

## AI-1782

### Specifications

**AWS/ASME** A5.14 : ERNiCr- 3

MIL-E-21562 Types MIL-RN82, MIL-EN82

### Description and Applications

**AI-1782** is a nickel based filler wire used in the joining and cladding of similar materials such as Inconel 600, 601 and Incoloy® 800.

**AI-1782** is recommended for dissimilar welding applications such as Inconel® to Nickle 200, Monel® 400, stainless steels and carbon steels.

This consumable can be used for materials, which operate at extremes of temperature from -196°C to 900°C.

The **AI-1782** gives a fully austenitic weld metal that withstands hot cracking.

### Typical Weldmetal Analysis

Si	C	Ni	Fe	Nb	Co	Ti	Cu	Mn	Cr	Other
0.50	0.05	67.00	3.00	2.00-3.00	0.10	0.75	0.50	2.50-3.50	18.0-22.00	0.05

### Mechanical Properties of Weldmetal

	As Welded
Yield Strength (0.2%)	360MPa
Tensile Strength	600MPa
Elongation A5	30%
Impact Strength	100 J/cm <sup>3</sup>
<b>Shielding Gas</b>	<b>98% Ar + 2% O<sub>2</sub> or 100% Ar</b>

### Welding Parameters

Diameter (mm)	Current type	Amps
0.9	DC(+)	90-150
1.2	DC(+)	150-220
1.6	DC(+)	180-300

Also available as Bare Rod **AI-0382T**. Spool Size 13.4Kg

### 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](mailto:sales@alloysint.com.au)



**ALLOYS INTERNATIONAL PTY LTD**

25 Raymond Road Laverton North Victoria 3026

Telephone: +61 3 8368 2222 | Facsimile: +61 3 8368 2200

**ABN** 53 112 712 286

[sales@alloysint.com.au](mailto:sales@alloysint.com.au) | [www.alloysint.com.au](http://www.alloysint.com.au)