

TECHALLOY® 418

Nickel ▪ AWS ERNiCu-7

KEY FEATURES

- Used for TIG, MIG and SAW welding of copper alloys
- Dissimilar welding applications include joining Nickel 200 to copper-nickel alloys
- Q2 Lot® -Certificate showing actual deposit composition available online

WELDING POSITIONS

All

CONFORMANCES

AWS A5.14M: 2011
UNSERNiCu-7
N04060

TYPICAL APPLICATIONS

Marine

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	SAW 55 lb (25 kg) Coil
0.035 (0.9)	MG418035667		
0.045 (1.1)	MG418045667		
1/16 (1.6)	MG418062667	TG418062638	
3/32 (2.4)		TG418093638	SA418093726
1/8 (3.2)		TG418125638	SA418125726

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

	%C	%Mn	%Fe	%P	%S	%Si
Requirements AWS ERNiCu-7	0.15 max	4.0 max	2.5 max	0.02 max	0.015 max	1.25 max
Typical Performance⁽²⁾ Techalloy® 418	0.07	3.0	0.1	0.002	0.002	0.31
	%Cu	%Ni	%Al	%Ti	%Others	
Requirements AWS ERNiCu-7	Remainder	62.0 - 69.0	1.25 max	1.5 - 3.0	0.50 max.	
Typical Performance⁽²⁾ Techalloy® 418	30	64	0.15	1.8	<0.50	

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas
MIG	0.035 (0.9)	25-28	160-200	75% Argon / 25% Helium
	0.045 (1.1)	26-30	190-230	
	1/16 (1.6)	29-33	200-250	
SAW	3/32 (2.4)	28-30	275-350	Lincolnweld® P2000
	1/8 (3.2)	29-32	350-450	

⁽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