Product Data Sheet

E 'Manual metal-arc welding'

OK 46.00

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
P-O Oskarsson	Tero Borg	J-P Ernoult	EN007096	EN006580	2016-02-22	1 (2)

REASON FOR ISSUE

ISO requirements amended.

GENERAL

OK 46.00 is an excellent performing, easy to use, rutile electrode and is relatively insensitive to rust or other surface impurities.

It deposits smooth weld beads in all positions including vertical down with self releasing slag. Good striking and restriking properties making it ideal for short welds, root runs and tacking , also useful for bridging gaps.

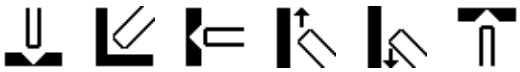
Min AC OCV: 50

Polarity: AC, DC+-

Alloy Type: Carbon Manganese

Coating Type: Rutile

WELDING POSITIONS



1 2 3 4 5 6

CLASSIFICATIONS Electrode

SFA/AWS A5.1	E6013
EN ISO 2560-A	E 38 0 RC 11
GOST 9467-75	E46
GOST R ISO 2560-A	E 38 0 RC 11

APPROVALS

ABS	2	PL,SF
BV	2	PL,SF
CE	EN 13479	SB,SF,SA,PL,HG
DB	10.039.05	HG,PL,SA,SF
DNV	2	PL,SF
GL	2	PL,SF
LR	2	PL,SF
RS	2	HG,SA
VdTÜV	00623	HG,PL,SA,SF

APPROVALS (SPECIFIC)

BKI	2	PL
ClassNK	KMW2	PL
NAKS/HAKC	2.5, 3.0, 4.0, 5.0 mm	SA
NAKS/HAKC	2.5, 3.0, 4.0, 5.0 mm	HG
NAKS/HAKC	2.5, 3.0, 4.0, 5.0 mm	SA
NAKS/HAKC	3.2-4.0 mm	SF
RRR	2	

APPROVAL COMMENT

Approvals valid for lot numbers with prefix in right column.

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CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.05	0.12
Si	0.10	0.50
Mn	0.15	0.65
P		0.030
S		0.030
Cr		0.19
Ni		0.29
Mo		0.19
V		0.049
Nb		0.049
Cu		0.29

MECHANICAL PROPERTIES OF WELD METAL

	ISO			AWS
	As welded			As welded
Properties	**Min**	**Max**	**Typ**	**Min**
Rp0.2 (MPa)				330
ReL (MPa)	380		400	
Rm (MPa)	510	600	510	430
A4 (%)				17
A5 (%)	22		28	
Charpy V at 0°C (J)	47		70	
	Comments: EN standard requires Rm min 470 MPa and A5 min 20%.			Comments:

ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	N	B	H	T	U	Welding
Ø x Length	Min	Max								Positions
1.6 x 300	30	60	0.6	93	0.63	263	0.38	36	26	1,2,3,4,5,6
2.0 x 300	50	70	1.0	93	0.60	172	0.55	38	25	1,2,3,4,5,6
2.5 x 350	60	100	1.8	95	0.65	86	0.80	50	22	1,2,3,4,5,6
3.0 x 350	70	140	2.5	80	0.51	77	1.0	46	32	1,2,3,4,5,6
3.2 x 350	80	150	2.9	95	0.65	53	1.30	57	22	1,2,3,4,5,6
3.2 x 450	80	150	3.7	93	0.64	43	1.33	63	22	1,2,3,4,5,6
4.0 x 350	100	200	4.5	95	0.60	39	1.60	65	22	1,2,3,4,5,6
4.0 x 400	100	200	5.0	87	0.60	33	1.69	64	26	1,2,3,4,5,6
4.0 x 450	100	200	5.3	90	0.58	33	1.94	76	23	1,2,3,4,5,6
5.0 x 350	150	290	6.9	90	0.60	24	2.30	87	24	1,2,3,4,5,6
5.0 x 400	150	290	7.9	84	0.56	22	2.2	71	30	1,2,3,4,5,6
5.0 x 450	150	290	9.0	95	0.60	31	2.30	114	24	1,2,3,4,5,6

W = Weight (kg / 100 electrodes)

η = Efficiency (g weld metal x 100 / g core wire)

N = Effective value (kg weld metal / kg electrodes)

B = Changes (number of electrodes / kg weld metal)

H = Deposit rate at 90% of max current (kg weld metal / hour arc time)

T = Fusion time at 90% of max current (s / electrode)

U = Arc voltage (V)