

## **OK Autrod 19.30**

A continuous, solid, copper wire for the GMAW joining of copper-zinc alloys and low-alloyed copper and for the GMAW brazing of zinc-coated steel sheets. OK Autrod 19.30 is alloyed with silicon and manganese and has good flow properties and wear resistance. The alloy is widely used in the joining of zinc-coated steel sheets in car body production, as well as for overlay welding on low- and non-alloyed steels and cast iron. Pulsed GMAW is recommended. OK Autrod 19.30 is normally welded with pure Ar as the shielding gas; however, for GMAW brazing, the addition of 1% O2 improves the brazing properties.

| Classifications Wire Electrode: | 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 ) |  |
|-------------|-------------------------------|--|
|-------------|-------------------------------|--|

| Typical Tensile Properties |                |                  |            |  |
|----------------------------|----------------|------------------|------------|--|
| Condition                  | Yield Strength | Tensile Strength | Elongation |  |
| As welded                  | 130 MPa        | 350 MPa          | 40 %       |  |

| Typical Wire Composition % |    |    |      |      |      |
|----------------------------|----|----|------|------|------|
| Mn                         | Si | Cu | Fe   | Sn   | Zn   |
| 0.9                        | 3  | 96 | 0.05 | 0.01 | 0.05 |

| Deposition Data |           |           |                 |  |
|-----------------|-----------|-----------|-----------------|--|
| Diameter        | Current   | Voltage   | Wire Feed Speed |  |
| 0.8 mm          | 60-165 A  | 13-17.5 V | 4.0-13.0 m/min  |  |
| 1.0 mm          | 80-210 A  | 12.5-18 V | 4.0-12.0 m/min  |  |
| 1.2 mm          | 150-320 A | 16-29 V   | 5-11.5 m/min    |  |
| 1.6 mm          | -         | -         | -               |  |