# OK Tigrod 316LSi

Bare corrosion resisting chroumium-nickel-molybdenium rods for welding of austenitic stainless alloys of 18% Cr-8% Ni and 18% Cr-10% Ni-3% Mo types. OK Tigrod 316LSi has a good general corrosion resistance, in particularly the alloy has very good resistance against corrosion in acid and chlorinated environments. The alloy has a low carbon content which makes it particularly recommended where there is a risc of intergranular corrosion. The higher silicon content improves the welding properties, such as wetting. The alloy is widely used in the chemical and food processing industries as well as in ship building and various types of architectural structures.

| Specifications | |
|---|---|
| **Classifications** | EN ISO 14343-A : W 19 12 3 L Si<br>SFA/AWS A5.9 : ER316LSi<br>Werkstoffnummer : ~1.4430 |
| **Approvals** | BV : 316L BT<br>CE : EN 13479<br>DB : 43.039.06<br>DNV-GL : VL 316 L (I1)<br>NAKS/HAKC : 1.6-2.4 mm<br>UKCA : EN 13479<br>VdTÜV : 05336 |

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

| | |
|---|---|
| **Alloy Type** | Austenitic (with approx. 8 % ferrite) 19% Cr - 12% Ni - 3% Mo - Low C- High Si |
| **Shielding Gas** | I1 (EN ISO 14175) |

| Typical Tensile Properties | | | |
|---|---|---|---|
| **Conditional Statement** | **Yield Strength** | **Tensile Strength** | **Elongation** |
| As welded | 500 MPa ( 72.5 ksi ) | 630 MPa ( 91 ksi ) | 33 % |

| Typical Charpy V-Notch Properties | |
|---|---|
| **Testing Temperature** | **Impact Value** |
| 20 °C ( 68 °F ) | 175 J ( 129 ft-lb ) |
| -110 °C ( -166 °F ) | 110 J ( 81 ft-lb ) |
| -196 °C ( -321 °F ) | 90 J ( 66 ft-lb ) |

| Typical Wire Composition % | | | | | | |
|---|---|---|---|---|---|---|
| **C** | **Mn** | **Si** | **Ni** | **Cr** | **Mo** | **Cu** |
| 0.01 | 1.8 | 0.9 | 12.2 | 18.4 | 2.60 | 0.12 |

| Typical Weld Metal Analysis % | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **C** | **Mn** | **Si** | **S** | **P** | **Ni** | **Cr** | **Mo** | **Cu** |
| 0.01 | 1.8 | 0.8 | 0.01 | 0.02 | 12 | 18 | 2.8 | 0.1 |