# OK Tigrod NiCu-7

Bare nickel based welding rods alloyed with 30 % Cu for welding of base materials of the same type. Can also be used to join these alloys to steel. The weld metal has good resistance to flowing seawater and has high strength and toughness over a rather wide temperature range. Has also good resistance to hydrofluoric acid, sulfuric acid, alkalis etc. Can be used for welding of similar types of base materials which are age-hardenable with small additions of Ti and Al.

| Specifications | |
|---|---|
| **Classifications** | SFA/AWS A5.14 : ERNiCu-7<br>EN ISO 18274 : S Ni 4060 (NiCu30Mn3Ti) |
| **Approvals** | VdTÜV : 12661 (MV)<br>VdTÜV : 12669 (FP) |

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

| | |
|---|---|
| **Alloy Type** | Alloyed nickel (Ni + 30 % Cu + 2 % Ti + 2 % Fe) |
| **Shielding Gas** | I1 (EN ISO 14175) |

| Typical Tensile Properties | | | |
|---|---|---|---|
| **Condition** | **Yield Strength** | **Tensile Strength** | **Elongation** |
| As Welded | 300 MPa | 520 MPa | 35 % |

| Typical Weld Metal Analysis % | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **C** | **Mn** | **Si** | **S** | **P** | **Ni** | **Al** | **Cu** | **Nb** | **Ti** |
| 0.01 | 3.2 | 0.06 | 0.001 | 0.001 | 64 | 0.1 | 30 | 0.002 | 1.8 |

| Typical Weld Metal Analysis % | | |
|---|---|---|
| **Ta** | **Fe** | **Nb+Ta** |
| 0.003 | 0.7 | 0.005 |

| Typical Wire Composition % | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **C** | **Mn** | **Si** | **Ni** | **Al** | **Cu** | **Ti** | **Fe** | **Nb+Ta** |
| 0.03 | 3 | 0.3 | 64 | 0.03 | 28 | 2 | 2 | < 0.5 |