# OK Tigrod 13.09

OK Tigrod 13.09 is a 0.5Mo-alloyed, copper-coated rod for the 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.

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| **Classifications Weld Metal:** | EN ISO 636-A:W 46 2 W2Mo |
| **Classifications Wire Electrode:** | 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, DNV III YMS, DB 42.039.08, NAKS/HAKC 2.0MM-3.2MM, VdTÜV 04950 |

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

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|---|---|
| **Alloy Type:** | Low alloyed steel (0.5 % Mo) |

## Typical Tensile Properties

| Condition | Yield Strength | Tensile Strength | Elongation |
|---|---|---|---|
| **AWS Ar (I1)** | | | |
| As welded | 520 MPa | 620 MPa | 27 % |
| PWHT 620°C 1h | 510 MPa | 610 MPa | 28 % |
| **EN Ar (I1)** | | | |
| PWHT 620°C 1h | 450 MPa | 550 MPa | 31 % |
| As welded | 490 MPa | 600 MPa | 30 % |

## Typical Charpy V-Notch Properties

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

## Typical Wire Composition %

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