HARDFACE 58-E

CLASSIFICATION

DIN 8555 : E3-UM-55-ST

EN 14700 : E Fe3

DESCRIPTION AND APPLICATIONS

• Basic electrode giving a martensitic weld deposit

• Very high resistance to metal to metal wear up to 550°C, to pressure and to impacts

- Particularly well adapted to hardfacing tool steels type X38CrMo5.1
- Applications : hot shearing, hot press tooling, extrusion pistons, dies
- Complements Welding Alloys cored wire HARDFACE R58-G

Base materials: High strength carbon steels and hot working steels

| Material no. | | DIN classification | | rial no. | DIN classification | | | |
|--|------|--------------------------------|-------------------------------|-------------------|--------------------|--|--|--|
| 1.2311 | | 40CrMnMo 7 | | 2367 | X38CrMoV 5 3 | | | |
| 1.2343 | | X38CrMoV 5 1 | | 2606 | X37CrMoW 5 1 | | | |
| 1.2344 | | X40CrMoV 5 1 1.2713 | | 55NiCrMoV 6 | | | | |
| 1.2365 | | X32CrMoV 3 3 | 1.2714 | | 56NiCrMoV 7 | | | |
| TYPICAL ALL-WELD METAL ANALYSIS | | | | | | | | |
| С | Si | Mn | Cr | Мо | Fe | | | |
| 0.40 | 0.50 | 1.00 | 7.00 | 2.50 | Balance | | | |
| TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES | | | | | | | | |
| Hardness – as welded | | | | | | | | |
| | 0.50 | Mn 1.00 TYPICAL ALL-WELD | Cr 7.00 METAL MECHANICA | Mo 2.50 | | | | |

~ 58 HRc

OPERATING CONDITIONS

| Electrode ØxL [mm] | 2.5x300 | 3.2x350 | 4.0x450 |
|--------------------|---------|---------|---------|
| Current [A] | 60-90 | 80-110 | 100-130 |

Preheat the workpiece to 250-400°C depending on thickness and alloy. Hold the electrode vertically with a short arc. Keep temperature during welding and let the workpiece cool slowly.

Subsequent machining is possible by grinding or with tungsten carbide tools.

= + ~ 70 V

| WELDING POSITIONS | | | | | | | |
|-----------------------------------|---------|---------|---------|--|--|--|--|
| 1G/PA, 2F/PB, 2G/PC, 3G/PF, 4G/PE | | | | | | | |
| PACKAGING | | | | | | | |
| Electrode ØxL [mm] | 2.5x300 | 3.2x350 | 4.0x450 | | | | |
| Weight/box [kg] | 4 | 5 | 6.5 | | | | |
| Piece/box | ~ 214 | ~ 139 | ~ 92 | | | | |