

AI-0606B

Specifications

AWS/ASME 11 C SFA 5.21: ERCoCr-A

Description and Applications

AI-0606B is a bare cast rod for surfacing parts subject to either the single or combined effect of medium abrasion or metal-to-metal wear, and/or temperatures from 500°C to 800°C in corrosive media, using either the TIG or Oxy welding process. Hardness and Toughness of deposited metal is used for service conditions involving heavy impact and thermal shocks.

Applications include: Hot shear blades, valves (slurry, exhaust, metering etc.), mill side guide rolls, ingot tong ends, seats, and nozzles.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Ni	Fe	W	Co	Mo
1.1	0.5	0.8	29.0	0.3	2.5	4.5	Bal	0.1

Mechanical Properties of Weldmetal

	As Welded
Hardness	42-48HRc 310HV at 500oC 250HV at 700oC
Metal-to-metal wear resistance	Excellent
Shock resistance	Low to moderate
High temperature resistance	Excellent
Thermal Shock Resistance	Moderate
Abrasion resistance	Good
Machineability	Good

Welding Instructions

Shielding Gas: Argon 100% for TIG application or Oxy-Acetylene (with a carburising flame)

Gas Rate: 15-18 l/min

Procedure for Gas Tungsten Arc (TIG) Welding

1. Thoroughly clean all areas to be joined.
2. Use a Thoriated or Ceriated tungsten electrode.
4. Use Direct Current Electrode Negative (DC-) and Welding Grade Argon.
5. Preheat thick sections



ALLOYS INTERNATIONAL PTY LTD

25 Raymond Road Laverton North Victoria 3026

Telephone: +61 3 8368 2222 | Facsimile: +61 3 8368 2200

ABN 53 112 712 286

sales@alloysint.com.au | www.alloysint.com.au

Available Sizes

2.5mm, 3.25mm, 4.00mm, 5.00mm and 6.4mm Diameter

Electrodes: **AI-0606E**

MIG wire: **AI-1706**

Arc spray wire: **AI-1806**

PTA/Laser cladding powder: **AI-2006**

HVOF powder: **AI-2606**

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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