

PRIMACORE® LW-71®

TYPICAL APPLICATIONS

PRIMACORE® LW-71® is a gas shielded, basic-rutile, general purpose, micro alloyed, flux-cored welding wire designed for all position welding of mild steel in applications requiring moderate levels of strength and very good notch toughness.

PRIMACORE® LW-71® should be used with CO₂ only.

ADVANTAGE

- Excellent mechanical properties
- Slag system provides for puddle support, good wetting, and bead shape in all position
- Arc action and metal transfer are smooth
- Slag removal is easily achieved with hand tools
- One side welding is possible with ceramic backing and will produce excellent results
- Manufactured under a quality system certified to ISO 9001 requirements
- Drum packaging is available

CONFORMANCE

- AWS A5.20/ASME SFA-5.20:E71T-1C/9C
- AWS A5.36 E71T1-C1A2-CS1
- JIS Z3313 T493T1-1CA-H16

SHIELDING GAS

- 100%CO₂ shielding gas

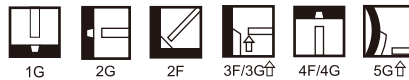
PACKAGING TYPE

- All spools of wire are level layer wound on plastic spools.
- The spools are then vacuum-packed in moisture proof, polyfoil bags.
- The spools of wire are boxed and securely stacked on wooden pallets with plastic shrink-wrap.

TYPICAL APPLICATIONS

Application include those in general fabrication, ship or barge construction, building or bridge erection, and off-shore industries

WELDING POSITIONS



APPROVALS

ABS, BV, CCS, DNV.GL, GOST, JIS, TUV.CE, LR, NAKS, NK, RMRS, RRR

DIAMETERS / PACKAGING

Diameter(mm)	Spool/Drum Weight(kg)	Pallet Weight(kg)
1.2	15	1080
1.4	15	1080
1.6	15	1080
1.2	4.5	1080
1.4	4.5	1080
1.6	4.5	1080
1.2	225	900
1.4	200	800
1.6	200	800
1.2	300	600
1.4	350	700
1.6	350	700

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Chemical Composition

	C%	Mn%	Si%	S%	P%
AWS:E70T-1C Requirements Max	0.12	1.75	0.90	0.03	0.03
Typical Values (With 100%CO ₂)	0.06	1.33	0.39	0.01	0.02

* Test results and product properties listed herein for gas shielded wires have been developed with the shielding gas stated. A change of shielding gas may cause significant changes in product performance and weld metal properties. Lincoln Electric does not cover these products under warranty for use with shielding gases other than those listed in the test data.

Mechanical Properties

	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	CVN Impact(J@-20 °C)	CVN Impact(J@-30 °C)
AWS:E71T-1C AWS:E71T-9C Requirements	Min390	490-670	Min22	Min27	Min27
Test Results As Welded 100%CO ₂	559	610	26	117	113
Test Results Stress Relieved100%CO ₂	450	550	32	108	--

*1.6mm diameter wire,DC+. Typical all weld metal in the as welded condition.

{1} For E71T-1 only, {2} For E71T-9 only, {3} Stress relieved for 1 hour at 620°C.

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Lincoln Electric does not warrant these products for use with shielding gases other than those listed in the test data.

TYPICAL OPERATING PROCEDURES

Diameter Polarity CTWD mm (Inches)	Wire Feed Speed in/min(cm/min)	Voltage (V)	Approx.Current (A)	Melt-Off Rate kg/hr (lb/hr)	Deposition Rate (Kg/hr)
1.2mm PRIMACORE® LW-71® DC+ 20(3/4)	175(445)	21-24	130	1.8	1.5
	225(572)	23-25	165	2.4	1.9
	275(699)	25-27	185	2.9	2.4
	325(826)	26-29	200	3.4	2.9
	375(953)	27-29	230	4.0	3.3
	425(1080)	28-30	250	4.5	3.7
	475(1207)	29-31	270	5.0	4.2
	600(1524)	31-33	310	6.2	5.3

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TYPICAL OPERATING PROCEDURES

Diameter Polarity CTWD mm (Inches)	Wire Feed Speed in/min(cm/min)	Voltage (V)	Approx.Current (A)	Melt-Off Rate kg/hr (lb/hr)	Deposition Rate (Kg/hr)
1.4mm PRIMACORE®LW-71® DC+ 25(63/64)	150(381)	23-25	150	2.0	1.7
	200(508)	24-26	190	2.6	2.2
	250(635)	25-27	225	3.3	2.8
	300(762)	26-28	240	4.0	3.6
	350(889)	27-29	275	4.6	3.7
	400(1016)	28-30	300	5.3	4.5
	450(1143)	29-31	325	6.0	5.1
1.6mm PRIMACORE®LW-71® DC+ 25(63/64)	130(330)	22-25	180	2.6	2.2
	150(381)	23-26	210	3.0	2.5
	200(508)	24-27	265	3.9	3.2
	250(635)	26-29	305	4.9	4.1
	300(762)	28-31	345	5.8	4.9

Customer Assistance Policy

The business of The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for advice or information about their use of our products. We respond to our customers based on the best information in our possession at that time. Lincoln Electric is not in a position to warrant or guarantee such advice, and assumes no liability, with respect to such information or advice. We expressly disclaim any warranty of any kind, including any warranty of fitness for any customers particular purpose, with respect to such information or advice. As a matter of practical consideration, we also cannot assume any responsibility for updating or correcting any such information or advice once it has not been given, nor does the provision of information or advice create, expand or alter any warranty with respect to the sale of our products.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to change - This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com.cn for any updated information.

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