


<b>Technical data sheet</b>  011121MBA	<b>Coated SMAW Electrode</b>  <b>WA ROBOTool 46-E</b>	 <b>Welding Alloys</b>
--	---	---

### CLASSIFICATION

EN 14700: E ZFe3

### DESCRIPTION

- Rutile coated electrode
- Martensitic tool steel deposit containing tungsten, chromium and vanadium carbides
- Good resistance to metal-metal wear and impacts
- Withstands service temperatures up to 550°C
- Machinable only by grinding as-welded, but may be softened for machining and re-hardened by quenching

### APPLICATIONS

Trimming and blanking dies, shearing tools, punches and dies, forging dies etc

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

C	Si	Mn	Cr	W	V	Fe
0.15	0.6	0.5	3.0	4.2	0.8	Bal.

### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness as welded: 40 – 45 HRc

Soft annealed at 750 – 800°C, 4 hours: 20 – 25 HRc

Hardened at 1100°C, quenched in oil: 50 HRc

### OPERATING CONDITIONS

Electrode Ø x L [mm]	3.2 x 350	4.0 x 450
Current [A]	115	160
= +	~ 50V	

Re-drying, if necessary, at 250°C for 1 hour. Preheating is not required on mild and medium carbon steels. Low alloyed, high carbon tool steels etc. need to be preheated to 250 - 400°C, depending on their composition and thickness. Maintain the temperature during welding. Cool slowly in still air after surfacing.

### WELDING POSITIONS

EN ISO 6947: PA, PB, PC, PF, PE

ASME IX: 1G, 2F, 2G, 3G, 4G

### PACKAGING

Electrode Ø x L [mm]	3.2 x 350	4.0 x 450
Weight/box [kg]	5	6.5

Other packaging and other sizes: please consult us