

OK 78.16

Type Basic

SMAW

E9018-G

Description

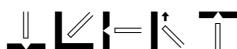
OK 78.16 is a CrMo-alloyed electrode for the welding of 0.25C-1Cr-0.3Mo-alloyed quenched and tempered steel grades. The heat treatment requirements for the weld metal are the same as those for the parent plate. The weld metal of OK 78.16 is also suitable for flame hardening. The welding of high tensile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

Recovery

120%

Welding current

DC(+)



Classifications

SFA/AWS A5.5 E9018-G

Typical all weld metal composition, %

C	Si	Mn	Cr	Mo
0.1	0.4	0.8	1.0	0.2

Typical mech. properties all weld metal

Yield stress, MPa	870
Tensile strength, MPa	900
Elongation, %	18

Charpy V

Test temps, °C +20	Impact values, J 50
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Approvals

DB	10.039.16
UDT	DIN 8555
Ü	10.039/1

Welding parameters

Diameter, mm	Length, mm	Welding current, A	Arc voltage, V	N. Kg weld metal/kg electrodes	B. No. of elec- trodes/kg weld metal	H. Kg weld metal/hour arc time	T. Burn-off time, s/ electrode
1.6	300	50-65					
2.5	350	75-100	20	0.64	70.0	0.9	58
3.2	450	105-140	21	0.64	32.5	1.4	78
4.0	450	145-195	22	0.66	22.5	1.9	83
5.0	450	190-260	23	0.68	15.0	2.8	86
6.0	450	240-330	25	0.70	10.0	3.6	98