

TECHALLOY® 413

Nickel ■ AWS ERCuNi

KEY FEATURES

- This filler metal can be used for MIG overlay on steel after a first layer with Nickel 208
- Dissimilar welding applications include joining copper-nickel alloys to Nickel 200 or nickel-copper alloys
- Q2 Lot® -Certificate showing actual deposit composition available online

WELDING POSITIONS

All

CONFORMANCES

AWS A5.14M: 2011
UNS

ERCuNi
C71580

TYPICAL APPLICATIONS

- Used for TIG and MIG and oxy-fuel welding of 70/30, 80/20 and 90/10 copper-nickel alloys

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)	MG413035667	
0.045 (1.1)	MG413045667	
1/16 (1.6)	MG413062667	
3/32 (2.4)		TG413062638
1/8 (3.2)		TG413093638
		TG413125638

WIRE COMPOSITION⁽¹⁾ - As Required per AWS A5.14M: 2011

	%Cu	%Mn	%Fe	%Si	%Ni
Requirements AWS ERCuNi	Remainder	1.0 max	0.40 - 0.75	0.25 max	29 - 32
Typical Performance⁽²⁾ Techalloy® 413	67.5	0.7	0.55	0.1	30
	%P	%Pb	%Ti	%Other	
Requirements AWS ERCuNi	0.02 max	0.02 max	0.20 - 0.50	0.50 max	
Typical Performance⁽²⁾ Techalloy® 413	0.006	0.003	0.25	<0.50	

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas
MIG	0.035 (0.9)	25-29	150-190	75% Argon / 25% Helium
	0.045 (1.1)	25-28	180-240	
	1/16 (1.6)	29-33	200-250	

⁽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