



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

Request to Conduct Reverse Auction for Expansion and Modification of existing Ammonia Refrigeration System

Scope of Work: Supply, Erection Testing & Commissioning of existing Ammonia Refrigeration System at Feeder Dairy.

Validity of the Bid: 180 days.

Estimated Cost: Rs. 85,00,000/-

EMD: 1,70,000/-

Tentative Work/Supply Schedule: Within 30 days of placement of work cum supply order.

Documents to be furnished by bidder for Technical Bidding:

1. OEM Certificate/Authorization Certificate of Principal Company.
2. Minimum 5 years of experience in execution of similar nature of Work of equivalent or higher quantum. Work Order and Completion Certificate in support of same must be uploaded.
3. Company Documents like MOA & AOA enlistment certificate.
4. GST Registration Certificate.
5. Average Annual turnover of Rs 10 crore in the last 3 years (2021-2022), (2022-2023), (2023-2024). Audited Balance Sheet in support of the same must be uploaded.
6. Staff Strength, Manufacturing details, Service details.
7. Declaration as per Annexure-B

TECHINICAL SPECIFICATION

Sl. No.	Scope of Work
01.	Supply, Erection Testing & Commissioning of existing Ammonia Refrigeration System at Feeder Dairy As per <u>ANNEXURE-A</u>

General Terms & Conditions:

1. Price to be quoted shall consist of cost of Equipment along with 5 years of onsite comprehensive maintenance, inclusive of all taxes and levies, transit insurance, freight, packing, loading, unloading and any other incidental charges. Kindly note that all cost should be taken into consideration while quoting the rates.
2. Inspection of materials may be undertaken at the supplier's premises whenever necessary by the Tendering Authority/ any officer authorized by the undersigned.
3. **Inspection of Equipment: Inspection after delivery:** After delivery, the Milk Union shall conduct joint inspection with the supplier's Engineer to verify whether goods have been delivered in good condition or not. Materials not delivered in good condition shall be rejected outright. Materials received in good condition shall be accepted and further procedure for release of payment shall be initiated.
4. Bidders should have local arrangement (within West Bengal) for prompt after sale service of the installed unit as and when required within warranty period free of cost. The service must be attended within 24 hours from the receipt of the information.



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

5. Supply, Modification, Erection Testing & commissioning of the ordered item with all accessories must be completed within 60 (sixty) days from the date of order. Trial – run of the whole unit will be done in presence of Milk Union's authorized personnel. Trial run report shall be submitted duly signed by the authorized personnel. Training of Operation & Maintenance to the operator will have to be imparted free of cost at the time of Commissioning & Trial run.
6. **Insurance:** - The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. If the equipment's is not commissioned and handed over to The Bhagirathi Co- Operative Milk Producers Union Ltd. within specified period, the insurance will have to be extended by the supplier at their cost till the successful testing and commissioning and handing over of the goods to The Bhagirathi Co-operative Milk Producers' Union Ltd.
7. **Place of Delivery, Installation and Commissioning:** The office of The Bhagirathi Cooperative Milk Producers' Union Ltd. Feeder Dairy, Panchantala, Berhampore, Murshidabad, Pin-742101, West Bengal.
8. **Delivery/Supply Schedule:** Within 60 days of placement of Work cum Supply Order.
9. **Payment:** Payment shall be released in 3 phases in NEFT/RTGS to the Bank Account of the supplier after submission of 3 copies of invoice along with documents mentioned in Documentation clause which are as follows:
 1. **First Phase:** 90% payment shall be released after 1 month of successful erection Testing, commissioning and trial run of all the refrigeration system. All the required training to be imparted to the DCS personnel and official of the Milk Union for release of this payment. 1 month shall count from the very first day when the entire installation commissioning and trial run with necessary training has been imparted.
 2. **Third Phase:** Remaining 10% payment shall be released within 60 days after receipt of equivalent amount of Performance Bank Guarantee valid for 1 years. The 1 year shall count from the days of last successful installation date. In case the party fails to provide maintenance and support as per the requirement of the Milk Union or is found to act in a way which jeopardizes the operation, the Performance Bank Guarantee shall be forfeited after giving a Notice to the supplier in writing and the supplier shall be debarred from participating into any tender in future. Performance Bank Guarantee shall be released within 60 days of successful execution of the Contract after 1 year.
10. **Penal Measure:** Time being the essence of the contract failure to supply the materials within due time or delay in installation and commissioning of the materials shall invite penalty.
 - I. Liquidated damages of 0.5% per day subject to a maximum of 10% of the total cost of materials shall be charged if goods are not delivered in time and the amount will be deducted from the Security Deposit and bills submitted by the supplier.
 - II. For violation of any terms and conditions of the contract the Bhagirathi Milk Union reserves the right to cancel the contract without assigning any reason thereof. On termination of Contract the Security Deposit will be forfeited and the resultant loss shall be recovered from the company. The subsequent company will be blacklisted for 3 years.



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

11. EMD of the lowest bidder shall be converted to Security Deposit and will be refunded after successful delivery of the equipment. EMD of unsuccessful bidders shall be refunded as per norms. EMD shall not carry interest.
12. Mode of transportation for the supply of the goods to our site will be arranged by the bidder.
13. Materials dispatched from the bidder until or unless reaches the Milk Union is the sole responsibility of the bidder. The Milk Union will not be responsible for any damage in transit, loading or unloading and no claim in this regard will be entertained.
14. **Loading and Unloading** and Transit insurance of the goods will be the responsibility of the bidder and no claim regarding this will be entertained.
15. **Documentation:** Supplier to submit the following documents at the time of delivery: 1. Commercial/E-Invoice. 2. E-Way bill 3. Packing List 4. Equipment Brochure comprising of Technical Specifications 5. Operating Manual 6. Cleaning & Maintenance Manual 7. Warranty Card. 8. Acceptance Copy of Purchase Order/Award of Contract.
16. **Maintenance of Equipment:**
 1. **Preventive maintenance:** should be done by the supplier's Service Engineer in each quarter. Preventive maintenance must comprise of job required to maintain the system in good condition.
 2. **Corrective maintenance:** Corrective maintenance must be done on call within 24 hours when the system is down and not in operation. The supplier must keep all spares in custody for speedy remedy. Equipment down must be brought into operation within 48 hours.
 3. Cost involving preventive and corrective maintenance for 1 years should be taken into consideration while quoting the rates.
17. **Warranty:** All the spares and components of the Ammonia Refrigeration System must be warranted by the supplier for a period of 1 year from the date of installation. If any component is found to be non-functional due to any manufacturing defect or because of poor workmanship the component must be immediately replaced with a new component by the supplier within 24 hours. In case the replacement is likely to take a longer period then the supplier must arrange for a substitute within 24 hours.
18. **Service Issues & Resolution:** Issues arising due to calibration, operation and maintenance must be effectively handled by the supplier. The Equipment should be operational at all times. If at any point of time the machine is not in operation due to maintenance issues, requirement of spares, consumables already informed to the supplier after 48 hours a penalty of Rs. 2000/- per day shall be imposed by the Milk Union on the supplier subjected to a maximum of 10% of the total cost and it shall be realised from the Performance Guarantee deposited to the Milk Union. till the day the machine is brought back to operation. It is also be noted that warranty shall be extended as per warranty extension clause.
19. **Force Majeure:** If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire,



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) provided notice of happening of any such eventuality is given by party to other within 21 days from the date of occurrence thereof, neither party shall by reason of such event be entitled to terminate this contract nor shall either party have any claim for damages against other in respect of such non-performance or delay in performance, and deliveries have been so resumed or not shall be final and conclusive.

20. **Standards:** The Goods supplied under this Agreement shall conform to the standards mentioned in the Technical Specifications and when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin.
21. **Registration of Goods:** If required under the Applicable Law, goods supplied under the Agreement shall be registered for use in India.
22. **Patent Rights:** The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.
23. **Packing:** The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Purchase Order.
24. **Termination for Default:** The Purchaser, without prejudice to any other remedy for breach of the Agreement, by written notice of default sent to the Supplier, may terminate this Agreement in whole or in part:
 - a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Purchase Order, or within any extension thereof granted by the Purchaser; or
 - b) If the Goods do not meet the Technical Specifications or registration requirement (if any) stated in the Agreement; or
 - c) If the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, in competing for or in executing the Agreement; or
 - d) If the Supplier fails to perform any other obligation(s) under the Agreement.
25. **Termination for Insolvency:** The Purchaser may at any time terminate the Agreement by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent.
26. **Termination for Convenience:** The Purchaser, by written notice sent to the Supplier, may terminate the Agreement or the Purchase Order, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Agreement or Purchase Order is terminated, and the date upon which such termination becomes effective. The Goods that are already supplied before the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the terms and prices described in the Agreement and the Purchaser order.
27. **Dispute Resolution** Any dispute arising out of the Agreement, which cannot be amicably settled between the parties, shall be referred to adjudication/arbitration in accordance with



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

the Arbitration and Conciliation Act of 1996 of India. The venue of adjudication/arbitration shall be Kolkata. The language of arbitration shall be English.

28. **Applicable Law:** The Agreement shall be interpreted in accordance with the laws of Union of India.
29. The undersigned reserves the right to accept or reject any tenders and to cancel the entire tender process without assigning any reason whatsoever.

Other Terms and Condition are as per stranded Terms and condition of the NCDFI.

Sd/-
Managing Director
The Bhagirathi Cooperative
Milk Producers' Union Limited



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

(ANNEXURE-A)

CLIENT SCOPE AND EXCLUSIVE SUPPLY (GENERAL)

01. Main power and earthing connection to our control panel with proper earthing to D. G. sets and control panel and change over switch etc.
02. All necessary civil work including foundation of machineries plastering, of insulation, making and breaking of walls and supports. Details regarding civil foundation equipment will be provided by customer.
03. Machinery and equipment unloading related activity should be arranged by the customer.
04. Water and electricity required for erection, testing and commissioning of equipment would be made available to us free of charge.
05. All excess material will be taken back after commissioning of the plant.
06. Any statutory approval from the government agency should be arranged by the customer.
07. All necessary wash points in dairy, required plumbing work with makeup water and drain connection wherever is required.
08. Any other requirements and machineries / material / services which is not including in present scope of supply.
09. Customer should arrange the lockable room for our erection crew at site while doing the installation and commissioning work.
10. Any other machinery which you are going to purchase should be made available in time. Otherwise our erection people become ideal.
11. Skilled & experienced man power, technician will be available with you from the date of installation, Erection work at your site, so technically well training during the period can be possible.

REFRIGERATION SYSTEM

Function	To Pre-chill the water before Ice Bank Tank to increase the Refrigeration Capacity
Refrigeration Compressor	Reputed make ammonia refrigeration compressor Model KCX -2/ Equivalent giving capacity of 38 TR while operation at evaporating temp. of -5 Deg.c. and condensing temp. of + 40 ⁰ Cwhile consuming 60 HP at shaft.(1 Nos)
Compressor Accessories	<ul style="list-style-type: none">• HP/LP/OP gauges and cutouts.• Suction and discharge stop valves.



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

	<ul style="list-style-type: none"> • Drive set, base frame of compressor. • Oil separator with float & oil return, drain arrangements. • Compressor & motor belt guard.(1 Set) 	
Electric Motor	Crompton/Kirloskar / or equivalent make 60 HP TEFC 4 pole electric motor operating at 415 volts 3 phase AC supply. (1 Nos)	
Evaporative Condenser	Description	Technical Specs
	Heat rejection Capacity	220 TR
	Condensing temperature (Deg.C)	38
	Ambient Wet bulb temperature -deg. C	28
	Total Estd. Airflow Rate CFM	11280
	Fan X Motor	36" X 2.2 KW X 3 Nos.
	Total Water flow Rate LPS at 10 Mtr.Head.	19
	MOC of Evaporative condenser coil.	SS-304 (19 MM OD X 1.2 MM Thk.
	Enclosure	Made up of GI Powder Coated with 1.2 mm Sheet.
	Main Structure	Hot Dip Galvanized.
	Size of Evaporative condenser-Approx.	3.7 L X1.6X 3.2 Mtr. High.
	Coil test pressure kg/cm2 (Pneu.)	22.5
	Water Tank/Sump	Made up of SS-304 X 2mm thick. Sump Tank volume should be as per cooling requirement of condenser capacity and cooling water flow rate as mentioned
	Water Pump- KDS-116/ equivalent	3HP (3 Phase) X 2 No.
Chilled Water	Cooling water pipes and fittings to Interconnect condenser water pump and condenser as well as compressor jacket cooling in G. I. 'B' class pipe with necessary valves, strainer and pipe fittings. (1 Lot)	
Ammonia Liquid Receiver Replacement of Old Receiver and Supply of new receiver	Ammonia liquid receiver capacity 1500 Ltrs complete with following accessories.(02 Nos.) <ul style="list-style-type: none"> - Safety Valve - Purge Valve - Level Gauge - Pressure Gauge -Liquid Inlet & Outlet Valve 	
Ammonia Pre Chiller	40 TR Ammonia Pre-Chiller is design to Chilled the incoming water temperature from the process and pass to the ice bank tank to increase the Capacity of refrigeration system.	
Refrigeration Control	Refrigeration controls comprising of(1 Lot) <ul style="list-style-type: none"> •Electronic Level Controller with Float Valve •Ammonia Solenoid Valve •Hand Expansion Valve •Temp. Gauge for I.B.T. 	



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

M. S. Pipes & Fittings	M. S. 'C' class pipes & fittings to interconnect all refrigeration equipment with required ammonia valve based on compact layout. (1 Lot)
Structural Materials:	One lot of structural material for support, base frame, and complete painting of plant and machinery etc. (1 Lot)
First Charge	First charge of ammonia and compressor oil. (1 Lot)
Electrical Connected Load	72.5 HP
Make	Reputed Industrial make.

ELECTRICAL SECTION

01. MCC CONTROL PANNEL:08 NO(S)

Function	To control (ON-OFF) all equipment & machinery which is having electrical connection with necessary interlocking & safety arrangement
Type	Wall Mounted
Material Construction	CRCA sheet powder coated
Electrical hardware make	Siemens/L & T/ Equivalent
Incoming Electrical Fittings/Accessories	R.Y.B. Indication lamp, voltmeter, ammeter, selector switch, Incoming SFU,
Outgoing Electrical Fittings/Accessories	As per rating MCB, contractor, relay, terminal box & wiring, ON-OFF push button.
Digital Display	Cold Room Temp Controller as well as Raw Milk, Pasteurised milk & chilled Milk temp indicator.
Make	Reputed Industrial make.

02. ELECTRICAL CONTROL CABLE: 02 LOT

Function	To interconnect all machineries from MCC control panel
Material Construction	4 Core, Copper Flexible cable including earthing
Cable Make	Polycab/Finolex
Other Electrical accessories	GI Support, Cable tray, PVC Conduit pipe, Clamps, Cable Glands etc.

PLANT INSTALLATION AND COMMISSIONING

ERECTION AND COMMISSIONING OF THE PLANT (01 JOB)

Installation of the Machineries	All machinery and equipment will be installed in accordance with the final approved Equipment Layout Drawing.
Installation of Pipeline and support	The scope of work includes installing and connecting all interconnecting pipes (Copper, Stainless Steel (SS), Mild Steel (MS), and Galvanized Iron (GI)) to all machinery and equipment, as per the approved Equipment Layout
Insulation	The scope of work includes Insulation work for Chilled Water, Hot water & Refrigeration Suction line.
Electrical Cabling	As per final approved Equipment Layout Drawing all equipment & Machinery will be electrically interconnected



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

Testing	All machinery and equipment will be tested after successful installation, Additionally, all pipelines will undergo leak testing under operating pressure. Comprehensive testing will be conducted to ensure readiness before plant startup.
Commissioning	After satisfactory completion of testing and inspection of the plant and pipelines, witnessed and approved by our expert engineers and your representatives, the plant will be commissioned and handed over for commercial production
Training for Plant Operator	We will provide comprehensive training to operators to ensure they are fully competent to operate and maintain the milk dairy plant safely, efficiently, and in compliance with regulatory requirements

Sd/-

Managing Director
The Bhagirathi Cooperative
Milk Producers' Union Limited



The Bhagirathi Co-op. Milk Producers' Union Limited

(A Govt. of West Bengal Project)

Annexure-B

DECLARATION

(To be furnished in a Twenty Rupees Non-Judicial Stamp Paper duly certified by Notary Public)

1. I/We the undersigned solemnly declare that all the statements made in the documents, records etc., attached with this application are true and correct to the best of my/our knowledge.
2. I/We the undersigned do hereby certify that neither my/our firm/company nor any of its constituent partners have abandoned any work/works of similar nature and magnitude in India, in the past.
3. I/We the undersigned do hereby certify that any of the contracts awarded to me/us has not been terminated rescinded, due to breach of contract on my/our part in the past.
4. I/We the undersigned do hereby certify that we have not been blacklisted by NDDB or any dairy industry or any other industry in the past.
5. I/We the undersigned do hereby certify that the materials to be supplied against the Contract shall be original and genuine. We further declare that no refurbished component or spare shall be supplied.
6. I/We the undersigned authorize (s) and request any bank / person / firm / corporation / Government Departments to furnish pertinent information deemed necessary and requested by The Bhagirathi Cooperative Milk Producers' Union Ltd. to verify the statement made by me/us or to assess my/our competence and general reputation.
7. I/We the undersigned, understand(s) that further qualifying information / clarifications on the statement made by me / us may be requested by The Bhagirathi Cooperative Milk Producers' Union Ltd and agree(s) to furnish such information/clarification within SEVEN Days from the date of receipt of such request from The Bhagirathi Cooperative Milk Producers' Union Ltd.
8. **I/We agreed to abide by the terms and conditions of the Reverse Auction Notice.**

Dated Signature of Applicant with Seal:

To be signed by the officer authorized by the Firm/Company to sign on behalf, the Firm/Company with company's seal)

Note: In case of sole proprietary concern, affidavit should be signed only by the sole proprietor.

(Title of the Officer)

(Title of the firm/Company)

(Date)