

TECHNICAL DATASHEET Version S18

AI-0178H-4R

Specifications

AS/NZS 1553.1 : E4818-5 H5R **AWS/ASME** A5.1 : E7018-1 H4R **ISO** 2560-A : E 42 B32 H5

Description and Applications

Universal basic coated electrode with 115% recovery, for welding highly stressed connections with high success. Good low temperature properties down to -500C. Highly resistant to cold cracks. Stable Arc with easily removable flux. Uses include Frames, cases, ship building and pressure vessels. Construction Steels for general use, Tube Steels, Ship Steels, Steels for Boiler and Pressure Vessels, High Strength steels, Heat resistant steels, Cold tough steels.

Base Materials

EN - Designation	S 185 - S 355	P235 - P355
	GP 240 R	P235GH - P265GH
	L210 - L360	
Ship Steels	Quality A, B, C and D	
	A285grade C	A414grade C, D, E, F
	A442 grade 55, 60	A 515 grade 55,60,65, 70
	A 516 grade 55,60,65 70	

Typical Weldmetal Analysis

С	Mn	Si	Fe
0.075	1.35	0.5	Bal

Mechanical Properties of Weldmetal

	As Welded
Tensile Strength	510-610MPa
Yield Strength (0.2%)	>420Mpa
Elongation	>24% (4d)
Charpy Impact KV(J)°C	20°C >160
	-20°C >100
	-40°C >47



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Welding

Diameter (mm)	Current type	Amps
2.5	DC /AC DC /AC DC /AC DC /AC	80
3.25	DC /AC	120
4.0	DC /AC	140
5.0	DC /AC	180

MIG wire: Various options available

Welding Positions

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical position, (4F) Horizontal overhead position, (4G) Overhead position, (3G, 3F, 5G up) Vertical Position Up, (3G, 3F, 5G down) Vertical position down

Disclaimer

All figures in this datasheet should be considered indicative only. No guarantee is made as to their accuracy. All figures subject to change without notice. Batch analysis is available for all products sold. Should you require any further information, please contact us at sales@alloysint.com.au



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