

## OK Autrod 19.30

A continuous, solid copper wire, for welding of copper-zinc alloys, low-alloyed copper and for Mig brazing of zinc coated steel sheets. OK Autrod 19.30 is alloyed with silicon and manganese. The alloy is widely used in the automotive industry for Mig brazing of galvanised steel in car body production. The wire is also suitable for overlay welding of un- and low alloyed steels. Pulsed GMAW is recommended.

### Specifications

#### Classifications

SFA/AWS A5.7 : ERCuSi-A  
EN ISO 24373 : CuSi3Mn1

#### Approvals

VdTÜV : 09147

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

#### Alloy Type

Alloyed copper (Cu + 3 % Si )

#### Shielding Gas

I1, I2, I3, M13 (EN439)

### Typical Tensile Properties

| Condition | Yield Strength | Tensile Strength | Elongation |
|-----------|----------------|------------------|------------|
| As Welded | 130 MPa        | 350 MPa          | 40 %       |

### Typical Wire Composition %

| Mn  | Si | Cu | Sn   | Zn   | Fe   |
|-----|----|----|------|------|------|
| 0.9 | 3  | 96 | 0.01 | 0.05 | 0.05 |

### Typical Weld Metal Analysis %

| Mn  | Si | P     | Ni    | Al    | Sn | Pb    | Fe   |
|-----|----|-------|-------|-------|----|-------|------|
| 0.8 | 3  | 0.005 | 0.005 | 0.004 | 0  | 0.003 | 0.05 |

### Recommended Welding Parameters

| Current   | Wire Diameter | Voltage   | Wire Feed Speed |
|-----------|---------------|-----------|-----------------|
| 60-165 A  | 0.8 mm        | 13-17.5 V | 4.0-13.0 mm/min |
| 80-210 A  | 1.0 mm        | 12.5-18 V | 4.0-12.0 mm/min |
| 150-320 A | 1.2 mm        | 16-29 V   | 5.0-11.5 mm/min |
|           | 1.6 mm        |           |                 |