

AI-0118

Specifications

AS/NZS 1553.2 : E7618-M H5R

AWS/ASME A5.5 : E11018M H4

Description and Applications

AI-0118 was developed for the welding of the quenched and tempered constructional alloy steels (eg Bisalloy, Hardox) having a yield strength of 685-880 MPa (100,000 - 130,000 psi). **AI-0118** is designed for joining and cladding on a wide range of construction equipment, heavy machinery in a varied range of heavy industries. The electrode is suitable for welding high strength steels where high impact values at low temperatures are required. Easy slag removal.

Typical Weldmetal Analysis

C	Mn	Si	Fe	Ni	Mo
0.08	1.4	0.45	Bal	1.6	0.35

Mechanical Properties of Weldmetal

	As Welded	Stress Relieved
Tensile Strength	772MPa, 112kpsi	766MPa, 111kpsi
Yield Strength (0.2%)	690MPa, 100kpsi	662MPa, 96kpsi
Elongation in 50mm	23%	23%
Reduction of area	62%	63%

Welding Parameters

Diameter (mm)	Current type	Amps
2.5	DC /AC	70
3.25	DC /AC	110
4.0	DC /AC	135

Also available in MIG wire

In most cases the use of **AI-0118** electrodes will reduce or eliminate the preheat requirements. Maintain a short arc. Do not weave the electrode more than twice the diameter of the core wire. Electrodes must be kept dry. If damp, they must be heated at 250°C – 300°C for two hours prior to welding. High strength quench and tempered plates should be preheated to 100°C for plate thicknesses between 10 mm - 15 mm. For plates where the carbon equivalent exceeds 0.25 a preheat of up to 250°C may be necessary.



Welding Positions

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical 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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