


<b>Technical data sheet</b>  <small>150222JMBA</small>	<b>Coated SMAW Electrode</b>  <b>WA HARDFACE AP-E</b>	 <b>Welding Alloys</b>
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### CLASSIFICATION

EN 14700: E Fe9

### DESCRIPTION

- Rutile-basic SMAW electrode
- Austenitic deposit with excellent work hardening properties
- Highly resistant to impact and high pressures
- Recovery: 140%

### APPLICATIONS

WA HARDFACE AP-E produces an austenitic, non-magnetic weld deposit which has excellent work hardening properties. The degree of work hardening is dependent on the amount of impact on the rebuilt component. It is used for rebuilding components exposed to severe impacts or heavy loads and can be welded on ferritic and austenitic steels including "Hadfield" manganese steel. It forms an excellent buffer layer prior to hardfacing with high chromium cast iron. The deposit can be multi-layered without limit.

### Examples

Railway frogs and crossings, hydraulic press pistons, crushing equipment subjected to heavy shock, hammers, dredge pumps and all components where a work-hardening deposit is useful.

### TYPICAL ALL-WELD METAL ANALYSIS [%]

C	Si	Mn	Cr	Fe
0.6	0.3	16	14	Bal.

### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: 3-layer deposit

As welded: 200 – 240 HB / 20 – 25 HRc

Work hardened: 45 – 55 HRc

### OPERATING CONDITIONS

Electrode Ø x L [mm]	2.5 x 350	3.2 x 350	4.0 x 450
Current [A]	90	130	160

Re-drying if necessary, 1h - 300°C.

Weld with a minimum heat input (low current, short beads) in order to respect an interpass temperature of 250°C maximum. Do not preheat the piece to weld

### WELDING POSITIONS

EN ISO 6947: PA, PB, PC

ASME IX: 1G, 2F, 2G

### PACKAGING

Electrode Ø x L [mm]	2.5 x 350	3.2 x 350	4.0 x 450
Weight/box [kg]	4.5	5	6.5
Piece/box	~ 176	~ 122	~ 77

Other packaging and other sizes: please consult us