


INVITATION TO BID - Addendum 01			BID DUE DATE AND TIME	
BOARD OF SUPERVISORS OF LOUISIANA STATE UNIVERSITY AND AGRICULTURAL & MECHANICAL COLLEGE			06/05/2025 11:00 AM CT	
SOLICITATION RFQ-0000002534 SUPPLIER # SUPPLIER NAME AND ADDRESS <div style="border: 1px solid black; height: 100px; width: 100%; margin-top: 10px;"></div>			RETURN BID TO <div style="font-size: 24px; font-weight: bold; text-align: center;">lsubids@lsu.edu</div> Buyer Amy Hill Bourgeois Buyer Phone Buyer Email ahill5@lsu.edu Issue Date 05/16/2025	
TITLE: Pressure Vessel/Autoclave				
Addendum 01: Notice is given to all parties that this solicitation is amended by the University as stated herein. This Addendum is hereby made an official part of this solicitation. See attached inquiries/responses.				
To Be Completed By Supplier				
1. _____ "No Bid" (sign and return this page only). 2. _____ My Company does not wish to receive future solicitations for this spend category. 3. Specify your Delivery: To be made within _____ days after receipt of order. 4. If applicable, Supplier's Addendum Acknowledgement/Response: As an authorized agent/signatory of the supplier, I/we acknowledge receipt of this Addendum, and _____ submit no alterations/clarifications to our original bid. _____ submit superseding revisions/clarifications to our original bid as written herein or attached hereto.				
General Instructions to Suppliers				
1. Sealed bids for furnishing the items and/or services specified are hereby solicited, and will be received by LSU Procurement at the "Return Bid To" address stated above, until the specified due date and time. 2. Read the entire solicitation, including all terms, conditions and specifications. 3. All bid information and prices must be typed or written in ink. Any corrections, erasures or other forms of alteration to unit price are to be initialed by the supplier. 4. Bid prices are to be quoted FOB LSU/Destination and inclusive of any and all applicable shipping and handling charges unless otherwise specified in the solicitation. Any invoiced delivery charges not quoted and itemized on the LSU purchase order are subject to rejection and non-payment. 5. Payment is to be made within 30 days after receipt of properly executed invoice, or delivery and acceptance, whichever is later. 6. By signing this solicitation, the supplier certifies compliance with all general instructions to suppliers, terms, conditions and specifications; and further certifies that this bid is made without collusion or fraud.				
SUPPLIER NAME			MAILING ADDRESS	
AUTHORIZED SIGNATURE			CITY, STATE ZIP	
PRINTED NAME			PHONE #	
TITLE			FAX #	
E-MAIL			FEDERAL TAX ID #	

LSU RFQ-0000002534 - Pressure Vessel/Autoclave
Addendum 01

Inquiry 1

"Equipment must include the following specifications" section bullet point 1 & 2: horizontal or vertical load orientation? It appears from the spec that 16 in schedule 40 pipe shall be used for the vessel and horizontal. If horizontal, desired centerline from floor.

Response 1

Yes, horizontal layout with the center line approximately 36 inches from the floor surface.

Inquiry 2

"Equipment must include the following specifications" section bullet point 3:

- Does the closure and components require all stainless-steel construction?
- Do you require flat front head or semi elliptical?
- Do you require rotating door or rotating locking ring?
- Is split segmental locking ring acceptable?

Response 2

- Yes.
- Semi elliptical.
- Rotating door.
- Yes.

Inquiry 3

"Equipment must include the following specifications" section bullet point 4 & 5: design load weight and heating rate and cooling rate?

Response 3

Load weight is approximately 100 lbs (wood). Slow heating and cooling.

Inquiry 4

"Equipment must include the following specifications" section bullet point 4 & 5: 230 C steam is 27 bar; design point is 21 bar per specification?

Response 4

There will be no live steam going to the chamber. Some steam will be generated from water in wood or from sprayed water.

Inquiry 5

Oil Heating jacket section bullet points 7 & 9

- Is this intended to be on the straight section of the vessel only or include the rear head.
- Is insulation and aluminum cladding required on the entire vessel including heads and lock ring.
- Is the oil circulation system to include electric heater, control valves, circulation pump, expansion tank, scr heater controls, bypass for aerial cooler (mounted outdoors?), initial oil fill, and all system integration components?

Response 5

- Only straight section of vessel.
- Only straight section of vessel.
- Yes. We can buy heating oil. Heating shall be controlled by the vessel PLC system as an integrated system. All components shall be located inside our lab, not outdoors.

Inquiry 6

"Equipment must include the following specifications" section bullet point 7: rate of steam (cooling water flow) evolution. Is a steam separator and condensate recovery and or disposal system required?

Response 6

Cooling system includes an air cooler for thermal oil only. No water cooling.

Inquiry 7

"Equipment must include the following specifications" section bullet point 7: want to maintain xx bar during steam evolution period?

Response 7

Pressure is generated mainly with heating of water in wood or sprayed water.

Inquiry 8

"Equipment must include the following specifications" section bullet point 4: pressurize with? Does the system need a high-pressure water supply system and control valves. Does the water introduction system need distribution (spray header)?

Response 8

No high-pressure water spray system. Need three spray heads along the vessel length. A pressure pump is needed to supply spray water.

Inquiry 9

Does the system need to have a impregnation media delivery system. If so please provide technical information on the media.

Response 9

No, this is intended for thermally modify the wood. No any liquid media will be pumped into the system.

Inquiry 10

"Equipment must include the following specifications" section bullet point 4 & 7 & 9: flooding and drain system (separate from steam generation)? If horizontally installed the vessel would be slightly inclined to allow drainage of impregnate and cooling water.

Response 10

A valve will be required to empty condensate at the end of the process. We expect minimum amount of water inside the vessel.

Inquiry 11

"Equipment must include the following specifications" section bullet point 9: impregnate transfer systems and medium?

Response 11

Not a liquid impregnation based system.

Inquiry 12

"Equipment must include the following specifications" section bullet point 9: what are the requirements for the filter system? Are these systems required for water and impregnant system?

Response 12

Not a liquid impregnation based system.

Inquiry 13

"Equipment must include the following specifications" section bullet point 4 & 5: is the impregnant flammable? Does the system require a vacuum system, control valves and vacuum pump to pre evacuate the vessel? What vacuum level ie. 28" Hg?

Response 13

Not a vacuum-pressure based liquid impregnation system.

Inquiry 14

"Installation": unload location to install location dimensions and distance; for rigging estimate, general arraignment for tanks and pumps, aerial cooler location, main power etc.?

Response 14

We have 480 volts/60Hz/3 phases power supply. The equipment will be delivered to our site. We will arrange to have it moved to our lab and make power connection.

Inquiry 15

Could the control and measurement software be implemented using **LabVIEW**?

Response 15

Any stand alone control system is acceptable.

Inquiry 16

Could you please clarify the temperature ramp requirements? Specifically, do you have an estimated or preferred time for the equipment to reach 250 °C? Any guidance on the desired ramp rate or time frame would be greatly appreciated.

Response 16

Relatively slow heating rate for wood treatment.

- 1) 1-2 °C/min up to 100-130 °C (drying).
- 2) 3-5 °C/min up to 230°C.
- 3) Gradual cooling and conditioning.

Inquiry 17

What is the available electrical power supply at the autoclave installation site (e.g., voltage, phase, and amperage)?

Response 17

480 volts/60Hz/3 phases/40 amperage power in place.

Inquiry 18

Do you require the entire system to be provided on a single skid, or is it acceptable to deliver it in separate modules (e.g., temperature control unit, autoclave vessel, control panel)?

Response 18

Separate skids are acceptable.

Inquiry 19

Do you have any specifications or reference regarding the steam injection nozzles mentioned in the Statement of Work?

Response 19

No steam injection. Only cold water spray nozzles required.