

## OK Aristorod 13.26

The non copper coated OK AristoRod 13.26 is a low-alloyed, nickel-copper (0,8% Ni, 0,45% Cu), solid wire for GMAW of weathering steels, such as COR-TEN, Patinax, Dillicor etc. According to NACE it would be acceptable to use these welding consumables, since the nickel content is below the maximum acceptable level, 1 % for sour gas applications. One other requirement from NACE is the maximum hardness of the deposited weld metal, which must not exceed 22 HRC. The weld metal composition and mechanical properties also make this product suitable for welding high strength steels with a minimum yield strength less than 470 MPa. 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 13.26 delivered in the unique Esab Octagonal Marathon Pac is excellent in mechanised welding applications.

Specifications	
<b>Classifications</b>	EN ISO 14341-A : G 42 0 C1 Z 3Ni1Cu EN ISO 14341-A : G 46 4 M21 Z 3Ni1Cu EN ISO 14341-A : G Z 3Ni1Cu SFA/AWS A5.28 : ER80S-G
<b>Approvals</b>	CE : EN 13479 DB : 42.039.32 DNV-GL : II YMS (C1) DNV-GL : III YMS (M21) NAKS/HAKC : 1.2MM VdTÜV : 19755
<b>Alloy Type</b>	Low alloyed (0.8 % Ni, 0.4 % Cu)

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
<b>EN 80Ar/20CO2 (M21)</b>			
As Welded	510 MPa	620 MPa	23 %
<b>EN CO2 (C1)</b>			
As Welded	470 MPa	580 MPa	25 %
<b>AWS 80Ar/20CO2 (M21)</b>			
As Welded	540 MPa	625 MPa	26 %
<b>AWS 98Ar/2O2 (M13)</b>			
As Welded	580 MPa	650 MPa	22 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
<b>EN 80Ar/20CO2 (M21)</b>		
As Welded	-40 °C	60 J
<b>EN CO2 (C1)</b>		
As Welded	0 °C	65 J
<b>AWS 80Ar/20CO2 (M21)</b>		
As Welded	-40 °C	80 J
As Welded	-60 °C	50 J
As Welded	20 °C	140 J
As Welded	-20 °C	110 J
As Welded	0 °C	140 J
<b>AWS 98Ar/2O2 (M13)</b>		
As Welded	-60 °C	30 J
As Welded	-40 °C	70 J
As Welded	-20 °C	100 J
As Welded	20 °C	140 J

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### Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cu
<b>CO2 (C1)</b>						
0.1	1.3	0.7	0.015	0.010	0.8	0.3
<b>80Ar/20CO2 (M21)</b>						
0.1	1.4	0.8	0.015	0.010	0.8	0.3

### Typical Wire Composition %

C	Mn	Si	Ni	Cr	Mo	Cu
0.095	1.32	0.80	0.84	0.12	0.02	0.30

### Deposition Data

Diameter	Current	Voltage	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
1.4 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