

## AI-0621E

### Specifications

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

### Description and Applications

**AI-0621E** is an electrode (Equivalent to Stellite™\* 21) designed for surfacing parts subject to the single or combined effects of metal-to-metal wear at high temperatures (500-800°C) repeated thermal cycling, friction, abrasion, high impact oxidation and corrosion up to temperatures of 1150°C.

**Applications include:** Hot shear blades, Forging Bottom Dies, Cutting discs, Hot working tools, Wear Pads, Steam Valves, Seats and spindles, Ingot Bloom and Billet Holders. Deposit has the added benefit of being machinable.

\*Stellite is a trademark of the Kennametal Corporation

### Typical Weldmetal Analysis

C	Cr	Ni	Co	Mn
0.25	28	2.5	Bal	5.5

### Mechanical Properties of Weldmetal

	As Welded
Hardness	48HRc after work hardening or heat treatment 32HRc as welded
Metal-to-metal wear resistance	Very good
Shock resistance	Excellent
High temperature resistance	Excellent
Thermal Shock Resistance	Exceptional
Machineability	Good
Hardness	48HRc after work hardening or heat treatment

### Welding Instructions

Castings, billets, HIP'ed castings

### Welding Parameters

Diameter (mm)	Current type	Amps
2.5	DC /AC	90-120
3.2	DC /AC	120-150
4.0	DC /AC	150-180

Bare/TIG rods: **AI-0621B**

MIG wire: **AI-1721**

PTA/Laser cladding powder: **AI-2021**

HVOF powder: **AI-2621**

### 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)



**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](mailto:sales@alloysint.com.au) | [www.alloysint.com.au](http://www.alloysint.com.au)