OK AristoRod 69

The non copper coated OK AristoRod 69 is a low-alloyed, chromium-nickel-molybdenum (0,3% Cr, 1,4% Ni, 0,25% Mo), solid wire for GMAW of high tensile strength steels requiring tough weld metal for critical applications. Also suitable when high impact strength at lower temperatures is required. 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 69 delivered in the unique Esab Octagonal Marathon Pac is excellent in mechanised welding applications.

Specifications	
Classifications	EN ISO 16834-A : G 69 4 M20 Mn3Ni1CrMo EN ISO 16834-A : G 69 4 M21 Mn3Ni1CrMo EN ISO 16834-A : G Mn3Ni1CrMo SFA/AWS A5.28 : ER110S-G
Approvals	ABS : ER 110S-G (M21) CE : EN 13479 DB : 42.039.33 DNV : G 69 4 M Mn3Ni1CrMo UKCA : EN 13479 VdTÜV : 11837

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

Alloy Type	Low alloyed (1.4 % Ni, 0.3 % Cr, 0.3 % Mo)
Shielding Gas	M20, M21 (EN ISO 14175)

Tensile_Properties			
Testing Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
EN 80Ar/20CO2 (M21)			
As Welded	730 MPa	800 MPa	19 %
Stress Relieved 15 hour(s) 620 °C	690 MPa	750 MPa	20 %
AWS 80Ar/20CO2 (M21)			
As Welded	715 MPa	805 MPa	17 %
EN 92Ar/8CO2 (M20)			
As Welded	725 MPa	780 MPa	19 %

Charpy Testing		
Testing Condition	**Testing Temp**	**Impact Value**
EN 80Ar/20CO2 (M21)		
As Welded	20 °C	100 J
Stress Relieved 15 hour(s) 620 °C	20 °C	130 J
Stress Relieved 15 hour(s) 620 °C	-20 °C	60 J
Stress Relieved 15 hour(s) 620 °C	-30 °C	60 J
As Welded	-40 °C	73 J
AWS 80Ar/20CO2 (M21)		
As Welded	-30 °C	80 J
As Welded	-40 °C	60 J
EN 92Ar/8CO2 (M20)		
As Welded	-40 °C	65 J

Typical Weld Metal Analysis %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**V**	**Cu**
80Ar/20CO2 (M21)									

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Typical Weld Metal Analysis %									
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Cr**	**Mo**	**V**	**Cu**
0.06	1.6	0.6	0.01	0.01	1.4	0.3	0.25	0.07	0.07

Typical Wire Composition %					
C	**Mn**	**Si**	**Ni**	**Cr**	**Mo**
0.089	1.54	0.53	1.23	0.26	0.24

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
0.9 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	3.1-8.1 m/min	3.3 kg/h