TECHALLOY® 617

Nickel ▪ AWS ERNiCrCoMo-1

KEY FEATURES

- The weld metal provides optimum strength and oxidation resistance from 1500°F (815°C) up to 2100°F (1150°C)
- Q2 Lot® - Certificate showing actual deposit composition available online

WELDING POSITIONS

All

CONFORMANCES

AWS A5.14M: 2011	ERNiCrCoMo-1
UNS	N06617

TYPICAL APPLICATIONS

- Used for TIG, MIG and SAW welding of nickel-chrome-cobalt-molybdenum 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	SAW 55 lb (25 kg) Coil
0.035 (0.9)	MG617035667		
0.045 (1.1)	MG617045667		
1/16 (1.6)	MG617062667	TG617062638	
3/32 (2.4)		TG617093638	
1/8 (3.2)		TG617125638	SA617125726
5/32 (4.0)		TG617156638	

WIRE COMPOSITION[1] - *As Required per AWS A5.14M: 2011*

	%C	%Mn	%Fe	%P	%S	%Si	%Cu
Requirements AWS ERNiCrCoMo-1	0.05 - 0.15	1.0 max	3.0 max	0.03 max	0.015 max	1.0 max	0.50 max
Typical Performance[2] Techalloy® 617	0.07	0.4	0.3	0.001	0.003	0.3	0.09
	%Ni	**%Co**	**%Al**	**%Ti**	**%Cr**	**%Mo**	**%Other**
Requirements AWS ERNiCrCoMo-1	Remainder	10.0 - 15.0	0.8 - 1.5	0.60 max	20.0 - 24.0	8.0 - 10.0	0.50 max
Typical Performance[2] Techalloy® 617	54	12.0	1.0	0.4	22.0	8.7	<0.50

TYPICAL OPERATING PROCEDURES

Process	Diameter in (mm)	Voltage (volts)	Amperage	Gas
MIG	0.035 (0.9) 0.045 (1.1) 1/16 (1.6)	26-29 28-32 29-33	150-190 180-220 200-250	75% Argon / 25% Helium
SAW	1/8 (3.2)	29-32	350-450	Lincolnweld® P2000

[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