



4505
TORCHMATE®

LINCOLN
ELECTRIC



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ELECTRIC

TORCHMATE® 4000 SERIES

CNC PLASMA TABLE



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

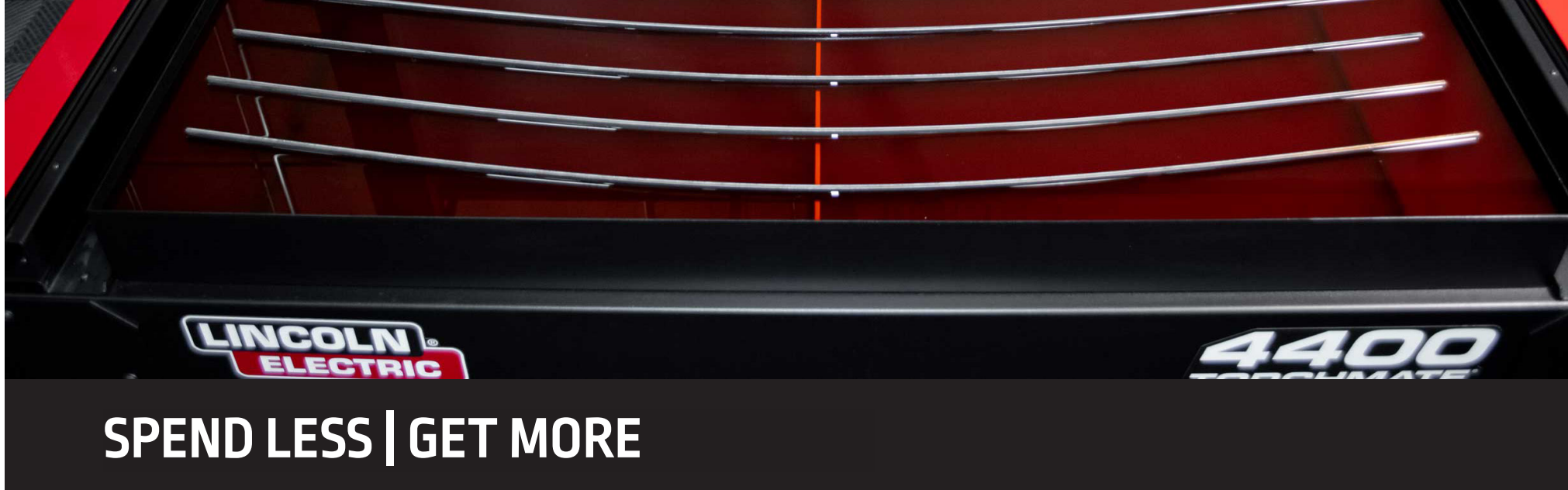
With a long history of innovation in arc welding and cutting equipment, Lincoln Electric has been providing state-of-the-art products and comprehensive process solutions to our customers for more than a century. In the past decade, we have combined the resources and expertise of several leading companies – Torchmate®, Vernon Tool®, Burny Kaliburn®, Burlington Automation® 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

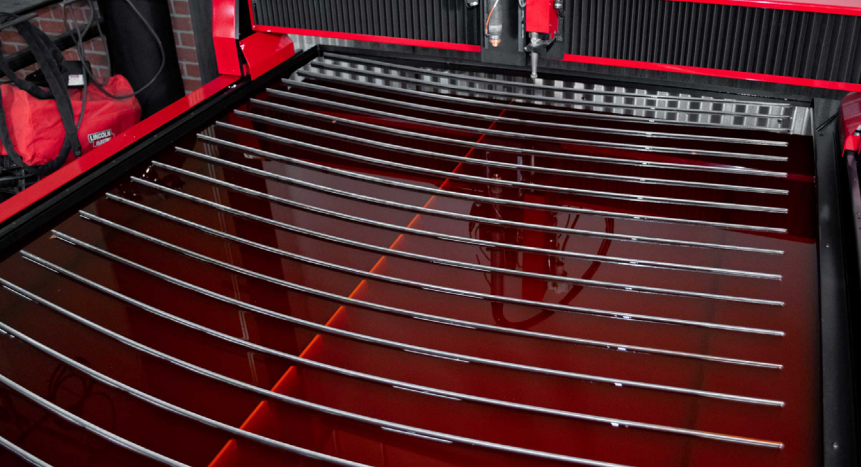
Get started cutting quickly with our available next day shipping and rapid setup time. Machines come completely assembled with all needed components, including the consumable starter kit and slat supports. Get started cutting in about 30 minutes.

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.

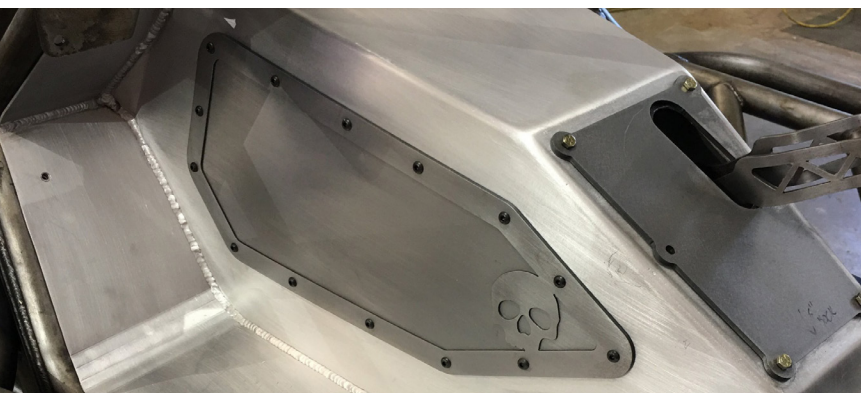
Lincoln Electric is no stranger to the fabrication industry. It's the arena in which we've maintained a leadership position for more than a century. In our company's history, we've learned that welding is always synonymous with cutting. It's a fact of life in virtually every related industry: aerospace, 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.



Customer Success Stories

How Torchmate helps businesses grow

MOTOBILT

"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 want to deal with four vendors to solve a single business problem! 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."

Dan DuBose -
Motobilt
Dotham, Alabama



CANEDY METAL CRAFT

"I would 100% recommend Torchmate technology to another business. Reason being, it is very easy to use, amazing accuracy, cut quality is outstanding, and touchscreen monitor/controls make it a breeze when switching material types, thicknesses and setting up new jobs. Once you press the run button you can walk away and work on other things making your day more productive."

Andy Canedy -
Canedy Metal Craft
Peoria, Arizona



AARON SMITH INDUSTRIES

"When deciding what equipment to buy, it wasn't worth the risk to purchase anything from unknown or disreputable companies. I knew I could trust Lincoln Electric products and they would give my business the highest chance of success possible."

Aaron Smith -
Aaron Smith Industries
Eagle Creek, Oregon



ARTFUL METALWORX

"To start, the quality of Torchmate products is outstanding, it can be abused and can answer any of my needs. Secondly, the customer service is unmatched. I hadn't done anything before the class with Iggy and now I feel like an expert. I know the company and the support team always have my back. I don't know why anybody would choose another brand. Now, we do roughly \$15,000 in sales per month from our Torchmate 4800 table."

Damon Gabriel -
Artful Metalworx
Ellijay, Georgia



TORCHMATE CNC PLASMA SYSTEMS SPECIFICATIONS	Product Number
TABLE DIMENSIONS	
4400	74" x 67" x 63" (1879.60mm x 1701.80mm x 1600.20mm)
4505	86" x 79" x 63" (2184.40mm x 2006.60mm x 1600.20mm)
4800	74" x 114 x 63" (1879.60mm x 2895.60mm x 1600.20mm)
4510	86" x 138" x 63" (2184.40mm x 3505.20mm x 1600.20mm)
MACHINE WEIGHT	
4400	1322 lbs (599.65 kg)
4505	1480 lbs (671.32 kg)
4800	1847 lbs (837.79 kg)
4510	2452 lbs (1112.21 kg)
TOOL CAPACITY	
4400 - 4800 - 4510	2
WATER CAPACITY	
4400	60 Gallons (230 Liters)
4505	85 Gallons (322 Liters)
4800	107 Gallons (405 Liters)
4510	140 Gallons (530 Liters)
MATERIAL CAPACITY	
4400-4505-4800-4510	1" Mild Steel (25.4mm)
POWER AIR REQUIREMENTS	
4400-4505-4800-4510 HMI Motion Control	115V / 15A Dedicated Circuit
4400-4505-4800-4510 Air	87-109 psi (6-7.5 bar) 380 SCFH 180 SLPM
4400-4505-4800-4510 Single Phase	200-208V or 230V / 1 / 50 / 60
4400-4505-4800-4510 Three Phase	200-208V / 230V / 380V / 460V / 575V / 3 / 50 / 60
Machine Ground	Dedicated Earth Ground Supplied By Customer
PRECISION GEAR RACK AND PINION DRIVE SYSTEM	
Stepper Motors	{ 3 } 396 oz-in ({3} .4419 kg/mm)
Belt reduction	{ 3 } 3:1
Linear Guidance	20mm Profile Linear Rail
Gear Engagement	Spring Loaded
Gantry Carriage	Miled 3/8" Aluminum (9.525mm Aluminium)
Traverse Speed	500 ipm (12700 mm/min)
Machine Repeatability	0.0015" (0.0381mm)
Gantry Clearance	5" (127mm)
Frame Construction	3/16" Mild Steel (4.7625mm Mild Steel)
CUT CAPACITY SPEED (MILD STEEL)	
Maximum Pierce Capacity	0.75 in (19 mm) - FlexCut 80 1 in (25.4 mm) - FlexCut 125
1/4" in. (6.35 mm)	148 ipm (See Manual For Cut Charts) (3759.2 mm/min)
1/2" in. (12.7 mm)	52 ipm (See Manual For Cut Charts) (1320.8 mm/min)
3/4" in. (19 mm)	26 ipm (See Manual For Cut Charts) (660.4 mm/min)

Performance In Motion

Advanced Technology | Simple Operation



Ready To Run In 30 Minutes

The TORCHMATE® 4000 Series 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 4000 Series tables include all necessary components to operate the system, including: an integrated touchscreen 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 4000 Series 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-080-4400-01 (FC80), LECS-125-4400-01 (FC125)	
Torchmate 4505 CNC Plasma Cutting Table (5x5 cutting area)	LECS-080-4505-00 (FC80), LECS-125-4505-00 (FC125)	
Torchmate 4800 CNC Plasma Cutting Table (4x8 cutting area)	LECS-080-4800-01 (FC80), LECS-125-4800-01 (FC125)	
Torchmate 4510 CNC Plasma Cutting Table (5x10 cutting area)	LECS-080-4510-01 (FC80), LECS-125-4510-01 (FC125)	
Optional FlexCut 125 Amp Plasma Cutter	K4811-1 LC125M Plasma Torches: 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 (FLEXCUT 80)		
Electrode- (LC100M)	BK12849-3	5 per pack
Swirl Ring- (LC100M)	BK12849-9	2 per pack
Nozzle- (Precision Cut) (LC100M)	BK12849-11	5 per pack
Nozzle- (40A) (LC100M)	BK12849-4	5 per pack
Nozzle- (60A) (LC100M)	BK12849-5	5 per pack
Nozzle- (80A) (LC100M)	BK12849-6	5 per pack
Retaining Cap- (LC100M)	BK12849-21	1 per pack
Retaining Cap, CTP- (LC100M)	BK12849-22	1 per pack
Shield Cap- (Precision Cut) (LC100M)	BK12849-18	2 per pack
Shield Cap- (40A) (LC100M)	BK12849-14	2 per pack
Shield Cap- (60A-80A) (LC100M)	BK12849-15	2 per pack
CONSUMABLES-MACHINE CUTTING (FLEXCUT 125)		
Electrode- (LC125M)	BK14300-1	5 per pack
Swirl Ring- (LC125M)	BK14300-13	2 per pack
Nozzle - (45A) (LC125M)	BK14300-7	5 per pack
Nozzle - (65A) (LC125M)	BK14300-8	5 per pack
Nozzle - (85A) (LC125M)	BK14300-9	5 per pack
Nozzle - (105A) (LC125M)	BK14300-10	5 per pack
Nozzle - (125A) (LC125M)	BK14300-11	5 per pack
Retaining Cap, CTP- (LC125M)	BK14300-15	1 per pack
Retaining Cap - (LC125M)	BK14300-14	2 per pack
Shield Cap - (45A-65A) (LC125M)	BK14300-3	2 per pack
Shield Cap - (85A-125A) (LC125M)	BK14300-4	2 per pack
CNC PLASMA MACHINE CUTTING ACESSORIES AND OPTIONS		
Pneumatic Plate Marking Tool	TMS-203-1000-21	
Plateguard	TMS-310-0001-00 (5 gal), TMS-310-0001-02 (55 gal)	
Educational Curriculum	K4433-1	
VMD Nest TMS-106-0040-00	TMS-106-0040-00	
Two-Stage Air Filter Assembly	TMS-214-0000-00	



K4809-1 FlexCut 80 with BK12849-25 LC100M Machine Plasma Torch

Heavy-Duty, 80 Amps

FlexCut® 80

Whether you're cutting fine artwork or fabricating steel parts in a production setting, you want a plasma solution that will give you the cleanest and fastest cuts possible. With 80 amps at 80% duty cycle, the FlexCut 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 faster cut speeds, optimal cut performance, and durability. The result is a superior cut with minimal dross – which minimizes the need for a secondary operation. Regardless of whether you are mechanized cutting or hand cutting, our patent-pending consumable designs provide up to three times longer consumable life than competitors. 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 a Parts-in-Place™ feature to ensure that the consumables are in place before starting the cutting or gouging process.

If you value cut quality, productivity, and lower operating costs, then go ahead and make the cut with the FlexCut 80.



K4811-1 FlexCut 125 Base Model (w/o Torch)
BK4300-4 LC125M Machine Plasma Torch (Torch Sold Separately)

Powerful, 125 Amps

FlexCut®125

Whether you are running a mid-sized shop or an industrial-scale fabricating operation, you need a plasma cutting system that will give you the cleanest and fastest cuts possible. Rated for 125 amps at 100% duty cycle, the FlexCut 125 plasma cutter not only gives you the cut speed and quality you have come to expect from the FlexCut family of plasma cutters, but an increased level of power.

Built on an inverter platform, the FlexCut 125 plasma cutting machine 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 torch and consumable designs (providing up to six times longer consumable life than competitors) and the FlexCut 125 has the potential to significantly reduce your operating costs.

The FlexCut 125 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™, a feature that ensures that the consumables are in place before starting the cutting process. Switch to plasma marking and use the same set of consumables with either air or nitrogen.

Choose Your Torchmate Accessories



PNEUMATIC PLATE MARKER

The Torchmate Plate Marking tool offers high-precision marking capabilities on a variety of metals, including steel and aluminum. The Plate Marker is easily installed with four screws and removal of the torch assembly is not required. This pneumatic engraving tool offers oscillation of the stylus and can be adjusted to fit your specific engraving needs.



2-STAGE AIR FILTER ASSEMBLY

Lincoln Electric® air filter with moisture separator will create a factory option for air filtration and moisture separation, as well as air drying, to sufficiently filter and dry the air to ISO standard 8573-1:2010, class 1.4.1.



LINCOLN ELECTRIC PLATEGUARD

Lincoln Electric® PlateGuard can be added to any steel water table utilized for Plasma or Oxy-Fuel plate cutting thermal processes. PlateGuard is recommended to be added at a concentration of 10% PlateGuard to 90% water or 1 gallon of PlateGuard to 10 gallons of water.

For water tables that are not often agitated and may sit stagnant for extended periods of time, it is recommended to add 32oz of PlateGuard Conditioner per 50 gallons of water.

Software and Interface Upgrades

MULTI-LANGUAGE CAPABILITY

Torchmate tables now offer multi-language capabilities on the VMD Software and VMD Onboard nest. You can now select between English, Spanish, German, Polish, Italian, and French to operate your table.



METRIC OPERATION MODE

The new Metric operation mode will run the machine natively in metric units. You can easily change the operation mode from Imperial to Metric directly from your touchscreen and all of your machine operations will be set.

LARGER JOB GRAPHICS PANEL

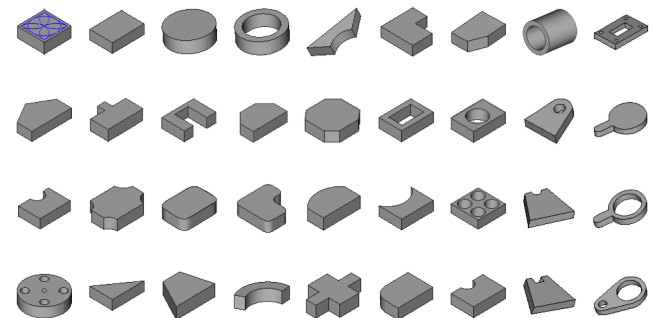
The 30% larger job graphics panel increases your visibility so you can easily see the smallest parts of your job in real-time and operate your machine with ease.

PRE-LOADED CUT CHARTS

Get back to cutting faster with the new pre-loaded cut charts. Simply enter your material type and thickness, and the correct cut parameters will set automatically, saving you the hassle of referencing cut charts and inputting data.

UPDATED SHAPES LIBRARY

The upgraded shape library now includes 8 new Shape Library parts (Pipe Weld Coupon, Rectangular Bolt Flange, Arc Trapezoid Tab, Paddle, Damper, Slanted Pipe Support, Slanted Slot Support, and Cam). You can program the shapes directly from the touchscreen and eliminates the need to create shapes in the CAD software.



Lincoln Electric Academy

Advanced Online Training

Jumpstart Your Torchmate Training

Lincoln Electric Academy is the newest advanced online training system. LEA includes high definition, detailed video walkthroughs for start to finish machine setup and maintenance, for our industry leading 4000 Series CNC plasma cutting tables.

The online training system offers updated premium video content available 24/7 to current and new Torchmate operators. The academy is designed to teach you everything you need to know about operating your machine. We include resources to help you set up your machine when it arrives, if you need to replace any consumables, and how to keep your machine running like new with basic maintenance. The course walks you through the online platform, keeps track of completed, in progress and overdue training courses to your specific table.

With the Lincoln Electric Academy subscription, you can conveniently login at any time and access courses for machine setup, safety procedures, and operations for your Torchmate machine. Access to Lincoln Electric Academy is available through www.torchmatestore.com and by calling 866-571-1066.



Customer Training Options

Committed to Your Success

We offer a wide range of training options to help you learn how to operate your machine. Visit [Torchmate.com/Seminars](https://www.torchmate.com/Seminars) or give us a call at 866-571-1066 to sign up for a training course and accelerate your knowledge of machine operations today!

Online	Fabrication Forum	Fabrication Forum is an online community of Torchmate customers where you can find tips, project ideas, troubleshooting, and general fabrication help for your machine. Login to FabricationForum.com to collaborate with other members and find your next project build.	Free
	Torchmate Academy	Torchmate Academy is our advanced online training system for the Torchmate 4000 series tables. TM Academy includes high definition, detailed video walkthroughs from start to finish machine setup and maintenance.	Call For Pricing
	Virtual Training 2 Hour Blocks	Torchmate now offers a new way for our customers to receive training. The interactive virtual training classes are designed to teach you everything you need to know about your Torchmate machine. Our instructors provide a live, in-depth training experience.	Call For Pricing
Classroom	Regional Class 2 Days	Torchmate offers table operations and CAD training across the United States of America for your convenience. To view our training schedule, visit Torchmate.com/Seminars and book a class with our expert trainers near you.	Call For Pricing
	Reno Class 3 Days	Torchmate offers in-house training classes right here in our production facility. The interactive training classes are designed to teach you everything you need to know about your Torchmate machine and give you a hands-on training experience.	Call For Pricing
Private	Reno Private 2 Days	Torchmate also provides scheduled private training sessions with one of our expert trainers. The private training sessions can be customized and tailored to your individual business needs.	Call For Pricing
			Call For Pricing
	OnSite 2-3 Days	If you need professional setup, operation, or maintenance help with your Torchmate machine at your facility, Torchmate will send one of our factory trained technicians to your direct location to assist.	Call For Pricing

Peace Of Mind Dependability

Best In Class Warranty

Torchmate 4000 Series

Protect your investment with Lincoln Electric. The Torchmate 4000 Series CNC plasma cutting systems are backed by a best in class warranty to keep your small business running. Our systems have been rigorously 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. The machines include a 2 year warranty on the table and components, and 3 years on the power supply.



2 YEAR MACHINE AND PLASMA TORCH LEAD WARRANTY

3 YEAR PLASMA POWER SUPPLY WARRANTY

*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 4000 SERIES CNC MACHINE
UNLIMITED EDUCATIONAL CAD LICENSES
PRIVATE EDUCATOR ONLINE COMMUNITY

Education Package

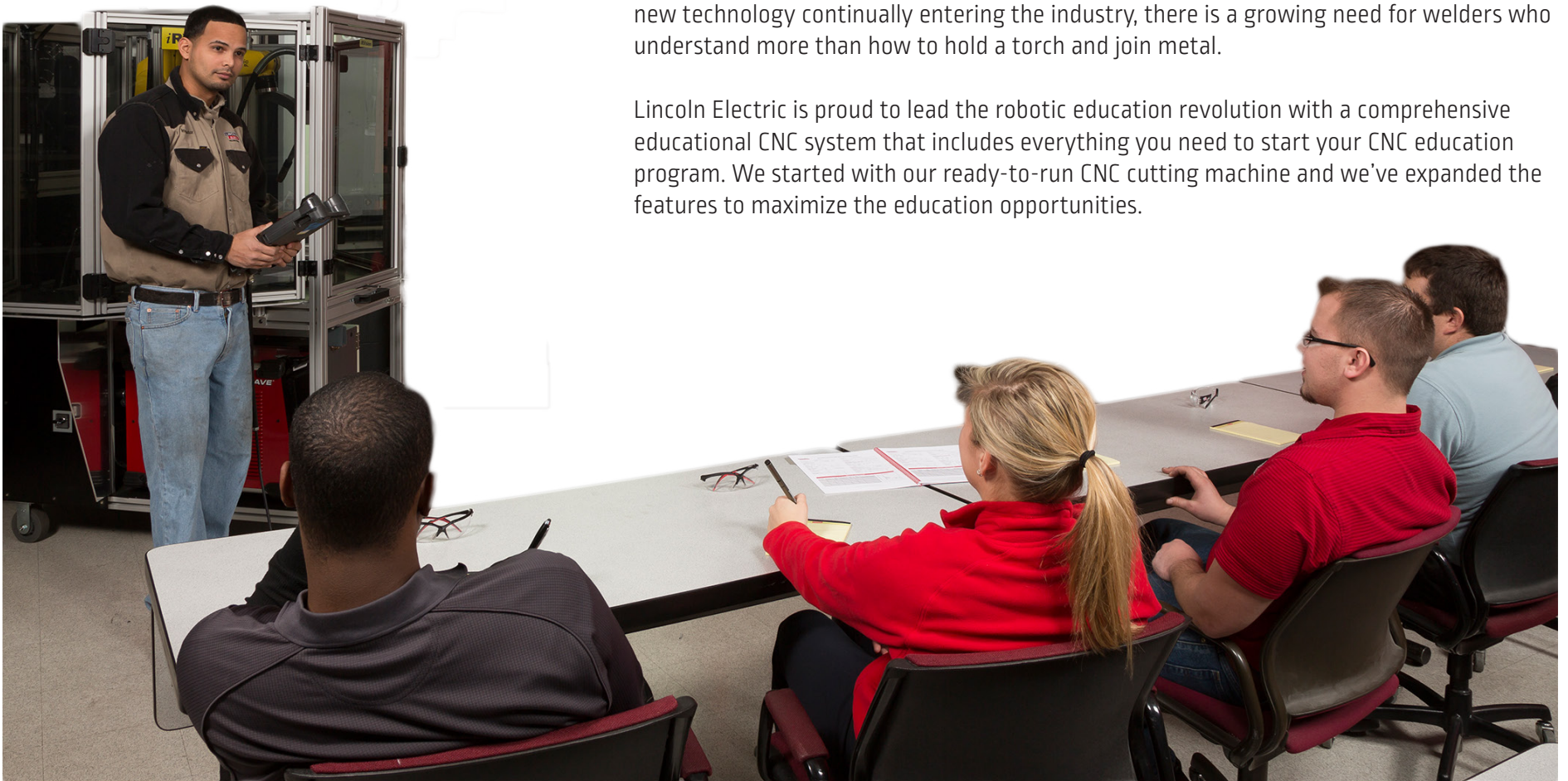
CNC Cutting – The Gateway to Robotics

Educating The Next Generation Manufacturing Trade

Torchmate 4000 Series 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 assistance.

FLEXIBLE TRAINING AND SUPPORT

THREE DAY ONSITE RENO CAMPUS TRAINING -
OPTIONAL
TORCHMATE ACADEMY - ADVANCED ONLINE IN-
TERACTIVE VIDEO TRAINING - OPTIONAL
TECHNICAL PHONE SUPPORT
EXTENSIVE ONLINE VIDEO RESOURCES
INCLUDED
INTERACTIVE ONLINE COMMUNITY,
FABRICATIONFORUM.COM
EDUCATIONAL CURRICULUM

