

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)			
Stress Relieved 15 hour(s) 620 °C	690 MPa	750 MPa	20 %
As Welded	730 MPa	800 MPa	19 %
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)		
Stress Relieved	20 °C	130 J
Stress Relieved	-30 °C	60 J
Stress Relieved	-20 °C	60 J
As Welded	20 °C	100 J
As Welded	-40 °C	73 J
AWS 80Ar/20CO2 (M21)		
As Welded	-40 °C	60 J
As Welded	-30 °C	80 J
EN 92Ar/8CO2 (M20)		
As Welded	-40 °C	65 J

Typical Wire Composition %

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

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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

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	3.3-0.0 kg/h