OK Tigrod 13.09

A copper coated, low alloyed, molybdenum (0,5% Mo) rod for GTAW of creep resistant steels of the same type, such as pipes in pressure vessels and boilers with a working temperature of up to about 500 C.

Classifications	EN ISO 636-A : W 46 2 W2Mo EN ISO 636-A : W2Mo EN ISO 21952-A : W MoSi EN ISO 21952-B : W 52 1M3 SFA/AWS A5.28 : ER70S-A1 (ER80S-G)
Approvals	CE : EN 13479 DB : 42.039.08 DNV-GL : III YMS (I1) NAKS/HAKC : 2.0MM-3.2MM VdTÜV : 04950

Alloy Type	Low alloyed steel (0.5 % Mo)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
EN Ar (I1)			
As Welded	490 MPa	600 MPa	30 %
PWHT 1 hour(s) 620 °C	450 MPa	550 MPa	31 %
AWS Ar (I1)			
As Welded	520 MPa	620 MPa	27 %
PWHT 1 hour(s) 620 °C	510 MPa	610 MPa	28 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
EN Ar (I1)		
As Welded	-60 °C	25 J
As Welded	20 °C	180 J
As Welded	-20 °C	160 J
PWHT 1 hour(s) 620 °C	20 °C	190 J
PWHT 1 hour(s) 620 °C	-20 °C	170 J
As Welded	-40 °C	90 J
AWS Ar (I1)		
As Welded	-46 °C	130 J
PWHT 1 hour(s) 620 °C	-20 °C	220 J
As Welded	-29 °C	150 J

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo
0.094	1.09	0.61	0.05	0.05	0.45

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Mo	Cu
0.1	1.1	0.7	0.015	0.015	0.5	0.2