AI-1850MF

Description and Applications

AI-1850MF 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.
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.
Applications include: Exhaust Fans, Boiler Tubes, Shifter Forks and hot crusher rolls.

Typical Analysis

C	Mn	Si	Cr	Fe	B	Ni
0.70	0.20	4.50	8.0	1.5	2.70	Bal

Mechanical Properties

Abrasion Resistance	:	Good
Impact Resistance	:	Good
Deposit Efficiency	:	85%
Hardness	:	50 - 55 HRc
Machineability	:	Grinding

Spray Parameters

VOLTS	AMPS	AIR	DISTANCE
29-31	150-350	414-621kPa (60-90psi)	150-175mm

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.

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