



# Selectarc HBMar50

*Basic Coated Electrode  
Age-hardenable*

## Description & Applications

Basic coated electrode with a stable arc, regular drop transfer and a smooth deposit. The weld deposit resists to metal/metal wear at higher temperatures and can be age-hardened. Therefore the electrode is used for overlay and build up of machinery parts and tools subject to impact, compression and wear used at operating temperatures up to 500° C. The deposit can be machined with standard tools after welding and then age hardened by a subsequent heat treatment.

**General applications:** For building up dies for extrusion of Al-castings and plastic, for hot working tools, for moulds, ...

### Base materials

### High strength carbon steels, tool steels and hot working steels

Material N°	DIN classification	Material N°	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

## All Weld Metal Mechanical Properties

Hardness(as welded)  
Approx. 33-37 HRC

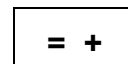
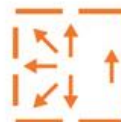
After age hardening: 3-4h at 480°C  
50-54 HRC

## Welding Current & Instructions

Electrode	ØxL ( mm )	2,5x350	3,2x350	4,0x450
Current	( A )	60-90	90-120	110-140

Clean weld zone properly. Preheat massive work pieces to 100-150°C . Hold the electrode vertically with a short arc. Keep temperature during welding and let the workpiece cool slowly. Subsequent machining is possible with standard tools before applying the age hardening heat treatment.

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