

TECHNICAL DATASHEET Version S19

AI-0612E

Specifications

AWS/ASME 11 C SFA 5.13: ECoCr-B

Description and Applications

AI-0612E is a rutile coated electrode (Equivalent to Stellite^{TM*} 12). 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

С	Cr	W	Со
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

Castings, billets, HIP'ed castings

Welding Parameters

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

Bare/TIG rods: 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



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^{*}Stellite is a trademark of the Kennametal Corporation