



Office of Administrative Services

(Wait 5-10s)

Requisition Request Form

R _____ - _____

Fiscal Year		Vendor ID #	Vendor Name			Date Required
Deliver To		Room #	Return Copy of Requisition To			
Seq	Item #	Description	Qty	Unit Price	Extended Cost	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
Comments				Subtotal		
				Tax		
				Shipping		
				Total Cost		
FOAP to be Charged			%	Amount		
-						
FUND	ORG	ACCOUNT	PROGRAM			
-						
FUND	ORG	ACCOUNT	PROGRAM			

Requestor (print name) _____ Date _____ Dean (signature) *Stuart McElderry* Date 3/25/22

Coordinator/Manager (signature) _____ Date _____ President (signature) *Dyrell Foster* Date _____

OFFICE OF ADMINISTRATIVE SERVICES USE ONLY			
Reviewed: _____	Verified: _____	Approved: _____	
<i>Administrative Services</i>	<i>Administrative Services Officer</i>	<i>VP, Administrative Services</i>	
PO Number: _____	Budget Transfer #: _____	Entered: _____	
TR 4/6/20			



CLASSMATE™

**LINCOLN
ELECTRIC**

FABRIC 5000
ARC Mate 50ip
7L

CORNER

WARNING
WELDING ARC RAYS CAN BURN
WEAR PROTECTIVE GEAR AND DON'T CONDUCT WELDING

**R450
POWER WAVE**

ClassMate® M

SYSTEM FIRM PROPOSAL

December 9, 20221

Las Positas Community College

Proposal Number: 211209-1523slo

Submitted By: Sebastian Lovett

EXPERIENCE. INNOVATION. QUALITY

SUBJECT: Proposal Number 211209-1523slo

Dear Customer,

Lincoln Electric Automation is pleased to submit this proposal covering your requirement for a robotic welding system.

One of Lincoln Electric's many core competencies is providing complete welding and training systems to our customers as well as assistance and support. These unique systems improve quality, lower costs, and help customers enhance their working environments. Through design, integration, world-class customer service, and unparalleled welding expertise, we are the industry leader in automated arc welding and tooling solutions. We have served industries as diverse as automotive, aerospace, transportation, shipbuilding, petrochemical and heavy industry.

We hope that our proposal and the enclosed literature will answer any questions or concerns you may have. If you have any further questions after reviewing this information, please call me at (216) 308-1329.

We look forward to assisting you on this project in any way we can.

Sincerely,
Sebastian Lovett
Project Manager, Proposals/Educational



WE'RE HERE WHEN YOU NEED US

**Lincoln Electric Automation
Cleveland Automation**

**22221 Saint Clair Avenue
Cleveland, Ohio 44117**

**+1 888-935-3878 TOLL FREE
+1 216-383-2667 PHONE
+1 216-383-4727 FAX**

1 Notice to Recipients

CONFIDENTIAL: DO NOT DISTRIBUTE

This document may only be reproduced as required for internal use by recipient in evaluation of this proposal.

In consideration of Lincoln Electric Automation's preparation of this proposal and disclosure of certain proprietary information, its recipient agrees to treat as confidential all of Lincoln Electric Automation's proprietary information disclosed herein. Such proprietary information includes, but is not limited to, all technical requirements, specification, prints, and information relating to the description and operation of the system which is the subject of this proposal, its components, equipment, options and related services, designs, processes, techniques, documentation, pricing, installation, and safety.

The recipient further acknowledges that Lincoln Electric Automation's proprietary information is unique and valuable, was developed or acquired by Lincoln Electric Automation at substantial expense, and is the subject of efforts by Lincoln Electric Automation to maintain the secrecy thereof. The recipient agrees not to reverse engineer, to use or to disclose this proprietary information to any person or party without the prior written consent of Lincoln Electric Automation. This agreement is effective between the recipient and Lincoln Electric Automation regardless of whether the parties enter into a contract for sale of the goods or services that are the subject matter of this proposal.

CORONAVIRUS NOTICE

THIS PROPOSAL IS CONTINGENT ON A LACK OF IMPACT BY THE CORONAVIRUS PANDEMIC. Given the existence of the coronavirus pandemic, The Lincoln Electric Company will use its best efforts to manufacture, staff and service this project to meet the scheduled delivery date(s). However, The Lincoln Electric Company reserves its right to extend the delivery date/time if The Lincoln Electric Company is unable to perform or its subcontractors or suppliers fail to perform on time due to illness, supply shortages or governmental restraints on business, travel and/or assembly. In the event of such a suspension/delay, The Lincoln Electric Company shall not be in default for failure to perform and shall not be liable for loss, damage, detention or delay. To the extent that the project is suspended by the Buyer, The Lincoln Electric Company reserves its right to seek additional costs associated with the suspension.

2 System Concepts



ClassMate® M ROBOTIC WELDING TRAINER



**POWER WAVE®
R450 ROBOTIC
POWER SOURCE**



**X-TRACTOR® MINI
PORTABLE
WELDING FUME
EXTRACTOR**



**3-IN-1
WELDING FIXTURE**



**PROJECT BASED
LESSON PLANS**

3 System Specifications

Product Number	AD2446-1
Weight – lb (kg)	1000 lb.
H x W x D – in (mm)	94.23 x 68.23 x 70.24 in. (2393 x 1733 x 1784 mm) [sides expanded]; 32.5 in. (826 mm) [sides folded]
Input Voltage	120VAC for Robot operation and programming

Power Wave® R450 and AutoDrive® 4R100 Product Specifications

Product Number	Power Wave R450: K3451-1 AutoDrive 4R100: K3002-2
Output Range	5-550A
Rated Output – Current/Voltage/ Duty Cycle	GMAW: 550A/41.5V/40% GMAW: 450A/36.5V/100%
Input Voltage	208/230/380-415/460/575/3/50/60VAC

Robot Specifications

FANUC ARC Mate® 50iD/7L	<ul style="list-style-type: none"> · Six Axis Mechanical Unit · 7 kg Maximum Payload · 0.911 m Reach
FANUC R-30iB Mate Controller	<ul style="list-style-type: none"> · 6-channel servo amplifier · RIA compliant E-stop unit · Integrated operator panel (includes Auto/T1 mode switch, Estop and cycle start push buttons) · RIA-compliant color haptic iPendant with non touch panel and USB2.0 port
FANUC Robotics LR ArcTool® Software	Compliant with RIA R15.06 Safety Requirements

Safety/Weld Cell Controls

- CSA/UL certification ready system – PLEASE NOTE: Obtaining CSA/UL certification is the responsibility of the customer
- Fully integrated ANSI/RIA 15.06-2012 compliant operator safety devices including door safety switches
- RIA compliant robotic controller operator panel, robotic software and pendant

Complete System Documentation

Electronic manuals and tools (Available upon request)	operations manuals maintenance guides, spare parts lists, calibration numbers and serial numbers, print, and supplier references and specifications
--	---

4 Training Systems Proposal

AD2446-1 ClassMate® M

1. Robotic System - Specifications:
 - a. Height: 81.23 inches
 - b. Length: 67 inches
 - c. Width: 70 inches (sides expanded), 32 inches (sides folded)
 - d. Weight: 1000 lbs
 - e. Work surface area: 2,329 sq.in.
 - f. Robot controller input voltage 120VAC
 - g. CSA/UL certification ready system.
 - i. PLEASE NOTE Obtaining CSA/UL certification is the responsibility of the customer
 - h. Fully integrated ANSI/RIA 15.06-2012 compliant operator safety devices including a door safety switch
 - i. RIA compliant robotic controller operator panel
2. Power Source & Wire Feeder:
 - a. Power Wave® R450
 - b. AutoDrive® 4R100
3. FANUC Robot - ARC Mate® 50iD/7L
 - a. Six Axis Mechanical Unit
 - b. 7 kg Maximum Payload
 - c. 911mm (36") Reach
 - d. ARCMate R30iB+ Controller
4. FANUC Educational Bundle Includes 17 distinct software:
 - Bump Box Software - Constant Path - Through Arc Seam Tracking (TAST)
 - Touch Sensing - Automatic Error Recovery with Fast Fault Recovery
 - Lincoln Electric Weld Equipment Library - Menu Utility - Panel Wizard
 - Password Protection - Torch Guard - Fault and Incident Reporting
 - Lincoln Weld Equipment Library - DCS Speed and Position Package
 - 4D Graphics - Lincoln America Package - Integrated PMC - KAREL
5. Other Features includes:
 - a. Hand shields (PPE), Qty. 10
 - b. Complete System Documentation (Digital Copies)
 - c. Robotic 3-in-1 welding fixture
 - d. Education Cell Project Based Lessons - Book 1
 - e. X-Tractor® Mini Portable Welding Fume Extractor
 - f. Lettering Program (pre-set programs)
 - g. 2 instructor-seats in Basic Robotic Programming (5 days at LE Automation, Cleveland, OH)
6. Shipping Pre-paid
 - Shipping truck selected based on availability of loading dock

Total Investment

\$73,500.00



5 Optional Equipment and Services

Educational WeldPRO Package

Features included:

1. WeldPro Offline Programming Software
2. Cert training program with 15 WeldPro seats
3. WeldPro training for instructor (1.5 day course at LE Automation, Cleveland, OH)
4. Functional WeldPro 3D system model for WeldPro programming



Optional Investment

\$9,250.00

Additional New WeldPro License (EA) WeldPro License

\$450.00

Renewal After First Year (EA)

\$250.00

Gripper Package

Increase your curriculum by adding pick-and-place material handling capabilities. Features included:

1. Quick change pneumatic gripper for teaching dual operation
2. Manual Tool Changer allows a quick changeover from torch to gripper



Optional Investment

\$8,350.00

Jumpstart Package

Features included:

1. One-on-one training with an expert for one day at your facility with your robot
2. Includes coupons to practice a variety of welds and programming techniques
3. Premium Welding Gear Ready-Paks (PPE) for instructors, Qty. 2

Optional Investment

\$5,950.00

6 Financials & Delivery

General

All Prices based on agreement to Assumptions and Customer Responsibilities below and Terms and Conditions at www.lincolnelectric.com/automation-terms.

Shipping from Lincoln Electric Automation to the customer dock is included in this proposal. Title to the shipment to the Buyer at the time the carrier accepts the shipment. Prices do NOT include state and local taxes. UCC Filing may be required.

This quote is valid for 30 days, and is governed by Seller's Terms and Conditions of Sale attached hereto and/or located at the website indicated below. Any reference to Buyer's request for quote incorporates only the technical information described therein. ALL TERMS AND CONDITIONS IN BUYER'S REQUEST FOR PROPOSAL/QUOTE ARE DEEMED MATERIAL ALTERATIONS AND ARE HEREBY EXPRESSLY REJECTED. Lincoln Electric is not liable for clerical errors.

Lead Time:

Typical lead time for this system is 12-16 weeks. Lead-time is defined as acceptance of PO to build completion at Lincoln Electric. Actual timeline may vary, and is to be determined based on production schedule at the time an order is received and confirmed. Additional duration for tooling, programming, runoff, shipment, and installation should be considered based on purchased options.

Payment Terms:

Automation Division terms for a robotic system or parts order are 60% due with order and 40% due net-30 days after shipment, unless otherwise approved by Lincoln Electric Automation Management.

Order Cancellation Charges:

If an order is cancelled after work has been started on the order, cancellation charges will be assessed in accord with the percent completion of the order.

7 Assumptions & Customer Responsibilities

Weld Quality:

Weld quality is a function of product tolerances and condition. Variance outside the range of that qualified in any process development activity may cause degradation in weld quality. In general, gaps are not to exceed one-half of the wire diameter. Surface defects such as rust may also affect weld quality and process speeds.

Robot Programming, System Functionality Run Off, and Weld Development:

The Scope of robot programming, system functionality run off, and Weld Development is defined by what is listed in this quote. All verbal and written communications must be appended to this quotation to be included in the scope of the project. Any verbal or written communication surrounding robot programming and system functionality run off not documented or appended in this quote will not be honored. This option includes system functionality verification and basic programming of customer part(s).

Unanticipated Project Modifications:

During the design, construction and implementation phases of a project, changes to the project scope may occur. Changes resulting from a divergence from the initially agreed upon project parameters (including but not limited to part and part tooling redesign, system performance factors including throughput and equipment changes) will need to be carefully reviewed by the Project Management team and may result in a renegotiation of the delivery date and/or proposed system price in order to recover the additional costs associated with the increased labor and materials.

Flooring Requirements:

Lincoln Electric will provide individual components weights and dimensions. For standard systems, special concrete considerations are typically not required if the floor is in good condition. Because of the variables involved, Lincoln Electric recommends that the customer contract a civil engineer to analyze the load carrying capacity of the soil and any isolation requirements for larger systems or if the existing concrete is questionable.

Robotic Programming Training

For robotic systems, pricing includes two (2) training credits that can be applied to the 5-day Robotic Basic Training in Cleveland, Ohio. Training credits remain valid for up to two (2) years from the date of purchase. The Robotic Basic Training class is a pre-requisite prior to attending our Intermediate or Advanced Robotic Training, as well as the Robotic Service Training classes. Travel and living expenses, robotic packages, and welding/cutting equipment are not included. Cancellations are accepted prior to two weeks before a pre-scheduled training session. Company cancellations within two weeks of a pre-scheduled training session will forfeit one training slot. No-show students forfeit all remaining company training slots.



8 Customer Service

WE'RE HERE WHEN YOU NEED US 24/7/365

Lincoln Electric technician experts are ready to help you around the clock. From installation to equipment refurbishment—our technicians have the expertise to address your specific needs. All of our customer support technicians, training experts, and manufacturing facilities are based in the United States. We're here for you when you need us.

Installation & Startup Support:

Lincoln Electric can speed up the process of starting production. We offer engineers with extensive experience in installation to help ensure a smooth and efficient start-up. Benefits include increases in performance and uptime, increases in reliability and efficiency and reductions in installation time and start-up time. If not explicitly described in the main proposal, please reach out to your local Lincoln Electric representative to see if these benefits can be added to your system.

Preventative Maintenance:

Lincoln Electric takes a very proactive approach to avoiding potential crashes, extending robot life, and ensuring optimal performance of your robotic system. The experts at Lincoln Electric offer an extensive Preventive Maintenance service that includes a detailed inspection, cleaning, lubricating, and testing to confirm that your robot is in the highest performing condition. After completing a full inspection, we will recommend and replace any worn parts if needed. Benefits include unparalleled 60 point inspections to improve the life cycle of your robot system, improved robot uptime productivity, reduced cost of ownership and peace of mind knowing your investment is running in top form

Repairs:

At Lincoln Electric, we understand that teaching is a sequential process, and a down robot can bring learning to a halt. This is exactly why we make customer service a top priority. Our experienced and knowledgeable service staff will work diligently with you to find the ideal solution for your robotic issues. Our service personnel have decades of experience and knowledge, and have set the industry standard for great service. This select group of individuals are the best in the industry and are on-call 24 hours a day, 7 days a week to respond in a moment's notice. With continuous training and improvement, our customer service engineers stay ahead of new technology, allowing us to provide world-class service anywhere Lincoln Electric systems are installed.

Parts:

We understand the smallest part can have a huge impact if the part is no longer functioning. Many parts and supplies we provide have a 24-hour turnaround time to keep your downtime to a minimum. Just give us a call; we will get you what you need.





THE LINCOLN ELECTRIC COMPANY

22801 Saint Clair Avenue • Cleveland, Ohio 44117 • U.S.A Tel: +1 (216) 481-8100 • Fax: +1 (216) 486-1751

March 9, 2021

To Whom it May Concern:

The Lincoln Electric Company, headquartered in Cleveland, Ohio, is the sole developer and manufacturer of the Lincoln Electric ClassMate® Robotic Welding Trainers, which is described in detail herein. The ClassMate® series includes the following unique features:

- Aluminum or Steel frame with a physical surrounding enclosure (Excluding ClassMate® Cobot)
- Sensor-interlocked entry door(s) (Excluding ClassMate® Cobot)
- Power Wave® series power source with CheckPoint™ – cloud-based data collection tool
- AutoDrive® Robotic Wire Feeding System
- 500A Air-Cooled Robotic External Dress Torch
- FANUC ARC Mate 6-Axis Robot with R-30iB Mate or Mini Plus PlusController
- ANSI/RIA R15.06-2012 compliant

The ClassMate® series of robotic cells from Lincoln Electric® provide a 'manufacturing ready' system to an educator for training on a system as close to a production environment as possible. Our pre-configured cells create an easy entry point for first-time buyers and an affordable stepping stone to a more elaborate and sophisticated training curriculum down the line.

The systems enable MIG and flux-cored welding processes performed by a Fanuc® Arc Mate robot driven by a Lincoln Electric Power Wave® power source. Power Wave software controls and monitors welding processes to deliver the highest levels of quality and productivity.

Engineered for the first-time user of robotic systems, the ClassMate® system's setup and programming procedures are intuitive and user friendly. The (2) free credits to our training program takes you through the first steps of operation and gets you up and running quickly, so you can reap the benefits of your investment quickly.

Best regards,

Peter Griffith
General Manager, Cleveland Automation
Lincoln Electric Automation™