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# COR™NICKEL N182 FC

### **DESCRIPTION**

COR™NICKEL N182 FC is a flux-cored, nickel base alloy formulated for superior welder appeal and bead appearance. The N182 FC offers improved wetout and easy slag removal, resulting in increased productivity over conventional shielded metal arc welding electrodes and solid wires.

## **APPLICATIONS**

N182 FC is used for joining nickel-chromium-iron alloys, and iron and nickel base alloys of dissimilar metal combinations: nickel to stainless, stainless to carbon steel, and combinations with Inconel<sup>®</sup>, Incoloy<sup>®</sup>, and Monel<sup>®</sup> alloys. N182 FC maintains strength and oxidation resistance at service temperatures from cryogenic to 900°F. Strength and oxidation resistance decrease at elevated temperatures. Further testing and or qualification may be needed to ensure that the weld metal exceeds the design criteria at the service temperature.

#### **PROCEDURE**

Keep preheat and postheat to a minimum or according to base material.

#### **WELDING PARAMETERS**

Size	Volts	Amps	Stickout	Shielding Gas
FC-G .045"	24-28	120-200	1/2"	CO <sub>2</sub> or Ar-CO <sub>2</sub> mixtures
FC-G 1/16"	22-28	150-250	3/4"	CO <sub>2</sub> or Ar-CO <sub>2</sub> mixtures
FC-G 3/32"	23-28	300-400	3/4"	CO <sub>2</sub> or Ar-CO <sub>2</sub> mixtures

## **MECHANICAL PROPERTIES**

Tensile Strength: 80,000 psi minimum Elongation: 25% minimum

# **CLASSIFICATION**

AWS A5.34 TNi 6182-01/4 ENiCrFe3TO-1/4

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