



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 drop 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.

General applications: For endless screws, mixer paddles, pump bodies for abrasive materials, excavator teeth, crushing of mineral materials, concrete pumps, screws for brick presses, wear plates.

Typical Weld Metal Composition (%)

| C | Si | Mn | Cr | Fe |
|-----|-----|-----|------|------|
| 5.0 | 1.0 | 0.5 | 35.0 | Rem. |

All Weld Metal Mechanical Properties

Hardness (in the 2nd layer)
60-63 HRC

Welding Current & Instructions

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

Redrying 1h at 250°C, if necessary. 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°C-depending on the material and thickness, followed by slow cooling.



1G/PA

= + ~50V

Ind.12

