

OK Autrod 12.51

OK Autrod 12.51 is a copper-coated solid wire with higher levels of deoxidizers (manganese and silicon). The high content of deoxidizers allow welding over heavier amounts of dirt, rust, and mill scale while providing a more fluid puddle and smoother bead profile.

| | |
|---|--|
| Clasificaciones metal de soldadura | EN ISO 14341-A : G 38 3 C1 3Si1 EN ISO 14341-A : G 42 4 M20 3Si1 EN ISO 14341-A : G 42 4 M21 3Si1 |
| Clasificaciones electrodo de hilo | SFA/AWS A5.18 : ER70S-6 EN ISO 14341-A : G 3Si1 CSA W48 : B-G 49A 3 C1 S6 JIS Z 3312 : YGW 12(C1) |
| Aprobaciones | ABS 3YSA BV SA3YM CE EN 13479 DB 42.039.06 DNV-GL III YMS LR 3YS H15 PRS 3YS RS 3YMS VdTUV 00899 CWB B-G 49A 3 C1 S6 JIS YGW12 NAKS/HAKC 0.8-2.0 mm NAKS/HAKC 1.2-1.6 mm RINA 3YS |

Las aprobaciones dependen de la ubicación de la fábrica. Póngase en contacto con ESAB para obtener más información.

| | |
|-------------------------|--|
| Tipo de aleación | Carbon-manganese steel (Mn/Si-alloyed) |
|-------------------------|--|

Propiedades tensoras típicas

| Condición | Límite de elasticidad | Resistencia a la tracción | Alargamiento |
|----------------------------|-----------------------|---------------------------|--------------|
| AWS CO2 (C1) | | | |
| As Welded | 430 MPa | 530 MPa | 30 % |
| EN 80Ar/20CO2 (M21) | | | |
| As Welded | 460 MPa | 560 MPa | 26 % |
| Stress Relieved 15hr 620°C | 370 MPa | 495 MPa | 28 % |
| EN CO2 (C1) | | | |
| As Welded | 440 MPa | 540 MPa | 25 % |

Typical Charpy V-Notch Properties

| Condition | Testing Temperature | Impact Value |
|----------------------------|---------------------|--------------|
| AWS CO2 (C1) | | |
| As Welded | -30 °C | 75 J |
| EN 80Ar/20CO2 (M21) | | |
| As Welded | 20 °C | 130 J |
| As Welded | -20 °C | 120 J |
| As Welded | -30 °C | 100 J |
| As Welded | -40 °C | 90 J |
| Stress Relieved 15hr 620°C | 20 °C | 120 J |
| Stress Relieved 15hr 620°C | -20 °C | 90 J |
| EN CO2 (C1) | | |
| As Welded | 20 °C | 110 J |
| As Welded | -30 °C | 75 J |

à% Análisis metal depositado (valores típicos)

| C | Mn | Si | S | P |
|------|------|------|-------|-------|
| 0.10 | 1.11 | 0.72 | 0.012 | 0.013 |

à% Composición hilo (valores típicos)

| C | Mn | Si |
|-------|------|------|
| 0.078 | 1.46 | 0.85 |

Datos aportación

| Diámetro | Amperios | Voltios | Velocidad de alimentación de hilo | Tasa de Deposición |
|----------|----------|---------|-----------------------------------|--------------------|
| 0.6 mm | 30-100 A | 15-20 V | 5.5-13.0 m/min | 0.7-1.7 kg/h |

OK Autrod 12.51

Datos aportación

| Diámetro | Amperios | Voltios | Velocidad de alimentación de hilo | Tasa de Deposición |
|----------|-----------|---------|-----------------------------------|--------------------|
| 0.8 mm | 60-200 A | 18-24 V | 3.2-10.0 m/min | 0.8-2.3 kg/h |
| 0.9 mm | 70-250 A | 18-26 V | 3.0-12.0 m/min | 0.9-3.5 kg/h |
| 1.0 mm | 80-300 A | 18-32 V | 2.7-15.0 m/min | 1.0-5.5 kg/h |
| 1.14 mm | 100-350 A | 18-34 V | 2.6-15.0 m/min | 1.2-7.0 kg/h |
| 1.2 mm | 120-380 A | 18-35 V | 2.5-15.0 m/min | 1.3-8.0 kg/h |
| 1.32 mm | 130-400 A | 19-35 V | 2.4-15.0 m/min | 1.5-8.5 kg/h |
| 1.4 mm | 150-420 A | 22-36 V | 2.3-12.0 m/min | 1.6-8.7 kg/h |
| 1.6 mm | 225-550 A | 28-38 V | 2.3-10.0 m/min | 2.1-9.4 kg/h |
| 2.0 mm | 300-650 A | 32-44 V | 3.0-7.0 m/min | 4.4-10.2 kg/h |

*APPROVAL COMMENT

Approval valid for lot numbers with prefix in right column.