

## 9018-B3

**CATEGORY** SMAW Stick Electrodes

**TYPE** Basic electrode for creep resistant steel welding

**APPLICATIONS** Construction of containers, boilers, machines and pipe work. Steam boilers and turbine construction.

**PROPERTIES** Excelent welding properties with low spatter formation and very stable arc. Suitable for welding in all positions except vertical down. Excellent gap bridging for root welding. 118% recovery type for economic production of creep resistant steels and pressure-hydrogen-resistant 2¼Cr1Mo-steels.

**CLASSIFICATION**

AWS	A 5.5: E 9018-B3 H4R
EN ISO	3580-A: E CrMo2 B 42 H5 3580-B: E 6218-2C1M H5
DIN	8575: E CrMo2 B 20+

**SUITABLE FOR** 10CrMo9.10, 12CrMo9-10, 10CrSiMoV7, 12CrSiMo8, 30CrMoV9, GS-18CrMo9.10  
W.Nrs: 1.7380, 1.8075, 1.7707, 1.7379,  
ASTM: A 387 Gr. 22, A217 Grade WC9

**APPROVALS** CE approved

**WELDING POSITIONS:**



**WELD DEPOSIT WEIGHT %**

C	Mn	Si	Cr	Ni	Mo
0.06	0.90	0.60	2.4	-	1.0

**MECHANICAL PROPERTIES**

Heat Treatment	R <sub>p0,2</sub> (N/mm <sup>2</sup> )	R <sub>m</sub> (N/mm <sup>2</sup> )	A <sub>5</sub> (%)	Impact Energy (J) ISO-V			Hardness HRc / HV
				+20°C	-40°C	-60°C	
*SR 690°C/2hr	>490	620-720	>18	>95			
**	>420	>590	>18	>95			

\* SR: stress relieved / \*\* 930°C/ 30 minutes in oil, + annealed for 30 minutes at 730°C

**WELDING PARAMETERS PACKING**

Welding Parameters			Packing		
D (mm)	Length (mm)	Current (A) DC+	kg / can	kg / 6pack	kg / 1000
2.5	300	70-95	2.5	15	19.8
3.25	350	100-130	2.8	16.8	36.4
4.0	450	150-180	3.3	19.8	66.7
5.0	450	180-220	3.6	21.6	101.9

**REDRYING TEMPERATURE** 400°C/1hr