

OK Autrod 12.66

A copper coated solid wire especially designed for downhill circumferential GMAW on pipes in materials such as API 5L (grade 52 up to grade 70). The main applications are pipelines, compressor stations and associated works in the oil and gas distribution industries with special requirements. To meet these requirements the electrode is a "clean" type of EN ISO 14341-A G4Si1 as regards chemical analysis.

Specifications

Classifications

EN ISO 636-A : W 46 3 4Si1
 EN ISO 14341-A : G 42 2 C1 4Si1
 EN ISO 14341-A : G 46 3 M21 4Si1
 EN ISO 636-A : W 4Si1
 EN ISO 14341-A : G 4Si1
 SFA/AWS A5.18 : ER70S-6

Approvals

NAKS/HAKC : 1.0-1.2 mm
 VdTÜV : 10035

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

Alloy Type

Carbon-manganese steel (Mn/Si-alloyed)

Shielding Gas

M20, M21, C1 (EN ISO 14175)

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
AWS C1			
As Welded	470 MPa	575 MPa	29 %
EN C1			
As Welded	495 MPa	575 MPa	25 %
EN M21			
As Welded	545 MPa	600 MPa	26 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
AWS C1		
As Welded	-20 °C	100 J
As Welded	-29 °C	80 J
EN C1		
As Welded	-20 °C	80 J
As Welded	20 °C	120 J
EN M21		
As Welded	-20 °C	100 J
As Welded	-30 °C	80 J
As Welded	20 °C	140 J

Typical Wire Composition %

C	Mn	Si
0.09	1.65	0.97

Typical Weld Metal Analysis %

C	Mn	Si	S	P
0.07	1.25	0.82	0.009	0.009

MILD STEEL

MIG WIRES / TIG RODS (GMAWIGTAW)



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Welding_Parameters
Wire Diameter
1.0 mm
1.2 mm