

OK 76.96

OK 76.96 is an LMA electrode containing 9Cr1Mo for the welding of creep-resistant steels. It is especially suitable for pipe welding. The electrode runs with a quiet, stable arc and gives a minimum amount of spatter. A preheating and interpass temperature of 150-260°C is normally required. The mechanical properties stated here are after one hour of heat treatment at 740°C.

Specifications

Classifications	SFA/AWS A5.5 : E8015-B8 EN ISO 3580-A : E (CrMo9) B 4 2 H5
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Welding Current	DC+
Diffusible Hydrogen	<5ml/100g
Alloy Type	Creep resisting
Coating Type	Lime Basic

Tensile Properties

Testing Condition	Conditional Statement	Yield Strength	Tensile Strength	Elongation
AWS				
PWHT	740°C 1h			
ISO				
PWHT	740°C 1h			
Stress Relieved 2 hour(s) 650 °C		730 MPa	850 MPa	17 %
Stress Relieved 2 hour(s) 850 °C			> 450 MPa	> 20 %
Stress Relieved 2 hour(s) 750 °C		550 MPa	720 MPa	22 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
ISO		
Stress Relieved	20 °C	25 J
Stress Relieved	20 °C	60 J
Stress Relieved	20 °C	80 J

Deposition Data

Diameter	Amps	Volts	kg weld metal/kg electrodes	Number of electrodes/kg weld metal	Fusion time per electrode at 90Per I max	Deposition Rate
2.0 x 300 mm	55-75 A	23 V	0.58	131.0	49 hour(s)	0.50 kg/h
2.5 x 300 mm	70-100 A	25 V	0.55	92.0	51 hour(s)	0.80 kg/h
3.2 x 350 mm	90-135 A	26 V	0.55	50.0	70 hour(s)	1.10 kg/h
4.0 x 450 mm	130-200 A	21 V	0.64	22.5	80 hour(s)	1.90 kg/h