LINCOLN ELECTRIC CHINA FLUX CORED WIRE

PRIMACORE © LW-71®







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.

CONFORMANCE

AWS A5.20 / ASME SFA-5.20: E71T-1C/9C AWS A5.36 E71T1-C1A2-CS1 JIS Z 3313: T493T1-1CA-H16

APPROVALS

ABS, LR, CCS, DNV-GL, BV, KR, RMRS, NK

SHIELDING GAS

100% CO2 shielding gas. Flowrate:40-45 CFH or 20 litres/min

DIAMETERS / PACKAGING

	Diameter (mm)	Spool/Drum Weight [kg]	Pallet Weight [kg]	Product No.
	1.2	15	1,080	COPLW71E21
	1.4	15	1,080	COPLW71E41
	1.6	15	1,080	COPLW71E61
	1.2	4.5	1,080	COPLW71E29
	1.4	4.5	1,080	COPLW71E49
	1.6	4.5	1,080	COPLW71E69
	1.2	225	900	COPLW71X28
	1.4	200	800	COPLW71X48
	1.6	200	800	COPLW71X68
	1.2	300	600	COPLW71X22
	1.4	350	700	COPLW71X48
	1.6	350	700	COPLW71X68

Cone + Conduit Adapter Part No.: QTM-00003 (200,225kg drum packaging) QTM-00004 (300,350kg durm packaging)

WELDING POSITIONS











DIFFUSIBLE HYDROGEN

Diffusible hydrogen conforms to relevant agency approval designations.

ADVANTAGE LINCOLN

- Excellent mechanical properties.
- Slag system provides for puddle support, good wetting, and bead shape in all positions.
- Arc action and metal transfer are smooth.
- Slag removal is easily achieved with hand tools.
- One sided welding is possible with ceramic backing and will produce excellent results.
- Applications include those in general fabrication, ship or barge construction, building or bridge erection, and off-shore industries.
- Manufactured under a quality system certified to ISO 9001 requirements.
- Drum packaging is available.

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.



LINCOLN ELECTRIC CHINA FLUX CORED WIRE

PRIMACORE®LW-71®

ALL WELD METAL MECHANICAL PROPERTIES -- TYPICAL

	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation [%]	Charpy V @-20°C	- Notch (J) @-30°C
Requirements AWS E71T-1C AWS E71T-9C	390	490-670	22min.	27 min. ⁽¹⁾	27 min. ^[2]
Test Results* As Welded (with 100% CO2)	559	610	26	117	113
Test Results(3) Stress Relieved (with 100% CO2)	450	550	32	108	

^{*1.6}mm 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.

WELD DEPOSITE CHEMICAL COMPOSITIONS (Wt-%) -- TYPICAL

	С	Mn	Р	S	Si
AWS Requirements E71T-1C/E71T-9C per A5.20 Max.	0.12	1.75	0.03	0.03	0.90
Test results* (with 100%CO2)	0.06	1.33	0.02	0.01	0.39

TYPICAL OPERATING PROCEDURES

I II ICAL OI LIKATINOT ROCLDORES						
Diameter Polarity CTWD mm (inches)	Wire Feed Speed in/min (cm/min)	Voltage (Volts)	Approx.Current (Amps)	Melt-Off Rate Kg/hr (lb/hr)	Deposition Rate Kg/hr (lb/hr)	
1.2mm PRIMACORE® LW-71® DC+ 20(3/4)	175 [445] 225 [572] 275 [699] 325 [826] 375 [953] 425 [1,080] 475 [1,207] 600 [1,524]	21-24 23-25 25-27 26-29 27-29 28-30 29-31 31-33	130 165 185 200 230 250 270 310	1.8 2.4 2.9 3.4 4.0 4.5 5.0 6.2	1.5 1.9 2.4 2.9 3.3 3.7 4.2 5.3	
1.4mm PRIMACORE® LW-71® DC+ 25(63/64)	150 (381) 200 (508) 250 (635) 300 (762) 350 (889) 400 (1,016) 450 (1,143)	23-25 24-26 25-27 26-28 27-29 28-30 29-31	150 190 225 240 275 300 325	2.0 2.6 3.3 4.0 4.6 5.3 6.0	1.7 2.2 2.8 3.6 3.7 4.5 5.1	
1.6mm PRIMACORE® LW-71® DC+ 25(63/64)	130 (330) 150 (381) 200 (508) 250 (635) 300 (762)	22-25 23-26 24-27 26-29 28-31	180 210 265 305 345	2.6 3.0 3.9 4.9 5.8	2.2 2.5 3.2 4.1 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 disclainly of 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.

Authorized Distributor:



^{*}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 warrant these products for use with shielding gases other than those listed in the test data.