ISO 14343-A : W 23 12 L SFA/AWS A5.9 : ER309L
Approvals	CE : EN 13479 CWB : ER309L UKCA : EN 13479 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)

Tensile_Properties			
Testing Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
AWS			
As Welded	430 MPa	590 MPa	32 %
ISO			
As Welded	480 MPa	585 MPa	30 %

Charpy Testing		
Testing Condition	**Testing Temp**	**Impact Value**
AWS		
As Welded	20 °C	160 J
As Welded	-60 °C	130 J
As Welded	-110 °C	90 J
ISO		
As Welded	-60 °C	150 J
As Welded	-196 °C	105 J

Typical Weld Metal Analysis %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Cu**	**N**
0.015	1.7	0.4	0.015	0.020	13.0	24.0	0.1	0.1	0.08

Typical Weld Metal Analysis %
FN WRC-92
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Typical Wire Composition %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**Cu**	**N**
0.02	1.8	0.4	0.010	0.015	13.4	23.2	0.10	0.1	0.05

Typical Wire Composition %
FN WRC-92
10