

AI-1867

Description and Applications

AI-1867 is an alloy especially manufactured for arc spraying components for reclamation and corrosion protection. It may also be used as an overlay on copper prior to build-up with a variety of alloys but more often as an overlay on steel and iron-based components. Best results are obtained in combination with a bond layer of **AI-1800** or **AI-1875**.

Applications include: Bearing surfaces in bores and on journals, high load and/or high pressure applications, tough and wear resistant alloy used as a buildup layer under harder top layers. Also provides excellent corrosion protection in saline environments. Often used as an arc sprayed pseudo-alloy with **AI-1822** to give a combination offering high wear resistance, high load bearing capacity, thick coatings and excellent machineability and turned finish 'off the tool' with reasonable levels of corrosion resistance.

Typical Overlay Analysis

C	Mn	Si	S	Ni	Fe	Ti	Cu
0.02	0.75	0.10	0.005	38.00	0.45	0.30	Bal

Mechanical Properties

	As Sprayed
Melting Point	1,300°C (approx.)
Machined Finish	Good
Density	7.62gm/cm
Typical Hardness – ARC	70 HRb (macro)
Shrink	0.002 (approx.)
Bond Strength – ARC	38MPa (5,550 psi) blasted surface
Spray Rate - ARC	4.5kg/hr/100amps

Spray Parameters

	Volts	Amps	Air	Distance
Bond Pass	USE A BOND PASS OF AI-1800 or AI-1875 BOND ARC WIRE			
Build-Up	29-31	150-350	414-621kPa (60-90psi)	150-200mm

Available Sizes:

Available in 1.6mm diameter for typical arc spray applications

Disclaimer

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