

CLASSMATE M

INCOLN
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LINCOLN
ELECTRIC
AUTOMATION

LEA-022323TM1-00

CLASSMATE SOLUTIONS

LINCOLN ELECTRIC AUTOMATION SOLUTIONS FOR EDUCATION



A yellow robotic arm is shown in the foreground, performing a welding task on a metal component. The arm is positioned over a workbench where the metal part is held in a fixture. Bright blue sparks are visible at the point of contact between the welding torch and the metal. In the background, a person wearing a dark jacket is visible through a glass safety barrier, observing the process. The setting appears to be a modern industrial or educational laboratory environment.

CLASSMATE

Why choose the ClassMate?

SOLUTIONS

The Lincoln Electric Company

Lincoln Electric® is the world leader in the engineering, design, and manufacturing of advanced arc welding solutions, automated joining, assembly and cutting systems, plasma and oxy-fuel cutting equipment, and has a leading global position in brazing and soldering alloys. Lincoln is recognized as the Welding Expert™ for its leading materials science, software development, automation engineering, and application expertise, which advance customers' fabrication capabilities to help them build a better world. Headquartered in Cleveland, Ohio, Lincoln has 71 manufacturing locations in 20 countries and a worldwide network of distributors and sales offices serving customers in over 160 countries. For more information about Lincoln Electric and its products and services, visit the Company's website at www.lincolnelectric.com.

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.

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.

Lincoln Electric Automation and Education

Providing solutions for industry-leading global partners and educators

THE FUTURE IS AUTOMATION

Here at Lincoln Electric, we keep a pulse on the way automation is revolutionizing manufacturing worldwide. To meet these demands, we have expanded our portfolio to include a dynamic line of products under our Lincoln Electric Automation™ division. No other welding company or robot manufacturer has the experience Lincoln Electric does. Lincoln Electric is the #1 FANUC welding integrator. We offer 24/7/365 support for installation, start-up, on-site service, training, programming assistance, preventative maintenance, and repairs.

VALUE OF EDUCATION

We emphasize the value of education to the community and aim to provide affordable, high-quality products for education centers around the globe. We work with distributors to integrate our educational products into schools. Hands-on, career-focused experiences in the classroom are invaluable for students and their futures in the workforce.

LEARN WITH LINCOLN ELECTRIC AUTOMATION

We are the welding experts and are thrilled to be a part of your welding and robotics curriculum. If you are a distributor or school faculty member interested in one of our ClassMate® offerings, please contact us at educationsales@lincolnelectric.com. Be sure to ask us about our automation programming and welding courses taught in-house at our Cleveland headquarters so you can be confident in equipping your students with the best knowledge of these systems.

CLASSMATE M

Your Go-To ClassMate

As our most popular and versatile product in this line, ClassMate® M systems can be found in high schools, technical schools, colleges, and universities around the world. The ClassMate M offers the most mobility with its compact design. If you are introducing a welding or robotic curriculum to your classroom, this model will be an essential tool for student success.

Product Details

- Mobile cart, small footprint
- FANUC 50iD/7L robot – R30iB+ mate controller
- Power Wave® R450 robotic power source
- AutoDrive® 4R100 wire drive
- Thick plate software bundle
- 3-in-1 welding fixture
- X Tractor® Mini fume extractor
- Hand shields (PPE), Qty 10
- Complete system documentation (digital copies)
- 2 instructor seats in Lincoln Electric Automation courses
- Free shipping

Options Available

- Virtual Educational WeldPRO package
- Ed-Start package
- Gripper package



“Your students will thrive in a welding classroom with a ClassMate product”







LINCOLN
ELECTRIC

CLASSMATE COBOT

R450
POWER WAVE

LINCOLN
ELECTRIC
AUTOMATION

WARNING

WARNING

WARNING

LINCOLN
ELECTRIC

CLASSMATE COBOT

Your Collaborative ClassMate

The ClassMate® Cobot model provides your classroom with all the benefits of a traditional collaborative robot. With advanced sensing technology, the ClassMate Cobot can detect human motion and more safely complete tasks alongside a human operator. Its versatility and mobility are comparable to the ClassMate M model, making it great for high school or university classrooms.

Product Details

- Mobile cart, small footprint
- Advanced robotic technology for simpler programming
- FANUC CRX10iA – R30iB+ controller
- Power Wave® R450 robotic power source
- AutoDrive® 4R100 wire drive
- Thick plate software bundle
- 3-in-1 welding fixture
- X Tractor® Mini fume extractor
- Legacy teach pendant and tablet pendant
- Hand shields (PPE), Qty 10
- Complete system documentation (digital copies)
- Cobot training modules
- Free shipping

Options Available

- Modular table and clamping
- Virtual Educational WeldPRO package
- Ed-Start package



“The Cobot takes your welding and robotics classrooms into the future of automation”



CLASSMATE PRO

Your Industrial ClassMate

The ClassMate® Pro finds itself most often in technical schools, universities, and community colleges training immediate workforce students. Ideal for facilities with a designated welding shop, the ClassMate Pro is a larger model that is stationary once installed. This is the only model in the portfolio available with a positioner, allowing students to gain a better understanding of arc welding and more advanced programming techniques.

Product Details

- Stationary system, lagged to the floor
- FANUC 100iD/12 robot – R30iB+ controller
- Power Wave® R450 robotic power source
- AutoDrive® 4R100 wire drive
- Thick plate software bundle
- 3-in-1 welding fixture
- Fume hood
- Hand shields (PPE), Qty 10
- Complete system documentation (digital copies)
- 2 instructor seats in Lincoln Electric Automation courses
- Free shipping

Options Available

- Virtual Educational WeldPRO package
- Ed-Start package
- FANUC 500kg headstock
- Fume extraction: prism compact



“It offers students the closest experience to real-life industry applications”



*Option available with positioner



CLASSMATE™ LASER

ELECTRIC

DANGER

230 VOLTS



CLASSMATE LASER

Your Experimental ClassMate

The ClassMate® Laser system is geared towards both research institutions and facilities teaching advanced robotics manufacturing curriculums. Laser automation is growing exponentially in various industries and this system empowers you to conduct innovative research and development projects. We have designed this model to be affordable and accessible for education while still having the full-fledged capabilities of an industrial model.

Product Details

- Mobile cart, small footprint
- Laser welding solution – advanced tech
- FANUC 50iD/7L robot – R30iB+ Mate controller
- nLight 1kW fiber laser oscillator
- Laser mechanisms FiberMINI® 2.0 processing head
- SMC compact thermo chiller
- Camera and 32” Monitor
- 3-in-1 welding fixture
- X Tractor® Mini fume extractor
- 2 instructor seats in Lincoln Electric Automation courses
- Free shipping

Options Available

- Cold-wire feed
- Cutting package
- Ed-Start package



“It brings industrial-quality laser technology to the classroom in a compact, cost effective, and easy-to-use way”



OPTION DETAILS

Virtual Educational WeldPRO Package

- Gives all students more “hands-on” time with the robot utilizing a digital teach pendant
- Introduces offline programming
- 15 PC WeldPro licenses
- WeldPro 3D model
- Single instructor seat in WeldPRO virtual training with live instructor

Ed-Start Package

- On-site application technician startup assistance
- 1-on-1 training and support for instructors
- Recommended for all first-time robotic welding customers
- Welding Gear Ready Paks - Qty 2
- Welding coupons to practice a variety of welds and programming techniques

Gripper Package

- Ideal for dual-purpose curriculums
- Ability to swap between weld torch and gripper end-of-arm tooling
- Manual tool changer
- WeldPRO CAD model

Headstock (ClassMate Pro ONLY)

- Allows rotation of part during program
- Provides students with a wider range of real-world applications
- Single-axis positioner
 - 500 kg
 - Range 740°
 - Speed 130°/sec

Cutting Package (ClassMate Laser ONLY)

- Adds cutting capabilities to the laser system



CHOOSE YOUR CLASSMATE

Which ClassMate model will work best for your facility? Answer the following questions to help you choose your ClassMate:

Do you want a versatile system to kickstart your welding/robotics curriculum?

If so, the **CLASSMATE M** is for you!



Do you want to teach human/robot collaborative programming?

If so, the **CLASSMATE COBOT** is for you!



Do you want to conduct welds with lifelike operator training?

Do you have a permanent spot to house a robotic welding system?

If so, the **CLASSMATE PRO** is for you!

Does your curriculum focus on advanced manufacturing and technologies?

Are you seeking to accelerate your training program with state-of-the-art automated welding and cutting processes?

If so, the **CLASSMATE LASER** is for you!





ASSMATE™ LASER

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The operation of welding fume control equipment is affected by various factors including proper use and positioning of the equipment, maintenance of the equipment and the specific welding procedure and application involved. Worker exposure level should be checked upon installation and periodically thereafter to be certain it is within applicable OSHA PEL and ACGIH TLV limits

CUSTOMER ASSISTANCE POLICY

The business of Lincoln Electric is manufacturing and selling high quality welding equipment, automated welding systems, consumables, and cutting equipment. Our challenge is to meet the needs of our customers, who are experts in their fields, and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or technical information about their use of our products. Our employees respond to inquiries to the best of their ability based on information and specifications 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, or to provide engineering advice in relation to a specific situation or application. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or communications. Moreover, the provision of such information or technical information does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or technical information, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose or any other equivalent or similar warranty is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the definition of specifications, and 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.

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