

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.

Specifications	
Classifications	SFA/AWS A5.1 : E7018-1H4 R
Approvals	DNV-GL : 3 YH5 CWB : E4918-1-H4 NAKS/HAKC : 2.5-4.0mm LR : 3Ym H5 RS : 3Y H5 BV : 3Y H5 ABS : 3Y H5 VdTÜV : 00632 DB : 10.039.03 CE EN : 13479

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

Welding Current	AC, DC+
Diffusible Hydrogen	< 4.0 ml/100g
Alloy Type	Carbon Manganese
Coating Type	Basic covering

Typical Tensile Properties			
Conditional Statement	Yield Strength	Tensile Strength	Elongation
As welded	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	Deposition Efficiency (%)	Burn-off Time /Electrode	Deposition Rate @ 90% I max
2.5 x 350.0 mm (0.098 x 13.8 in.)	80-110 A	23 V	64 %	64 sec	0.9 kg/h (2.0 lbs/h)
3.2 x 350.0 mm (1/8 x 13.8 in.)	110-140 A	23 V	62 %	72 sec	1.2 kg/h (2.6 lbs/h)
3.2 x 450.0 mm (1/8 x 17.7 in.)	110-140 A	24 V	69 %	88 sec	1.4 kg/h (3.1 lbs/h)
4.0 x 350.0 mm (5/32 x 13.8 in.)	140-200 A	23 V	62 %	72 sec	1.77 kg/h (3.9 lbs/h)
4.0 x 450.0 mm (5/32 x 17.7 in.)	140-200 A	24 V	70 %	94 sec	2.0 kg/h (4.4 lbs/h)
5.0 x 450.0 mm (0.197 x 17.7 in.)	200-270 A	24 V	72 %	94 sec	3.0 kg/h (6.6 lbs/h)



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Deposition Data

Diameter	Current	Voltage	Deposition Efficiency (%)	Burn-off Time /Electrode	Deposition Rate @ 90% I max
6.0 x 450.0 mm (0.236 x 17.7 in.)	215-360 A	25 V	72 %	98 sec	4.0 kg/h (8.8 lbs/h)