OK 92.35

Type Rutile-basic

SMAW
(ENiCrMo-5)

Description

OK 92.35 is a nickel-based, super-alloy electrode of the NiCrMoW type. OK 92.35 deposits an extremely tough work-hardening weld metal, resistant to attacks by the most commonly used acids. The weld metal has good high-temperature properties in terms of tensile strength, hardness, thermal shock and scaling. The lowest possible heat input should be applied.

Typical applications

Hardfacing: hot forging dies, hot working tools, hot shear blades

Joining: Nimonic and Inconel alloys, these alloys to carbon and alloy steels

Cladding: Corrosion- and wear-resistant layers on valves and pump components

Welding current

DC+, AC OCV 70 V

Classifications

SFA/AWS A5.11	(ENiCrMo-5)
DIN 8555	E 23-250 CKT

Typical all weld metal composition, %

C	Si	Mn	Cr	Ni	Mo	W	Fe
0.06	0.7	0.7	15.5	57	16.5	3.8	5.5

Typical mech. properties all weld metal

Weld metal hardness, a w	240-260 HV
Weld metal hardness, w h	40-45 HRC
As-welded condition:	
Yield strength, MPa	515
Tensile strength, MPa	750
Elongation, A5 (%)	17
Machinability	Fair
High temp. wear resistance	Excellent
Corrosion resistance	Very good

Deposition data at max current

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
2.5	300	65-110	18	0.61	56	1.1	62
3.2	350	110-150	18	0.63	28	1.6	86
4.0	350	160-200	20	0.64	19	2.3	89
5.0	350	190-250	20	0.65	11	3.1	106