Local Competitive Bidding

Bidding Document for

LN Container Supply for RGM and Semen Station of NDDB Dairy Services

IFB Ref. No NDS/ALM/RGM/LNCONTAINERS/25-26/June/07

Important Points Bidders Should Bear in Mind

1. General Conditions

- Bids deviating from the bidding document terms or requirements may be rejected.
- Bids without original Earnest Money Deposit (EMD)/Bid Security submitted to NDDB DS, will be summarily rejected.
- Evaluation will be done by Itemwsie
- All prices must be FOR rate throughout the India, No extra charge will be paid in the name of transport or freight.
- Quantity mentioned in the bid may be vary either it may be **zero** or may extend upto +100% only on the availability of Budget from Government
- Any **deviation** from technical or commercial terms and conditions must be **clearly mentioned in the deviation statement form only**. Deviations mentioned elsewhere shall not be binding on the purchaser.
- Bidders must provide contact details of an **authorized representative**: name, email, contact number, and full address.
- Negligence in preparing the bid does not confer any right to withdraw the bid after opening.
- The entire bid and its enclosures must be in English language.
- Specifications, corrigenda, and schedules form an **integral part of the bidding document**.
- The bidding process shall be governed by the laws of the Union of India.
- NDDB Dairy Services, Delhi reserves the right to **accept or reject any or all bids** without assigning reasons.

2. About the Project

NDDB Dairy Services (NDS) and its Semen Station at Alamadhi & Rahuri are managing various projects under the **Rashtriya Gokul Mission** and are also engaged in the **trading of LN containers** for operational purposes.

Description	Details	
Event Start Date	5 June 2025	
Event End Date	25 June 2025	
Categories/Quantities	LN2 Container (35 Ltrs.)/ 450 Nos	
	Semen Storage Container (47 Ltrs.) Nos 27	
	3 Litre Conatiner, 470 Nos	
	23 Litre LN Container 47 Nos	
	55 Litre Conatiner 600 Nos	
EMD Amount	Rs. 1,00,000.00	
EMD Submission Mode	NEFT/RTGS or Demand Draft	

3. Tender Schedule & Key Details

EMD Payment Details:

- Beneficiary Name: National Co-operative Dairy Federation of India Ltd.
- Bank Name: Union Bank
- Branch: Anand Branch (Amul Dairy Road), Anand: 388001
- Account No.: 520141000774940
- IFSC Code: UBIN0905208

Note:

- **Transaction Fee**: 0.40% of contract value (+ GST) for successful bidders.
- **TDS u/s 194/O**: 0.10% of contract value will be deducted.

4. Delivery Locations

Above mentioned quantities will splitted into following locations

- Meerut, Gorakhpur, Varanasi, Agra, Etah (Uttar Pradesh)
- Bapudham, Motihari (Bihar)
- Washim, Yavatmal, Vidarbha (Maharashtra)
- Mayurbhanj (Odisha)
- Andhra Pradesh / Telangana
- Jharkhand
- Madhya Pradesh

5. Instructions for E-Procurement

- The bid document can be downloaded from:
 - o <u>nddbdairyservices.com</u>
 - <u>https://www.ncdfiemarket.com/</u> <u>NCDFI E-Market</u> or may contact to Parth Parikh: +91 70435 31188
- Bidders must email **etenders@ncdfiemarket.com** at least 2 days before bid end date with:
 - Name of Organization
 - Contact Person
 - Contact Number
 - o Email
 - NCDFI Registration Status (Yes/No)
- Bidders altering the document will face disqualification even post-award.

6. Eligibility Criteria

- Minimum **3 years in business** under same name/style.
- Valid registrations under relevant statutory Acts.

- **Financial Turnover**: At least 60% of estimated cost for each of the last 3 financial years.
- **Positive Net Worth**: For at least last 2 years.
- **Positive Cash Flow**: In at least 1 of the last 3 years.
- Must have completed similar contracts meeting:
 - One contract \geq 50% of quantity
 - Two contracts \geq 30% each
 - Three contracts $\geq 20\%$ each

7. Quotation Validity

• Must remain valid for **at least 120 days** from submission deadline.

8. Bid Evaluation Process

- 1. **Technical Evaluation** Compliance with specifications and eligibility.
- 2. **Financial Evaluation** Among technically qualified bids only.
- Evaluation is overall and inclusive of taxes, freight, insurance, etc.
- Decision of NDDB DS will be **final and binding**.

9. Contract Award

- Awarded to the **lowest evaluated bidder** meeting technical requirements.
- NDDB DS reserves the right to **reject/cancel** any or all bids without notice.

10. Payment Terms

• Payment within **30 days after successful supply**

11. Inspection and Testing

• May be conducted **stage-wise and pre-dispatch** to ensure compliance.

12. Delivery Delays

- Must be communicated in writing.
- NDDB DS may **extend timelines** with or without penalties.

13. Liquidated Damages

- **0.5% per week** on delayed goods' price.
- Maximum penalty **10% of order value**. Beyond that, contract may be terminated.

14. Taxes and Duties

• All applicable taxes/duties to be borne by the supplier until delivery.

15. Clarifications & Amendments

- Requests for clarification must be received **at least 10 days before deadline**.
- Any amendment/corrigendum will be uploaded on NDDB/NCDFI websites.

16. Bid Preparation & Submission

- All documents and communication must be in **English**.
- Uploaded bids must be **digitally signed**.
- No price information should be in Techncial bids
- Full acceptance of terms & conditions required.
- Modifications/withdrawals after submission deadline are not allowed.

17. Opening of Bids

- Technical bids opened on NCDFI portal as per IFB schedule.
- Financial bids of technically qualified bidders will be opened later.

18. Bid Evaluation Criteria

- **Preliminary Check**: Completeness, EMD, and document correctness.
- **Responsiveness**: No material deviation.
- Bids may be rejected for lack of substantial compliance.
- Minor deviations may be waived without affecting bid fairness.
- **Comparison basis**: Item-wise, final destination price.

19. NDDB DS Rights

- Full discretion to accept/reject any or all bids.
- Rights to award partial contracts or cancel tender without explanation.

20. Communication Address

NDDB Dairy Services

National Dairy Development Board Complex, Room No. D-32, Plot A, 84, Block A, Sector 17, Noida, Uttar Pradesh – 201301 **Mobile**: 8853491248

Emails: samar.rehman@nddbdairyservices.com

21. Enclosure

• Technical Specifications and Terms & Conditions attached separately.

For and on behalf of NDDB Dairy Services, Delhi Issued by: NDDB Dairy Services, Delhi

Generalised Technical Specifications for 50+ litre Type Liquid Nitrogen Containers

1. Capacity & Application

- Nominal Liquid Nitrogen Capacity: minimum 50 litres
- Container Type: Portable, vacuum-insulated, non-pressurized Dewar-type LN₂ container
- **Intended Use:** For safe storage and transport of cryogenic biological materials (e.g., semen straws, vaccines, lab samples) in field and laboratory conditions

2. Construction & Materials

- **Design:** Double-walled vacuum insulated construction
- **Inner Vessel:** High-quality aluminum alloy or other corrosion-resistant cryogenic-grade material
- **Outer Shell:** Aluminum alloy or equivalent material with durable finish
- **Insulation:** Multi-layer vacuum insulation with adsorbent (molecular sieve or equivalent) for long vacuum retention
- Neck Tube: Strong and low-conductivity design to reduce thermal losses

3. Technical Parameters (Indicative Range)

- Static Evaporation Rate (SER): ≤ 0.12 litres/day
- Static Holding Time (SHT): \geq 450 days
- Neck Opening Diameter: Approximately 50 mm (±10%)
- **Empty Weight:** $\leq 17 \text{ kg}$
- **Filled Weight:** $\leq 61 \text{ kg}$
- **Height:** $\leq 900 \text{ mm}$
- **Outer Diameter:** $\leq 500 \text{ mm}$

Note: Slight variation in dimensions and performance parameters is acceptable if functional performance is equivalent.

4. Accessories

- Neck Plug: Insulated plug to minimise evaporation
- **Outer Cap/Lid:** Sturdy cover with handle or securing mechanism
- **Optional:** Protective base ring or wheel trolley (if offered by OEM)

5. Performance & Quality Assurance

- Containers must be new, unused, and meet relevant cryogenic equipment quality standards such as ISO 9001, CE, BIS, or equivalent
- Manufacturer's or third-party test certificates for:
 - Vacuum retention
 - Static evaporation rate
 - Mechanical integrity and material compliance

6. Warranty & Support

- Minimum warranty of 2 years against manufacturing defects from the date of supply
 Supplier must ensure after-sales service support and availability of spare parts

Generalised Technical Specifications for 23-Litre Liquid Nitrogen Containers 1. Capacity & Use

- Nominal Liquid Nitrogen Capacity: Approximately 23 litres
- **Type:** Portable, non-pressurised cryogenic container (Dewar type)
- Usage: Suitable for storage and handling of biological materials at cryogenic temperatures (e.g., for veterinary, laboratory, or field applications)

2. Design & Construction

- **Design:** Vacuum-insulated, double-walled construction
- Materials:
 - o Inner Vessel: Aluminum alloy or equivalent corrosion-resistant material
 - Outer Shell: Aluminum alloy or equivalent material with weather-resistant finish
- Vacuum Insulation: Multi-layer vacuum insulation with adsorption material to ensure extended vacuum life
- Neck Tube: Designed for minimal thermal loss; should support cryo canisters

3. Technical Parameters (Indicative Range)

- Static Evaporation Rate (SER): ≤ 0.15 litres/day
- Static Holding Time (SHT): ≥ 150 days
- Neck Opening Diameter: Approximately 50 mm (±10%)
- **Empty Weight:** $\leq 13 \text{ kg}$
- Filled Weight: $\leq 33 \text{ kg}$
- **Height:** $\leq 700 \text{ mm}$
- **Outer Diameter:** $\leq 400 \text{ mm}$

Note: Values may vary slightly depending on design, but must ensure effective cryogenic performance.

4. Accessories

- Minimum 6 cryo canisters made of aluminum or stainless steel, suitable for storing semen straws or other biological samples
- Insulated neck plug to minimize LN2 evaporation
- Outer lid/cap with securing mechanism
- Label holder or provision for identification tagging
- Optional: Ring base or trolley for movement (if offered by manufacturer)

5. Quality and Compliance

- Containers must be new, unused, and meet applicable national/international quality standards (e.g., ISO 9001, CE, BIS, etc.)
- Test reports or manufacturer's quality certificates for:
 - Vacuum performance

- Structural integrity
- Evaporation loss and holding time

6. Warranty & Support

- Minimum 24-month warranty from the date of supply against manufacturing defects
- Supplier should provide after-sales service and guarantee availability of spare parts

Technical Specifications for 3 litre Liquid Nitrogen Containers 1. Capacity & Design

- Nominal Capacity: Minimum 3 litres
- Type: Static / Portable, suitable for manual handling
- **Design:** Cryogenic vacuum-insulated Dewar-type container

2. Construction

- Inner Vessel: High-grade aluminum alloy or stainless steel
- **Outer Shell:** Aluminum alloy or equivalent material with corrosion-resistant finish
- **Insulation:** High-efficiency vacuum insulation with adsorbent material for prolonged vacuum retention

3. Performance Parameters

- Static Evaporation Rate (SER): ≤ 0.2 litres/day
- Static Holding Time (SHT): ≥ 20 days (under ambient conditions)
- Neck Diameter: Approximately 30 mm
- Working Pressure: Atmospheric pressure (non-pressurized type)

4. Physical Characteristics

- Weight (Empty): $\leq 5 \text{ kg}$
- Weight (Full): $\leq 8.5 \text{ kg}$
- **Height:** \leq 500 mm
- **Outer Diameter:** $\leq 250 \text{ mm}$
- Handle: Ergonomic handle for easy carrying

5. Accessories

- **Canisters:** Minimum 6 stainless steel canisters for cryogenic storage (semen straws)
- Neck Plug: Insulated neck plug to minimize evaporation loss
- Lid / Cover: Durable, insulated cover with strap or locking mechanism
- Cryo Card / Stickers: For labeling and identification

6. Compliance & Certification

- Must comply with CE / ISO standards or equivalent for cryogenic containers
- Test certificates for:
 - Vacuum integrity
 - Holding time
 - Pressure relief system (if applicable)

7. Warranty & Support

- Minimum 2-year warranty against manufacturing defectsShould include service support details and spare part availability

LIQUID NITROGEN CONTAINER FOR BULK STORAGE AND TRANSPORT OF FROZEN SEMEN CAPACITY: 47 LITRES

FUNCTIONAL REQUIREMENTS.

The container filled with liquid nitrogen would be used .to preserve frozen semen doses in canisters/goblets at NTP for field use.

DESIGN REQUIREMENTS

The design parameters for a Liquid Nitrogen container shall be as under:

	-	
Net capacity	47.4litres +/-5%	
Neck diameter	120mm +/- 2mm	
Straw holding capacity	Double level	
	0.25 ml- 24000 nos.	
No. of canister/goblets	11	
Max. allowable static evaporation rate	0.38 Litres/ day	
Minimum required static holding time	124 days	
Field working duration @ 1.6 safety	78 days	
Material of construction: Container body	Alu. Alloy Grade IS 737- 1974	
	(52000). Polycarbonate I SS304	
Insulation	Multi-layer Super Insulation (MLSI)	
Canister outside diameter height	72mm/280 mm	
Container OD	450mm +/-15mm	
Container height	700mm +/- 25mm	

It should be high vacuum multi-layer super insulated. The supplier should indicate the degree of vacuum (absolute pressure) in 'Torr' -warm sealing vacuum of 5 x10-3 torr or better and the material of insulation- imported paper and AI foil is required.

The cap of the container must be suitable for convenient use; outer lid made of SS 304/Polycarbonate and inner neck plug with insulating material like fishery foam suitable to withstand a temperature range of - 200 to + 50 deg C. The inner plug should be grooved to match with canisters. The cap should have provision for locking during transit.

The container should be provided with a set of II canisters made of stainless steel AISI 304 tube/cup, with easy displacement facility for removal of frozen semen straws.

The canister should be sturdy to withstand-regular use. The joints with fiberglass tube and SS rod must be glued to withstand regular removal & insertion of canister should be suitable to withstand a temperature range of -200 to +50 deg C

The canister should have minimum height of 280 mm (double level) and provided with a hole of 2 mm approx dia at 20 mm approx from bottom of the canister. Each canister should accommodate one goblet of 65 mm dia. in one level. Provision for second layer of goblet also must be available.

The canister should fit into slots of the indexing ring of the container neck and to be held firmly in place by container cap. The canister should have smooth surface and all the weld joints should be smooth without causing any damage to container or persons handling.

The inner and outer comers of the container should be well radiused.

Lifting handle/handles should be provided for easy handling of the container.

The container shall be protected from external shock by gluing suitable rubber padding of trapezoidal/ rectangular cross section(one bottom and two side ring) INSPECTION:

Purchaser reserves the right to inspect the Liquid Nitrogen Containers during manufacturing stages and witness the performance test.

GENERAL

The container should be warranted for two years from the date of dispatch against defects in design workmanship or substandard material.

Each container should be provided with a test certificate and warrantee card. Containers should be packed separately with proper packing material to avoid damage during transit.

Container to be certified to BIS standard IS:11552

5.0 Manufacturer to conduct in-house QA stages and Inspection Test reports for each batch to consist of the following:

Raw material (Aluminium) physical and chemical test report copy

Incoming MLSI check

Dimensional check report

Welding soundness - MSLD -

Warm vacuum-sealing

Painting

Final assembly

Warranty: Normal commercial warranty of 24 months applicable on supplied goods.

LIQUID NITROGEN-FROZEN SEMEN STORAGE CONTAINER - CAPACITY: 35 LITRES

1. FUNCTIONAL REQUIREMENTS

1.1. The container filled with liquid nitrogen would be used to preserve frozen semen doses in canisters/goblets at NTP for field use.

2. DESIGN REQUIREMENTS

2.1. The design parameters for a Liquid Nitrogen container shall be as under :

Net capacity	33.4litres +/- 5%	
Neck diameter	50mm+/- 1mm	
Straw holding capacity	Single level Double level	
	0.25 ml -1560 nos. 3120 nos.	
	0.50 ml- 720 nos. 1440 nos.	
No. of canister/goblets	6	
Max. allowable static evaporation	0.118 Litres/ day	
Minimum required static holding	282 days	
Field working duration @ 1.6 safety	176 days	
Material of construction:		
Container body	Alu. Alloy Grade IS 737- 1974	
Сар	(52000). Polycarbonate	
Insulation	Multi-layer Super Insulation	
Canister outside diameter	38mm	
Container OD	450mm +/- 20mm	
Container height	670mm +/- 25mm	

It should be high vacuum multi-layer super insulated. The supplier should indicate the degree of vacuum (absolute pressure) in 'Torr'- warm sealing vacuum of 5 x10-3 torr or better and the material of insulation- imported paper and Al foil is required.

2.2 The cap of the container must be suitable for convenient use; outer lid made of SS 304/Polycarbonate and inner neck plug with insulating material like fishery foam suitable to withstand a temperature range of -200 to + 50 deg C. The inner plug should be grooved to match with canisters. The cap should have provision for locking during transit.

2.3 The container should be provided with a set of 6 canisters made of stainless steel AISI 304 tube/cup, with easy displacement facility for removal of frozen semen straws.

2.4 The canister should be sturdy to withstand regular use. The joint with fiberglass and SS rod must be glued to withstand regular removal and insertion of canister should be suitable to withstand a temperature range of -200 to + 50 Deg CThe canister should have minimum height of 120 mm and provided with a hole

of 2 mm approx dia. at 20 mm approx from bottom of the canister. Each canister should accommodate one goblet of 35 mm dia. in one level. Facility must be available for double level canister fitting also as an alternative.

2.5 The canister should fit into slots of the indexing ring of the container neck and to be held firmly in place by container cap. The canister should have smooth surface and all the weld joints should be smooth without causing any damage to container or persons handling.

- 2.6 The inner and outer comers of the container should be well radiuses.
- 2.7 Lifting handle/handles should be provided for easy handling of the container.

2.8 The container shall be protected from external shock by gluing suitable rubber padding of trapezoidal/ rectangular cross section (one bottom and two side ring)

3. INSPECTION:

3.1 Purchaserreserves the

right to inspect the Liquid Nitrogen Containers during manufacturing stages and witness the performance test.

4. GENERAL

4.1 The container should be warranted for two years from the date of dispatch against defects in design workmanship or substandard material.

4.2 Each container should be provided with a test certificate and warrantee card.

4.3 Containers should be packed separately with proper packing material to avoid damage during transit.

4.4 Container to be certified to BIS standard IS:11552

5.0 Manufacturer to conduct in-house QA stages and Inspection Test reports for each batch to consist of the following:

Raw material (Aluminium) physical and chemical test report copy

- Incoming MLSI check
- Dimensional check report
- Welding soundness MSLD

- Warm vacuum-sealing
- Painting
- Final assembly

Warranty: Normal commercial warranty of 24 months applicable on supplied goods.

Eligibility Checklist

Sl. No	Eligibility Requirement	Supporting Document Provided (Ves/No)
1	Minimum 3 years of experience in the same	Trade License / Incorporation
	business name and style	Cert.
2	Valid Income Tax, GST, PAN, ESI, PF registrations	Attach copies
3	Average turnover $\ge 60\%$ of estimated cost in last 3 financial years	Audited Financial Statements
4	Positive net worth in last 2 financial years	CA Certificate or Financial Report
5	Positive cash flow in at least 1 of the last 3 financial years	CA Certificate or Bank Statement
6	Experience in similar supplies in last 5 years	Purchase Orders / Work Completion Cert.
7	Declaration of acceptance of all RFQ terms without material deviation	Signed Declaration
8	Submission of EMD as per clause	Proof of EMD Transfer
9	Digital signature registration on NCDFI e-market	Registration Confirmation

Annexure II: Deviation Form

Bidder Name: _____ Tender Reference No.: _____

Please list all deviations (if any) from the RFQ terms and specifications.

Clause No. Description of RFQ Requirement Deviation Proposed by Bidder Justification

Note: Any deviation not listed in this form will not be considered during evaluation.