

## OK Autrod 385

A continuous solid corrosion resisting chromium-nickel-molybdenum-copper wire for welding of austenitic stainless alloys of 20% Cr, 25% Ni, 5% Mo, 1.5% Cu, low C types. OK Autrod 385 weld metal has a good resistance to stress corrosion and intergranular corrosion and shows a very good resistance to attack in non-oxidizing acids. The resistance and crevice corrosion is better than for ordinary 18% Cr, 8% Ni, Mo steels. The alloy is widely used in many applications related to the process industry.

### Specifications

|                        |                                                         |
|------------------------|---------------------------------------------------------|
| <b>Classifications</b> | EN ISO 14343-A : G 20 25 5 Cu L<br>SFA/AWS A5.9 : ER385 |
| <b>Approvals</b>       | NAKS/HAKC : 1.2 mm                                      |

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

|                      |                                                                  |
|----------------------|------------------------------------------------------------------|
| <b>Alloy Type</b>    | Fully austenitic (20 % Cr - 25 % Ni - 5 % Mo - 1.5 % Cu - Low C) |
| <b>Shielding Gas</b> | I1, I2, I3, M13 (EN ISO 14175)                                   |

### Typical Tensile Properties

| Condition | Yield Strength | Tensile Strength | Elongation |
|-----------|----------------|------------------|------------|
| As Welded | 340 MPa        | 540 MPa          | 37 %       |

### Typical Charpy V-Notch Properties

| Condition | Testing Temperature | Impact Value |
|-----------|---------------------|--------------|
| As Welded | 20 °C               | 120 J        |

### Typical Wire Composition %

| C    | Mn  | Si  | Ni   | Cr   | Mo  | Cu  | N    |
|------|-----|-----|------|------|-----|-----|------|
| 0.01 | 1.7 | 0.4 | 25.0 | 20.0 | 4.4 | 1.5 | 0.05 |

### Deposition Data

| Diameter | Current   | Voltage | Wire Feed Speed | Deposition Rate |
|----------|-----------|---------|-----------------|-----------------|
| 1.2 mm   | 100-300 A | 15-29 V | 3.0-14.0 m/min  | 1.6-7.5 kg/h    |

### Recommended Welding Parameters

| Current   | Wire Diameter | Voltage |
|-----------|---------------|---------|
| 230-350 A | 1.6 mm        | 24-28 V |
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