

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)

Typical Tensile Properties

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 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	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