

OK 84.42

Type Rutile-basic

SMAW

E5-UM-45-R

Description

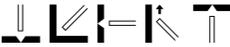
OK 84.42 is a hardfacing electrode depositing a corrosion-resistant, martensitic-ferritic stainless steel. Suitable for hardfacing shafts, wheel conveyors, racks and pinions, links and pins and valve seats of cast steel.

Recommendation:

Generally, a preheat and interpass temperature of about 200°C is recommended for most applications. Temperatures above 250°C could lead to reduced hardness levels and should be avoided.

Welding current

AC, DC+ OCV 70 V



Classifications

DIN 8555 E5-UM-45-R

Typical all weld metal composition, %

C	Si	Mn	Cr
0.12	0.5	<0.5	13.0

Typical mech. properties all weld metal

Weld metal hardness, a w (no preheat, interpass temperature 250°C):	39-45 HRC
1st layer:	35-41 HRC
2nd layer:	37-43 HRC
3rd layer:	39-45 HRC
Machinability	By cemented carbide tools
Metal-to-metal wear resistance	Very good
Abrasion resistance	Good
High temp. wear resistance	Very good
Corrosion resistance	Very good

Tempering resistance

Temp°C/1h	HRC
100	45
200	44
300	44
400	45
500	46
600	41
700	34

Annealing and hardening of weld metal:

Soft annealing: 780-800C
 Rehardening procedure:
 Hardening temperature, °C: 950- 1000
 Quenching medium: compressed air or oil

Deposition data at max current

Diameter, mm	Length, mm	Welding current, A	Arc voltage, V	N.	B.	H.	T.
				Kg weld metal/kg electrodes	No. of elec- trodes/kg weld metal	Kg weld metal/hour arc time	Burn-off time, s/ electrode
2.5	350	70-110	22	0.57	77.0	1.0	46
3.2	450	100-160	24	0.60	34.0	1.5	69
4.0	450	140-220	25	0.60	22.5	2.1	78
5.0	450	220-310	31	0.62	14.0	3.2	80