

## AI-1746BW

### Description and Applications

**AI-1746** is a premium Martensitic Surfacing Alloy alloyed with Chrome and Tungsten.

**AI-1746** is designed to be used as a **matrix for the Bulk Welding Process where AI 14/24 - Tungsten Carbide Chips are dropped into the weld pool**. This alloy is designed to prevent 'matrix wash out' which happens when mild steel consumable is used in this process.

**Applications:** High impact and wear applications, buckets, conveyor screws, cutting edges, pump components.

### Typical Weldmetal Analysis

C	Mn	Si	Cr	Fe	W	Mo	V
0.45	1.00	2.00	6.00	Bal	1.00	0.80	0.5

### Mechanical Properties of Weldmetal

	As Welded
Wear Index	35%
Microstructure	Martensite
Machinability	Grinding
Hardness Undiluted Weld metal	57-60 HRc (Mixed Gas)
<b>Shielding Gas</b>	<b>Argon + CO<sub>2</sub> (20-25%)</b>

### Welding Parameters

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

### 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)

