

## AI-1875

### Description and Applications

**AI-1875** is a solid Nickel Aluminium bond wire produced specifically for metal spraying. It has been introduced as an economical alternative to **AI-1800** bond wire where ultimate bond strength may not be required.

### Typical Analysis

Al	Ni
5.0	95.0

### Mechanical Properties

	As Sprayed
Coating Tensile Strength	124MPa (18,000psi)
Bond Tensile Strength	62.6MPa (9,077psi) clean surface 66.9MPa (9,700psi) blasted surface
Deposit Efficiency	70%
Melting Point	1,660°C (3,020°F)
Coating Density	7.78gm/cm <sup>3</sup>
Coating Hardness	25HRc (converted)
Coverage	1.1kg/m <sup>2</sup> /100μ

### Spray Parameters

Spray	Volts	Amps	Air	Spray Distance (mm)
Bond Pass	29-31	150	345kPa (50psi)	100-125
Build Up Passes	29-31	150-350	414-552kPa (60-80psi)	150-200

Available size 1.6mm dia. 15kg standard MIG spool

### Finishing

**AI-1875** can be finished by either machining or grinding. It can be applied directly on to a smooth, chemically cleaned surface where rough machining or grit blasting is not possible. It is recommended however, that a Class 2 white finish be achieved prior to spraying, by grit blasting with a Chilled Iron G24 grade grit or rough machined to maximise bond strength.

### Disclaimer

All figures in this datasheet should be considered indicative only. No guarantee is made as to their accuracy.

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