

## OK 76.18

Basic DC electrode for welding creep resisting steels of the type 1% Cr 0.5% Mo. Welds with a stable arc and minimum spatter. Deposits weld metal resistant to both cracking and porosity.

Specifications	
<b>Classifications</b>	SFA/AWS A5.5 : E8018-B2 EN ISO 3580-A : E CrMo1 B 4 2 H5
<b>Approvals</b>	ABS : SR H5 BV : Welding of low alloy steels type 1%Cr 0.5%Mo, H5 CE : EN 13479 DNV-GL : -H5 NAKS/HAKC : 2.5-4.0 mm VdTÜV : 01387

<b>Welding Current</b>	DC+(-)
<b>Diffusible Hydrogen</b>	< 5ml/100g
<b>Alloy Type</b>	Low alloyed (1.25 % Cr ; 0.5 % Mo)
<b>Coating Type</b>	Basic covering

Tensile Properties			
Testing Condition	Yield Strength	Tensile Strength	Elongation
<b>ISO</b>			
PWHT 1 hour(s) 690 °C	580 MPa	670 MPa	24 %

Charpy Testing		
Testing Condition	Testing Temp	Impact Value
<b>ISO</b>		
PWHT 1 hour(s) 690 °C	20 °C	100 J

Typical Weld Metal Analysis %				
C	Mn	Si	Cr	Mo
0.06	0.7	0.3	1.3	0.5

Deposition Data						
Diameter	Amps	Volts	Efficiency (Per)	Number of electrodes/kg weld metal	Fusion time per electrode at 90Per I max	Deposition rate at 90Per
2.0 x 300.0 mm	55-80 A	22 V	58 %	136.0	40 sec	0.7 kg/h
2.5 x 300.0 mm	70-110 A	24 V	58 %	88.0	52 sec	0.8 kg/h
3.2 x 350.0 mm	95-150 A	25 V	59 %	49.0	65 sec	1.1 kg/h
4.0 x 450.0 mm	130-190 A	27 V	64 %	23.0	90 sec	1.7 kg/h
5.0 x 450.0 mm	150-260 A	28 V	64 %	14.5	95 sec	2.7 kg/h