

OK AristoRod 55

The non copper coated OK AristoRod 55 is a low-alloyed, chromium-nickel-molybdenum (0,5% Cr, 0,5% Ni, 0,2% Mo), solid wire for GMAW of high strength steels. But, also suitable when welding steels where good impact toughness is required at lower temperatures. 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 55 delivered in the unique ESAB Octagonal Marathon Pac is excellent in mechanised welding applications.

Specifications

Classifications	EN ISO 16834-A : G 55 4 M20 Mn3NiCrMo EN ISO 16834-A : G 55 4 M21 Mn3NiCrMo EN ISO 16834-A : G Mn3NiCrMo SFA/AWS A5.28 : ER100S-G
Approvals	CE : EN 13479 NAKS/HAKC : 1.2MM UKCA : EN 13479

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

Alloy Type	Low alloyed (0.5 % Cr, 0.5 % Ni, 0.2 % Mo)
Shielding Gas	M20, M21 (EN ISO 14175)

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
EN 80Ar/20CO₂ (M21)			
Stress relieved+ 1 hour(s) 620 °C	660 MPa	750 MPa	24 %
As Welded	650 MPa	750 MPa	20 %
Stress Relieved 1 hour(s) 570 °C	660 MPa	750 MPa	24 %
EN 92Ar/8CO₂ (M20)			
As Welded	680 MPa	760 MPa	18 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
EN 80Ar/20CO₂ (M21)		
Stress Relieved	-20 °C	60 J
Stress Relieved	-40 °C	50 J
As Welded	-60 °C	50 J
Stress relieved+	-50 °C	40 J
As Welded	-50 °C	50 J
Stress relieved+	0 °C	95 J
Stress relieved+	-30 °C	55 J
Stress Relieved	-60 °C	35 J
As Welded	-20 °C	75 J
As Welded	-40 °C	60 J
Stress relieved+	-20 °C	70 J
As Welded	0 °C	80 J
As Welded	-30 °C	65 J
EN 92Ar/8CO₂ (M20)		
As Welded	-30 °C	80 J
As Welded	-40 °C	60 J

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Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo
0.12	1.38	0.71	0.53	0.58	0.20

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo	Cu
0.11	1.1	0.5	0.015	0.015	0.5	0.5	0.2	0.07

Deposition Data

Diameter	Amps	Volts	Wire Feed Speed	Deposition Rate
0.8 mm	40-170 A	16-22 V	2.0-10.8 m/min	0.4-2.6 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	3.5-12.0 m/min	3.3-11.6 kg/h