

OK 48.08

Basic universal electrode with very good welding characteristics, especially designed for welding of carbon steels, carbon manganese steels and fine grained carbon manganese steels with elevated yield strength. Typical field of application is offshore construction. The weld metal alloyed with approximately 0.9% Ni fulfills the requirements on impact toughness at -50°C. The coating is of low moisture absorption type and gives diffusible hydrogen < 4ml per 100 grams of weld metal. OK 48.08 is HIC test compliant as per NACE TM0284 & SSC test compliant as per NACE TM0177.

Specifications

Classifications	SFA/AWS A5.5 : E7018-G H4R EN ISO 2560-A : E 46 5 1Ni B 32 H5
Approvals	ABS : 3Y H5 CE : EN 13479 DB : 10.039.31 DNV-GL : 4 Y40H5 LR : 4Y40 H5 NAKS/HAKC : 2.5-5.0 mm RS : 4Y H5 VdTÜV : 05778

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

Welding Current	AC, DC+(-)
Diffusible Hydrogen	< 4.0 ml/100g
Alloy Type	Low alloyed (0.9 % Ni)
Coating Type	Basic covering

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
AWS			
As welded (3G, V-UP)	530 MPa	610 MPa	
ISO			
As Welded	540 MPa	630 MPa	26 %
PWHT 1 hour(s) 620 °C	480 MPa	550 MPa	26 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
AWS		
As welded (3G, V-UP)	-60 °C	50 J
As welded (3G, V-UP)	-50 °C	55 J
ISO		
PWHT	-46 °C	105 J
As Welded	-50 °C	85 J
As Welded	-60 °C	65 J

Typical Weld Metal Analysis %

C	Mn	Si	Ni	Cr	Mo
0.06	1.2	0.35	0.95	0.02	0.001

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Deposition Data					
Diameter	Current	Voltage	Deposition Efficiency (%)	Fusion time per electrode at 90% I max	Deposition Rate @ 90% I max
2.5 x 350.0 mm	65-110 A	20 V	60 %	57 sec	0.9 kg/h
3.2 x 350.0 mm	85-150 A	22 V	63 %	63 sec	1.3 kg/h
3.2 x 450.0 mm	85-150 A	22 V	63 %	64 sec	1.3 kg/h
4.0 x 450.0 mm	115-190 A	25 V	66 %	95 sec	1.8 kg/h
5.0 x 450.0 mm	155-280 A	28 V	66 %	93 sec	2.7 kg/h