AI-0601B

Specifications

AWS/ASME II C SFA 5.21: ERCoCr-C

Description and Applications

AI-0601B is a cobalt-based Alloy 1 rod for use by TIG or oxy welding. Applications include 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.

Applications include: rolling mill guides, pump bushes and spindles, steam turbine parts, extrusion dies.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Ni	Fe	W	Co	Mo
2.2	2	2	32	3	5	12	Bal	1

Mechanical Properties of Weldmetal

	As Welded
Hardness	56HRc 37HRc at 500oC
Metal-to-metal wear resistance	Excellent
High temperature resistance	Excellent
Thermal Shock Resistance	Moderate
Abrasion resistance	Very Good
Machineability	Grinding only

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

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Available Sizes

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

Electrodes: **AI-0601E**
MIG wire: **AI-1701**
Arc spray wire: **AI-1801**
PTA/Laser Powder: **AI-2001**
HVOF Powder: **AI-2601**
Castings, HIP'ed castings, billets, forgings

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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