



Product Data Sheet

T 'Tubular cored electrode arc welding'

OK Tubrod 15.15

Prepared by Daniel Amahatsion	Qualified by P-O Oskarsson	Approved by Neil Farrow	Reg no EN007585	Cancelling EN006466	Reg date 2017-07-11	Page 1 (2)
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REASON FOR ISSUE

EN ISO classifications updated

GENERAL

A positional rutile cored wire for use with C1 or M21 shielding gas.

Shielding Gas: M21, C1 (EN ISO 14175)

Polarity: DC+

Alloy Type: C Mn

Fill Type: Rutile

Diff Hydrogen: < 5 ml/100g (<10 ml/100g for 1.6mm)

CLASSIFICATIONS Weld Metal

SFA/AWS A5.36	E71T1-C1A0-CS2
SFA/AWS A5.36	E71T1-M21A0-CS2
EN ISO 17632-A	T 46 2 P C1 1 H5
EN ISO 17632-A	T 46 2 P M21 2 H5

APPROVALS

ABS	3YSA H5 (C1)	
ABS	3YSA H5 (M21)	
BV	3YS H5 (C1)	
BV	3YS H5 (M21)	
CE	EN 13479	
DB	42.039.14 (M21 and C1)	
DNV-GL	III YMS H5 (C1)	III YMS H5 (M21)
LR	3YS H5 (C1)	
LR	3YS H5 (M21)	
RS	3YMS H5 (C1)	
RS	3YMS H5 (M21)	
VdTÜV	04175	

CHEMICAL COMPOSITION

All Weld Metal (%)

	M21 shielding gas		C1 shielding gas	
	Min	Max	Min	Max
C	0.020	0.080	0.020	0.080
Si	0.10	0.60	0.10	0.60
Mn	1.10	1.60	1.00	1.50
P		0.025		0.025
S		0.025		0.025
Cr		0.2		0.20
Ni		0.50		0.50
Mo		0.2		0.2
V		0.08		0.08
Nb		0.05		0.05
Cu		0.3		0.3



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MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal		
	C1 shielding gas EN		
	As welded		
	Min	Max	Typ
ReL (MPa)	460		528
Rm (MPa)	530	660	560
A5 (%)	22		27
Charpy V at -20°C (J)	54		159

Comments:

The hydrogen values are determined in accordance with the method given in ISO 3690. Welding parameters for hydrogen determination:

Wire diameter 1.2mm ,Shielding gas: M21, Current: 250 amps,

Voltage: 29 V, Stickout: 15mm, DC+ polarity.

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	H	Feed		U	
	Min	Max	Nom	Nom	Min	Max	Min	Max	Max
Ø									
1.2	100	300	20	85	1.3	5.8	3.2	14.5	30
1.6	150	360	20	85	2.0	6.2	3.0	11.0	34

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)