

# **EXECUTIVE 617**

# **NICKEL ALLOY**

SOLID WIRE TECHNICAL DATA SHEET

#### **DESCRIPTION**

Executive 617 is a nickel-chromium-molybdenum alloy designed for welding INCONEL® 617 alloy using TIG and MIG welding processes. This alloy is also used for joining dissimilar high temperature alloys including 800HT, 803 and HK-40. The high alloy content of Executive 617 produces weld material with high temperature strength and oxidation resistance.

Executive 617 filler metal is produced using high quality raw materials and tightly controlled chemistry to provide top quality, exceptionally clean wires that deliver the results fabricators demand.

#### **APPLICATIONS & FEATURES**

Executive 617 is used for welding INCONEL® 617 and dissimilar high temperature alloys.

High temperature alloys that can be joined include alloy 800, 803 along with HK-40 and HP materials.

#### **TYPICAL WIRE CHEMISTRY & MECHANICAL PROPERTIES**

C S Αl Mn Fe Ρ Si Cu Ni Ti Cr Co Mo 0.088 0.05 0.08 0.07 0.03 0.34 9.10 0.004 0.001 54.2 1.11 22.5 11.5

**Tensile Strength:** 90,000 PSI Min **Yield Strength: Elongation:** 25%

## **TYPICAL WELDING PARAMETERS**

Process	Diameter	Voltage	Amperage	Gas Flow	Shielding Gas / Flux
GMAW - Short	.035"	17-20	70-90		100% Ar 30 to 50 CFH 75% Ar / 25% He
	.045"	19-22	75-160	20 to E0 CEU	
- Spray	.045"	30-32	190-250	90% He / 7.5% A	
- Pulse	.045"	18-20	120-150		90% He / 7.5% Al / 2.5% CO <sub>2</sub>
GTAW	.093"	Direct Current; Electrode -		30 to 40 CFH	100% Ar

#### **STANDARD PACKAGING**

GMAW (MIG) 33-lb wire baskets 500-lb Drum
GTAW (TIG) 10-lb plastic tube 40-lb box

### **CLASSIFICATION**

AWS/SFA 5.14, Class ERNiCrCoMo-1

