

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.

Classifications	EN ISO 16834-A : G 69 4 M 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-GL : IV Y69MS (M21) VdTÜV : 11837 NAKS/HAKC : 1.2MM

Alloy Type	Low alloyed (1.4 % Ni, 0.3 % Cr, 0.3 % Mo)
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
EN 80Ar/20CO2 (M21)			
As Welded	730 MPa (106 ksi)	800 MPa (116 ksi)	19 %
Stress Relieved 15 hour(s) 620 °C (1148 °F)	690 MPa (100 ksi)	750 MPa (109 ksi)	20 %
AWS 80Ar/20CO2 (M21)			
As Welded	715 MPa (104 ksi)	805 MPa (117 ksi)	17 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
EN 80Ar/20CO2 (M21)		
Stress Relieved 15 hour(s) 620 °C (1148 °F)	20 °C (68 °F)	130 J (96 ft-lb)
As Welded	20 °C (68 °F)	100 J (74 ft-lb)
As Welded	-40 °C (-40 °F)	73 J (54 ft-lb)
Stress Relieved 15 hour(s) 620 °C (1148 °F)	-20 °C (-4 °F)	60 J (44 ft-lb)
Stress Relieved 15 hour(s) 620 °C (1148 °F)	-30 °C (-22 °F)	60 J (44 ft-lb)
AWS 80Ar/20CO2 (M21)		
As Welded	-40 °C (-40 °F)	60 J (44 ft-lb)
As Welded	-30 °C (-22 °F)	80 J (59 ft-lb)

Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo
0.089	1.54	0.53	1.23	0.26	0.24

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
80Ar/20CO2 (M21)									
0.06	1.6	0.6	0.01	0.01	1.4	0.3	0.25	0.07	0.07



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Deposition Data				
Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm (0.030 in.)	80-280 A	18-28 V	2.7-14.7 m/min (106-579 in./min)	1.0-5.4 kg/h (2.2-11. lbs/h)
0.9 mm (0.035 in.)	80-280 A	18-28 V	2.7-14.7 m/min (106-579 in./min)	1.0-5.4 kg/h (2.2-11. lbs/h)
1.0 mm (0.040 in.)	80-280 A	18-28 V	2.7-14.7 m/min (106-579 in./min)	1.0-5.4 kg/h (2.2-11. lbs/h)
1.2 mm (0.047 in.)	120-350 A	20-33 V	2.7-12.4 m/min (106-488 in./min)	1.5-6.6 kg/h (3.3-14. lbs/h)
1.6 mm (1/16 in.)	225-480 A	26-38 V	3.1-8.1 m/min (122-319 in./min)	3.3-0.0 kg/h (7.3-0.0 lbs/h)