



Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK AristoRod 13.29

Signed by Mats Linde	Approved by Per Sundberg/Barbro Karlström	Reg no EN002232	Cancelling EN001136	Reg date 2004-06-23	Page 1 (2)
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REASON FOR ISSUE

New Product

GENERAL

The non copper coated OK AristoRod 13.29 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 13.29 delivered in the unique Esab Octagonal Marathon Pac is excellent in mechanised welding applications.

Shielding Gas: Ar + 15-25 % CO₂, CO₂

Alloy Type: Low alloyed (1.4 % Ni, 0.3 % Cr, 0.3 % Mo)

CLASSIFICATIONS Weld Metal

EN 12534 G 62 3 M G Mn3Ni1CrMo

CLASSIFICATIONS Wire Electrode

EN 12534 G Mn3Ni1CrMo
SFA/AWS A5.28 ER100S-G

APPROVALS

Ü 42.039/5

DB 42.039.33

VdTÜV 10090

CHEMICAL COMPOSITION

Compound	All Weld Metal (%)	Wire/Strip (%)	
	Nom	Min	Max
	80Ar/20CO ₂ (M21)		
C	0.06		0.10
Si	0.6	0.4	0.7
Mn	1.6	1.5	1.7
P	0.01		0.015
S	0.01		0.015
Cr	0.3	0.20	0.40
Ni	1.4	1.20	1.60
Mo	0.25	0.2	0.3
V	0.07	0.05	0.10
Cu	0.07		0.15



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MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal					
	AWS 80Ar/20CO2 (M21)	EN 80Ar/20CO2 (M21)			EN 80Ar/20CO2 (M21)	EN 80Ar/20CO2 (M21)
	As welded	As welded			Normalized 920°C 0,5h	Stress relieved 620°C 15h
	Min	Min	Max	Typ	Typ	Typ
Rp0.2 (MPa)		620		750	350	690
Rm (MPa)	690	700	890	820	640	750
A4-A5 (%)		18		19	26	20
Charpy V at 20°C (J)				100	100	130
Charpy V at -20°C (J)				70	50	60
Charpy V at -30°C (J)		47		60	50	60

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	H		Feed		U	
Ø	Min	Max	Nom	Nom	Min	Max	Min	Max	Min	Max
1.0	80	280	15		1	5,4	2,7	14,7	18	28
1.2	120	350	18		1,5	6,6	2,7	12,4	20	33
1.6	225	480	22		3,3	0	3,1	8,1	26	38

W = Gas consumption (l / min)

η = Recovery, g weld metal / 100g wire (%)

H = Deposit rate (kg weld metal / hour arc time)

Feed = Feeding rate (m/min)

U = Arc voltage (V)