

AI-1721

Specifications

AWS/ASME II C SFA 5.21 ERCCoCr-E

DIN 8555 MF 20-GF-300-CKTZ

Description and Applications

AI-1721 is a MIG wire designed for surfacing parts subject to the single or combined effects of metal to metal wear at high temperatures with repeated thermal cycling, friction, abrasion, high impact, oxidation and corrosion up to temperatures of 1150°C. Deposit has the added benefit of being machinable.

Solid solution of the austenitic type with precipitation of finely dispersed Cr + Mo Carbides.

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.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Fe	Ni	Co	Mo
0.28	0.70	0.55	27.00	3.00	2.20	Bal	5.00

Mechanical Properties of Weldmetal

	As Welded
Shock Resistance	Excellent
Metal-to-Metal Wear Resist	Very Good
High Temperature Resist	Excellent
Thermal Shock Resistance	Exceptional
Spray Transfer	30V-250A
Pulse Arc	25V-180A
Hardness	32 HRc 44-48 HRc (after work hardened)
Submerged Arc Welding	26V-300A
Machineability	Good
Shielding Gas	98% Ar with 2% O₂ or 100% Ar

Nominal Hot Hardness (DPH) of undiluted weld deposit

20°C	100°C	200°C	300°C	400°C	500°C	600°C	700°C	800°C	900°C
347	279	248	228	208	197	181	153	123	92

Welding Parameters

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



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 | www.alloysint.com.au

Welding Positions

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

Available Forms

Coated Electrodes **AI-0621E**

Bare/TIG rod **AI-0621B**

PTA / Laser Powder **AI-2021**

Arc Spray Wire: **AI-1821**

Castings, wrought, HIP'ed castings

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



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 | www.alloysint.com.au