

Wearshield® 60 (e)

CLASSIFICATION

DIN 8555 E10-UM-60-GR
EN 14700 E Fe15

GENERAL DESCRIPTION

A basic coated downhand 200% recovery electrode that produces a primary carbide weld deposit
The electrode coating facilitates easy arc control and arc visibility whilst maintaining a short arc
Designed for severe abrasion applications

WELDING POSITIONS (ISO/ASME)



PA/1G



PB/2F

CURRENT TYPE

AC / DC +/-

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

| C | Cr | Si |
|-----|----|----|
| 5.0 | 35 | 4 |

STRUCTURE

In the as welded condition the microstructure consists of primary chromium carbides in an austenite - carbide eutectic matrix.

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Typical hardness values

1 Layer 57-60 HRc
2 Layers 60-62 HRc
Welded on Mild Steel Plate

PACKAGING AND AVAILABLE SIZES

| | | Diameter (mm) | | | |
|---------|----------------------|---------------|-----|-----|-----|
| | | 3.2 | 3.2 | 4.0 | 4.0 |
| | Length (mm) | 350 | 450 | 350 | 450 |
| PE-Tube | Pieces / unit | 48 | 37 | 32 | 23 |
| | Net weight/unit (kg) | 2.5 | 2.5 | 2.5 | 2.5 |

Identification Imprint: WEARSHIELD 60 (E) Tip Color: violet

Wearshield® 60 (e) rev. C-EN25-01/02/16

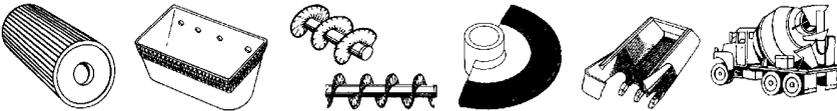
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APPLICATION

Wearshield 60 produces a primary carbide deposit with a hardness range of 60-62 HRc. The primary carbide microstructure makes Wearshield 60 ideally suitable for applications of severe abrasion.

Typical applications include:

Crusher rolls, plates and jaws
 Conveyor screws and sleeves
 Shovel lips
 Brick & coke machinery
 Cement mill parts



ADDITIONAL INFORMATION

When welding with Wearshield 60 stringer beads should be employed. Weaving is not advised since wide weaves generally increase the check crack spacing which can result in deposit spalling.

The as-welded deposit readily check cracks.

Preheat is not necessary when surfacing austenitic substrates such as stainless steels and manganese steels, although the interpass temperature should be limited to about 260°C for manganese steels.

The deposited weld metal is not machinable.

The deposit thickness is usually limited to 2 layers.

For applications requiring build-ups in excess of 2 layers, buttering layers of Arosta 307-160, Wearshield BU-30 or Wearshield Mangjet (manganese steels) should be used prior to Wearshield 60. Alternatively, a preheat of 650°C can be used to eliminate the formation of check cracks.

CALCULATION DATA

| Diam. x length [mm] | Current range [A] | Current type | Dep. rate |
|------------------------|----------------------|-----------------|-----------|
| | | | H(kg/h) |
| 3.2 x 450 | 110-150 | DC+ | 1.75 |
| 4.0 x 450 | 140-180 | DC+ | 2.2 |

COMPLEMENTARY PRODUCTS

Lincore® 60-O and Lincore® 60-S with flux 801 or 802