



Product Data Sheet

T 'Tubular cored electrode arc welding'

OK Tubrod 14.01

Prepared by Daniel Amahatsion	Qualified by P-O Oskarsson	Approved by Neil Farrow	Reg no EN007654	Cancelling EN007636	Reg date 2017-11-03	Page 1 (2)
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REASON FOR ISSUE

Cu range amended.

GENERAL

A 0.5% Cu metal cored wire for use with M21 shielding gas.

Shielding Gas: M21 (EN ISO 14175)

Polarity: DC+-

Alloy Type: Low alloy (0.5% Cu).

Fill Type: Metal cored

Diff Hydrogen: <10 ml/100g

CLASSIFICATIONS Weld Metal

SFA/AWS A5.36 E71T15-M21A0-G
EN ISO 17632-A T 42 2 Z M M21 2 H10

APPROVALS

CE EN 13479

CHEMICAL COMPOSITION

All Weld Metal (%)

	M21 shielding gas	
	Min	Max
C	0.04	0.11
Si	0.35	0.85
Mn	1.05	1.65
P		0.025
S		0.025
Cr		0.20
Ni		0.50
Mo		0.20
V		0.08
Nb		0.05
Cu	0.5	0.6

MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Properties	M21 shielding gas		
	As welded		
	Min	Max	Typ
ReL (MPa)	420		489
Rm (MPa)	510	640	595
A5 (%)	22		26
Charpy V at -20°C (J)	47		98

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: 30,V, Stickout 15mm,



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ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	H		Feed			U
	Min	Max	Nom	Nom	Min	Max	Min	Max	Min	Max
$\emptyset$ 1.2	100	320	20	95	1.3	7.5	1.8	12.0	16	32

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)