



Product Data Sheet

G 'Gas-shielded metal-arc welding'

OK AristoRod 55

Prepared by Mats Linde	Qualified by Tero Tolonen	Approved by Mikael Mimer	Reg no EN006519	Cancelling EN005224	Reg date 2014-08-19	Page 1 (2)
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REASON FOR ISSUE

LR approval added

GENERAL

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.

Shielding Gas: M21 (EN ISO 14175)

Alloy Type: Low alloyed (0.5 % Cr, 0.5 % Ni, 0.2 % Mo)

CLASSIFICATIONS Wire

EN ISO 16834-A G Mn3NiCrMo

CLASSIFICATIONS Weld Metal (as welded)

EN ISO 16834-A G 55 4 M Mn3NiCrMo

CLASSIFICATIONS Wire Electrode

SFA/AWS A5.28 ER100S-G

APPROVALS

CE EN 13479

LR 4Y55

CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
	Nom	Min	Max
C	0.11	0.07	0.14
Si	0.5	0.60	0.80
Mn	1.1	1.30	1.80
P	0.015		0.015
S	0.015		0.015
Cr	0.5	0.50	0.65
Ni	0.5	0.50	0.65
Mo	0.2	0.15	0.30
Cu	0.07		0.15
Others tot			0.25



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MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Properties	AWS 80Ar/20CO2 (M21) As welded			EN 80Ar/20CO2 (M21) As welded			EN 80Ar/20CO2 (M21) Stress relieved+ 620°C 1h			EN 80Ar/20CO2 (M21) Stress relieved 570°C 1h		
	Min	Max	Typ	Min	Max	Typ	Min	Max	Typ	Min	Max	Typ
Rp0.2 (MPa)				550		690	660			660		
Rm (MPa)	690			640	820	770	750			750		
A4-A5 (%)				18		20	24			24		
at 0°C (J)						80	95					
at -20°C (J)						75	70			60		
at -30°C (J)						65	55					
at -40°C (J)				47		60				50		
at -50°C (J)						50	40					
at -60°C (J)						50				35		

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	H		Feed			U	
	Min	Max			Nom	Nom	Min	Max	Min	Max	Min
\emptyset											
0.8	40	170	12		0,4	2,6	2	10,8	16		22
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	11,6	3,5	12,0	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)