

AI-1860MF

Description and Applications

AI-1860MF is an alloy developed for Arc Spraying followed by subsequent fusion. The Arc Spraying process produces the highest productivity of any Thermal Spray Process. This combination of using the Arc Spray together with subsequent fusion produces deposits smooth pore free deposits that are metallurgically bonded to the substrate.

Applications: **AI-1850MF** is recommended for applications involving severe high stress abrasion combined with low impact at temperatures not exceeding 450°C. Also intended for use where cavitation is expected. This alloy is ideally suited for applications where there is a combination of Abrasive Wear and Corrosion.

Typical applications include: Exhaust Fans, Boiler Tubes, Shifter Forks and hot crusher rolls.

Properties

	As sprayed
Abrasion Resistance	Good
Impact Resistance	Good
Deposit Efficiency	70%
Hardness (Fused Deposit)	59-62 HRc
Machineability	11.2kg/hr/250Amps
Spray Rate	1.1kg/m ² /100 μm
Coverage	10kg

Parameters

	Volts	Amps	Air	Distance
Bond Pass	Use AI 1800 Bond Arc for bond wire			
Build Up	29-31	150-300	414-621kPa (60-90psi)	100-125mm

NOTE: Be sure not to overheat substrate as this reduces coating quality. If necessary, stop to allow cooling or use air jet cooling if greater speed is required.

Finishing

- Grinding using medium grit Aluminium Oxide or Silicon Carbide, eg: carborundum AC 60-411-VR or PA 46-F8-V40.
- Use light cuts for roughing and finishing.

Dress frequently and do not permit coating to overheat.

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 |

ABN 53 112 712 286

sales@alloysint.com.au | www.alloysint.com.au