

Classification								
AWS A5.1		AWS A5.1M		EN ISO 2560-A		EN ISO 2560-B		
E7018-1H4R		E4918-1H4R		E 42 5 B 42 H5		E 49 18-1 A U H5		
Characteristics and typical fields of application								
<ul style="list-style-type: none"> • Basic covered electrode with very good welding characteristics including out of position work. • Particular good impact properties down to -50°C. • CTOD tested at -10°C. • Weld metal recovery about 115%*. • Crack-free weld metal when welding high-carbon steels. • Suitable for use in tank construction, boiler and pressure vessel manufacturer, apparatus engineering, vehicle manufacture, offshore applications and ship building. • Very low hydrogen content in the weld metal (under AWS conditions $HD \leq 4 \text{ ml/100 gm}$) • Suitable for welding steels with low purity and high carbon content. 								
Base Materials								
S235JRG2 – S355J2, E295, E335, C35; boiler steels P235GH, P265 GH, P295GH, P355GH; fine grained structural steels up to S420N; shipbuilding steels A, B, D, E; offshore steels; pipe steels P265, P295, L290NB – L415NB, L290MB, X42 – X60; cast steels GS-38, GS-45, GS-52; ageing resistant steels Ast35 – Ast52; SA 516 Gr 60, 65, 70; SA333 Gr 6.								
Typical analysis of all weld metal (wt.-%)								
C	Si	Mn	P	S	Cr	Mo	Ni	Mn+Ni+Cr+Mo+V
0.08	0.50	1.40	0.009	0.01	< 0.05	< 0.05	< 0.05	1.4
Mechanical properties of all-weld metal								
Heat treatment	Yield strength	Tensile strength		Elongation	Impact work			
	$R_e \text{ N/mm}^2$	$R_m \text{ N/mm}^2$		$(L_0=5d_0)$	ISO-V KV J			
	MPa	MPa		%	+ 20 °C		- 50 °C	
As Welded	490	560		30	190		90	
620°C/2 h	440	530		35	220		120	
Operating data								
		Polarity DCEP		Note: * metal recovery rate may vary slightly with higher diameter Re-drying if necessary : 300 – 350°C min. 2h				
Approvals								
ABS, LR, DNV-GL, BKI, CE								
Size, Packaging and Electrical Operating Data								
Size (mm)		Carton Pack		Vacuum Pack		Amperage (A)		
Ø	Length	Kg / Pack	Kg / Box	Kg / Vac.	Kg / Box			
2.50	350	5.0	20.0	2.0	12.0	80 – 110		
3.25	350/450	5.0	20.0	2.0	12.0	100 – 145		
4.00	450	5.0	20.0	2.0	12.0	140 – 200		
5.00	450	5.0	20.0	2.0	12.0	190 – 250		