

## AI-0606E

### Specifications

**AWS/ASME** 11 C SFA 5.13: ECoCr-A

### Description and Applications

**AI-0606E** is a cobalt based rutile coated electrode (Equivalent to Stellite™\* 6) 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. This alloy is typically 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	0.3	2.5	4.5	Bal	0.1

### Mechanical Properties of Weldmetal

	As Welded
Hardness	42-48HRc 310HV at 500°C 250HV at 700°C
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 Parameters

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

Bare/TIG rods: **AI-0606B**

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](mailto:sales@alloysint.com.au). \*Stellite is a trademark of the Kennametal Corporation



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