# TECHALLOY® 99

Nickel ▪ AWS ERNi-CI

## KEY FEATURES

- Welds produced are generally more machinable than a Tech-Rod® 55 deposit
- A preheat and inter-pass temperature of not less than 350°F (175°C) is required during welding on cast iron to minimize the potential for cracks
- Q2 Lot® - certificates showing actual deposit composition available online

## CONFORMANCES

**AWS A5.15/A5.15M: R2006** ERNi-CI
**UNS** N02215

## TYPICAL APPLICATIONS

- Used for welding of cast irons to other cast irons as well as for joining cast irons to mild steels and stainless steels
- Readily used for the repair of castings

## WELDING POSITIONS

All

## SHIELDING GAS

**MIG** 75% Ar / 25% He
**TIG** 100% Ar

## DIAMETERS / PACKAGING

| Diameter in (mm) | MIG 33 lb (15 kg) Steel Spool | MIG 250 lb (113.4 kg) Accu-Trak® Drum | TIG 10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton |
|---|---|---|---|
| 0.035 (0.9) | MG99035667 | | |
| 0.045 (1.1) | MG99045667 | MG99045684 | |
| 3/32 (2.4) | | | TG99093638 |

## WIRE COMPOSITION[1] - *As Required per AWS A5.15/A5.15M: R2006*

| | %C | %Mn | %Si | %S | %Fe |
|---|---|---|---|---|---|
| **Requirements** AWS ERNi-CI | 2.0 max | 2.5 max | 4.0 max | 0.03 max | 8.0 max |
| **Typical Performance[2]** Techalloy® 99 | 0.003 | 0.07 | 0.09 | 0.001 | 0.1 |
| | **%Ni** | **%Cu** | **%Al** | **%Other** | |
| **Requirements** AWS ERNi-CI | 85 min | 2.5 max | 1.0 max | 1.0 max | |
| **Typical Performance[2]** Techalloy® 99 | 99 | 0.02 | 0.1 | <0.50 | |

## TYPICAL OPERATING PROCEDURES

| Process | Diameter in (mm) | Voltage (volts) | Amperage | Gas |
|---|---|---|---|---|
| MIG | 0.035 (0.9)<br>0.045 (1.1) | 24-27<br>25-30 | 150-190<br>200-290 | 75% Argon / 25% Helium |

*[1]Typical all weld metal. [2]See test results disclaimer on pg. 13.*
*Safety Data Sheets (SDS) are available on our website at www.lincolnelectric.com*