OK AristoRod 12.57

The non copper coated OK AristoRod 12.57 is a manganese-silicon bearing solid wire for welding of unalloyed steels, such as general structural, pressure vessel and ship building steels with a minimum tensile strength of 500 MPa, and for fine-grained carbon-manganese steels for the same purpose with a minimum yield strength of max 400 MPa. The electrode can be welded with Ar/20CO2 or with pure CO2 as the shielding gas. The wire electrode is suitable for welding at high currents.

Specifications	
Classifications	EN ISO 14341-A : G 35 2 C1 2Si EN ISO 14341-A : G 38 3 M21 2Si EN ISO 14341-A : G 2Si SFA/AWS A5.18 : ER70S-3 CAN/CSA-ISO 14341 : B-G 49A 2 C1 S3
Approvals	CE : EN 13479 CWB : B-G 49A 2 C1 S3 DB : 42.039.10 UKCA : EN 13479 VdTÜV : 10615

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**
EN 80Ar/20CO2 (M21)			
As Welded	430 MPa	515 MPa	26 %
EN CO2 (C1)			
As Welded	385 MPa	485 MPa	25 %

Charpy Testing		
Testing Condition	**Testing Temp**	**Impact Value**
EN 80Ar/20CO2 (M21)		
As Welded	20 °C	140 J
As Welded	-20 °C	110 J
As Welded	-30 °C	90 J
EN CO2 (C1)		
As Welded	20 °C	125 J
As Welded	-20 °C	90 J

Typical Weld Metal Analysis %					
C	**Mn**	**Si**	**S**	**P**	**Cu**
80Ar/20CO2 (M21)					
0.10	0.80	0.46	0.011	0.015	0
CO2 (C1)					
0.10	0	0.41	0.011	0.015	0

Typical Wire Composition %		
C	**Mn**	**Si**
0.074	1.05	0.55

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Deposition Data				
Diameter	**Amps**	**Volts**	**Wire Feed Speed**	**Deposition Rate**
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	1.0-5.6 kg/h
1.2 mm	120-380 A	18-34 V	2.5-15.0 m/min	1.3-8.0 kg/h
1.6 mm	120-380 A	18-34 V	2.5-15.0 m/min	1.3-8.0 kg/h