

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
Industry	Civil Construction Energy Industrial and General Fabrication Light Fabrication Marine and Offshore

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

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

Typical Weld Metal Analysis %

C	Mn	Si
0.06	1.1	0.5

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