

## OK Tigrod 309LSi

Bare corrosion resistant chromium-nickel welding rod for welding of similar steels, wrought and cast steels of 23% Cr-12% Ni types. The alloy is also used for welding of buffer layers on CMn steels and welding of dissimilar joints. When using the wire for buffer layers and dissimilar joints it is necessary to control the dilution of the weld. OK Tigrod 309LSi has a good general corrosion resistance. The higher silicon content improves the welding properties, such as wetting.

### Specifications

|                        |   |
|------------------------|---|
| <b>Classifications</b> | EN ISO 14343-A : W 23 12 L Si<br>SFA/AWS A5.9 : ER309LSi              |
| <b>Approvals</b>       | CE : EN 13479<br>DB : 43.039.17<br>NAKS/HAKC : 2.4MM<br>VdTÜV : 12489 |

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

|                      |   |
|----------------------|---|
| <b>Alloy Type</b>    | Austenitic (with approx. 8 % ferrite) 24 % Cr - 13 % Ni - Low C |
| <b>Shielding Gas</b> | I1 (EN ISO 14175)   |

### Typical Tensile Properties

| Condition | Yield Strength | Tensile Strength | Elongation |
|-----------|----------------|------------------|------------|
| As Welded | 475 MPa        | 610 MPa          | 35 %       |

### Typical Charpy V-Notch Properties

| Condition | Testing Temperature | Impact Value |
|-----------|---------------------|--------------|
| As Welded | 20 °C               | 185 J        |
| As Welded | 0 °C                | 155 J        |
| As Welded | -110 °C             | 130 J        |

### Typical Wire Composition %

| C     | Mn  | Si  | S     | P     | Ni   | Cr   | Mo  | Cu  | N    |
|-------|-----|-----|-------|-------|------|------|-----|-----|------|
| 0.016 | 1.9 | 0.7 | 0.004 | 0.019 | 13.7 | 23.3 | 0.1 | 0.1 | 0.09 |

### Typical Wire Composition %

| FN WRC-92 |
|-----------|
| 9         |

### Typical Weld Metal Analysis %

| C    | Mn  | Si  | S     | P     | Ni   | Cr | Mo  | Cu  | N    |
|------|-----|-----|-------|-------|------|----|-----|-----|------|
| 0.01 | 1.8 | 0.7 | 0.003 | 0.015 | 13.5 | 23 | 0.1 | 0.1 | 0.09 |

### Typical Weld Metal Analysis %

| Nb   | FN WRC-92 |
|------|-----------|
| 0.01 | 8         |