

OK 78.16

OK 78.16 is a CrMo-alloyed electrode for the welding of 0.25C-1Cr-0.3Mo-alloyed quenched and tempered steel grades. The heat treatment requirements for the weld metal are the same as those for the parent plate. The weld metal of OK 78.16 is also suitable for flame hardening. The welding of high tensile strength steel with OK 78.16 should be carried out at a preheating temperature of minimum 200°C.

Specifications

Classifications	SFA/AWS A5.5 : E9018-G EN ISO 18275-A : E 69 A Z B 42
Approvals	CE : EN 13479

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

Welding Current	DC+
Alloy Type	Low alloyed (1.15 % Cr ; 0.2 % Mo)
Coating Type	Basic covering

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
ISO			
As Welded	800 MPa	900 MPa	17 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
ISO		
As Welded	20 °C	80 J

Typical Weld Metal Analysis %

C	Mn	Si	Cr	Mo
0.17	0.76	0.52	1.15	0.2

Deposition Data

Diameter	Current	Voltage	Efficiency (%)	Fusion time per electrode at 90% I max	Deposition Rate
2.5 x 350.0 mm	75-100 A	20 V	64 %	58 sec	0.9 kg/h
3.2 x 450.0 mm	105-140 A	21 V	64 %	78 sec	1.4 kg/h
4.0 x 450.0 mm	145-195 A	22 V	66 %	83 sec	1.9 kg/h
5.0 x 450.0 mm	190-260 A	23 V	68 %	86 sec	2.8 kg/h