

4400 4800 ~ 

TORCHMATE



### The Lincoln Electric Company

Founded in 1895 by John C. Lincoln, The Lincoln Electric Company is the world leader in the design, development and manufacture of arc welding products, robotic arc welding systems, plasma and oxyfuel cutting equipment and has a leading global position in the brazing and soldering alloys market. Headquartered in Cleveland, Ohio, Lincoln Electric has a global network of manufacturing, distribution, sales and technical support covering more than 160 countries.

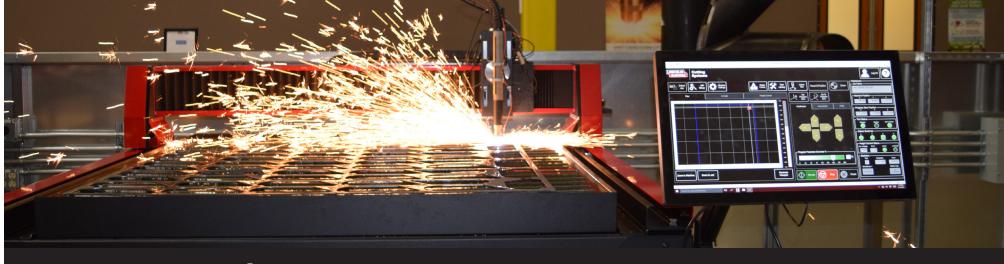
#### INNOVATION

With a long history of innovation in arc welding and cutting equipment, Lincoln Electric has been providing state-of-the-art products and comprehensive process solutions to our customers for more than a century. In the past decade, we have combined the resources and expertise of several leading companies – Torchmate<sup>®</sup>, Vernon Tool<sup>®</sup>, Burny Kaliburn<sup>®</sup>, Burlington Automation<sup>®</sup> and others – to create a single cutting entity to address every possible customer need. What's more, we've developed a worldwide network of R&D centers to oversee the most comprehensive research and product development program in the global welding and cutting industries.

#### CUSTOMER COMMITMENT AND SUPPORT

Lincoln Electric owes its position as an industry leader to an enduring combination of high quality products, technical expertise and unwavering customer support. Whether you're welding, cutting, integrating an automated system into your existing operation or taking your existing automated system to a new level, we'll help you find a way to do it better and more cost-efficiently. If there's a way to improve your product and your bottom line, we'll show you how it can be done.

We are driven by customer satisfaction and known as the supplier of choice in the many industries we serve. We continuously strive to exceed customer expectations and are not simply known as a provider of equipment and consumables, but as a provider of complete welding and cutting solutions.



# SPEND LESS GET MORE

## Faster Delivery | Quicker Set-Up | Easier To Learn | Improved Cycle Times | Industry Leading Technical Support

### **Cut High Quality Parts Faster**

With up to 65% faster cut speeds, improved cut quality, and exceptional repeatability, this machine reaches a new standard in the industry. Each component has been designed and engineered by Lincoln Electric to work seamlessly together.

### Spend Less Money Cutting Parts

Save money with dramatically lower consumable costs. Reduce post process operations with less dross and better edge quality. Keep your investment running longer with lower mechanical maintenance and longer machine life expectancy.

## **Ready To Run**

Get started cutting quickly with our available next day shipping and rapid setup time. Machines come completely assembled with all needed components, including the consumable starter kit and slat supports. Get started cutting in about 30 minutes.

## Peace Of Mind Dependability

For over 120 years Lincoln Electric has specialized in creating industrial manufacturing solutions to help our customers build their businesses. Backed by our best-in-class warranty and industry-leading technical support, our customers know that we'll always be there.

## Easy To Use

An intuitive touch screen HMI with an integrated 27-part shape library will get you cutting immediately. There's also an optional clip art gallery with over 6000 files for fast and easy art projects. Flexible training resources are provided so that your team can learn at their own pace.







# **The Cutting Industry** Cutting Solutions to Meet the Most Demanding Requirements – Yours.

Lincoln Electric is no stranger to the fabrication industry. It's the arena in which we've maintained a leadership position for more than a century. In our company's history, we've learned that welding is always synonymous with cutting. It's a fact of life in virtually every related industry: aerospace, automotive, machinery, mining, farming, construction, structural steel, oil, gas and more. No matter the application, no matter the material, no matter the shape, we have the tools and solutions that will enable you to make the cut.

#### OUR MANY DIMENSIONS, YOUR SINGLE SOURCE

At every step in our evolution we've focused on building a portfolio of expertise that encompasses every cutting application within the fabrication and industrial manufacturing universe: plasma cutting and motion control, plate cutting, tube and pipe cutting, structural steel cutting and more. There are no miscellaneous brands or products; every segment of Lincoln Electric's overall business is directly aimed at providing solutions to the challenges you face every day. After all, cutting is about much more than just material separation; it's about material handling, robotics and automation, regulatory compliance, part quality and a host of other concerns. We're the one source and the one partner you'll ever need to address it all.

#### MEETING EVERY CHALLENGE

What started with welding several decades ago has evolved into a range of applications and solutions that apply to virtually every segment of the manufacturing process, including cutting. That's why Lincoln Electric invests in the largest application engineering, automation and R&D support centers in the industry. Highly trained and experienced technologists, engineers and applications personnel are available to not only troubleshoot customer problems in the field – anywhere in the world – but also develop new process or consumable solutions based on whatever customer challenges we encounter. In the end, this industry-leading technical support team has one focus: providing you with the best cutting solutions for your specific needs.

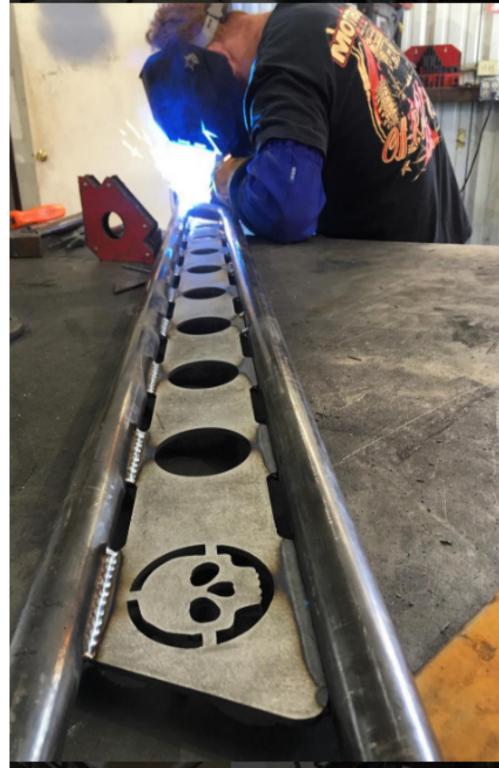
# **Cutting Edge Performance**

Cut High Quality Parts Faster

# "I don't want to deal with four vendors to solve a single business problem!"

Dan DuBose - Motobilt Dotham, Alabama

"My previous CNC kit machines required me to integrate parts from multiple vendors. Every time I had an issue with my table it resulted in a lot of finger pointing. I don't have time for my biggest investment to sit idle. The Lincoln Electric Cutting Systems machine was up and in running in minutes, not days."



TORCHMATE CNC PLASMA SYSTEMS SPECIFICATIONS	Product Number
TABLE DIMENSIONS	
4400	74" x 67" x 63"
4800	74" X 114 x 63"
MACHINE WEIGHT	
4400	840 lbs
4800	1252 lbs
TOOL CAPACITY	
4400 - 4800	2
WATER CAPACITY	
4400	60 Gallons (230 Liters )
4800	107 Gallons ( 405 Liters )
MATERIAL CAPACITY	
4400 - 4800	3/4" Mild Steel
POWER   AIR REQUIREMENTS	
4400-4800 HMI   Motion Control	115V / 15A Dedicated Circuit
4400-4800 Air	87-109 psi (6-7.5 bar) 380 SCFH 180 SLPM
4400-4800 Single Phase	200-208V or 230V / 1 / 50 / 60
4400-4800 Three Phase	200-208V / 230V / 380V / 460V / 575V / 3 / 50 / 60
Machine Ground	Dedicated Earth Ground Supplied By Other
PRECISION GEAR RACK AND PINION DRIVE SYSTEM	
Stepper Motors	(3) 396 oz-in
Belt reduction	(3)3:1
Linear Guidance	20mm Profile Linear Rail
Gear Engagement	Spring Loaded
Gantry Carriage	Milled 3/8" Aluminum
Traverse Speed	500 ipm
Machine Repeatability	0.0015"
Gantry Clearance	5"
Frame Construction	3/16" Mild Steel
CUT CAPACITY   SPEED (MILD STEEL)	
Maximum Pierce Capacity	3/4" (19mm)
1/4" in. ( 6.35 mm )	148 ipm
1/2" in. ( 12.7 mm )	52 ipm
3/4" in. [19 mm ]	26 ipm

6 | The Lincoln Electric Company

# **Performance In Motion**

Advanced Technology | Simple Operation

## Ready To Run In 30 Minutes

The TORCHMATE® 4400 | 4800 CNC plasma cutting systems by Lincoln Electric® are designed for the growing fabrication shop. Its design, components, and construction were all single-source engineered to deliver exceptional repeatability and performance. Rapid delivery and setup time gets your machine up and running quickly with limited assembly required. Our best in class warranty, industry leading support and lowest operation costs, ensure you spend more time making money.

The Torchmate 4400 and the Torchmate 4800 include all necessary components to operate the system, including: an integrated touch-screen HMI, industrial grade user console with adjustable mounting arm, and proprietary motion control system. Our standard 80 amp power supply delivers 65% faster cut speeds and savings of up to 45% in consumable costs. The 4400 and 4800 produce cycle times that are 2.5 times faster than our previous system.

## APPLICATIONS

- » SMALL METAL FABRICATION SHOPS
- » SHEET METAL CONTRACTORS
- » HOBBYISTS & ARTISTS
- » CUSTOM VEHICLE FABRICATORS
- » PROTOTYPING
- » EDUCATION
- » RACING INDUSTRY

TORCHMATE CNC PLASMA SYSTEMS AND ACESSORIES	Product Number
MACHINE AND OPTIONAL HAND TORCH	
Torchmate 4400 CNC Plasma Cutting Table ( 4x4 cutting area)	LECS-080-4400-00
Torchmate 4800 CNC Plasma Cutting Table (4x8 cutting area)	LECS-080-4800-00
Optional FlexCut 125 Amp Plasma Cutter	K4811-1   K4300-4   K4300-5
Optional LC105 Handheld Plasma Torch 25 ft. (7.5 m)	K2849-1
Optional LC105 Handheld Plasma Torch 50 ft. (15 m)	K2849-2
CONSUMABLES-MACHINE CUTTING	
Electrode (LC105M)	BK12849-1
Shield Cap (40A) (LC105M)	BK12849-13
Shield Cap (60A-80A) (LC105M)	BK12849-2
Nozzle 40A (LC105M)	BK12849-4
Nozzle 60A (LC105M)	BK12849-5
Nozzle 80A (LC105M)	BK12849-6
Retaining Cap (LC105M)	BK12849-8
Swirl Ring (LC105M)	BK12849-9
Retaining Cap (Contact-CTP) (LC105M)	BK12849-10
CONSUMABLES-HAND CUTTING	
Electrode (LC105)	KP4141-1
Shield (LC105)	KP4141-13
Shield Cap Gouging (LC105)	KP4141-17
Drag Shield Cap (40A)	KP4141-14
Drag Shield Cap (80A)	KP4141-15
Nozzle - 40A (LC105)	KP4141-4
Nozzle - 60A (LC105)	KP4141-5
Nozzle - 80A (LC105)	КР4141-б
Nozzle (Gouging) (LC105)	KP4141-18
Retaining Cap (LC105)	KP4141-8
Swirl Ring (LC105)	KP4141-9
CNC PLASMA MACHINE CUTTING ACESSORIES AND OPTIONS	
Pneumatic Plate Marking Tool	TMS-203-1000-21
Expanded Clip Art Gallery (Over 6000 Ready-To-Cut Files)	TMS106-0031-04
Educational Curriculum	K4433-1
EDU CAD Upgrade	TMS-106-0011-01



# Heavy-Duty, 80 Amps FlexCut<sup>™</sup> 80

Whether cutting fine artwork or fabricating steel parts in a production setting, customers want a plasma solution that will give them the cleanest and fastest cuts possible. With 80 amps at 80% duty cycle, the FlexCut<sup>™</sup> 80 adds power to the speed and precision equation.

Built on an inverter platform, the FlexCut 80 is a constant-current plasma cutting power source that delivers superior cut quality with minimal dross – which minimizes the need for secondary finishing operations. Add to that our patent-pending consumable designs (providing up to three times longer consumable life than competitors) and the FlexCut 80 has the potential to significantly reduce your operating costs.

FlexCut 80 initiates the plasma arc with a simple yet reliable touch-start mechanism that eliminates many of the failure problems associated with high-frequency start systems. The control system includes Parts-in-Place<sup>™</sup>, a feature that ensures that the consumables are in place before starting the cutting or gouging process.

# Peace Of Mind Dependability Best In Class Warranty

#### Torchmate 4400 - 4800

Protect your investment with Lincoln Electric. The Torchmate 4400 and Torchmate 4800 CNC plasma cutting systems are backed by a best in class warranty to keep your small business running. Our systems have been rigerously tested to the highest industry standards.\* Our two year complete warranty is the only single source warranty in its class, with all components warrantied by Lincoln Electric. There's no third party vendor to deal with. One phone call provides peace of mind and keeps you up and running.



\*Machine testing includes IP 23 | ISO | Laser Interferometer | EMC | MTBF. Warranty applies to the CNC machine and power supply. Software is subject to a limited warranty, see Torchmate.com/4400-4800-TC for full details, terms and conditions.

# **Package Includes**

- » READY TO RUN 4400 | 4800 CNC MACHINE
- » UNLIMITED EDUCATIONAL CAD LICENSES
- » PRIVATE EDUCATOR ONLINE COMMUNITY

# Education Package CNC Cutting — The Gateway to Robotics Educating The Next Generation Manufacturing Trade Torchmate 4400 | 4800 EDU

Entering its second century, the welding profession is maturing. With many employers requiring more exposure to robotic automation, advanced equipment, exotic materials, specialized code certification, theory, welding procedure specifications and more. With new technology continually entering the industry, there is a growing need for welders who understand more than how to hold a torch and join metal.

Lincoln Electric is proud to lead the robotic education revolution with a comprehensive educational CNC system that includes everything you need to start your CNC education program. We started with our ready-to-run CNC cutting machine and we've expanded the features to maximize the education opportunities.

# Industry Leading Technical Support

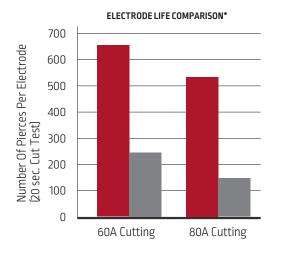
We Include The Tools To Train Your Operators

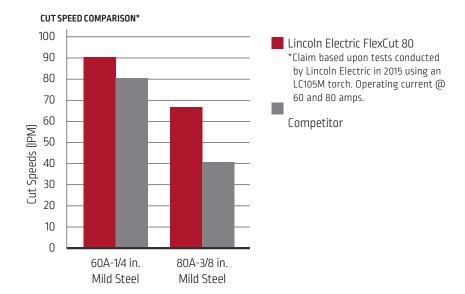
Lincoln Electric has been helping businesses succeed since 1895, which means that we have the largest technical support staff in the industry. Our team of trained technicians are here full time to walk you through the design, operation, and maintenance of your Torchmate table. Providing manufacturing solutions is built into our company's core belief; when you need help, we are here. Tap into our team of traveling technicians or our authorized distribution network with optional onsite training and service. You can also use the variety of online resources or reach out to our phone support team when your operator needs assitance.

#### FLEXIBLE TRAINING AND SUPPORT

- » TWO DAY OPTIONAL ONSITE
- » RENO CAMPUS TRAINING
- » TECHNICAL PHONE SUPPORT
- » EXTENSIVE VIDEO RESOURCES
- » INTERACTIVE ONLINE COMMUNITY
- » EDUCATIONAL CURRICULUM
- » PHONE SUPPORT

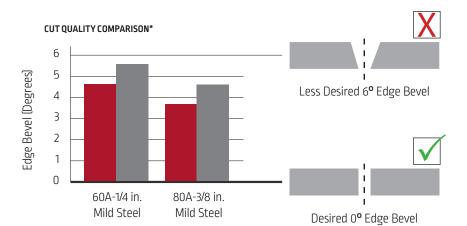








- Less Edge Bevel
- $\cdot\,$  Better Cut Quality and Performance
- Longer Consumable Life





Lincoln Electric Cutting Systems 1170 Trademark Drive Suite 101 Reno, NV 89521 U.S.A. www.torchmate.com 775-673-2200 CUSTOMER ASSISTANCE POLICY

The business of The Lincoln Electric Company<sup>®</sup> 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 to the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant to 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 welding the customers.

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.