

# TECHNICAL DATASHEET Version S18

### AI-0382T

## **Specifications**

AWS/ASME A5.14 : ER NiCr-3

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

SFA-5.14 Class ERNiCr-3

## **Description and Applications**

AI-0382T is a Nickel based filler wire used in the joining and cladding of similar materials such as Inconel 600, 601 and Incoloy™ 800.

**AI-0382T** is recommended for dissimilar welding applications such as Inconel to Nickel 200, Monel<sup>™</sup> 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. **AI-0382T** gives a fully austenitic weld metal that withstands hot cracking.

#### **Typical Weldmetal Analysis**

| С    | Cu  | Mn      | Si  | Cr    | Ni   | Fe  | Other | Со   | Ti   | Nb      |
|------|-----|---------|-----|-------|------|-----|-------|------|------|---------|
| 0.05 | 0.5 | 2.5-3.5 | 0.5 | 18-22 | Bal. | 3.0 | 0.05  | 0.10 | 0.75 | 2.0-3.0 |

### **Mechanical Properties of Weldmetal**

|                     | As Welded             |  |  |
|---------------------|-----------------------|--|--|
| Yield Strength 0.2% | 360MPa                |  |  |
| Tensile Strength    | 600Mpa                |  |  |
| Elongation A5       | 30%                   |  |  |
| Impact Strength     | 100 J/cm <sup>2</sup> |  |  |

## **Welding Instructions**

Shielding Gas: Argon 100% or Oxy-Acetylene

Gas Rate 15-18 I/min

#### Disclaimer

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