

AI-1784

Specifications

AWS/ASME A5.7 : ER CuNiAl

DIN 1733 : SG-CuAl 8 Ni 6

Description and Applications

This nickel aluminium bronze filler alloy is used to weld bronze base metals (Particularly NiAl Bronze) and for overlaying onto steel and cast iron substrates. **AI-1784** can also be used in some cases for joining these alloys to themselves or to steel. This alloy is particularly resistant to seawater environments and cavitation.

Applications include: pump impellers and shafts, propellers, water turbines, propeller shafts etc.

Typical Weldmetal Analysis

Mn	Fe	Ni	Al	Cu
1.0	3.5	5.0	9.0	Bal

Mechanical Properties of Weldmetal

	As Welded
Tensile Strength	700MPa
Yield Strength (0.2)	400MPa
Elongation	15%
Hardness	200 HB
Electrical Conductivity	3-5 S/m
Melting Range	1,015 – 1,045°C
Shielding Gas	98% Ar +2% O₂ or 100% Ar

Welding Parameters

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

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

