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 CO_2 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% CO_2 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.

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ALL WELD METAL MECHANICAL PROPERTIES -- TYPICAL

	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Charpy V-Notch (J) @-20°C	Charpy V-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% CO_2)	559	610	26	117	113
Test Results(3) Stress Relieved (with 100% 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.

*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.

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

	C	Mn	P	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%CO_2)	0.06	1.33	0.02	0.01	0.39

TYPICAL OPERATING PROCEDURES

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)	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 (1,080)	28-30	250	4.5	3.7
	475 (1,207)	29-31	270	5.0	4.2
	600 (1,524)	31-33	310	6.2	5.3
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 (1,016)	28-30	300	5.3	4.5
	450 (1,143)	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

Authorized Distributor:

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