

AI-0612B

Specifications

AWS/ASME II C SFA 5.21: ERCoCr-B

Description and Applications

AI-0612B is a bare cast cobalt based Alloy 12 rod for use with the oxyacetylene torch or by the TIG process. Particularly suited for surfacing parts subject to either the single or combined effect metal-to-metal wear, and/or temperatures from 500°C to 800°C in corrosive media

Applications include: Tools for cutting wood, paper, board, carpet and plastic.

Typical Weldmetal Analysis

C	Cr	W	Co
1.4	31	8.4	Bal

Mechanical Properties of Weldmetal

	As Welded
Hardness	48HRc 32HRC at 500°C
Metal-to-metal wear resistance	Excellent
Shock resistance	Medium
High temperature resistance	Excellent
Thermal Shock Resistance	Moderate
Abrasion resistance	Good
Machineability	Machineable with care

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



Available Sizes

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

Electrodes: **AI-0612E**

MIG wire: **AI-1712**

Arc spray wire: **AI-1812**

PTA/Laser cladding powder: **AI-2012**

HVOF powder: **AI-2612**

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



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