

Lake Land College

SPECIFICATIONS

FOR

CIM Machinery Upgrade
Lake Land College District Number 517
Mattoon, Illinois 61938

PROJECT NO. 2017-001

Bid Date: January 13, 2017

SECTION 000101

TABLE OF CONTENTS

<u>SECTION</u>	<u>DESCRIPTION</u>
001113	Advertisement for Bids
002113	Instructions to Bidders
004146	Bid Form
110111	CIM Machinery Upgrade

END OF SECTION

SECTION 001113

ADVERTISEMENT FOR BIDS

Advertisement for Bids
Bids: January 13, 2017
LAKE LAND COLLEGE DISTRICT #517
MATTOON, ILLINOIS
Project No. 2017-001

The Lake Land College District Number 517 Board of Trustees will receive sealed bids for CIM Machinery.

Bids will be received until 2:00 PM Central Standard Time on Friday, January 13, 2017 in the office of the Vice President for Business Services, in the Luther Student Center on the campus of Lake Land College, 5001 Lake Land Boulevard, Mattoon, IL. Bids received after this time will not be accepted. Bids will be opened and publicly read immediately after the specified closing time. All interested parties are invited to attend. Obtain bidding documents/requirements at the office of Joe Tillman, West Building, Office 006, phone (217) 234-5313, jtillman@lakelandcollege.edu.

The Board of Trustees reserves the right to waive irregularities and reject all bids or parts of bids.

Successful Bidders shall have the sole responsibility of complying with all aspects of existing Prevailing Wage Policies.

Gary Cadwell
Chairperson - Lake Land College Board of Trustees

SECTION 002113

INSTRUCTIONS TO BIDDERS

PART 1 GENERAL

1.01 DEFINITIONS

- A. Lake Land College Board of Trustees will be hereafter referred to in this Specification as “Owners” and all correspondence shall be addressed to: Joe Tillman, Division Chair of Technology, Lake Land College, 5001 Lake Land Blvd., Mattoon, IL 61938.
- B. A Bidder is a person or entity who submits a Bid to the Owner.
- C. Bidding Documents include the Advertisement for Bid, Instructions to Bidders, Bid Forms and supplements, and Addenda.
- D. Contract Documents include any Contract forms, Specifications, Drawings, Addenda, and modifications.
- E. An Agreement is a written agreement between the Owner and Contractor setting forth the obligations of the parties thereunder, including but not limited to the provision of the specified goods and materials, the basis of payment and the contract time.
- F. A Bid is a complete and properly signed proposal to provide the goods and services for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- G. The Base Bid is the sum stated in the Bid for which the Bidder offers to provide the goods and services described in the Bidding Documents as the base, to which items may be added or from which items may be deleted for sums stated in Alternate Bids.
- H. An Alternate Bid is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding changes in the items, as described in the Bidding Documents, are executed.
- I. A Unit Price is an amount stated in the Bid as a price per unit of measurement for goods or services as described in the Bidding Documents or in the proposed Contract Documents.

1.02 DOCUMENTS

- A. Copies of the Bidding Documents may be obtained at the office of Joe Tillman, West Building, Office 006, 5001 Lake Land Boulevard, Mattoon, Illinois 61938, (217) 234-5313, jtillman@lakelandcollege.edu.

1.03 EXAMINATION OF DOCUMENTS

SECTION 002113

- A. Bidders shall examine all documents. Failure to do so will not relieve a successful bidder of his obligation to provide all labor and materials necessary to carry out the provision of his contract for the sum stated thereon.
- B. Each Bidder, by submitting his bid represents that he has read and understands the bidding documents.

1.04 INTERPRETATIONS DURING BIDDING

- A. If any Bidder is in doubt as to the meaning of any part of the Bidding Documents, they may submit a written request to: Joe Tillman, Division Chair of Technology, West Building, Office 006, 5001 Lake Land Boulevard, Mattoon, Illinois 61938, jtillman@lakelandcollege.edu; for an interpretation of that part.
- B. Written requests for interpretations or clarifications must be made no later than five (5) working days prior to the Bid Date specified in the Advertisement for Bids.
- C. Any interpretation or change will be made only by Addenda numbered, dated, and issued by the Owner to each Bidder on record as having received a set of Bidding Documents and will be available for inspection wherever the Bidding Documents are kept available for that purpose. Lake Land College will not be responsible for any other explanations or interpretations of the Bidding Documents.

1.05 SUBSTITUTION OF PRODUCTS

- A. **MANUFACTURER'S TRADE NAMES ARE USED IN SPECIFICATIONS FOR THE EXPRESS PURPOSE OF ESTABLISHING A STANDARD OF QUALITY AND COORDINATION OF DESIGN, NOT FOR THE PURPOSE OF LIMITING COMPETITION.**
- B. All sizes of equipment must be as specified, and all pieces of equipment must include or have those features which are set forth in the specifications.
- C. No substitution will be considered unless a written request has been submitted with their bid.
- D. Bidders proposing substitutions in writing must submit detailed specifications with catalog cuts or manufacturer's literature, pictorially portraying that on which they are bidding for comparison to specified items by the Owner.
- E. Any additional explanation or statement which the Bidder wishes to make must be placed in the same envelope and attached to the proposal. Unless the Bidder so indicates, it is understood that the Bidder has bid in strict accordance with the specifications and drawings and has made no substitutions, modifications or additional stipulations.

SECTION 002113

- F. Bids shall not contain any recapitulation of the work to be done and no oral, telephone, facsimile or email proposals or modifications will be considered.

1.06 QUALIFICATION OF BIDDERS

- A. Bidders may be disqualified and their Bids not considered for any of the following specific reasons:
 - 1. Reason to believe collusion exists among Bidders.
 - 2. The Bidder being interested in any litigation against the Owner.
 - 3. The Bidder being in arrears on any existing contract or having defaulted on a previous contract.
 - 4. Lack of competency as revealed by the financial statement, experience, and equipment, questionnaires, or qualification statement.
 - 5. Uncompleted work, which in the judgment of the Owner will prevent or hinder the prompt completion of additional work if awarded.
- B. If requested, a Bidder shall submit to the Owner a confidential Financial Statement in a sealed envelope.

1.07 PREPARATION OF BID:

- A. All bids must be submitted on the bid form contained herein. Oral, telephone, facsimile, electronic mail, or telegraph bids will not be accepted.
- B. The Bidder shall base the bid on materials complying with the Bidding Documents, and shall list all information where the bid form requires.
- C. The blank spaces in the bid form shall be filled in correctly with ink or typewritten. A bid form containing an alteration or erasure of any price contained in the bid which is used in determining the lowest responsible bid shall be rejected unless the alteration or erasure is corrected as herein provided:
 - 1. An alteration or erasure must be crossed out and the correction printed in ink or typewritten adjacent to the alteration or erasure.
 - 2. The person signing the bid must initial the correction in ink.
 - 3. In the event that any price used in determining the lowest responsible bid is expressed by the Bidder in both written and numerical form, the written representation shall govern in all cases.
- D. If the bid form includes alternates, each Bidder shall bid on each alternate. Failure to comply may be cause for rejection.

SECTION 002113

- E. If an individual submits Bid, he or his duly authorized agent must sign his name. If a firm, association or partnership submits the Bid, the name, address and title of each member must be given, and an official or duly authorized agent must sign the Bid. Powers of attorney authorizing agents or others to sign Bids must be properly certified and must be in writing and submitted with the Bid.
- F. Bids from individuals or partnerships, if signed by an attorney-in-fact, shall have attached to the bid the power of attorney, evidencing the authority to sign the bid. If the bid is signed by any other legal entity, the authority of the person signing shall be attached to the bid.

1.08 EXEMPTION FROM SALES TAX ON MATERIALS

- A. The Owner is exempted by Section Three of the Illinois Use Tax Act (Sec 3, House Bill 1610 approved July 31, 1961. IL. Rev. Stat. 1961, Chap. 120 Sec 439.3) from paying any of the taxes imposed by that act and sales to the Owner are exempt by Section Two of the Illinois Retailer's Occupation Tax Act (Section 2, House Bill 1609, Approved July 31, 1961 IL. Rev. Stat. 1961, Chap. 120 Sec. 441) from any of the taxes imposed by that Act.

1.09 IDENTIFICATION AND SUBMITTAL OF BID

- A. Each bid and all papers bound and attached to it shall be placed in an envelope and securely sealed therein. The envelope shall be plainly marked with the following:
 - 1. The word "BID"
 - 2. Name and address of the Bidder.
- B. The envelope of the bid shall be addressed to:

Lake Land College
C/O Bryan Gleckler
CIM Machinery Upgrade, Project # 2017-001
5001 Lake Land Boulevard
Mattoon, Illinois, 61938
- C. Bids shall be delivered before the time set for the opening of the bids. Bids arriving by mail or otherwise after the time designated for the opening of bids will be returned unopened. Oral, telephone, facsimile, electronic mail, or telegraph bids shall not be accepted.

1.10 MODIFICATION OR WITHDRAWAL OF BID

- A. A bid may not be modified after submittal. Bidders may withdraw a bid at any time before opening. A Withdrawal of a Bid must be made in writing or in person by a bidder or his duly authorized agent. If a firm, association or partnership

SECTION 002113

wishes to withdraw a bid, an official or duly authorized agent must sign the written request or appear in person.

- B. Once withdrawn, the bidder must submit a new bid prior to the opening in order to be considered.
- C. No Bid may be withdrawn or modified after the Bid opening except where the award of the Contract has been delayed beyond 60 days after date of Bid.

1.11 OPENING OF BIDS

- A. The Bids submitted will be opened at the time and place stated in the Advertisement for Bids and publicly read aloud and thereafter shall remain on file with the Owner.
- B. After Bids are opened, the Bids will be tabulated for comparison on the basis of the Bid prices and quantities shown on the Bids.
- C. The Owner reserves the right to withhold the award of the Contract for a period of 60 days from the date of the opening of Bids and no award will be made until the Owner is satisfied as to the responsibilities of the low Bidders.
- D. Until final award of the Contract, the Owner reserves the right to reject any or all Bids or proceed to do the work otherwise in the best interest of the Owner.

1.12 EVALUATION AND CONSIDERATION OF BIDS

- A. The Owner reserves the right to reject all bids or parts of bids, and to waive informalities therein.
- B. For the purpose of determining the lowest responsible bidder in the consideration of all bids submitted, the Owner reserves the right to accept or reject any or all alternates in the numerical order in which they appear on the bid form.

1.13 DISQUALIFICATION OF BIDDERS

- A. Bids will not be considered if they show any omissions, additions, alterations of form, conditions not requested unauthorized alternate Bids or irregularities of any kind. However, the Owner reserves the right to waive any irregularities and to make the award in the best interest of the Owner.
- B. The Bidder acknowledges the right of the Owner to reject any or all Bids and to waive any informality or irregularity in any Bid received. In addition, the Bidder recognizes the right of the Owner to reject a Bid if the Bidder fails to submit the data required by the Bidding Documents.

SECTION 002113

- C. For the purpose of determining the lowest responsible bidder in the consideration of all bids submitted, the Owner reserves the right to accept or reject any or all alternates in the numerical order in which they appear on the bid form.

1.14 APPLICABLE LAWS

- A. All applicable state laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over the Work shall apply to the Contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full.
- B. Bidder's signatures shall be construed as acceptance of and willingness to comply with all provisions of the acts of the General Assembly of the State of Illinois relating to the Department of Human Rights Act, previously the Illinois Fair Employment Practices Act, Prevailing Wage Act for workers in our area, preference to citizens of the United States and residents of the State of Illinois, and discrimination and intimidation of employees. Provisions of said acts are hereby incorporated by reference and become a part of this proposal and specification.

1.15 EXECUTION OF THE AGREEMENT

- A. The successful Bidder, if awarded the Project, shall sign the necessary Agreements with the Owner and furnish Payment and Performance Bonds and Certificates of Insurance, if required elsewhere in this document, but no such Agreement shall be in force and effect until it is executed by all parties, and the Payment and Performance Bonds and Certificates of Insurance have been approved.
- B. Failure to execute and return the Agreement within ten (10) calendar days may result in the rescinding of the Contract award.

1.16 RECORDS:

- A. The Contractor shall maintain, for a minimum of 5 years after the completion of the contract, adequate books, records and supporting documents to verify the amounts, recipients, and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the Contract shall be available for review and audit, and the Contractor agrees to cooperate fully with any audit conducted and to provide full access to all relevant materials.

END OF SECTION

SECTION 004146

BID FORM

PROJECT IDENTIFICATION: CIM Machinery Upgrade, Project # 2017-001
BID TO: Board of Trustees
Lake Land College District Number #517
C/O Bryan Gleckler
Vice President for Business Services
5001 Lake Land Boulevard
Mattoon, Illinois, 61938

BID FROM: _____

The undersigned Bidder agrees, if this Bid is accepted, to enter into an Agreement with the Owner, in the form included in the Bidding Documents, to perform and furnish all materials, labor and equipment as specified or indicated in the Bidding Documents for the Bid Price and within the Bid Times indicated in this Bid and in accordance with the terms and conditions of the Contract Documents.

In submitting this Bid, Bidder represents that:

- A. This Bid will remain subject to acceptance for 60 days after the day of the bid opening.
B. The Owner has the right to reject this bid.
C. Bidder will sign and submit the Agreement with the Bonds and other documents as required by the Bidding requirements within 15 days after the Owner's Notice of Award.
D. Bidder has copies of all the Bidding Documents.
E. Bidder is familiar with federal, state and local laws and regulations.
F. Bidder has correlated the information known to Bidder with the Bidding Documents.
G. This Bid is genuine and not made in the interest of or on the behalf of an undisclosed person, firm or corporation and is not submitted in conformity with an agreement or rules of a group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited another Bidder to submit a false or sham Bid; Bidder has not solicited or induced a person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself an advantage over another Bidder or over the Owner.
H. Bidder has received the following addenda receipt of which is hereby acknowledged.

Date Number

Bidder will provide all materials, labor and equipment as specified in accordance with the Contract Documents for the following price(s):

STIPULATED-SUM BID PRICE
(Base Bid - CNC Mill) _____ Dollars (\$) _____
(use words) (figures)

Bidder agrees to provide all materials, labor and equipment, as specified, on or before the number of calendar days indicated below.

SUBMITTED on _____,
2017

Company _____

Address _____

No. of Working Days
To Provide Specified
Materials, Labor and
Equipment

Signed _____

(Printed Name)

_____ Days

Phone _____
Email _____

END OF
SECTION

SECTION 110111

CIM MACHINERY

PART 1 GENERAL

1.01 SCOPE

- A. The purpose of these specifications is to establish minimum standards and features for the purchase of Computer Integrated Manufacturing (CIM) Equipment. The systems shall meet all applicable codes, and other provisions as specified herein. Furnish parts, fittings, and any other accessories required, as specified, to provide a complete and fully functioning CIM Equipment.
- B. If a Bidder is unable to comply with any of the following specifications, the Bidder shall submit in writing the reason for noncompliance. Noncompliance with any specification is grounds for rejection of the entire bid. The buyer reserves the right to reject any bid which does not meet these specifications.
- C. **Bids shall be for product complete, delivered, installed and operating as intended, including all shipping, handling and delivery fees and will have no hidden costs.**
- D. Bids shall include explicit technical information regarding electrical, plumbing, ventilation, special structural considerations or other accommodations required for the proper installation and operation of specified equipment.
- E. All equipment shall bear full manufacturers on-site warranty for a minimum of one year from the date of delivery to the Owner and shall include parts, labor and software upgrades.
- F. Provide on-site training for college personnel by certified instructor(s) to ensure a reasonable level of proficiency with all supplied equipment.
 - 1. All student and teacher materials, software, manuals, guides or other supplied materials or information shall be presented in a neat, orderly, and professional manner using binders, folders or other devices as necessary.
- G. Unloading from truck as near as possible to final destination and placement of system in final destination and all necessary power and air connections shall be provided by owner.

1.02 QUALITY ASSURANCE

- A. Submit spare parts data for each item of equipment and material specified. The data shall include a complete list of parts and supplies, with current unit prices and source of supply, and a list of parts recommended by the manufacturer to be replaced after 1 year and 3 years of service. Include a list

SECTION 110111

of special tools and test equipment required for maintenance and testing of the products supplied.

- B. All equipment shall have a nameplate that identifies the manufacturer's name, address, type or style, model or serial number, and catalog number.

1.03 GENERAL

- A. Items specified below are singular in quantity unless otherwise specified.

PART 2 PRODUCTS

2.01 CIM Machinery

- A. Provide one (1) ROBODRILL - α-D14MiA as manufactured by FANUC Corporation, Oshino-mura, Yamanashi Prefecture 401-0597, Japan. Tel. 81-555-84-5555, and shall include the following:

1. Standard Torque 10,000 RPM Spindle
2. BT-30 Tool Holding System
3. LED Illumination
4. Single Manual Front Door
5. Side Windows on Splash Guard - both sides
6. Basic Top Cover for Splash Guard
7. Mist Collector Prep - Removable Plate
8. Automatic Oil Lubrication
9. Operator Panel with Alphabet Keys
10. 200 VAC to 220 VAC, 3-phase, 60 Hz power
11. Standard Software Package
12. Standard equipment and software:

ROBODRILL STANDARD EQUIPMENT & SOFTWARE	
Control unit FANUC Series 31i-B	Coordinate system rotation
Custom macro	Background editing
Basic controlled axes 3 axes (X,Y,Z)	Tool life management

SECTION 110111

Canned cycles for drilling	Quick editor
Simultaneously controlled axes – 5-Max.	Production control counter
Tool compensation memory C (D/H code, Tool geometry/wear)	Tool compensation memory C (D/H code, Tool geometry/wear)
Part program storage size (512Kbyte)	Setup file
Addition of workpiece coordinate system (48 pairs)	Rapid traverse bell-shaped acceleration/ deceleration
Number of registerable programs (1000)	Stroke limit check before move
Helical interpolation	Reader/puncher interface
AI contour control	Stored stroke check 1,2,3
Machining Mode Setting	Ethernet interface
HRV control	Dual check safety
AI thermal displacement compensation (XYZ axes)	Background editing
Tool offset pairs 200-pairs	Custom PMC
Skip function	PCMCIA memory card port
Rapid traverse block overlap	Leakage Detection Function
Multi-step skip	USB port for USB memory
FSSB High speed rigid tapping	Smart Trouble Shooting Function
High-speed skip	I/O Link i
Retraction for rigid tapping	Hard Copy Parts Manual for ROBODRILL
Hard Copy Operators Manual for MANUAL GUIDE i (Included Measurement Cycle)	Hard Copy Operators Manual for ROBODRILL & CNC.
Hard Copy Maintenance Manual for ROBODRILL and CNC	Control unit incorporated type display unit with 10.4" color LCD (*1)

13. Curriculum Off-line delivery option:
 - a. One set of student manuals
 - b. Instructor's materials (lesson plans, instructions for getting started, answer book)
 - c. CDR-FCTMCPO-D: Machining center presentations CD

SECTION 110111

PART 3 EXECUTION

3.01 DELIVERY, STORAGE AND HANDLING

- A. All equipment delivered and placed in storage shall be housed in a manner to preclude any damage from the weather, humidity and temperature variations, dirt and dust, or other contaminants. Additionally, all open orifices, enclosures and pipes shall either be capped or plugged until installed. Lake Land College will have the option of picking up the machine or having it delivered from the vendor.
- B. All equipment shall be provided in the manufacturer's original sealed packaging and shall be clearly marked with the project name and number;

Project 2015-008 – CIM Machinery

3.02 INSTALLATION

- A. Work shall be installed according to the manufacturer's diagrams and recommendations.

END OF SECTION