

Ni-cast 99 ERNi-CI Tig Welding Wire

DESCRIPTION

ERNi-CI (Nickel Alloy 99) is used for TIG and MIG welding of cast iron. This wire is extensively used to repair gray iron castings. It can also be used for overlay and build-up applications. Dilution from the casting influences the mechanical properties of the metal. Due to the high nickel content, the welds are readily machinable. A preheat and interpass temperature of 350°F min is recommended during welding.

SHIELDING GAS: 100% Argon & Argon/Helium Mixtures

WELDING CURRENT: DCEP

CONFORMANCES: ERNi-CI **AWS:** AWS A5.15-90 (R2006)

Typical Wire Chemistry as welded with 100% CO₂ shielding gas

C	Mn	Si	S	Fe	N + Incidental Cobalt	N + Incidental Silver	Other
1.0	2.5	0.75	0.03	4.0	90 min	4.0	1.0

Mechanical Properties (As Welded)

Tensile Strength (MPa)	Yield Strength (MPa)	Elongation (% Min)
455	248	40

AVAILABLE DIAMETERS AND SUGGESTED OPERATING RANGE IN AMPS

These machine settings are a guide only. Actual voltage, welding current and ESO used will depend on machine characteristics, plate thickness, run size, shielding gas, operator technique, etc.

Wire Dia (mm)	Current Range (amps)
1.6mm	90-130
2.4mm	120-175

WELDING POSITIONS: F,V,OH,H