OK 48.00

A reliable, general purpose electrode for manual metal arc welding of carbon steels, carbon manganese steels and fine-grained carbon manganese steels with elevated yield strength. OK 48.00 deposits a tough, crack-resistant weld metal. The coating is of the low moisture absorption type. High welding speed in the vertical-up position. OK 48.00 is insensitive to the composition of the base material within fairly wide limits. The electrode can be used for welding structures where difficult stress conditions cannot be avoided. Tested according to NACE TM0177 and TM0284. Diffusible Hydrogen tested in various conditions show values below 3 ml/100g.

Specifications	
Classifications	SFA/AWS A5.1 : E7018 H4 R EN ISO 2560-A : E 42 4 B 42 H5
Approvals	ABS : 3Y H5 BV : 3Y H5 CE : EN 13479 DB : 10.039.12 DNV-GL : 3 YH5 LR : 3Y H5 PRS : 3Y H5 RINA : 3Y H5 RS : 3Y H5 VdTÜV : 00690 NAKS/HAKC : 2.5 - 5.0 mm
Industry	Civil Construction Energy Industrial and General Fabrication Light Fabrication Marine and Offshore

Welding Current	DC+(-)
Diffusible Hydrogen	< 4.0 ml/100g (< 3 for most of the batches)
Alloy Type	Carbon Manganese
Coating Type	Basic covering

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
ISO			
As Welded	475 MPa	565 MPa	29 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
AWS		
As Welded	-30 °C	130 J
ISO		
As Welded	-40 °C	115 J
As Welded	-30 °C	130 J

Typical Weld Metal Analysis %		
C	**Mn**	**Si**
0.06	1.1	0.5

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Deposition Data						
Diameter	**Current**	**Voltage**	**Efficiency (%)**	**Number of electrodes/kg weld metal**	**Fusion time per electrode at 90% I max**	**Deposition Rate**
1.6 x 300.0 mm	30-55 A	24 V	59 %	192	50 sec	0.38 kg/h
2.0 x 300.0 mm	55-80 A	22 V	65 %	125	45 sec	0.63 kg/h
2.5 x 350.0 mm	70-110 A	24 V	67 %	65	57 sec	0.96 kg/h
3.2 x 350.0 mm	90-140 A	23 V	70 %	42	68 sec	1.24 kg/h
3.2 x 450.0 mm	90-140 A	23 V	73 %	31	85 sec	1.33 kg/h
4.0 x 350.0 mm	120-190 A	24 V	70 %	29	75 sec	1.63 kg/h
4.0 x 450.0 mm	120-190 A	24 V	71 %	22	92 sec	1.76 kg/h
5.0 x 450.0 mm	190-260 A	24 V	75 %	13	99 sec	2.61 kg/h
6.0 x 450.0 mm	220-340 A	26 V	80 %	9	97 sec	3.88 kg/h
7.0 x 450.0 mm	280-410 A	27 V	79 %	7.0	104 sec	4.83 kg/h

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