

## OK Autrod 5556

Continuous solid wire suitable for welding of aluminium alloys with up to approx. 5 % Mg that are not age-hardenable and alloys where a higher tensile strength is required. The corrosion resistance in marine atmosphere is high.

| Specifications  |                                                                   |
|-----------------|-------------------------------------------------------------------|
| Classifications | SFA/AWS A5.10 : ER5556<br>EN ISO 18273 : S Al 5556A (AlMg5Mn1Ti)  |
| Approvals       | ABS : ER 5556<br>BV : WC<br>ClassNK : KA15WCG (I)<br>CWB : ER5556 |

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

|               |                           |
|---------------|---------------------------|
| Alloy Type    | AlMgMn                    |
| Shielding Gas | I1, I2, I3 (EN ISO 14175) |

| Typical Tensile Properties |                |                  |            |
|----------------------------|----------------|------------------|------------|
| Condition                  | Yield Strength | Tensile Strength | Elongation |
| As Welded                  | 145 MPa        | 295 MPa          | 25 %       |

| Typical Charpy V-Notch Properties |                     |              |
|-----------------------------------|---------------------|--------------|
| Condition                         | Testing Temperature | Impact Value |
| As Welded                         | 20 °C               | 24 J         |

| Typical Wire Composition % |      |      |     |      |       |       |      |     |
|----------------------------|------|------|-----|------|-------|-------|------|-----|
| Mn                         | Si   | Cr   | Al  | Cu   | Ti    | Zn    | Fe   | Mg  |
| 0.7                        | 0.05 | 0.10 | Rem | 0.01 | 0.080 | 0.005 | 0.12 | 5.2 |

| Deposition Data |          |         |                 |                 |
|-----------------|----------|---------|-----------------|-----------------|
| Diameter        | Current  | Voltage | Wire Feed Speed | Deposition Rate |
| 1.0 mm          | 90-180 A | 22-26 V | 7.0-14.0 m/min  | 0.9-1.8 kg/h    |

| Recommended Welding Parameters |               |         |
|--------------------------------|---------------|---------|
| Current                        | Wire Diameter | Voltage |
| 140-260 A                      | 1.2 mm        | 20-29 V |
| 125-150 A                      | 1.2 mm        | 20-24 V |
| 180-210 A                      | 1.2 mm        | 22-26 V |
| 170-240 A                      | 1.2 mm        | 24-28 V |
| 140-300 A                      | 1.2 mm        | 20-29 V |
| 190-350 A                      | 1.6 mm        | 25-30 V |
| 240-300 A                      | 1.6 mm        | 22-27 V |
| 190-260 A                      | 1.6 mm        | 21-26 V |
| 290-340 A                      | 1.6 mm        | 26-30 V |
| 260-310 A                      | 1.6 mm        | 22-27 V |
| 280-320 A                      | 1.6 mm        | 24-28 V |
| 280-400 A                      | 2.4 mm        | 26-31 V |