



# Product Data Sheet

G 'Gas-shielded metal-arc welding'

# OK AristoRod 13.16

Prepared by Mats Linde	Qualified by Christos Skodras	Approved by Per-Erik Andersson	Reg no EN005836	Cancelling EN005802	Reg date 2012-06-08	Page 1 (2)
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## REASON FOR ISSUE

CE added

## GENERAL

OK AristoRod 13.16 is a low-alloyed, chromium-molybdenum (1,3% Cr, 0,5% Mo) ER80S-B2, solid wire for GMAW of creep resistant steels like SA-387 Grade 11, A 335 Grade P11 or similar materials. OK AristoRod 13.16 is a high purity wire with a guaranteed Bruscato factor  $X < 15$ . It is treated with ESAB's unique advanced surface characteristics (ASC) technology, taking MAG welding operations to new levels of performance and all-round efficiency, especially in robotic and mechanised welding. Characteristics features include excellent start properties; trouble free feeding at high wire speeds and lengthy feed distances; a very stable arc at high welding currents; extremely low levels of spatter; low fume emission; reduced contact tip wear and improved protection against corrosion of the wire.

**Shielding Gas:** C1 (EN ISO 14175)

**Alloy Type:** Low-alloyed, 1,3Cr-0,5Mo

## CLASSIFICATIONS Wire Electrode

EN ISO 21952-A Z CrMo1Si  
EN ISO 21952-B G 55A 1CM  
SFA/AWS A5.28 ER80S-B2

## APPROVALS

CE EN 13479

## CHEMICAL COMPOSITION

	All Weld Metal (%)	Wire/Strip (%)	
	Nom	Min	Max
C	0.1	0.07	0.12
Si	0.5	0.40	0.70
Mn	0.4	0.40	0.70
P	0.010		0.015
S	0.015		0.020
Cr	1.3	1.20	1.50
Ni			0.20
Mo	0.5	0.40	0.65
Cu	0.10		0.15
Mn+Si			1.15
X			15
J (Watanabe)			150
Others tot			0.50

Comments:  
 $X = (10P+5Sb+4Sn+As) / 100$  (values in ppm)



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## MECHANICAL PROPERTIES OF WELD METAL

	<b>All Weld Metal</b>
	80Ar/CO <sub>2</sub> (M21) AWS
	Stress relieved 620°C 1h
<b>Properties</b>	<b>Min</b>
Rp0.2 (MPa)	470
Rm (MPa)	550
A4-A5 (%)	19

## Comments:

## ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	$\eta$		H		Feed			U	
	Min	Max		Nom	Nom	Min	Max	Min	Max	Min	Max	
$\emptyset$												
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	

**W** = Gas consumption (l / min)

$\eta$  = Recovery, g weld metal / 100g wire (%)

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

**Feed** = Feeding rate (m/min)

**U** = Arc voltage (V)