

OK Autrod 12.64

OK Autrod 12.64 is a copper-coated, Mn-Si-alloyed G4Si1/ER70S-6 solid wire for the GMAW of non-alloyed steels, as used in general construction, automotive components, pressure vessel fabrication and shipbuilding. It has a slightly higher manganese and silicon content than OK Autrod 12.50 to increase the weld metal strength. This also promotes low sensitivity to surface impurities and contributes to smooth, sound welds. The wire can be used with both Ar/CO₂ mixed gas and pure CO₂ shielding gas

Classifications Weld Metal	EN ISO 636-A: W 46 3 W4Si1 EN ISO 14341-A: G 42 3 C1 4Si1 EN ISO 14341-A: G 46 5 M21 4Si1
Classifications Wire Electrode	EN ISO 636-A: W4Si1 EN ISO 14341-A: G 4Si1 SFA/AWS A5.18: ER70S-6
Godkännanden	ABS 3YSA BV SA3YM CE EN 13479 CWB B-G 49A 3 C1 S6 (B-G 49A 3 C G6) DB 42.039.11 DNV-GL III YMS LR 3YS H15 (C1 & M21) NAKS/HAKC 1.2-1.6 mm RS 3YMS VdTUV 04294

Godkännanden baseras på fabriken lokaliserad. Vänligen kontakta ESAB för mer information.

Alloy Type	Carbon-manganese steel (Mn/Si-alloyed)
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
AWS CO₂ (C1)			
As Welded	450 MPa	550 MPa	30 %
EN 80Ar/20CO₂ (M21)			
As Welded	490 MPa	590 MPa	29 %
Stress Relieved °C	385 MPa	520 MPa	-
EN CO₂ (C1)			
As Welded	460 MPa	570 MPa	28 %
EN 80Ar/20CO₂ (M21)			
As Welded	490 MPa	590 MPa	29 %
Stress Relieved °C	385 MPa	520 MPa	-

Slagseghetsdata Charpy V

Condition	Testing Temperature	Impact Value
AWS CO₂ (C1)		
As Welded	-30 °C	100 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
As Welded	-50 °C	80 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

Typical Wire Composition

C	Mn	Si
0.074	1.68	0.95

Insmålningsdata

Diameter	Ampere	Volt	Trådmatningshastighet	Insmålningshastighet
0.8 mm	60-185 A	18-24 V	3,2-10 m/min	0,8-2,5 kg/h
0.9 mm	70-250 A	18-26 V	3-12 m/min	0,8-3,3 kg/h
1.0 mm	80-300 A	18-32 V	2,7-15 m/min	1-5,5 kg/h

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Insmältningsdata				
Diameter	Ampere	Volt	Trådmatningshastighet	Insmältningshastighet
1.2 mm	120-380 A	18-35 V	2,3-15 m/min	1,2-8 kg/h
1.4 mm	150-420 A	22-36 V	2,5-12 m/min	1,7-8,5 kg/h
1.6 mm	225-550 A	28-38 V	2,3-12 m/min	2,1-11,4 kg/h
2.0 mm	300-650 A	32-44 V	4-15 m/min	3,2-12,5 kg/h