

AI-1746

Description and Applications

AI-1746 is a premium Martensitic Surfacing Alloy specifically designed for **hardfacing out of position** in the horizontal or vertical-up modes under gas shielding.

AI-1746 is ideal for hardfacing components subjected to friction and low stress abrasive wear with moderate impact.

Applications include: Cable Sheaves, plastics screws, conveyor rolls, rock drills, screw conveyors, cutting edges, sliding metal parts (metal-to-metal wear), bucket teeth, gravel pumps etc.

Typical Weldmetal Analysis

C	Mn	Si	Cr	Fe	W	Mo	V
0.46	1.10	2.10	6.15	Bal	0.97	0.81	0.42

Mechanical Properties of Weldmetal

	As Welded
Wear Index	35%
Microstructure	Martensite
Machinability	Grinding
Hardness Undiluted Weld metal	58-60HRc (Mixed Gas)
Shielding Gas	Ar + 20-25% CO₂

Welding Instructions

Preferred method of finishing would be **grinding**; however, it can be machined using special tools.

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

