

## OK 61.20

Rutile coated electrode for welding 19Cr10Ni -type steels. Also suitable for welding stabilized steels of similar composition, except when the full creep resistance of the base material is to be met. The electrode is especially designed for welding of thin walled pipes. It can be used in all positions including vertical down.

### Specifications

|                        |                                                                                       |
|------------------------|---------------------------------------------------------------------------------------|
| <b>Classifications</b> | EN ISO 3581-A : E 19 9 L R 1 1<br>SFA/AWS A5.4 : E308L-16<br>Werkstoffnummer : 1.4316 |
| <b>Approvals</b>       | CE : EN 13479<br>UKCA : EN 13479<br>VdTÜV : 10769                                     |

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

|                        |                 |
|------------------------|-----------------|
| <b>Welding Current</b> | DC+, AC         |
| <b>Ferrite Content</b> | FN 3 - 10       |
| <b>Alloy Type</b>      | Austenitic CrNi |
| <b>Coating Type</b>    | Acid Rutile     |

### Typical Tensile Properties

| Condition  | Yield Strength | Tensile Strength | Elongation |
|------------|----------------|------------------|------------|
| <b>ISO</b> |                |                  |            |
| As Welded  | 430 MPa        | 560 MPa          | 45 %       |

### Typical Charpy V-Notch Properties

| Condition  | Testing Temperature | Impact Value |
|------------|---------------------|--------------|
| <b>ISO</b> |                     |              |
| As Welded  | -60 °C              | 38 J         |
| As Welded  | -50 °C              | 48 J         |
| As Welded  | 20 °C               | 70 J         |

### Typical Weld Metal Analysis %

| C     | Mn  | Si  | Ni  | Cr   | Cu   | N    | FN WRC-92 |
|-------|-----|-----|-----|------|------|------|-----------|
| 0.026 | 0.7 | 0.7 | 9.6 | 19.2 | 0.05 | 0.10 | 5         |

### Deposition Data

| Diameter       | Current | Voltage | Efficiency (%) | Fusion time per electrode at 90% I max | Deposition Rate |
|----------------|---------|---------|----------------|----------------------------------------|-----------------|
| 2.0 x 300.0 mm | 25-60 A | 22 V    | 66 %           | 38 sec                                 | 0.7 kg/h        |
| 2.5 x 300.0 mm | 28-85 A | 22 V    | 63 %           | 44 sec                                 | 0.9 kg/h        |