

## AI-1786

### Specifications

**AWS/ASME A5.7 ER CuSi-A**

### Description and Applications

This silicon bronze filler alloy is used to weld tin-bronze base metals, brasses and for overlaying onto steel and cast iron substrates. **AI-1786** can also be used in some cases for joining these alloys to themselves or to steel.

**Applications include:** pump impellers, skids, guides, endless screws, shafts, valve seats, bearings etc.

### Typical Weldmetal Analysis

Zn	Sn	Si	Al	Pb	Cu	Other
1.00	1.00	2.9-4.0	0.01	0.02	Bal	0.50

### Mechanical Properties of Weldmetal

	As Welded
Tensile Strength	350MPa
Yield Strength (0.2%)	220MPa
Elongation	30%
<b>Shielding Gas</b>	<b>Ar + 20-25% CO<sub>2</sub></b>

### Welding Parameters

Diameter (mm)	Current type	Amps
0.9	DC(+)	90-150
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](mailto:sales@alloysint.com.au)

