


<b>Technical data sheet</b>  011121MBA	<b>Coated SMAW Electrode</b>  <b>WA SPEEDARC 7018-1-E</b>	 <b>Welding Alloys</b>
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### CLASSIFICATION

ASME IIC SFA 5.1 / AWS A 5.1: E7018-1H4

### DESCRIPTION AND APPLICATIONS

- Basic coated SMAW electrode for all position welding with high level mechanical properties
- Welding of steels subject to high static or dynamic stresses with guaranteed high toughness even at low temperatures
- Excellent usability in all positions, stable arc, soft fusion, very high radiographic quality
- High deposition rates

### APPLICATIONS

#### Base materials

Unalloyed construction steel, boiler plate, pipe steels, fine-grained steels, shipbuilding steels, cast steels

#### Examples

Unalloyed construction steels	EN 10025	S185, S235JR to S355K2G4
Boiler plate	EN 10028-2	P235GH, P265GH, P295GH, P355GH
Fine-grained steels	EN 10113	S275N to S460N, S275M to S460ML
Pipe steels	API 5LX	X42, X46, X 52, X60, X65
	EN 10208	L240NB to L415NB
Pressure vessel plates	ASTM SA516	Gr55 to Gr70
Shipbuilding steels		A, B, D, E, and A32/36 to F40
Cast steels	DIN 1681	GS-38, GS-45, GS-52
	ISO/TR 15608:	Gr1.1, 1.2, 1.3, 2.1 and 3.1

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

<b>C</b>	<b>Mn</b>	<b>Si</b>
0.07	1.4	0.3

### MINIMUM ALL-WELD METAL MECHANICAL PROPERTIES

<b>Rm [MPa]</b>	<b>Rp0.2% [MPa]</b>	<b>A5 [%]</b>	<b>CVN [J]</b>
530	460	22	-46°C: 27

### TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

<b>PWHT</b>	<b>Rm [MPa]</b>	<b>Rp0.2% [MPa]</b>	<b>A5 [%]</b>	<b>CVN [J]</b>
As welded	550	510	30	-46°C: 80
620°C / 1 hour	520	460	33	-46°C: 90

### OPERATING CONDITIONS

<b>Electrode Ø x L [mm]</b>	2.5 x 350	3.2 x 350	3.2 x 450	4.0 x 450
<b>Current [A]</b>	60 - 80	100 - 130	130 - 180	170 - 230
= +/-	~ 70V			

Re-drying if standard packaging: 2 hours at 300/350° C

Recovery: 120 %

### WELDING POSITIONS

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

ASME IX: 1F, 1G, 2F, 2G, 3Fu, 3Gu, 4F, 4G, 5Gu

### PACKAGING

<b>Electrode Ø x L [mm]</b>	2.5 x 350	3.2 x 350	3.2 x 450	4.0 x 450
<b>Weight/box [kg]</b>	5	5	6.5	6.5

Other packaging and other sizes: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.