

# OK Autrod 5356

OK Autrod 5356 is the most widely used welding alloy and can be classified as a general purpose type filler alloy. OK Autrod 5356 is typically chosen because of its relatively high shear strength. The 5XXX alloy base material, welded with OK Autrod 5356, with a weld pool chemistry greater than 3 % Mg and service temperatures in excess of 65°C are susceptible to stress corrosion cracking. The alloy is non-heat treatable.

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|--|---|
| <b>Classifications Wire Electrode:</b> | SFA/AWS A5.10:ER5356, EN ISO 18273:S Al 5356 (AlMg5Cr(A)), JIS Z 3232:A53556  |
| <b>Approvals:</b>                      | CE EN 13479, JIS JIS Z 3232, ABS ER 5356, BV WB, DB 61.039.01, DNV 5356, LR WB/11, VdTUV 04664, RINA WC (*), CWB: AWS A5.10/A5.10M:2012 ER5356, GL S-ALMg 5 |

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

## Typical Tensile Properties

| Condition | Yield Strength   | Tensile Strength | Elongation |
|-----------|------------------|------------------|------------|
| As welded | 110 MPa (16 ksi) | 235 MPa (34 ksi) | 17 %       |

## Typical Wire Composition %

| Mn   | Si   | Cr   | Al     | Cu   | Fe   | Mg  | Zn   |
|------|------|------|--------|------|------|-----|------|
| 0.13 | 0.05 | 0.12 | 94.560 | 0.01 | 0.13 | 4.9 | 0.01 |

## Deposition Data

| Diameter          | Current   | Voltage |
|-------------------|-----------|---------|
| 0.8 mm (.030 in.) | 60-170 A  | 13-24 V |
| 0.9 mm (.035 in.) | 60-170 A  | 13-24 V |
| 1.0 mm (.040 in.) | 90-210 A  | 15-26 V |
| 1.2 mm (3/64 in.) | 140-260 A | 20-29 V |
| 1.6 mm (1/16 in.) | 190-350 A | 25-30 V |
| 2.4 mm (3/32 in.) | 280-400 A | 26-31 V |