

OK 55.00



OK 55.00 is an exceptional, all-position, low hydrogen basic electrode, particularly suitable for critical applications requiring exceptional impacts at low temperatures. This electrode provides a smooth, stable arc with very low spatter. Excellent arc starting is enhanced by a special graphite tip on the electrode. The complete slag coverage provides easy removal and minimal post weld cleanup. OK 55.00 is intended for a wide variety of carbon, low alloy and hardenable steels. The weld metal is also very resistant to hot cracking. OK 55.00 meets the requirements of 4 mL diffusible hydrogen content in 100 g of deposited weld metal. In addition to standard packaging, OK 55.00 is available in VacPac™ packaging to ensure the lowest possible moisture content and eliminates the need for costly rebaking procedures.

Classifications	SFA/AWS A5.1 : E7018-1H4 R CSA W48 : E4918-1-H4 EN ISO 2560-A : E 46 5 B 32 H5
Approvals	ABS 3Y H5 BV 3Y H5 CE EN 13479 CWB E4918-1-H4 DB 10.039.03 DNV-GL 3 YH5 LR 3Y H5 RS 3Y H5 VdTUV 00632 NAKS/HAKC *5.0mm

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

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

Typical Tensile Properties

Yield Strength	Tensile Strength	Elongation
500 MPa (72.5 ksi)	590 MPa (85.6 ksi)	28 %

Typical Charpy V-Notch Properties

Testing Temperature	Impact Value
-45 °C (-49 °F)	85 J (63 ft-lb)
-50 °C (-58 °F)	80 J (59 ft-lb)

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
2.5 x 350.0 mm (0.098 x 13,8 in.)	80-110 A	23 V	66	64 sec	64 %	0.9 kg/h (2,0 lb/h)
3.2 x 350.0 mm (1/8 x 13,8 in.)	110-140 A	23 V	41	72 sec	62 %	1.2 kg/h (2,6 lb/h)
3.2 x 450.0 mm (1/8 x 17,7 in.)	110-140 A	24 V	30	88 sec	69 %	1.4 kg/h (3,1 lb/h)
4.0 x 350.0 mm (5/32 x 13,8 in.)	140-200 A	23.2 V	28	72.5 sec	62 %	1.77 kg/h (3,9 lb/h)
4.0 x 450.0 mm (5/32 x 17,7 in.)	140-200 A	24 V	19	94 sec	71 %	2.0 kg/h (4,4 lb/h)
5.0 x 450.0 mm (0.197 x 17,7 in.)	200-270 A	24 V	13	94 sec	72 %	3.0 kg/h (6,6 lb/h)
6.0 x 450.0 mm (0.236 x 17,7 in.)	215-360 A	25 V	9	98 sec	72 %	4.0 kg/h (8,8 lb/h)