

OK Tigrod 316L

Bare corrosion resisting chromium-nickel-molybdenum welding rods for welding of austenitic stainless alloys of 18% Cr - 8% Ni and 18% Cr - 10% Ni - 3% Mo-types. OK Tigrod 316L has a good general corrosion resistance, particularly against corrosion in acid and chlorinated environments. The alloy has a low carbon content which makes it particularly recommended where there is a risk of intergranular corrosion. The alloy is widely used in the chemical and food processing industries as well as in shipbuilding and various types of architectural structures.

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|---------------------------------------|---|
| Classifications Wire Electrode | SFA/AWS A5.9 : ER316L EN ISO 14343-A : W 19 12 3 L Werkstoffnummer : ~1.4430 |
| Approvals | ABS ER 316L BV 316L BT CE EN 13479 CWB ER316L DNV-GL VL 316 L (I1) NAKS/HAKC 1.6 - 3.2 mm VdTUV 04270 |

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

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|----------------------|--|
| Alloy Type | Austenitic (with approx. 10 % ferrite) 19% Cr - 12% Ni - 3% Mo - Low C |
| Shielding Gas | I1 (EN ISO 14175) |

Typical Charpy V-Notch Properties

| Testing Temperature | Impact Value |
|---------------------|--------------------|
| 20 °C (68 °F) | 175 J (129 ft-lb) |
| -60 °C (-76 °F) | 130 J (96 ft-lb) |
| -110 °C (-166 °F) | 120 J (88.5 ft-lb) |
| -196 °C (-321 °F) | 75 J (55 ft-lb) |

Typical Weld Metal Analysis %

| C | Mn | Si | S | P | Ni | Cr | Mo | Cu |
|------|-----|-----|------|------|----|----|-----|-----|
| 0.01 | 1.8 | 0.4 | 0.01 | 0.02 | 12 | 19 | 2.6 | 0.1 |

Typical Wire Composition %

| C | Mn | Si | Ni | Cr | Mo | N | FN WRC-92 |
|------|-----|-----|------|------|-----|------|-----------|
| 0.01 | 1.7 | 0.4 | 12.0 | 18.2 | 2.6 | 0.04 | 7 |