

OK Tigrod B2 SC

OK Tigrod B2 SC is a copper coated, low-alloyed, chromium-molybdenum solid wire designed for GTAW of creep resistant 1,25% Cr 0,5% Mo alloyed steels, SA-387 Grade 11, SA-182 Grade 11, SA-335 Grade P11 or similar materials when highest toughness values are required also after step cooling treatment. Very low level of impurity elements providing a X-bar max. 10 for temper embrittlement resistant applications. Usually welding is followed by a PWHT. Suitable for refinery, petrochemical and chemical industries, power generation, pressure vessels, etc.

Specifications

Classifications	EN ISO 21952-A : W Z CrMo1Si EN ISO 21952-B : W 55 I1 1CM SFA/AWS A5.28 : ER80S-B2
Approvals	CE : EN 13479 UKCA : EN 13479

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

Alloy Type	Low alloyed (1.25% Cr, 0.5% Mo)
Shielding Gas	I1 (EN ISO 14175)

Typical Tensile Properties

Condition	Conditional Statement	Yield Strength	Tensile Strength	Elongation
Ar (I1) EN ISO				
PWHT 1 hour(s) 620 °C		650 MPa	740 MPa	25 %
Ar (I1) AWS				
PWHT 2 hour(s) 690 °C		500 MPa	610 MPa	30 %
PWHT 1 hour(s) 620 °C		590 MPa	685 MPa	28 %
PWHT (Test	Test temp. 450°C	375 MPa	430 MPa	21 %
PWHT 22 hour(s) 690 °C		420 MPa	540 MPa	32 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
Ar (I1) AWS		
PWHT	-30 °C	300 J
PWHT	-30 °C	300 J
PWHT	-30 °C	300 J

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo
0.10	0.55	0.55	0.05	1.4	0.55

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Al
0.073	0.52	0.55	0.005	0.005	0.05	1.3	0.52	0.005	0.003

Typical Weld Metal Analysis %

Cu	Nb	Ti	Sb	As	B	Sn	Mn+Si	Nb+Ti+V	P+Sn
0.1	0.003	0.002	0.001	0.001	0.0001	0.002	1.07	0.010	0.007

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Typical Weld Metal Analysis %

PE	J-Factor	X-bar	Others tot
2	80	6	<0.50