

T "Tubular cored electrode arc welding"

Signed by Neil Farrow	Approved by Shaun Studholme/Barbro Karlström	Reg no EN002301	Cancelling DCT-90-6125	Reg date 2004-07-06	Page 1 (2)
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GENERAL

A basic cored wire which gives good toughness down to -60 °C for use with M21 shielding gas. Diameters less than 1.4mm are all-positional.

Shielding Gas: M21 (EN 439)

Alloy Type: Low alloy

Polarity: DC-(+)

Fill Type: Basic

CLASSIFICATIONS Weld Metal

EN 758 T 42 6 1Ni B M 1 H5
SFA/AWS A5.29 E71T5-K6M H4

APPROVALS

Ü 42.105/2
ABS 3SA, 3YSA
BV SA4 5YMHH
CL 0956
DB 42.105.12
DNV V Y40MS (H5)
DS T 42 6 1Ni B M 1 H5
GL 6Y10S
LR 5Y40S
RINA SG 52 5
RS 5Y42HHS
UDT EN 758
VdTÜV 05648

CHEMICAL COMPOSITION

All Weld Metal (%)

	M21 shielding gas	
	Min	Max
C	0.05	0.09
Si	0.30	0.60
Mn	1.00	1.40
P		0.020
S		0.015
Ni	0.70	1.00

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MECHANICAL PROPERTIES OF WELD METAL

Properties	All Weld Metal			
	M21 shielding gas		M21 shielding gas	
	Stress relieved 600°C 2h		As welded	
	Min	Max	Min	Max
Rp0.2 (MPa)	400		420	
Rm (MPa)	500	575	510	600
A4-A5 (%)	28		26	
Charpy V at -40°C (J)	100		100	
Charpy V at -60°C (J)	60		54	
	Comments: Elongation = A5		Comments: Elongation = A5	

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	H		Feed		U	
	Min	Max			Nom	Nom	Min	Max	Min	Max
\emptyset			Nom	Nom	Min	Max	Min	Max	Min	Max
1.0	100	250	20	90	1.4	4.7	5.6	18.6	16	31
1.2	150	350	20	90	2.1	7.9	5.8	22.0	20	35
1.6	150	450	20	90	1.8	7.9	2.8	12.0	18	36

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)