

# TECHNICAL DATASHEET Version S18

#### AI-0390

#### **Specifications**

**AWS/ASME** A5.6.76 E NiCu-7 **DIN** 1736 S-NiCu30MnTi **MIL** E-21562 Type MIL-RN60 & EN60

#### **Description and Applications**

**AI-0390** is an electrode which is used for welding of MONEL\* alloys 400 and 404 to themselves and each other. It can also be used as an overlay on steel after an initial layer of **AI-0399**. Dissimilar welding applications include joining MONEL\* alloys to Nickel 200 and joining MONEL\* alloys and Nickel 200 to copper-nickel alloys. This alloy has a high strength, good weldability and excellent temperature and corrosion resistance over a wide range of temperatures.

Applications include: Valves, shafts, pumps, marine fixtures, electrical and electronic components, processing and refining equipment, heat exchangers etc.

#### **Typical Weldmetal Analysis**

С	Mn	Si	Cu	Ni	Fe	Ti	S
<0.02	3.50	0.3	29	Bal	0.10	2.20	0.005

#### **Mechanical Properties of Weldmetal**

·	As Welded
Tensile Strength	500MPa
Yield Strength (0.2%)	310MPa
Elongation	43% (4d)

## **Welding Parameters**

Diameter (mm)	Current type	Amps
2.5	DC +ve	60-80
3.2	DC +ve	80-120
4.0	DC +ve	120- 150

Also available as Solid MIG Wire AI-1790 and TIG AI-0390T

### **Welding Positions**

(1G, 1F) Downhand/flat position, (2F) Horizontal position, (2G) Horizontal vertical position, (4F) Horizontal overhead position, (4G) Overhead position, (3G, 3F, 5G up) Vertical Position Up

#### Disclaimer

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<sup>\*</sup>MONEL is a registered trademark of The International Nickel Co.



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