

OK 309L

Acid-rutile coated MMA-electrode giving an overalloyed weld metal. Suitable for welding stainless steel to mild and low alloyed steels. Also suitable for welding of transition layers when surfacing mild steel with stainless steel weld metal.

Specifications

| | |
|------------------------|--|
| Classifications | EN ISO 3581-A : E 23 12 L R 3 2 SFA/AWS A5.4 : E309L-16 |
|------------------------|--|

| | |
|------------------------|-----------------|
| Welding Current | AC, DC+ |
| Ferrite Content | FN 12 - 22 |
| Alloy Type | Austenitic CrNi |
| Coating Type | Acid Rutile |

Typical Tensile Properties

| Condition | Yield Strength | Tensile Strength | Elongation |
|------------|----------------|------------------|------------|
| ISO | | | |
| As Welded | 470 MPa | 580 MPa | 32 % |

Typical Charpy V-Notch Properties

| Condition | Testing Temperature | Impact Value |
|------------|---------------------|--------------|
| ISO | | |
| As Welded | 20 °C | 50 J |
| As Welded | -10 °C | 40 J |

Typical Weld Metal Analysis %

| C | Mn | Si | Ni | Cr | N | FN WRC-92 |
|------|-----|-----|------|------|------|-----------|
| 0.03 | 0.9 | 0.8 | 12.4 | 23.7 | 0.09 | 15 |

Deposition Data

| Diameter | Current | Voltage | Efficiency (%) | Fusion time per electrode at 90% I max | Deposition Rate |
|----------------|----------|---------|----------------|--|-----------------|
| 2.5 x 300.0 mm | 45-90 A | 28 V | 60 % | 38 sec | 1.1 kg/h |
| 3.2 x 350.0 mm | 65-120 A | 29 V | 60 % | 51 sec | 1.6 kg/h |
| 4.0 x 350.0 mm | 85-180 A | 31 V | 60 % | 51 sec | 2.5 kg/h |