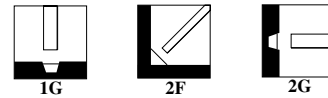


Great for downhand welding applications where high deposition rates and Charpy V-Notch properties are desired. Designed for use with mild steel and some low alloy steels for single and multiple pass, automatic and semiautomatic welding. Excellent operator appeal.

- Our quality driven manufacturing system – certified to ISO 9002 – and our exceptionally high grade raw materials mean every coil of Innershield delivers great arc characteristics and superior feedability.

**WELDING POSITIONS**



**ADVANTAGE LINCOLN**

- A great choice when high deposition rates *and* good penetration are desired.
- Low spatter.
- Welds well on lightly rusted or primed plate.
- Self-shielded, flux-cored. No need for external gas or flux.
- Produces quality welds in moderate wind conditions with no tenting.

**TYPICAL APPLICATIONS**

- General plate fabrication including bridges and offshore rigs.
- Shipyards.
- Stiffener welding on ships and barges.
- Welding over tack welds made with stick electrodes.

**CONFORMANCE**

AWS A5.20-95: E70T-6  
 ASME SFA5.20: E70T-6  
 ABS: 2SA, 2YSA  
 DNV: II YMS  
 GL: 2YS  
 BV: SA2YM

**MECHANICAL PROPERTIES<sup>(1)</sup> - As Welded per AWS A5.20**

	Yield Strength psi (MPa)	Tensile Strength psi (MPa)	Elongation (%)	Charpy V-Notch ft-lbs (Joules)	
				@ 0°F (-18°C)	@ -20°F (-29°C)
<b>Requirements</b> AWS E70T-6	58,000 (400) min.	70,000 (480) min.	22 min.	—	20 (27) min.
<b>Test Results</b> As Welded	62,000 - 76,000 (427 - 524)	72,000 - 89,000 (496 - 614)	23 - 32	21 - 54 (28 - 73)	21 - 35 (28 - 47)
Stress Relieved 1 Hr @ 1150°F (621°C)	54,000 - 62,000 (372 - 427)	71,000 - 84,000 (489 - 579)	28 - 37	34 - 60 (46 - 81)	20 - 56 (27 - 76)

<sup>(1)</sup>The strength and elongation properties reported were obtained from a .505" tensile specimen artificially aged at 220°F (104°C) for 48 hours, as permitted by AWS A5.20-95. A naturally aged tensile specimen may take months to achieve the specified properties. See AWS A5.20-95, paragraph A8.3. The time required for the natural aging of weld deposits is dependent upon ambient conditions, weldment geometry, the metallurgical structure of the weld deposit and other factors.

**DIAMETERS / PACKAGING**

Diameter Inches (mm)	13.5 Lb. Coil	50 Lb. Coil	Seismic Welding Products			
			Hermetically Sealed Package		T2 Lot Controlled and Tested	
			22 Lb. Readi-Reel (Foil Bag)	50 Lb. Coil (Foil Bag)	22 Lb. Readi-Reel (Foil Bag)	50 Lb. Coil (Foil Bag)
5/64 (2.0)	ED012518		(2)	(2)	(2)	(2)
3/32 (2.4)		ED012593	ED030373	ED030005	ED030385	ED0303846

<sup>(2)</sup>5/64 in. NR305 is not recommended for seismic welding applications.

**TYPICAL OPERATING PROCEDURES**

Wire, Polarity Electrical Stickout Wire Weight	Wire Feed Speed in/min (m/min)	Arc Voltage (volts)	Approx. Current (amps)	Melt-Off Rate lbs/hr (kg/hr)	Deposition Rate lbs/hr (kg/hr)	Efficiency (%)
5/64" DC+	200 (5.1)	22	385	12.8 (5.8)	10.0 (4.5)	78
	250 (6.4)	25	430	16.0 (7.2)	13.0 (5.8)	81
7/8" to 1-3/4" (22- 44 mm) 1.07 lbs/1000"	350 (8.8)	30	450	22.5 (10.2)	18.8 (8.5)	83
	450 (11.4)	32	545	28.9 (13.1)	24.5 (11.1)	84
3/32" DC+	160 (4.1)	22	330	13.3 (6.0)	11.0 (5.0)	82
	240 (6.1)	25	425	20.0 (9.1)	16.7 (7.6)	83
2" (51mm) 1.39 lbs/1000"	300 (7.6)	28	475	25.0 (11.3)	21.0 (9.5)	84
	400 (10.2)	34	525	33.4 (15.2)	28.0 (12.7)	83

NOTE: Above typical operating procedures are starting points and may be adjusted as required.

**DEPOSIT COMPOSITION**

	%C	%Mn	%P	%S	%Si	%Al
<b>Requirements</b>						
AWS E70T-6	Report Only	1.75 max.	.03 max.	.03 max.	.60 max.	1.80 max.
<b>Test Results</b>						
3/32" (2.0 mm)	.08	1.26	.012	.005	.23	1.19
5/64" (2.4 mm)	.08	.60	.006	.006	.20	.73

This electrode has been tested in accordance with FEMA 353 - *Recommended Specifications and Quality Assurance Guidelines for Steel Moment-Frame Construction for Seismic Applications* and is capable of depositing weld metal that delivers minimum CVN properties of 40 ft-lbs. at 70°F (95 Joules at 21°C) at low and high heat input levels. As required by the AWS classification, it meets a minimum CVN of 20 ft-lbs. at -20°F (27 Joules at -29°C), when tested in accordance with AWS A5.20. This electrode will also deposit weld metal that will meet the requirements for H16 as tested according to AWS A4.3. FEMA 353 test certificates are available upon request.