

TECHALLOY® 55

Nickel ▪ AWS Similar to ENiFe-CI

KEY FEATURES

- The welds are moderately hard and require carbide tipped tools for machining
- 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

WELDING POSITIONS

All

CONFORMANCES

Similar to AWS A5.15/A5.15M: R2006 ENiFe-CI

TYPICAL APPLICATIONS

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

SHIELDING GAS

MIG 75% Ar / 25% He

TIG 100% Ar

DIAMETERS / PACKAGING

Diameter in (mm)	MIG 33 lb (15 kg) Steel Spool	TIG 10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton
0.035 (0.9)	MG55035667	
0.045 (1.1)	MG55045667	
1/8 (3.2)		TG55125638

WIRE COMPOSITION ⁽¹⁾ - As Required per AWS A5.15/A5.15M: R2006

	%C	%Mn	%Si	%S	%Fe
Requirements AWS ENiFe-CI	2.0 max	2.5 max	4.0 max	0.03 max	Remainder
Typical Performance⁽²⁾ Techalloy® 55	0.03	0.7	0.1	0.002	44.5
	%Ni	%Cu	%Al	%Other	
Requirements AWS ENiFe-CI	45-60	2.5 max	1.0 max	1.0 max	
Typical Performance⁽²⁾ Techalloy® 55	54	0.1	0.1	<0.50	

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas
MIG	0.035 (0.9)	26-29	150-190	75% Argon / 25% Helium
	0.045 (1.1)	28-32	180-220	

⁽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