

AI-1712

Specifications

AWS/ASME SFA 5.13 E: Co Cr - B

Description and Applications

Cobalt based surfacing alloy particularly suited for parts subject to either the single or combined effect of medium abrasion or metal-to-metal wear, temperatures from 500° C to 800° C, corrosive media.

Applications include: tools for cutting wood, papers, cardboard, carpet, plastic etc.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Fe	W	Co
1.60	1.00	1.00	27.00	3.00	8.00	Bal

Mechanical Properties of Weldmetal

	As Welded
Shock Resistance	Medium
Metal-to-Metal Wear Resist	Excellent
Abrasion Resistance	Good
High Temperature Resist	Excellent
Thermal Shock Resistance	Medium
Machineability	Difficult
Hardness	48HRc
	500°C 32HRc
Shielding Gas	98% Ar + 2% O₂ or 100% Ar

Welding Instructions

Spray Transfer: 30V-250 A
Pulse Arc: 25V-180 A

Welding Parameters

Diameter (mm)	Current type	Amps
1.2	DC(+)	150-220
1.6	DC(+)	180-300

Also available as Coated Electrodes **AI-0612E** and Bare Rod **AI-0612B**

Welding Positions

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

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

