HARDFACE HC-E

CLASSIFICATION

EN 14700 : E Fe15

DIN 8555* : E10-UM-60-GRZ

Former classification replaced by EN 14700

DESCRIPTION

• High chromium cast iron for hardsurfacing components subject to extremely severe abrasive wear and moderate impact

• The deposit contains a high proportion of hard primary chromium carbides in a tough ferritic matrix

• Very high recovery rate: 190%

APPLICATIONS

HARFACE 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 best limited to two layers unless impact loading is small.

TYPICAL ALL-WELD METAL ANALYSIS

C	Si	Mn	Cr
5.0	1.0	0.5	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-layers deposit on mild steel: 60-63 HRc

OPERATING CONDITIONS

Electrode ØxL [mm]	3.2x350	4.0x350	5.0x450
Current [A]	140	200	250

Redrying, if necessary, 2h/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.

= + 50 V

WELDING POSITIONS
1G/PA

PACKAGING			
Electrode ØxL [mm]	3.2x350	4.0x350	5.0x450
Weight/box [kg]	5	5	6.5
Piece/box	98	68	34