OK 74.78



OK 74.78 is an LMA AC/DC electrode suitable for welding high tensile steels used in low temperature applications. Good notch toughness down to -40°C. Suitable for enclosed welding and cladding of rails, when a hardness of ~ 250 HV is required. Also suitable for butt welding rails with tensile strength of 800-900 N/mm2. Due to low moisture content in the coating, this electrode is suitable when preheating cannot be applied.

Specifications	
Classifications	SFA/AWS A5.5 : E9018-D1 EN ISO 18275-A : E 55 4 MnMo B 3 2 H5
Approvals	ABS : 3YQ460 H5 CE : EN 13479 DB : 81.039.02 DB : 82.039.02 DNV-GL : 3 Y46H5 VdTÜV : 01027

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

Welding Current	AC, DC+
Diffusible Hydrogen	< 5.0 ml/100g
Alloy Type	Low alloyed (0.4 % Mo)
Coating Type	Basic covering
Min AC OCV	65 V

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
ISO			
As Welded	600 MPa	650 MPa	24 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
ISO		
As Welded	-40 °C	90 J
As Welded	-50 °C	70 J

Typical Weld Metal Analysis %					
C	**Mn**	**Si**	**Ni**	**Cr**	**Mo**
0.05	1.60	0.35	0.03	0.03	0.35

Deposition Data					
Diameter	**Current**	**Voltage**	**Efficiency (%)**	**Fusion time per electrode at 90% I max**	**Deposition Rate**
2.5 x 450 mm	105-140 A	23 V	65 %	86 sec	1.3 kg/h
4.0 x 450 mm	140-190 A	23 V	65 %	97 sec	1.8 kg/h
5.0 x 450 mm	190-260 A	24 V	68 %	100 sec	2.6 kg/h
6.0 x 350 mm	75-100 A	22 V	62 %	55 sec	0.9 kg/h