

# PRIMACORE® MW-71

## TYPICAL APPLICATIONS

PRIMACORE® MW-71 is designed specifically for use with mixed gas in welding 490N/mm<sup>2</sup> tensile steels. It is suitable for the following applications: general fabrication, heavy equipment fabrication, offshore drilling rig construction, shipbuilding, and bridge fabrication.

## ADVANTAGE

- Excellent mechanical properties
- Designed specifically for use with mixed gas
- Smooth, spray-like metal transfer
- Minimal spatter
- Excellent slag removal
- Manufactured under a quality system certified to ISO 9001 and JIS 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

## APPROVALS

- JIS, LR

## CONFORMANCE

- AWS A5.20/ ASME SFA-5.20: E71T-1M & E71T-9M
- AWS A5.36 E71T1-M21A2-CS1
- JIS Z3313: T493T1-1MA-H10

## SHIELDING GAS

- 75-80% Ar / Balance CO<sub>2</sub> shielding gas

## WELDING POSITIONS



## DIAMETERS / PACKAGING

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

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## Chemical Composition

	C%	Mn%	Si%	S%	P%
Requirements AWS E71T-1M/9M Max	0.12	1.75	0.90	0.03	0.03
Test results 75-80%Ar/Balance CO <sub>2</sub>	0.06	1.37	0.51	0.008	0.017

## Mechanical Properties

	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	CVN Impact(J@-20 °C)	CVN Impact(J@-30 °C)
Requirements AWS	Min390	490-670	Min22	Min27	Min27
Typical Value	560	600	25.5	199	171

\*1.6mm diameter wire,DC+. Typical all weld metal in the as welded condition. (1) For E71T-1 only. (2) For E71T-9 only.

\*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.

## TYPICAL OPERATING PROCEDURES

Diameter Polarity ES0mm (inches)	Wire Feed Speed in/min(cm/min)	Voltage [V]	Approx.Current [A]	Melt-Off Rate [kg/hr]	Deposition Rate [Kg/hr]
1.2mm DC+ 20mm(3/4in)	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 ES0mm [inches]	Wire Feed Speed in/min[cm/min]	Voltage [V]	Approx.Current [A]	Melt-Off Rate (kg/hr)	Deposition Rate (Kg/hr)
1.6mm DC+ 25mm[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	450	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](http://www.lincolnelectric.com.cn) for any updated information.

### Authorized Distributor:

## THE SHANGHAI LINCOLN ELECTRIC CO., LTD.

No.195, Lane 5008, Hu Tai Road, Shanghai China 201907

TEL:86-21-6673 4530

FAX:86-21-6602 6621

[www.lincolnelectric.com](http://www.lincolnelectric.com)