

# **EXECUTIVE 99**

### **NICKEL ALLOY**

SOLID WIRE TECHNICAL DATA SHEET

#### **DESCRIPTION**

Executive 99 is a nickel alloy designed for welding ductile, malleable and grey cast irons using TIG, MIG and SAW welding processes. This alloy is also used for dissimilar welding of cast irons to low alloy and carbon steels. The high alloy content of Executive 99 produces a machinable weld material in joining and build up applications. A preheat and interpass temperature of 350°F (175°C) minimum is recommended during welding.

Executive 99 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**

Used to join ordinary gray irons to themselves or to other ferrous and nonferrous materials and to reclaim or repair castings. May also be used on malleable or ductile iron. Should only be used in applications where maximum machinability of highly diluted filler metal is necessary.

This wire is extensively employed to repair gray iron castings

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

 C
 Mn
 Fe
 P
 S
 Si
 Cu
 Ni

 0.04
 0.16
 0.05
 <0.001</td>
 0.001
 0.05
 <0.01</td>
 99.6

**Tensile Strength:** 66,500 PSI Min **Yield Strength:** 36,000 PSI Min **Elongation:** 12%

# **TYPICAL WELDING PARAMETERS**

Process	Diameter	Voltage	Amperage	Gas Flow	Shielding Gas / Flux
GMAW - Short	.035"	17-20	70-90	30 to 50 CFH	100% Ar 75% Ar / 25% He 90% He / 7.5% Ar / 2.5% CO₂
	.045"	19-22	75-160		
- Spray	.045"	30-32	190-250		
- Pulse	.045"	18-20	120-150		
GTAW	.093"	Direct Current; Electrode -		30 to 40 CFH	100% Ar
SAW	.062"	28-32	250-280		
	.093"	28-33	275-350		NiCr-W Flux
	.125"	29-34	350-450		

#### **STANDARD PACKAGING**

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

SAW 60-lb wire coil

60-lb Acro Pak

## **CLASSIFICATION**

AWS/SFA 5.14, Class ERNi-CI

