

OK Tigrod 13.37

A copper coated, low-alloyed, chromium-molybdenum (9% Cr, 1% Mo), rod for GTAW of high temperature steels and steels for hot hydrogen service, especially in oil refineries. The electrode is a plain ER505 type.

Specifications	
Classifications	EN ISO 21952-A : W CrMo9 EN ISO 21952-B : W 55 9C1M SFA/AWS A5.28 : ER80S-B8

Alloy Type	Alloyed steel (9 % Cr - 1 % Mo) "ER505"
Shielding Gas	I1 (EN ISO 14175)

Tensile Properties			
Testing Condition	Yield Strength	Tensile Strength	Elongation
Enhanced testing temperature.			
Stress Relieved 2 hour(s) 760 °C	430 MPa	500 MPa	17 %
Stress relieved+ 2 hour(s) 760 °C	410 MPa	480 MPa	18 %
Stress relieved++ 2 hour(s) 760 °C	350 MPa	390 MPa	22 %
Ar (I1) EN			
Stress Relieved 2 hour(s) 760 °C	540 MPa	660 MPa	26 %
Stress relieved+ 4 hour(s) 735 °C	560 MPa	680 MPa	22 %

Charpy Testing		
Testing Condition	Testing Temp	Impact Value
Ar (I1) EN		
Stress Relieved 2 hour(s) 760 °C	-20 °C	140 J
Stress relieved+ 4 hour(s) 735 °C	-20 °C	150 J
Stress Relieved 2 hour(s) 760 °C	-40 °C	120 J
Stress relieved+ 4 hour(s) 735 °C	-40 °C	130 J
Stress Relieved 2 hour(s) 760 °C	-60 °C	90 J
Stress relieved+ 4 hour(s) 735 °C	-60 °C	50 J

Typical Weld Metal Analysis %						
C	Mn	Si	S	P	Cr	Mo
0.1	0.5	0.4	0.005	0.01	8.6	0.9

Typical Wire Composition %					
C	Mn	Si	Ni	Cr	Mo
0.06	0.52	0.45	0.23	8.66	1.00



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Welding_Parameters

Wire Diameter	Amps
2.0 mm	60-200 A
2.4 mm	100-220 A