

# OK 76.18



## A basic AC/DC low alloy electrode for MMAW



Classification    AWS A5.5: E 8018-B2  
                          DIN 8575: E Kb Cr Mo 1 26  
                          IS 1395: E 55B-B226Fe

### DESCRIPTION

OK 76.18 is a basic coated, hydrogen-controlled electrode; iron powder type used for welding creep resistant steels of 1.25%, Chromium 0.5% and Molybdenum type. The slag system design is such that the electrode welds with a quite stable arc and gives a minimum amount of spatter and a weld bead that is smooth and even. OK 76.18 welds without short-circuiting and deposits a weldmetal resistant to both cracking and porosity. Root runs can be made easily with the electrode. The weldmetal is resistant to scaling upto 775°C. The weld deposit is of radiographic quality.

**APPROVALS** : PDIL, IBR

**WELDING CURRENT**: DC +, AC 70V

### TYPICAL APPLICATIONS

OK 76.18 is specially used to the welding of 1.25 Cr 0.5 Mo and similar creep resistant steels which find extensive use in high temperature components of power plants, boilers, oil-refineries, petrochemical plants etc. Use for steels of the type ASTM A 182- F2, F11, F12; A387-2, 12; A213-T2, T11, T12; A335-P2, P11, P12 and German steels 13 Cr Mo 44, 15 Cr Mo 5 etc.

### TYPICAL ALL WELDMETAL PROPERTIES

Chemical Composition (%)			Mechanical Properties		Hot Tensile Properties*	
C	0.07	Mo 0.55	YS	520 N/mm <sup>2</sup>	100°C	480 N/mm <sup>2</sup>
Mn	0.60	Cr 1.40	UTS	610 N/mm <sup>2</sup>	200°C	465 N/mm <sup>2</sup>
Si	0.35	S 0.018	EL (L=4d)	24%	300°C	450 N/mm <sup>2</sup>
P	0.020				400°C	420 N/mm <sup>2</sup>
					500°C	360 N/mm <sup>2</sup>

\* Annealed 2H at 700°C, furnace cooled.

### CURRENT RANGE & PACKING DATA

Size (mm)	Length (mm)	Current Range (Amps)	No. of Electrodes in a	
			Carton	Cardboard box
2.50	350	70-110	130	520
3.15	450	90-150	95	380
4.00	450	130-190	60	240
5.00	450	150-260	35	140

PACKING: Electrodes are packed in cartons and four of these cartons are shrink wrapped in a cardboard box.