

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.

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 VdTUV 00690 NAKS/HAKE *2.5 - 5.0 mm
Industry	Civil Construction Energy Industrial and General Fabrication Marine and Offshore Light Fabrication

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

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	-30 °C	130 J
As Welded	-40 °C	115 J

Typical Weld Metal Analysis %

C	Mn	Si
0.06	1.1	0.5

Deposition Data

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