

TECHALLOY® 276

Nickel ▪ AWS ERNiCrMo-4

KEY FEATURES

- Used for welding materials of similar composition
- Due to high molybdenum content, this alloy offers excellent resistance to stress corrosion cracking, pitting and crevice corrosion
- Q2 Lot® - Certificate showing actual deposit composition available online

WELDING POSITIONS

All

CONFORMANCES

AWS A5.14M: 2011
UNSERNiCrMo-4
N10276

TYPICAL APPLICATIONS

- Low carbon, nickel-chromium-molybdenum filler metal can also be used for dissimilar welding between nickel base alloys and stainless steels for cladding
- Used in LNG applications

SHIELDING GAS

MIG 75% Ar / 25% He
TIG 100% Ar

DIAMETERS / PACKAGING

Diameter in (mm)	MIG 33 lb (15 kg) Steel Spool	MIG 250 lb (113.4 kg) Accu-Trak® Drum	TIG 10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton	SAW 55 lb (25 kg) Basket
0.035 (0.9)	MG276035667	MG276035684		
0.045 (1.1)	MG276045667			
1/16 (1.6)	MG276062667			
3/32 (2.4)			TG276062638	SA276093726 SA276125726
1/8 (3.2)			TG276093638	
5/32 (4.0)			TG276125638	
			TG276156638	

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

	%C	%Mn	%Fe	%P	%S	%Si	%Cu
Requirements AWS ERNiCrMo-4	0.02 max	1.0 max	4.0 - 7.0	0.04 max	0.03 max	0.08 max	0.50 max
Typical Performance⁽²⁾ Techalloy® 276	0.01	0.5	5.8	0.01	0.002	0.01	0.01
	%Ni	%Co	%Cr	%Mo	%V	%W	%Other
Requirements AWS ERNiCrMo-4	Remainder	2.5 max	14.5 - 16.5	15.0 - 17.0	0.35 max	3.0 - 4.5	0.50 max
Typical Performance⁽²⁾ Techalloy® 276	58.0	0.07	15.5	16.0	0.04	4.0	<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	
SAW	3/32 (2.4)	28-30	275-350	Lincolnweld® P2007
	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