


<b>Technical data sheet</b>  <small>011121MBA</small>	<b>Coated SMAW Electrode</b>  <b>WA HARDFACE HC-E</b>	 <b>Welding Alloys®</b>
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### CLASSIFICATION

EN 14700: E Fe15

### DESCRIPTION

- Basic coated SMAW electrode for hardfacing
- High chromium cast iron for protecting components subject to extremely severe abrasive wear and moderate impact
- Extreme resistance to mineral wear
- The deposit contains a high proportion of hard primary chromium carbides in a tough ferritic matrix
- 190% recovery

### APPLICATIONS

WA HARDFACE HC-E is used for hardfacing components undergoing wear by earth, sand and abrasives.

#### Examples

Gyratory crusher cones and mantles, catalyst pipes and valves, slurry pipes and valve bodies, dredge pump bodies, sand dredge parts, extruder screws, screws for brick presses, "barmac" crushers, mining and earthmoving equipment, blast furnace bells, wear plates, sugar mill crusher hammers, drag line components, coal pulveriser rolls, coke hammers, cone knives and shredders.

Relief checking is normal and hardfacing best limited to two layers unless impact loading is small.

### TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr
5	0.5	1	35

Structure: primary carbides and eutectic carbides of the  $M_7C_3$  type in a ferritic matrix

### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – 3-layer deposit on mild steel: 60 - 63 HRc

Machinability: by grinding

### OPERATING CONDITIONS

Electrode ØxL [mm]	3.2 x 350	4.0 x 350	5.0 x 450
Current [A]	140	200	250
= +	~ 50V		

Re-drying, if necessary, 2h at 300°C. Guide electrode almost vertically with a short arc.

When hardfacing highly alloyed steels such as tool steels, a buffer layer of 307 or 312 type metal is required. Preheat to 200 - 400°C according to base metal hardenability and thickness, followed by slow cooling.

### WELDING POSITIONS

EN ISO 6947: PA

ASME IX: 1G

### PACKAGING

Electrode ØxL [mm]	3.2 x 350	4.0 x 350	5.0 x 450
Weight/box [kg]	5	5	6.5

Other packaging and other sizes: please consult us