



Indian Institute of Technology Jodhpur

N.H. 62, Nagaur Road, Karwar, Jodhpur - 342030, Rajasthan (India)

☎ 0291-2801552 | ✉ office_materials@iitj.ac.in

Website: Department: <https://www.iitj.ac.in/materials-engineering> | IITJ: www.iitj.ac.in

INDIAN INSTITUTE OF TECHNOLOGY JODHPUR

Request For Technical Information and Pro Forma Quotations

For Procurement of Liquid Nitrogen Plant

1. Introduction

The Indian Institute of Technology Jodhpur (IIT Jodhpur) intends to procure **Liquid Nitrogen Plant** for academic and research purposes.

Before initiating the formal procurement process, the Institute invites **Technical Information and Indicative Pro Forma Quotations** from eligible Original Equipment Manufacturers (OEMs) or their authorized representatives.

2. Purpose

The objectives are to:

- Obtain technical information from prospective OEMs/authorized representatives.
- Obtain indicative Pro forma quotations for estimating the procurement cost.

3. Disclaimer

This document is issued **only for obtaining technical information and indicative Pro Forma quotations**.

Submission of information under this proposal:

- shall **not** be treated as a financial bid;
- shall **not** constitute any commitment on the part of IIT Jodhpur to procure the equipment;
- shall **not** confer any right upon the participating firm for award of any future contract;
- shall **not** automatically qualify the responding firm for participation in any future tender.

The Institute reserves the right to modify the technical specifications, estimated cost, procurement methodology, or procurement timeline based on its requirements.

4. Equipment Details

- Name of Equipment: Liquid Nitrogen Plant
- Quantity: 01
- Broad Functional Requirements (The essential functions or capabilities that the equipment should have, without mentioning a specific make, model, or brand):



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The broad functional requirements are indicative and may be revised by the Institute after evaluation of the technical information received from prospective suppliers.

Sl. No.	Parameter	Broad Functional Requirement
1	Liquid Nitrogen production capacity	Minimum 5litres/hour (120 liters/day) at 1 bar(g) or less
2	Purity	$\geq 99\%$ at 1 bar(g)
3	Technology for N ₂ Gas Separation	Should be warm gas separation through efficient PSA
4	Technology for Liquification of N ₂ Gas	GM cycle/Sterling cycle technology
5	Storage Vessel Pressure	0.3 to 6 bar(g)
6	Liquid Tank Capacity	At least 300 liters fitted with level sensor and control, easy dispensing system for LN ₂ , all valves and safety
7	Mode of operation	Fully Automated, Single Switch PLC controlled Operation
8	Power Consumption (including all accessories)	Must be minimum. 16 kW/hour or less. Indicate Power Consumption of all accessories with break up. Power consumption per liter of liquid N ₂ should be mentioned in the offer.
9	Noise Level	upto 72 dBA
10	Maintenance interval	At least 8000 hours of operation or greater
11	Operating Conditions	Plant should function at least upto 45 °C; and RH < 95%
12	Experience in India	At least 5-10 Liquid Nitrogen plants from the same OEM/Bidder must have been supplied to India for the similar technology. PO copies must be submitted to prove the experience in India.



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		Installation/Performance Certificates with contact details must be submitted.
13	Accessories	Servo Stabilizer of the suitable capacity Tools Set for maintenance and consumables for Plant's servicing and repair for 0-1200 hours of operation
14	Warranty/AMC	3 Year comprehensive warranty from the date of successful installation followed by 3 years AMC
15	Installation, Commissioning & Training	The installation, commissioning and demonstration of complete system to be carried out by the supplier at free of cost. After successful installation and commissioning, on-site operational and maintenance Training for the deputed personnel to be provided for required days at no additional cost.
16	Service Facility	The supplier must have sufficient nos. of local service engineers to provide prompt and top-notch service within 48-72 hours after submitting complaint.
17	Spare Availability	10 years from the date of successful installation and commissioning
18	Delivery	The equipment shall be delivered on DDP basis to the Central Research Facility (CRF), Indian Institute of Technology Jodhpur, Rajasthan, India, as per the latest Incoterms. The supplier shall be responsible for packing, forwarding, freight, transit insurance, export/import customs clearance, payment of all applicable duties and taxes, unloading (if required), transportation to the installation site, and safe delivery of the equipment. The quoted price shall include all incidental expenses up to successful delivery at the designated installation location. No additional payment towards freight, insurance, customs duties, or handling charges shall be entertained.

5. Eligibility Criteria

Interested firms should:

- Be an Original Equipment Manufacturer (OEM) or an authorized distributor/dealer.
- Have experience in supplying similar equipment.
- Have adequate installation and after-sales service support in India.



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6. Information/Documents to be Submitted

The interested firms shall submit the following (*Annexure-I*):

1. Company Profile.
2. Details of the OEM.
3. Product Brochure/Catalogue.
4. Detailed Technical Specifications.
5. Compliance with the Broad Functional Requirements.
6. List of previous users/clients with installation reports
7. Details of Warranty.
8. Details of After-Sales Service Support.
9. Authorization Letter from OEM (where applicable).
10. Any additional technical information relevant to the offered equipment.

7. Pro forma Quotation

- Interested firms are requested to submit a Pro forma Quotation (*Annexure-II*) along with their Request For Technical Information and Pro Forma Quotations response. Indicative **Pro Forma** quotation in Indian Rupees (INR), including the cost of the equipment, essential accessories, taxes, duties, freight, insurance, installation, commissioning, training, and any other associated charges. Wherever applicable, the Annual Maintenance Contract (AMC) and/or Comprehensive Maintenance Contract (CMC) charges and spare parts shall be quoted separately as additional charges.
- Expected delivery schedule and other relevant technical and commercial information.

Important Note:

- The **Pro Forma** quotation is required only for cost estimation and budget planning purposes.
- The prices quoted shall be indicative/non-binding.
- The Pro Forma quotation shall not be treated as a financial bid.
- Submission of a **Pro Forma** quotation shall not confer any right or preference in the subsequent procurement process.

8. Presentation/Demonstration

The Institute may invite for a technical presentation or product demonstration. The date and venue shall be communicated separately.

9. Submission:

Interested firms may submit their Proforma Quotations on or before the due date in sealed cover or through email (as applicable).



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The envelope/email should be superscribed as:

"Request For Technical Information and Pro forma Quotations for Procurement of Liquid Nitrogen Plant"

8. Important Dates

Activity	Date
Publication	11 Aug. 2026
Last Date for Submission	18 Aug. 2026
Technical Presentation (if required)	To be informed
Clarification Meeting (if required)	To be informed

10. General Terms & Conditions

1. This **Request For Technical Information and Pro forma Quotations** is issued only for obtaining technical information and **Pro Forma** estimates.
2. The Institute reserves the right to accept or reject any or all responses without assigning any reason.
3. Submission of an **Request For Technical Information and Pro forma Quotations** does not create any contractual obligation.
4. The Institute may seek additional information, technical clarifications, demonstrations, or presentations from any participant.
5. The Institute may modify the technical requirements based on the responses received.
6. The final technical specifications may be prepared by the User Committee after evaluating all **Request For Technical Information and Pro forma Quotations** responses.
7. The subsequent procurement, if any, shall be carried out through an appropriate procurement method in accordance with the GFR 2017 and applicable procurement rules.
8. Participation in this **Request For Technical Information and Pro forma Quotations** does not automatically entitle any firm to participate in or receive any preference during the subsequent tender process.

11. Contact Details:

Name: Dr. Ravi Prakash Srivastava

Designation: Assistant Professor

Department: Materials Engineering

Email: ravip@iitj.ac.in



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Annexure-I

Request For Technical Information and Pro forma Quotations Response Format

1. Name of the Firm:
2. Registered Address:
3. Name of OEM (if applicable):
4. Contact Person:
5. Email:
6. Phone:
7. Product Name and Model:
8. Brief Technical Description:
9. Compliance with Broad Functional Requirements:
10. List of previous users/clients with installation reports:
11. After-Sales Service Details:
12. Any Additional Features:
13. Remarks (if any).



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Annexure-II

Format for Pro forma Quotation

Sl. No.	Description	Amount (INR)
1	Indicative Pro forma quotation in Indian Rupees (INR), including the cost of the equipment, essential accessories, taxes, duties, freight, insurance, installation, commissioning, training, and any other associated charges.	

Warranty Period: _____

AMC/CMC Charges (after warranty): _____

Delivery Period: _____

Authorized Signatory

Name: _____

Designation: _____

Company Seal & Signature