



Product Data Sheet

OK 53.16 SPEZIAL

E 'Manual metal-arc welding'
ESAB-MÓR Kft Hungary

Prepared by P-O Oskarsson	Qualified by P-O Oskarsson	Approved by J-P Ernoult	Reg no EN007590	Cancelling EN007326	Reg date 2017-07-19	Page 1 (2)
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REASON FOR ISSUE

ABS grade amended.

GENERAL

OK 53.16 is a double coated electrode combining the running characteristics of a rutile with the mechanical properties of a basic electrode. The double coating enables it to be used with small transformers with low OCV. OK 53.16 welds on both AC and DC.

Min AC OCV: 50 V

Polarity: AC, DC+-

Alloy Type: Carbon Manganese

Coating Type: Basic covering

Diff Hydrogen: < 10.0 ml/100g

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.1 E7016
EN ISO 2560-A E 38 2B 32 H10

APPROVALS

ABS 3Y
BV 3,3Y H10
CE EN 13479
DB 10.039.29
DNV 3YH10
GL 3YH10
LR 3YH10
VdTÜV 02762

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C		0.10
Si	0.30	0.70
Mn	0.70	1.20
P		0.030
S		0.030
Cr		0.19
Ni		0.29
Mo		0.19
V		0.049
Nb		0.049
Cu		0.29



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MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO			AWS
	As welded Min	Max	Typ	As welded Min
Rp0.2 (MPa)				400
ReL (MPa)	380		450	
Rm (MPa)	510	600	530	490
A4 (%)				22
A5 (%)	22		28	
Charpy V at -20°C (J)	47		90	
Charpy V at -30°C (J)				27
	Comments: EN standard requires Rm min 470 MPa and A5 min 20%.			Comments:

ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
2.5 x 350	50	90	2,1	102	0,58	83,3	0.73	59	26,8	1,2,3,4,6,7
3.2 x 350	90	150	3,4	101	0,54	53,6	1,2	56	31,2	1,2,3,4,6,7
3.2 x 450	90	150	4.5	103	0,57	39,5	1,27	72	30,3	1,2,3,4,6,7
4.0 x 450	120	190	6.9	105	0.59	24	1.65	90	28	1,2,3,4,6,7
5.0 x 450	160	230	10.5	106	0.61	15.5	2.14	109	28	1,2,3,4

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)