



Product Data Sheet

T 'Tubular cored electrode arc welding'

Coreweld 46 LS

Prepared by Neil Farrow	Qualified by Christos Skodras	Approved by Neil Farrow	Reg no EN005731	Cancelling EN005545	Reg date 2012-03-09	Page 1 (2)
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REASON FOR ISSUE

New diameters 1.4 and 1.6mm and approvals for 1.2mm added

GENERAL

A metal cored wire which gives a very low amount of silica on the weld surface. Designed for robotic or automated thin plate welding with argon / carbon dioxide shielding gas. The wider welding arc produced means larger gaps can be bridged than with solid wire.

Shielding Gas: M20, M21 (EN ISO 14175)

Polarity: DC+

Alloy Type: C Mn steel

Fill Type: Metal cored

Diff Hydrogen: < 4 ml/100g

CLASSIFICATIONS Weld Metal

SFA/AWS A5.18 E70C-6M H4
EN ISO 17632-A T 46 4 M M 2 H5

APPROVALS

ABS	4Y40M H5 (M20 and M21)	(1.2mm)
BV	4Y40 H5 (M20 and M21)	(1.2mm)
CE	EN 13479	
DB	42.039.38	(1.2mm)
DNV	IV Y40MS(H5) (M20 and M21)	(1.2mm)
GL	4Y40H5S (M20 and M21)	(1.2mm)
VdTÜV	12152	(1.2mm)

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.03	0.10
Si	0.40	0.80
Mn	1.10	1.60
P		0.030
S		0.030
Cr		0.20
Ni		0.50
Mo		0.20
V		0.08
Nb		0.05
Cu		0.30



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MECHANICAL PROPERTIES OF WELD METAL

All Weld Metal

Properties	As welded		
	Min	Max	Typ
Rp0.2 (MPa)	460		490
Rm (MPa)	530	680	590
A5 (%)	22		26
Charpy V at -40°C (J)	47		72

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	H		Feed		U	
	Min	Max			Nom	Nom	Min	Max	Min	Max
Ø 1.2	100	320	20	95	1.3	7.5	1.8	12.0	16	32
1.4	150	350	20	95	1.8	6.7	2.5	8.8	18	33
1.6	150	450	20	95	1.7	7.8	2.0	9.3	17	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)