

**MILD STEEL****STICK ELECTRODES (SMAW)**

OK 53.16 is a double coated electrode combining the running characteristics of a rutile with the mechanical properties of a basic electrode. The double coating enables it to be used with small transformers with low OCV. OK 53.16 welds on both AC and DC.

| Specifications  |                                                                                                                           |
|-----------------|---------------------------------------------------------------------------------------------------------------------------|
| Classifications | SFA/AWS A5.1 : E7016<br>EN ISO 2560-A : E 38 2B 32 H10                                                                    |
| Approvals       | ABS : 3Y<br>BV : 3Y H10<br>CE : EN 13479<br>DB : 10.039.29<br>DNV : 3 YH10<br>LR : 3Y<br>UKCA : EN 13479<br>VdTÜV : 02762 |

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

|                     |                  |
|---------------------|------------------|
| Welding Current     | AC, DC+-         |
| Diffusible Hydrogen | < 10.0 ml/100g   |
| Alloy Type          | Carbon Manganese |
| Coating Type        | Basic covering   |

| Tensile Properties |                |                  |            |
|--------------------|----------------|------------------|------------|
| Testing Condition  | Yield Strength | Tensile Strength | Elongation |
| ISO                |                |                  |            |
| As Welded          | 450 MPa        | 530 MPa          | 28 %       |

| Charpy Testing    |              |              |
|-------------------|--------------|--------------|
| Testing Condition | Testing Temp | Impact Value |
| ISO               |              |              |
| As Welded         | -20 °C       | 90 J         |

| Typical Weld Metal Analysis % |     |     |
|-------------------------------|-----|-----|
| C                             | Mn  | Si  |
| 0.07                          | 1.0 | 0.6 |

| Deposition Data |           |       |                  |                                          |                          |
|-----------------|-----------|-------|------------------|------------------------------------------|--------------------------|
| Diameter        | Amps      | Volts | Efficiency (Per) | Fusion time per electrode at 90Per I max | Deposition rate at 90Per |
| 2.5 x 350.0 mm  | 50-90 A   | 27 V  | 58 %             | 59 sec                                   | 0.73 kg/h                |
| 3.2 x 350.0 mm  | 90-150 A  | 31 V  | 54 %             | 56 sec                                   | 1.2 kg/h                 |
| 3.2 x 450.0 mm  | 90-150 A  | 30 V  | 57 %             | 72 sec                                   | 1.27 kg/h                |
| 4.0 x 450.0 mm  | 120-190 A | 28 V  | 59 %             | 90 sec                                   | 1.65 kg/h                |
| 5.0 x 450.0 mm  | 160-230 A | 28 V  | 61 %             | 109 sec                                  | 2.14 kg/h                |