



# Product Data Sheet

W 'Tungsten inert gas arc welding'

# OK Tigrod NiCrMo-3

|                                |                              |                                |                    |                        |                        |               |
|--------------------------------|------------------------------|--------------------------------|--------------------|------------------------|------------------------|---------------|
| Prepared by<br>Fredrik Wedberg | Qualified by<br>Tero Tolonen | Approved by<br>Jay A Coubrough | Reg no<br>EN006806 | Cancelling<br>EN006316 | Reg date<br>2015-08-07 | Page<br>1 (2) |
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## REASON FOR ISSUE

Correction of minimum and typical impact values

## GENERAL

Bare corrosion and heat-resisting Ni-Cr-Mo rods for welding of high alloyed heat-resisting and corrosion resisting materials, 9%Ni-steels and similar steels with high notch toughness at low temperatures. Also for joining of dissimilar metals of the types mentioned. The weld metal has very good mechanical properties at high and low temperatures. Good resistance to pitting and stress corrosion.

**Alloy Type:** Alloyed nickel (Ni + 22 % Cr + 9 % Mo - 3.5 % Nb)

## CLASSIFICATIONS Wire Electrode

SFA/AWS A5.14    ERNiCrMo-3  
EN ISO 18274    S Ni 6625

## APPROVALS

DNV                      For NV1.5Ni up to  
                              NV9Ni  
VdTÜV                  12460

## CHEMICAL COMPOSITION

### Wire/Strip (%)

|            | Min  | Max   |
|------------|------|-------|
| C          |      | 0.03  |
| Si         |      | 0.20  |
| Mn         |      | 0.30  |
| P          |      | 0.008 |
| S          |      | 0.005 |
| Cr         | 20.0 | 23.0  |
| Ni         | 60.0 |       |
| Mo         | 8.0  | 10.0  |
| Cu         |      | 0.30  |
| Al         |      | 0.30  |
| Ti         |      | 0.30  |
| Fe         |      | 0.5   |
| Nb+Ta      | 3.15 | 4.15  |
| Others tot |      | 0.50  |

Comments:  
Up to 20% of Nb+Ta can be Ta.

## MECHANICAL PROPERTIES OF WELD METAL

### All Weld Metal

| Properties             | As welded |     |
|------------------------|-----------|-----|
|                        | Min       | Typ |
| Rp0.2 (MPa)            | 420       | 550 |
| Rm (MPa)               | 710       | 780 |
| A5 (%)                 | 30        | 40  |
| Z (%)                  |           | 40  |
| Charpy V at -196°C (J) | 60        | 100 |



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### OTHER DATA

The rods are used for welding of e.g.

Ni-alloy type:

625 (Werkstoffnr 2.4856)

825 (Werkstoffnr 2.4858)

800 (Werkstoffnr 1.4876)

9%Ni.steel: X 8Ni9

Austenitic stainless steels:

X10NiCrAlTi 32 20 (1.4876)

X2NiCrMoCu 25 20 6 (1.4529)

X2CrNiMoCuN 20 18 6

The filler metal is also used for welding of dissimilar joints containing Non- and Low alloyed steel.