

## OK 76.35

Basic DC electrode for welding heat resisting CrMo steel plate or tubes of the type 5 % Cr and 0.5 % Mo.

| Specifications  |                                                             |
|-----------------|-------------------------------------------------------------|
| Classifications | SFA/AWS A5.5 : E8015-B6<br>EN ISO 3580-A : E CrMo5 B 4 2 H5 |
| Approvals       | NAKS/HAKC : 2.5-4.0 mm                                      |

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

|                     |                                 |
|---------------------|---------------------------------|
| Welding Current     | DC+-                            |
| Diffusible Hydrogen | < 5.0 ml/100g                   |
| Alloy Type          | Low alloyed (5 % Cr ; 0.5 % Mo) |
| Coating Type        | Basic covering                  |

| Typical Tensile Properties |                |                  |            |
|----------------------------|----------------|------------------|------------|
| Condition                  | Yield Strength | Tensile Strength | Elongation |
| ISO                        |                |                  |            |
| PWHT<br>1 hour(s) 750 °C   | 500 MPa        | 620 MPa          | 22 %       |

| Typical Charpy V-Notch Properties |                     |              |
|-----------------------------------|---------------------|--------------|
| Condition                         | Testing Temperature | Impact Value |
| ISO                               |                     |              |
| PWHT                              | 20 °C               | 110 J        |

| Typical Weld Metal Analysis % |     |     |      |    |      |
|-------------------------------|-----|-----|------|----|------|
| C                             | Mn  | Si  | Ni   | Cr | Mo   |
| 0.05                          | 0.7 | 0.4 | 0.03 | 5  | 0.55 |

| Deposition Data |           |         |                |                                        |                 |
|-----------------|-----------|---------|----------------|----------------------------------------|-----------------|
| Diameter        | Current   | Voltage | Efficiency (%) | Fusion time per electrode at 90% I max | Deposition Rate |
| 2.0 x 300.0 mm  | 50-70 A   | 23 V    | 57 %           | 53 sec                                 | 0.49 kg/h       |
| 2.5 x 300.0 mm  | 65-95 A   | 23 V    | 57 %           | 63 sec                                 | 0.7 kg/h        |
| 3.2 x 350.0 mm  | 90-130 A  | 24 V    | 56 %           | 70 sec                                 | 1.0 kg/h        |
| 4.0 x 450.0 mm  | 125-165 A | 24 V    | 58 %           | 80 sec                                 | 1.3 kg/h        |