OK AristoRod 13.12

The non copper coated OK AristoRod 13.12 is a low-alloyed, chromium-molybdenum (1,1% Cr, 0,5% Mo), solid wire for GMAW of creep resistant steels of similar composition. Suitable for service temperatures up to 450 C. The AristoRod wires are suitable for operating at high currents with maintained disturbance free wire feeding giving a stable arc with a low amount of spatter. OK AristoRod 13.12 delivered in the unique Esab Octagonal Marathon Pac is excellent in mechanised welding applications.

Specifications	
Classifications	EN ISO 21952-A : G CrMo1Si EN ISO 21952-B : G 55M 1CM3 SFA/AWS A5.28 : ER80S-G GOST 2246 : 08X CM A
Approvals	NAKS/HAKC : 0.8-1.2 mm VdTÜV : 10089

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

Alloy Type	Low Alloyed (1 % Cr, 0.5 % Mo)

Tensile_Properties			
Testing Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
EN 80Ar/20CO2 (M21)			
Stress Relieved 1 hour(s) 690 °C	500 MPa	610 MPa	26 %
Q.T. 15 hour(s) 940+730 °C	320 MPa	460 MPa	35 %
As Welded	640 MPa	740 MPa	18 %
As Welded+	605 MPa	760 MPa	15 %
PWHT 0.5 hour(s) 700 °C	450 MPa	580 MPa	24 %
Q.T.+ 15 hour(s) 940+730 °C	210 MPa	410 MPa	25 %
Stress relieved++ 0.5 hour(s) 700 °C	390 MPa	500 MPa	17 %

Charpy Testing		
Testing Condition	**Testing Temp**	**Impact Value**
EN 80Ar/20CO2 (M21)		
Q.T.	20 °C	115 J
Q.T.	-20 °C	30 J
Stress Relieved	-40 °C	80 J
Stress Relieved	-20 °C	90 J
Q.T.	0 °C	60 J
As Welded	-40 °C	30 J
Stress Relieved	20 °C	130 J
As Welded	20 °C	90 J
As Welded	-20 °C	60 J
As Welded	0 °C	80 J

Typical Wire Composition %					
C	**Mn**	**Si**	**Ni**	**Cr**	**Mo**
0.11	1.00	0.65	0.02	1.18	0.42

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Typical Weld Metal Analysis %						
C	**Mn**	**Si**	**S**	**P**	**Cr**	**Mo**
0.1	1.0	0.7	0.015	0.010	1.1	0.5

Deposition Data				
Diameter	**Amps**	**Volts**	**Wire Feed Speed**	**Deposition Rate**
0.8 mm	80-280 A	18-28 V	2.7-14.7 m/min	1.0-5.4 kg/h
1.0 mm	80-280 A	18-28 V	2.7-14.7 m/min	1.0-5.4 kg/h
1.2 mm	120-350 A	20-33 V	2.7-12.4 m/min	1.5-6.6 kg/h
1.6 mm	225-480 A	26-38 V	3.1-12.0 m/min	3.3-11.6 kg/h