

LN-15 Wire Feeder

Portable, Semiautomatic Wire Feeder

The LN-15 is one of the smallest and most maneuverable wire feeders for the construction, shipbuilding and pipeline industries. It uses a high temperature, abrasion resistant plastic case, aluminum alloy roll cage and fully encapsulated PC boards.

The LN-15 is available in both Across-The-Arc and Control Cable versions. Both offer outstanding welding performance on a wide variety of steel, stainless steel, aluminum and alloy materials.



Output



Input



Processes

MIG, Pulsed MIG, Flux-Cored, STT[®] (1)

Advantage Lincoln

Performance:

- Both models are designed for MIG, Pulsed MIG, Flux-Cored and Metal-Cored welding processes using lightweight 8" (203 mm) diameter spools. The Control Cable version is also designed for the STT[®] (Surface Tension Transfer[®]) process.
- Maxtrac[®] wire drive system easily feeds .023"-.052" (0.6 - 1.3 mm) solid and .035"-5/64" (0.9 - 2.0 mm) cored wires.
- Compact unit fits easily through 14" (356 mm) diameter manhole/manway.
- Manufactured under a quality system certified to ISO 9001 requirements.
- Three-year warranty on parts and labor.

Simple Controls:

- Bright LED digital meters are easy to read in adverse lighting conditions.

Professional Features:

- Adjustable carrying strap makes it easy to carry and hang.
- Fully enclosed molded case is heat, spatter and impact resistant.
- Double latch case seals tight to protect drive system and wire from dirt, dust and rain.
- Full body aluminum roll cage provides sturdy impact protection and all-around handles for easy portability.

Base Unit Includes:

- K1500-2 Gun Receiver Bushing.
- Carrying Strap.
- Spindle Adapter for 8" O.D. Spools.
- Standard contactor with Across-The-Arc model.

Required Options:

- Magnum[®] Gun and Cable Assembly
- Drive Roll Kit
- Separate Control Cable -10 ft. (Control Cable Model only)

TECHNICAL SPECIFICATIONS								
Product Name	Product Number	Input Power	Rated Output Current/Voltage/Duty Cycle	Wire Feed Speed Range ipm (m/min.)	Wire Size Range in (mm)		Dimensions H x W x D inches (mm)	Net Weight lbs.(kg)
					Solid	Cored		
LN-15 Across-The-Arc	K1870-1	15-110 VDC	350A/60%	50-700 (1.3-17.8)	.023-.052 (0.6-1.3)	.035-5/64 (0.9-2.0)	12.7 x 8.7 x 23 (356 x 188 x 533)	30 (15.4)
LN-15 Control Cable	K1871-1	42 VAC	500A/60%					28 (12.7)

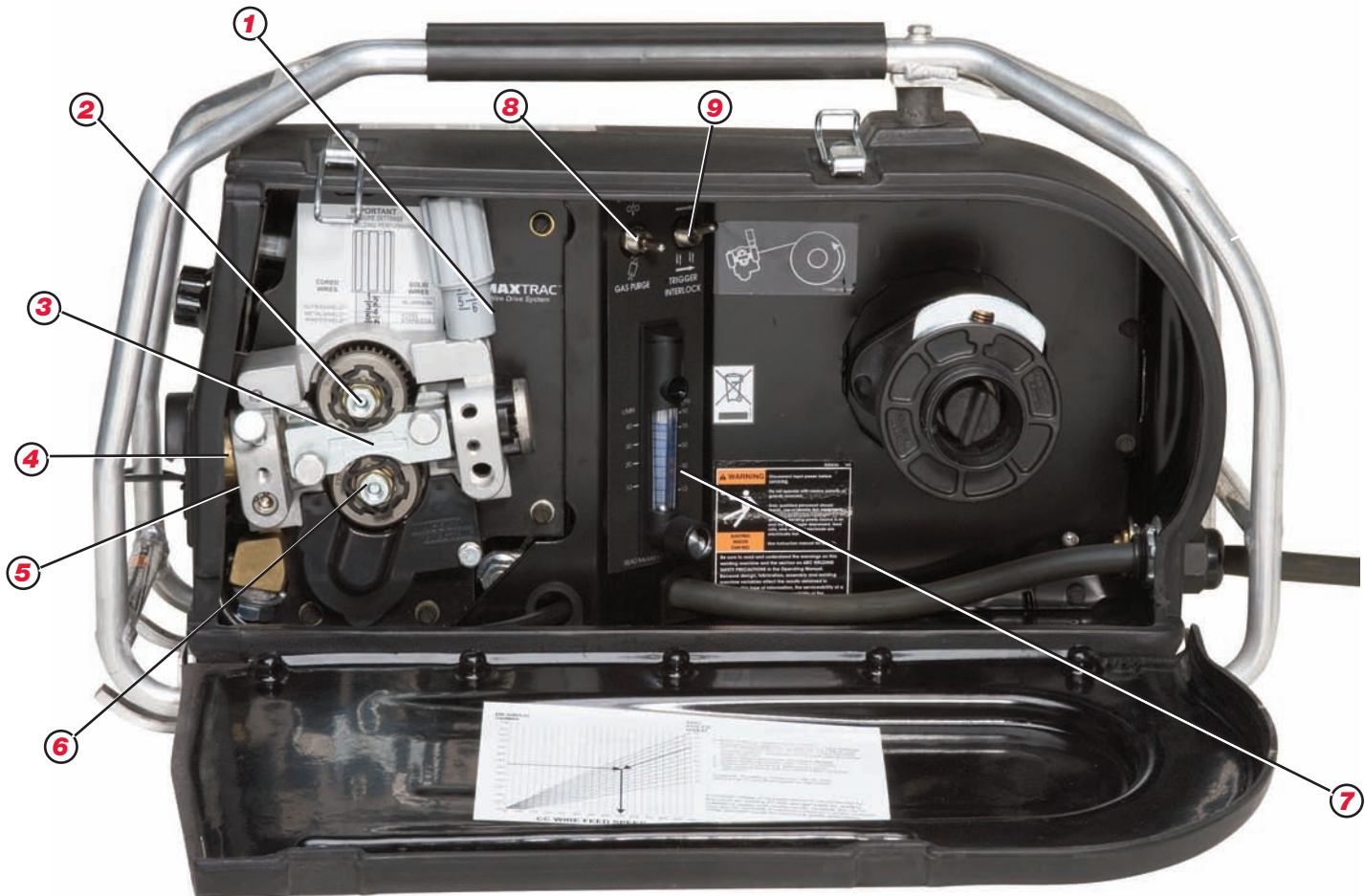
(1) Control Cable Model Only.

PERFORMANCE



MAXTRAC™

Wire Drive System



* Drive rolls and wire guide not included.

1 Patented Dual Spring Pressure Arm

- Easy turn numeric tension handle and pressure indicator.
- Set heavy tension for steel and stainless.
- Set moderate tension for cored wires.
- Set soft tension for aluminum.
- Wide idler arm hinge delivers improved drive roll clamping pressure.

2 New Patent-Pending Drive Rolls

- For steel - new design delivers 20% more feeding force.
- For aluminum - chrome plated to resist build-up.

3 Patented Split Wire Guides

- Full support for wire throughout the drive path.
- Removable outer wire guide for easy access.
- No tools required.
- No birdnesting.

4 Brass to Brass Interchangeable Gun Bushings

- More reliable electrical conductivity – no oxide build-up.
- More efficient energy transfer – lower voltage drops.
- Easily adapt any number of Lincoln Magnum® or competitive guns.

5 Rigid Cast Aluminum Frame

- Enhances precise drive roll alignment.

6 Twist-Lock Drive Roll Hubs

- Fast, tool-less changeovers.

7 Built-in Flowmeter

8 Cold Feed / Gas Purge Switch

9 Two-Step Trigger Interlock

Separate Drive Gear (not shown)

- Reduces pressure on motor for extended service life.

A CLOSER LOOK

QUALITY AND RELIABILITY

Strong

- Sturdy aluminum roll cage protects feeder from damage.

Durable

- Fully enclosed molded case is heat, spatter, and impact resistant.



Protected

- Fully encapsulated “potted and trayed” PC Boards protect internal systems from heat and humidity.

**3 Year
Warranty!**



ISO 9001 certified for quality and customer satisfaction. Designed to IEC60974 – 5, CE and CSA standards. Meets IP23S environmental rating.

Control Cable Model (K1871-1)

- Connect a Control Cable (K1819-10) and the electrode welding cable between the power source and the feeder. Features wire feed speed and voltage control on the front of the unit.



1. Digital Wire Feed Speed Meter
2. Wire Speed Control Knob

3. 5-pin Trigger Connection
4. Gun Connection
5. Voltage Control Knob (Control Cable Model Only)

Across-The-Arc Model (K1870-1)

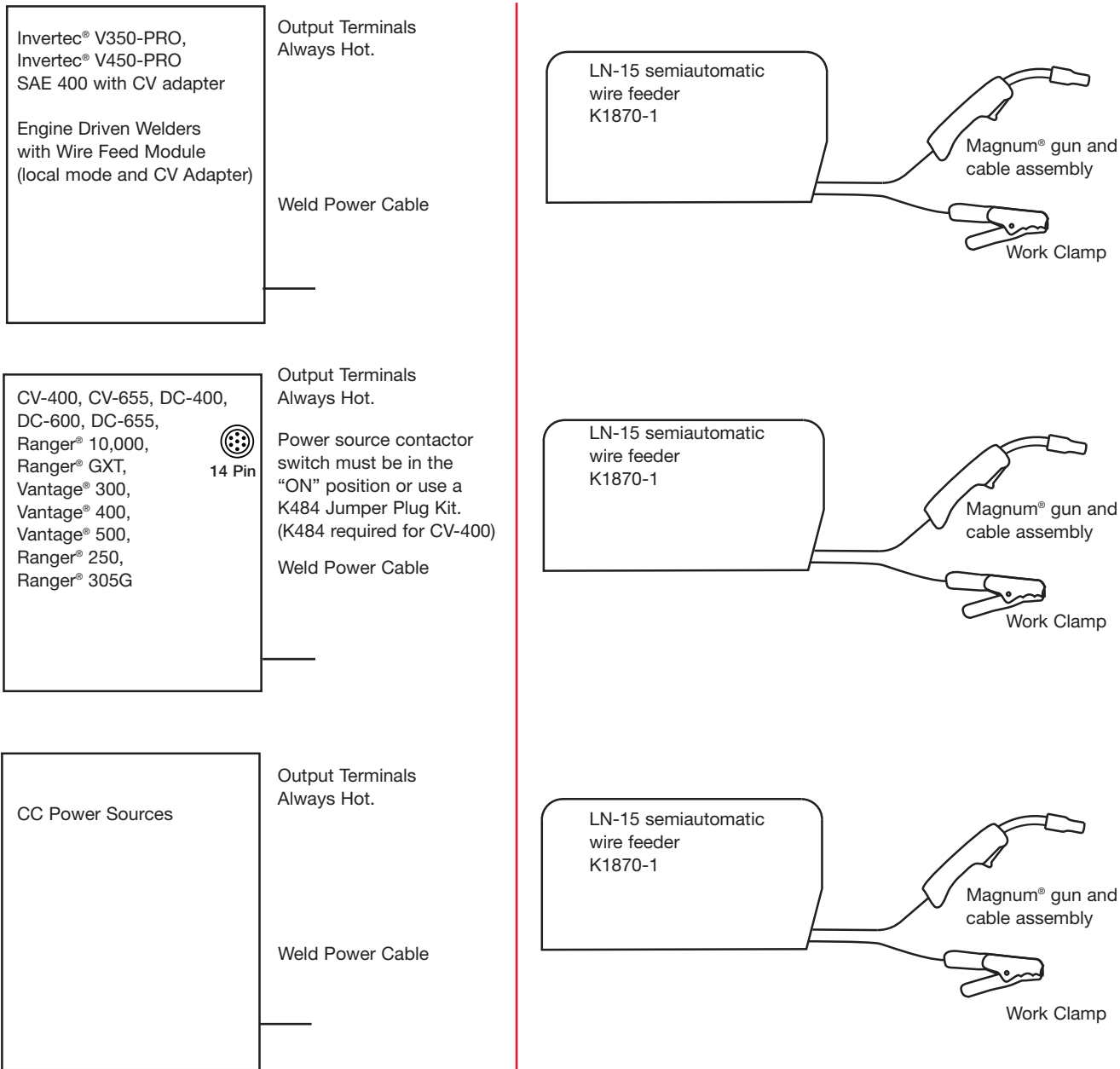
- Operates across the arc with a DC power source supplying between 15 VDC and 110 VDC. Simply connect the voltage sense lead to the work, then connect the LN-15 to the electrode cable.



6. Digital Voltage Meter
7. Sensing Lead (Across-The-Arc Model Only)
8. Power On/Off Switch

Across-The-Arc Set-Up

Typically used for general fabrication, maintenance and repair jobs because it's easy to set up and operate. Requires only one electrical cable to the feeder – less to carry. Internal contactor standard on Across-The-Arc model.



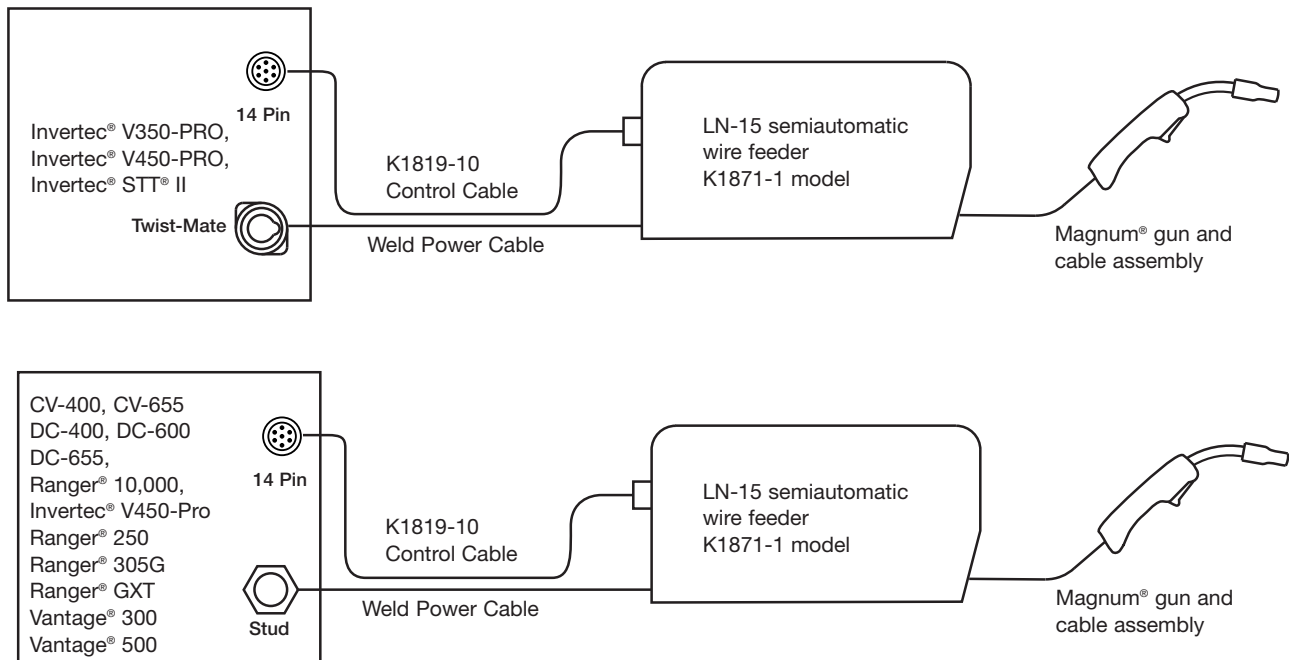
NOTE:

A constant voltage (CV) power source is recommended for flux-cored arc welding (FCAW) and gas metal arc welding (GMAW) to obtain code quality results. The LN-15 may be used with a constant current (CC) power source for non-critical applications where weld quality and deposition properties are not critical.

A CLOSER LOOK

Control Cable Set-up

Typically used for work on ships, buildings, bridges and pipelines where precision and quality are critical. Wire feed and voltage adjustment are done at the feeder for convenience at the job site.



NOTE:

For applications requiring cable lengths greater than 10 ft., use control cable extension K1797-10, K1797-25 or K1797-50.

FEED PLATE GUN RECEIVER BUSHINGS

K1500-1 Gun Receiver Bushing (Optional)	K1500-2 Gun Receiver Bushing (Standard)	K1500-3 Gun Receiver Bushing (Optional)	K489-7 Fast Mate™ Gun Receiver Bushing
<ul style="list-style-type: none"> Magnum® 200, 300 and 400 gun and cable assemblies with K466-1 connector kit. Lincoln Innershield® gun and cable assembly Fast-Mate™ gun and cable assembly with K489-2 Fast-Mate™ adapter kit. Magnum® 550 gun and cable assembly with K613-1 connector kit. 	<ul style="list-style-type: none"> Magnum® 200 and 400 fully assembled guns (K497-2x and K471-2x), see below. Magnum® 200, 300 and 400 gun and cable assemblies with K466-10 connector kit. Guns with Tweco® #2, #3, and #4 connectors. 	<ul style="list-style-type: none"> Magnum® 550 gun and cable assembly with K613-7 connection. Guns with Tweco®⁽¹⁾ #5 connectors. 	<ul style="list-style-type: none"> Magnum® gun and cable assemblies with Fast Mate connections. Handles both single and dual procedure guns.

⁽¹⁾ Tweco is a registered trademark of Thermadyne.

K1500-1 Gun Receiver Bushing (Optional)



K1500-2 Gun Receiver Bushing (Standard)



K1500-3 Gun Receiver Bushing (Optional)



K489-7 Fast Mate Gun Receiver Bushing



DRIVE ROLL & WIRE GUIDE KITS

Description	Order Number
Steel Wire Sizes (includes stainless steel):	
.023-.030" (0.6-0.8 mm)	KP1696-030S
.035" (0.9 mm)	KP1696-035S
.040" (1.0 mm)	KP1696-2
.045" (1.2 mm)	KP1696-045S
.052" (1.4 mm)	KP1696-052S
Cored Wire Sizes:	
.030-.035" (0.8-0.9 mm)	KP1697-035C
.040-.045" (1.0-1.2 mm)	KP1697-045C
.052" (1.4 mm)	KP1697-052C
1/16" (1.6 mm)	KP1697-1/16C
Solid Steel or Cored Wire Sizes:	
.068"-.072" (1.7 mm - 1.9 mm)	KP1697-068
5/64" (2.0 mm)	KP1697-5/64
Aluminum Wire Sizes:	
.035" (0.9 mm)	KP1695-035A
.040" (1.0 mm)	KP1695-040A
3/64" (1.2 mm)	KP1695-3/64A

WELD POWER CABLES

Description	Order Number
Twist-Mate™ to Lug:	
1/0, 350A, 60% duty cycle, 10 ft.	K1840-10
Twist-Mate™ to Twist-Mate:	
1/0, 350A, 60% duty cycle, 25 ft.	K1841-25
2/0, 350A, 60% duty cycle, 50 ft.	K1841-50
Lug to Lug:	
3/0, 600A, 60% duty cycle, 10 ft.	K1842-10
3/0, 600A, 60% duty cycle, 35 ft.	K1842-35
3/0, 600A, 60% duty cycle, 60 ft.	K1842-60
4/0, 600A, 60% duty cycle, 110 ft.	K1842-110

COAXIAL WELD POWER CABLES⁽¹⁾

Length ft. (m)	Amperage	Duty Cycle	AWG Size	Order
25 (7.6)	250	100%	#1	K2593-25
	300	60%	#1	K2593-25
	350	60%	1/0	K1796-25
50 (15.2)	250	100%	#1	K2593-50
	300	60%	#1	K2593-50
	350	60%	1/0	K1796-50
75 (22.8)	300	60%	1/0	K1796-75
100 (30.4)	250	100%	#1	K2593-100
	300	60%	1/0	K1796-100

⁽¹⁾ Recommended for STT® and pulse welding when using long distances between feeder and power source.

RECOMMENDED OPTIONS

GENERAL OPTIONS



Magnum® Gas-Shielded Gun & Cable Assemblies
Available 200-550 amps, air-cooled, gas-shielded welding guns. Dual procedure capability with gun trigger lock available on 400 amp gun.
See Publication E12.10



Magnum® Self-Shielded Gun & Cable Assemblies
Available 250-600 amps.
See Publication E12.110



Control Cable
8-pin female to 14-pin male, 10 ft. (3.0 m) long, control cable. (Required For Control Cable Model Only).
Order K1819-10



Spindle Adapter for 8" O.D. Spools
Included with unit. For small spools. Permits 8" (200 mm) O.D. spools to be mounted on 2" (50 mm) O.D. spindles.
Order K468



Terminal Strip Adapter Cable
Adapter cable for 14-pin control cable to terminal power sources.
Order K1798



Micro Wire Straightener
Straightens .035"-1/16" (0.9-1.6 mm) wire for use with portable feeders.
Order K1798



The rugged, lightweight LN-15 wire feeder is especially suited for the shipbuilding and construction industries.

LN-15 WIRE FEEDER ORDER FORM

PRODUCT DESCRIPTION	ORDER NUMBER	QUANTITY	PRICE
LN-15 – Across-The-Arc	K1870-1		
LN-15 – Control Cable	K1871-1		
Required Options			
Magnum® Gas-Shielded Gun and Cable Assemblies	See publication E12.10		
Magnum® Self-Shielded Gun and Cable Assemblies	See publication E12.100		
Drive Roll & Wire Guide Kits	See page 6		
Control Cable -10 ft. (Control Cable Model Only)	K1819-10		
Recommended Options			
Gun Receiver Bushing	See page 6		
Spindle Adapter for 8" O.D. Spools	K468		
Terminal Strip Adapter Cable	K1798		
Weld Power Cable	See page 6		
Recommended Power Sources			
Ranger® 10,000	See publication E6.92		
Ranger® 250	See publication E6.103		
Ranger® 305G	See publication E6.117		
Ranger® GXT	See publication E6.96		
Vantage® 300	See publication E6.206		
Vantage® 500	See publication E6.216		
Ranger® 305D	See publication E6.118		
CV-400	See publication E4.30		
CV-655	See publication E4.40		
Invertec® STT® II ⁽¹⁾	See publication E4.52		
DC-400	See publication E5.20		
DC-600	See publication E5.40		
DC-655	See publication E5.46		
Invertec® V350-PRO	See publication E5.91		
Invertec® V450-Pro	See publication E5.94		
Multi-Weld™ 350	See publication E5.300		
	TOTAL:		

⁽¹⁾ Control Cable Model Only.

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 information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

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 for any updated information.



THE LINCOLN ELECTRIC COMPANY

22801 St. Clair Ave., Cleveland, OH 44117-1199 • 216.481.8100 • www.lincolnelectric.com