

AI-0399T

Specifications

AWS/ASME A5.14 Class ERNi-1 (UNS N02061)

Description and Applications

AI-0399T is a **Nickel** alloy bare wire is used for the GTAW joining of Nickel 200 and Nickel 201. This includes ASTM grades such as B160 – B163, B725 and B730.

AI-0399T is useful in a variety of dissimilar applications between nickel alloys to stainless or ferritic steels. **AI-0399T** is also used for overlaying carbon steel and in repairing cast iron castings.

Typical Weldmetal Analysis(%)

C	Mn	Si	Fe	P	S	Ni
0.1	1	0.54	0.90	<0.006	<0.015	>93

Mechanical Properties of Weldmetal

	As Welded
Tensile Strength:	414 MPa 65,000 Psi
Yield Strength (0.2%):	255 MPa 37,000 Psi
Elongation (A5):	27%

Available Sizes

1.6, 2.4 mm Diameter

Welding Instructions

Procedure for Gas Tungsten Arc (TIG) Welding

1. Thoroughly clean all areas to be joined.
2. For the butt welding of thick plates, bevel edges to 60° - 70 ° included angle.
3. Use a Thoriated or Ceriated tungsten electrode, ground to a sharp needle point making sure the grinding lines run with length (longitudinally) of the electrode's axis. The length of the needle point should be about 2 - 3 times the diameter of the tungsten electrode.
4. Use Direct Current Electrode Negative (DC-) and Welding Grade Argon.
5. Preheat thick sections
6. It is recommended that a pickling paste be applied after welding for cleaning and finishing.

Welding Instructions

Shielding Gas: Argon 100% or Oxy-Acetylene

Gas Rate: 15-18 l/min

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



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