

TECHALLOY® 825

Nickel ▪ AWS ERNiFeCr-1

KEY FEATURES

- Used for TIG and MIG welding of nickel-chromium-molybdenum-copper alloys
- Can be used to overlay cladding where similar chemical composition is required
- Q2 Lot® - Certificate showing actual deposit composition available online

WELDING POSITIONS

All

CONFORMANCESAWS A5.14M: 2011
UNSERNiFeCr-1
N08065**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)	MG825035667	
0.045 (1.1)	MG825045667	
1/16 (1.6)	MG825062667	
3/32 (2.4)		TG825062638
1/8 (3.2)		TG825093638
		TG825125638

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

	%C	%Mn	%Fe	%P	%S	%Si	%Cu
Requirements AWS ERNiFeCr-1	0.05 max	1.0 max	22.0 min	0.03 max	0.03 max	0.50 max	1.5 - 3.0
Typical Performance⁽²⁾ Techalloy® 825	0.01	0.01	27	0.02	0.002	0.2	2.1
	%Ni	%Al	%Ti	%Cr	%Mo	%Other	
Requirements AWS ERNiFeCr-1	38.0 - 46.0	0.20 max	0.6 - 1.2	19.5 - 23.5	2.5 - 3.5	0.50 max	
Typical Performance⁽²⁾ Techalloy® 825	42.0	0.8	0.8	22.1	3.0	<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	
	1/16 (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