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 UKCA : EN 13479 VdTÜV : 00690

Approvals are based on factory location. Please contact ESAB for more information.

Welding Current	DC+(-)
Diffusible Hydrogen	< 4.0 ml/100g
Alloy Type	Carbon Manganese
Coating Type	Basic covering

Tensile_Properties			
Testing Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
ISO			
As Welded	475 MPa	565 MPa	29 %

Charpy Testing		
Testing Condition	**Testing Temp**	**Impact Value**
AWS		
As Welded	-30 °C	130 J
ISO		
As Welded	-40 °C	115 J

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

Deposition Data					
Diameter	**Amps**	**Volts**	**Efficiency (Per)**	**Fusion time per electrode at 90Per I max**	**Deposition rate at 90Per**
1.6 x 300 mm	30-55 A	24 V	59 %	50 sec	0.38 kg/h
2.0 x 300 mm	55-90 A	22 V	65 %	45 sec	0.63 kg/h
2.5 x 350 mm	70-110 A	24 V	67 %	57 sec	0.96 kg/h
3.2 x 350 mm	90-140 A	23 V	70 %	68 sec	1.24 kg/h

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Deposition Data					
Diameter	**Amps**	**Volts**	**Efficiency (Per)**	**Fusion time per electrode at 90Per I max**	**Deposition rate at 90Per**
3.2 x 450 mm	90-140 A	23 V	73 %	85 sec	1.33 kg/h
4.0 x 350 mm	120-190 A	24 V	70 %	75 sec	1.63 kg/h
4.0 x 450 mm	120-190 A	24 V	71 %	92 sec	1.76 kg/h
5.0 x 450 mm	190-260 A	24 V	75 %	99 sec	2.61 kg/h
6.0 x 450 mm	220-340 A	26 V	80 %	97 sec	3.88 kg/h
7.0 x 450 mm	280-410 A	27 V	79 %	104 sec	4.83 kg/h