



Product Data Sheet

OK Tubrod 15.14

T 'Tubular cored electrode arc welding'

Prepared by Neil Farrow	Approved by Neil Farrow/Christos Skodras	Reg no EN005361	Cancelling EN005312	Reg date 2011-03-11	Page 1 (2)
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REASON FOR ISSUE

EN ISO Classification amended

GENERAL

A multi-purpose all positional rutile cored wire for use with C1 or M21 shielding gas. Diameters less than 1.4mm are all-positional except vertical down.

Shielding Gas: M21, C1 (EN ISO 14175)

Polarity: DC+

Alloy Type: C Mn

Fill Type: Rutile

Diff Hydrogen: < 5 ml/100g (<10ml/100g for 1.4 & 1.6mm)

CLASSIFICATIONS Weld Metal

SFA/AWS A5.20	E71T-1C
SFA/AWS A5.20	E71T-1M
EN ISO 17632-A	T 46 2 P C 1 H5
EN ISO 17632-A	T 46 2 P M 2 H5

APPROVALS

ABS	3YSAH10 (M21 and C1)
BV	SA3YM (M21 and C1)
CE	EN 13479
DB	42.039.05 (M21 and C1)
DNV	IIIYMS (M21 and C1)
GL	3YS (M21 and C1)
LR	3Y H5 (M21) (with OK Backing Rectangular 13)
LR	3YS (M21 and C1)
PRS	3YS H10 (M21 and C1)
RINA	2Y S (C1) - 1.2mm only
RINA	3Y S (M21) - 1.2mm only
RS	3YMSH10 (M21 and C1)
VdTÜV	07651

CHEMICAL COMPOSITION

All Weld Metal (%)

	C1 Shielding gas		M21 Shielding gas	
	Min	Max	Min	Max
C	0.020	0.080	0.020	0.080
Si	0.30	0.80	0.30	0.80
Mn	1.00	1.50	1.10	1.60
P		0.025		0.025
S		0.025		0.025
Cr		0.2		0.2
Ni		0.5		0.5
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		
	Min	Max	Typ
	C1 Shielding gas		
	As welded		
ReL (MPa)	460		497
Rm (MPa)	530	660	588
A5 (%)	22		27
Charpy V at -20°C (J)	54		110

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, <5ml/100g.

Wire diameter: 1.6mm Shielding gas: M21, Current 350 amps, Voltage 29 V, Stickout: 20mm, <10ml/100g

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	H	Feed			U	
	Min	Max				Min	Max	Min		Max
\emptyset			Nom	Nom	Min	Max	Min	Max	Min	Max
1.2	110	300	20	85	1.3	5.8	3.2	14.5	21	32
1.4	130	320	20	85	1.4	6.3	3.0	12.5	22	32
1.6	150	360	20	85	2.0	6.2	3.0	11.0	24	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)