

# TECHNICAL DATASHEET Version J22

### AI-0601E

#### **Specifications**

AWS/ASME II C SFA 5.21: ECoCr-C

#### **Description and Applications**

**AI-0601E** is a cobalt based Alloy 1 rutile coated electrode 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. The addition of tungsten gives excellent wear resistance.

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

#### **Typical Weldmetal Analysis**

С	Mn	Si	Cr	Ni	Fe	W	Со	Мо
2.2	2.0	2.0	32.0	3.0	5.0	12.0	Bal	1.0

#### **Mechanical Properties of Weldmetal**

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

#### **Welding Parameters**

Diameter (mm)	Current type	Amps
2.5	DC /AC	90-120
3.2	DC /AC DC /AC	120-140
4.0	DC /AC	140-160
5.0	DC/AC DC/AC	160-180

## **Welding Positions**

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

#### **Available Forms**

Bare/TIG rods: AI-0601B

MIG wire: AI-1701 Arc spray wire: AI-1801 PTA/Laser Powder AI-2001

#### **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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