OK 68.81

Type Acid-rutile

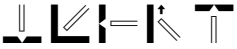
SMAW
E312-17

Description

OK 68.81 is a high-alloyed electrode which deposits a ferritic-austenitic duplex weld metal with approx. 40% ferrite. It is resistant to stress corrosion and is highly insensitive to dilution. Good scaling resistance up to 1150°C. OK 68.81 is used for joining dissimilar steels, steels with reduced weldability and buffer layers prior to hardfacing. Applications: rolls, forging diies, hot-work tools, dies for plastics and so on.

Welding current

DC+, AC OCV 60 V



Classifications

EN 1600	E 29 9 R 3 2
SFA/AWS A5.4	E312-17
Werkstoff Nr.	1.4337

Typical all weld metal composition, %

C	Si	Mn	Cr	Ni	Mo	Cu
0.12	0.7	0.8	29.0	9.8	<0.5	<0.3

Typical mech. properties all weld metal

Yield stress, MPa	610
Tensile strength, MPa	790
Elongation A5, %	22

Charpy V

Test temps, °C	Impact values, J
+20	30

Ferrite content FN 50-80

Approvals

UDT EN 1600

Welding parameters

Diameter, mm	Length, mm	Welding current, A	Arc voltage, V	N. Kg weld metal/kg electrodes	B. No. of electrodes/kg weld metal	H. Kg weld metal/hour arc time	T. Burn-off time, s/ electrode
2.0	300	35-60	22	0.64	123.0	0.7	41
2.5	300	50-85	24	0.64	78.0	0.9	48
3.2	350	80-125	25	0.62	42.0	1.3	65
4.0	350	110-175	26	0.62	26.0	2.0	66
5.0	350	150-240	28	0.65	16.5	3.2	68