# Lincolnweld®L-61®

## **Key Features:**

- ▶ Low carbon, medium manganese, low silicon general purpose SAW wire
- ▶ Weld with active or neutral flux for a wide range of SAW applications
- It is a good choice for a wide range of applications with single or multiple pass subarc welding.

#### **Recommended Fluxes:**

► PREMIERWELD®NF-3,PREMIERWELD®BF-1, JF-B, PREMIERWELD® 761,PREMIERWELD® 780, PREMIERWELD® 860, PREMIERWELD® 960, PREMIERWELD® 8500

#### **Conformance:**

► ASME SFA-5.17 AWS A5.17: EM12K

### **Welding Positions:**

▶ Horizontal & Flat welding

## Chemical Composition -- Solid Wire (Wt %), Typical

Wire	С	Mn	Si	Р	S
Requirements - AWS EM12K	0.05~0.15	0.80~1.25	0.10~0.35	≤0.030	≤ 0.030
Lincolnweld®L-61®	0.12	1.03	0.26	0.009	0.008

## Mechanical Properties -- All Weld Metal, Typical

Wire / Flux	Condition	Yield Strength MPa (ksi)	Tensile Strength MPa (ksi)	Elongation(%)		mpact @ °C(°F)	Classification
Lincolnweld® L-61®/ PREMIERWELD® 860	As-welded	420 (61)	515(75)	26	121 (90)	-40(-40)	AWS:F7A4-EM12K
Lincolnweld® L-61®/ PREMIERWELD® 960	As-welded	440 [64]	550 (80)	26	64 [47]	-29(-20)	AWS:F7A2-EM12K
Lincolnweld® L-61®/ PREMIERWELD® 8500	As-welded	400(58)	490(71)	33	110 (81)	-40(-40)	AWS:F7A4-EM12K

## Recommended Welding Parameters (DC+,AC)

Diameter (mm)	2.0	2.4	3.2	4.0	4.8
Current Range (A)	300~400	350~450	425~525	475~575	525~625
Voltage (V)	26~29	27~30	27~30	27~30	27~30
ESO (mm)	13~19	19~32	25~38	25~38	25~38
Travel Speed (mm/s)	5~6	5.5~6.5	6~7	6.5~7.5	6.5~7.5

The product performance data of this brochure and related attachments are from LINCOLN ELECTRIC application engineering laboratory.

Except for special instructions, experiments on welding machines are conducted in accordance with the general standard of IEC60974-1; experiments on welding consumables are conducted in accordance with the general standard of AWS; for specific applicable standards on welding consumables please refer to the product page.

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