

# HARDFACE 40-E

## CLASSIFICATION

DIN 8555 : E3-UM-40-PT

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 R40-G

**Base materials:** High strength carbon steels and hot working steels

Material no.	DIN classification	Material no.	DIN classification
1.2311	40CrMnMo 7	1.2367	X38CrMoV 5 3
1.2343	X38CrMoV 5 1	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

C	Si	Mn	Cr	Mo	Fe
0.15	0.50	0.70	6.50	3.50	Balance

## TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness – as welded

~ 40 HRc

## OPERATING CONDITIONS

Electrode ØxL [mm]	2.5x350	3.2x350	4.0x450
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<b>Electrode ØxL [mm]</b>	2.5x350	3.2x350	4.0x450
<b>Current [A]</b>	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

<b>Electrode ØxL [mm]</b>	2.5x350	3.2x350	4.0x450
<b>Weight/box [kg]</b>	4	5	6.5
<b>Piece/box</b>	~ 214	~ 139	~ 92