

AI-1740

Specifications

AWS/ASME ER 80S-B2

Description and Applications

Copper coated Cr-Mo alloyed wire for MIG welding of high temperature steels. Suitable for applications up to 550° C and for welding of heat treatable steels of similar composition.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Mo
0.11	1.00	0.60	1.20	0.50

Mechanical Properties of Weldmetal

	As Welded
Tensile Strength	590-690MPa
Yield Strength (0.2%)	490MPa
Elongation	22% (L=5D Min.)
Charpy V	78 Joules
Condition	Stress relieved at 720°C
Shielding Gas	Ar + 20-25% CO₂

Welding Parameters

Diameter (mm)	Current type	Amps
1.2	DC(+)	150-220
1.6	DC(+)	180-300

Welding Instructions

Cooling rate should not exceed 80°C per hour until the part reaches 300°C. Subsequent air cooling at rates not exceeding 100°C per hour.

Welding Positions

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

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

