



BLUESHIELD™ LA T-91 C60 Ni1

Low-Alloy Steel

STANDARDS

CSA, AWS A5.29-96/ASME SFA 5.9, U48-06 TO AWS A5.29/A5.29M:2008
Class E81T1-Ni1-H8, E81T1-Ni1M-H8, E551T1Ni1C-H8, E551T1Ni1M-H8

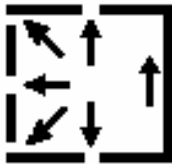
DESCRIPTION & APPLICATIONS

- An ideal all-position flux-cored wire designed to deliver sound weld-metal mechanical properties down to -60°C (-75°F) when using CO₂, Ar/CO₂ shielding gases containing up to 80% argon
- Welding low and medium carbon steels
- Welding corresponding steel grades: A572, A588, A302 and A734
- Welding structural members, bridge construction, light poles, mining machinery and naval construction

THE BLUESHIELD™ ADVANTAGE

- Nickel weld deposit – sound low-temperature mechanical properties
- Exceptional arc performance – easy cleanup
- Superior all-position welding characteristics
- Suitable substitute for E8018-C3 electrodes

TYPICAL WELDING PARAMETERS



Diameter		Volts V	Amps A	Wire feed speed ±5 %		Gas	Flow		Electrode Extension mm - in
mm	in			cm/min	in/min		l/min	cfh	
1.2	0.045	23-29	130-320	356-1524	140-600	CO ₂ BLUESHIELD™ 8	20	45	19 – 3/4
1.4	0.052	24-30	140-380	305-1397	120-550		20	45	19 – 3/4
1.6	0.062	24-32	150-400	254-1168	100-460		20	45	19 – 3/4

RECOMMENDED SHIELDING GASES:

BLUESHIELD™ 8 is recommended. CO₂ may also be used as alternate shielding gases

TYPICAL DIFFUSABLE HYDROGEN*:

8 ml/100 g

TYPICAL CHEMISTRY

Weight %	C	Mn	Si	P	S	Ni
CO ₂	0.03	1.16	0.40	0.008	0.008	0.90
BLUESHIELD™ 8	0.03	1.30	0.50	0.009	0.008	0.92

TYPICAL MECHANICAL PROPERTIES*

	As Welded	
	BLUESHIELD™ 8	CO ₂
Tensile Strength MPa (ksi)	614 (89)	593 (86)
Yield Strength MPa (ksi)	552 (80)	510 (74)
Elongation in 50 mm – 2 in (%)	24	27
Impact (Charpy V-notch) @ -60°C (-75°F)	42 J (30 ft-lb)	30 J (22 ft-lb)

* Actual welding procedure and conditions can impact results

PACKAGING

Diameter		Packaging			Item Number
mm	in	kg	lb		
1.2	0.045	15	33	Spool	BLU-37978106
1.6	1/16				BLU-37978105
1.2	0.045	27.2	60	Coil	BLU-37978107
1.6	1/16				BLU-37978104