

## 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.

<b>Classifications</b>	SFA/AWS A5.5 : E9018-G EN ISO 18275-A : E 69 A Z B 42
<b>Approvals</b>	CE : EN 13479 Seproz : UNA 272581

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

### Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
<b>ISO</b>			
As Welded	800 MPa	900 MPa	17 %

### Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
<b>ISO</b>		
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 (%)	Number of electrodes/kg weld metal	Fusion time per electrode at 90% I max	Deposition Rate
2.5 x 350.0 mm	75-100 A	20 V	64 %	70.0	58 sec	0.9 kg/h
3.2 x 450.0 mm	105-140 A	21 V	64 %	32.5	78 sec	1.4 kg/h
4.0 x 450.0 mm	145-195 A	22 V	66 %	22.5	83 sec	1.9 kg/h
5.0 x 450.0 mm	190-260 A	23 V	68 %	15.0	86 sec	2.8 kg/h