selectarc HBA

Hardfacing Electrode High Cr-carbides



Classification

DIN 8555 : E10-UM-60-GRZ

EN 14700 : E Fe15

Description & Applications

Basic coated, slag free, hardfacing electrode with high recovery (190%). Highly resistant to abrasion due to its high content of Cr and C. The service life of surfaced pieces is up to 50 times longer than for conventional electrodes of similar hardness.

Austenitic matrix containing Cr carbides. Deposit 1 or 2 layers maximum. Resists to heavy mineral abrasion and moderate impact. Only machinable by grinding.

Regular trop transfer, no slag, smooth beads. The formation of cracks in the weld deposit is normal for this type of composition.

For all pieces subject to low or moderate impact where an important resistance to abrasion is searched. Special applications: For endless screws, mixer paddles, pump bodies for abrasive materials, excavator teeth, crashing of mineral materials, concrete pumps, screws for brick presses, wear plates.

Typical Weld Metal Composition (%)

С	Si	Mn	Cr	Fe
5.0	1.0	0.5	35	base

All Weld Metal Mechanical Properties

Hardness

60-63 HRC Hardness in the 2nd layer

Welding Current & Instructions

Electrode	ØxL (mm)	3,2x350	4,0x350	5,0x450
Current	(A)	140	200	250

Re-drying, if necessary, $1h/250^{\circ}$ C. Guide electrode almost vertically with a short arc. In case of hardfacing high alloyed steels like tool steels, it is recommended to apply a cushion layer with selectarc 29/9 or 18/8Mn and to preheat the pieces to surface at $200 - 400^{\circ}$ C-depending on the material and thickness, followed by slow cooling.



= + ~50V



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