



**The Bhagirathi Co-op. Milk Producers' Union Ltd.**

Feeder Dairy: P.O-Berhampore: PIN -742101: Dist.-Murshidabad  
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**BU/MDO/RIDFXXIX/1826**

**Dated: 11.11.2024**

**NOTICE INVITING TENDER**

The Bhagirathi Cooperative Milk Producers' Union Limited invites Online Tender (E-Tender) in two bid system for Supply Installation and Commissioning of 5 no(s) of Bulk Milk Coolers (BMC), each having capacity of 5000 liters.

**IMPORTANT DATE AND TIME SCHEDULE**

Sl. No.	Particulars	Date & Time
1	Date of uploading (Publishing)of N.I.T. Documents (Online)	11.11.2024 at 1500 hrs
2	Documents download start date (Online)	11.11.2024 at 1505 hrs
3	Technical Bid proposal submission start date (Online)	11.11.2024 at 1510 hrs
4	Bid Submission end date (Online)	26.11.2024 at 1600 hrs
5	Technical bid opening date	28.11.2024 at 1600 hrs
6	Pre bid Meeting (Query can be resolved in any date within the timeline during 11:00 am to 04:pm)	18.11.2024 at 1200 hrs
7	Financial Bid Opening date	To be notified later

**The details of work are given below:**

<b>Nature of Work</b>	Supply Installation and Commissioning of 5 no(s) of Bulk Milk Cooler each having capacity of 5000 liters.
<b>Scope of Work</b>	Supply Installation and Commissioning of 5 no(s) of Bulk Milk Cooler each having capacity of 5000 liters.
<b>Estimated Cost of Work</b>	75,00,000/-
<b>Bid Inviting Authority</b>	The Managing Director of The Bhagirathi Cooperative Milk Producers' Union Limited
<b>Statutory&amp; Non Statutory Documents</b>	<ol style="list-style-type: none"><li>1. The Company must be an experienced manufacturer. Manufacturing license/certificate must be uploaded.</li><li>2. ISO, BIS Certificate and Industrial safety certificate must be uploaded. The certificates should be valid on the last date of submission of bid and should remain valid during the tenure of contract period if work is awarded.</li><li>3. PAN CARD and GSTIN (GST Registration)</li></ol>

	<ol style="list-style-type: none"> <li>4. Minimum Turnover of Rs 10 Crores. Audited Balance Sheet of previous three consecutive financial years (2020-21, 2021-22, 2022-23). The statement of annual turnover from Chartered Accountant with sign, seal and registration number.</li> <li>5. Income Tax Return of previous three consecutive financial years.</li> <li>6. COPY OF AFFIDAVIT as per ANNEXURE-I DULY SIGNED &amp; SEALED AND NOTARIZED BY THE BIDDER.</li> <li>7. Company declaration of minimum 3 years of Work Experience in supply installation and commissioning of at least 50 no(s) 5000 lit capacity BMC in Milk Unions, Federations etc. (Work Order or Completion Certificate of the same must be uploaded in support of the declaration).</li> <li>8. Preference shall be given to company must having sales &amp; service office at Eastern region of India. Name and address of the same must be uploaded.</li> <li>9. The Company which are blacklisted by our organization, any organization or by NDDDB are not eligible to bid otherwise, bid will not be accepted and EMD may be forfeited. Even order issued to such bidder may get cancelled.</li> <li>10. Technical team of BCMPUL may inspect the required infrastructure available with the bidder before finalization of the tender.</li> </ol>
<p><b>Earnest Money Deposit</b></p>	<p>The EMD amounting to Rs 1,50,000/- should be deposited online through Net Banking, NEFT/RTGS in favour of The Bhagirathi Cooperative Milk Producers' Union Limited payable at Berhampore. EMD shall not carry interest.</p> <p>Tenderers will select the Tender to bid and initiate payment of pre-defined EMD for that tender by selecting from either of the following payments modes (vide Finance Department Memorandum no. 3975-F(Y) Dt. 28/07/2016) :</p> <ol style="list-style-type: none"> <li>1. Net banking (any of the banks listed in the ICICI Bank Payment gateway) in case of payment through ICICI Bank Payment Gateway.</li> <li>2. RTGS/NEFT in case of offline payment through bank accounts in any Bank.</li> </ol> <p><b>Payment procedure.</b></p> <p><b>a) Payment by Net Banking (any listed bank) through ICICI Bank Payment Gateway :</b></p> <ol style="list-style-type: none"> <li>1. On selection of net banking as the payment mode, the bidder will be directed to ICICI Bank Payment Gateway webpage (along with a string containing a Unique ID) where he will select the Bank through which he wants to do the transaction.</li> <li>2. Bidder will make the payment after entering his Unique ID and password of the bank to process the transaction.</li> </ol>

3. Bidder will receive a confirmation message regarding success/failure of the transaction.
4. If the transaction is successful, the amount paid by the bidder will get credited in the respective Pooling account of The Bhagirathi Cooperative Milk Producers' Union Limited maintained with the Focal Point Branch of ICICI Bank at R.N. Mukherjee Road, Kolkata for collection of EMD/Tender Fees.
5. For transaction failure, the bidder will again try for payment by going back to the first step.

**b) Payment through RTGS/NEFT:**

1. On selection of RTGS/NEFT as the payment mode, the e-Procurement portal will show a pre-filled challan having the details to process RTGS/NEFT transaction.
2. The bidder will print the challan and use the pre-filled information to make RTGS/NEFT payment using his Bank account.
3. Once payment is made, the bidder will come back to the e-Procurement portal after expiry of a reasonable time to enable the NEFT/RTGS process to complete, in order to verify the payment made and continue the bidding process.
4. If verification is successful, the fund will get credited to the respective Pooling account of The Bhagirathi Cooperative Milk Producers' Union Limited maintained with the Focal Point Branch of ICICI Bank at R.N. Mukherjee Road for collection of EMD/Tender Fees.
5. Hereafter, the bidder will go to e-Procurement portal for submission of his bid.
6. But if the payment verification is unsuccessful, the amount will be returned to the bidder's account.

**B. Refund/Settlement Process:**

- i. After opening of the bids and technical evaluation of the same by the Quotation inviting authority through electronic processing in the e-Procurement portal of the State Government, the Quotation inviting authority will declare the status of the bids as successful or unsuccessful which will be made available, along with the details of the unsuccessful bidders, to ICICI Bank by the e-Procurement portal through web services.
- ii. On receipt of the information from the e-Procurement portal, the Bank will refund, through an automated process, the EMD of the bidders disqualified at the technical evaluation to their respective bidders' bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on rejection of bid is uploaded to the e-Procurement portal by the Tender inviting authority.
- iii. Once the financial bid evaluation is electronically processed in the e-Procurement portal, EMD of the technically qualified bidders other than that of the L1 and L2 bidders will be refunded, through an automated process, to the respective bidders' bank accounts from which they made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on rejection of financial bid is uploaded to the e-Procurement portal by the Quotation inviting authority. However, the L2 bidder should not be rejected till the LOI process is successful.
- iv. If the L1 bidder accepts the LOI and the same is processed electronically in the e-Procurement portal, EMD of the L2 bidder will be refunded through an

	<p>automated process, to his bank account from which he made the payment transaction. Such refund will take place within T+2 Bank Working Days where T will mean the date on which information on Award of Contract (AOC) to the L1 bidder is uploaded to the e-Procurement portal by the tender inviting authority.</p> <p>v. As soon as the L1 bidder is awarded the contract (AOC) and the same is processed electronically in the e-Procurement portal –</p> <p>a) EMD of the L1 bidder for tenders of State Government offices will automatically get transferred from the pooling account to the State Government deposit head “8443-00-103-001-07” through GRIPS along with the bank particulars of the L1 bidder.</p> <p>b) EMD of the L1 bidder for tenders of the State PSUs/Autonomous Bodies/Local Bodies/PRIs, etc. will automatically get transferred from the pooling account to their respective linked bank accounts along with the bank particulars of the L1 bidder.</p> <p>In both the above cases, such transfer will take place within T+1 Bank Working Days where T will mean the date on which the Award of Contract (AOC) is issued.</p> <p>vi. The Bank will share the details of the GRN No. generated on successful entry in GRIPS with the E-Procurement portal for updation.</p> <p>vii. Once the EMD of the L1 bidder is transferred in the manner mentioned above, Tender fees, if any, deposited by the bidders will be transferred electronically from the pooling account to the Government revenue receipt head “0070-60-800-013-27” through GRIPS for Government tenders and to the respective linked bank accounts for State PSU/Autonomous Body/Local Body/PRIs, etc tenders.</p> <p>viii. All refunds will be made mandatorily to the Bank A/c from which the payment of EMD &amp; Tender Fees (if any) were initiated.</p>
Technical Bid Evaluation	The Technical Bid will be evaluated by the Tender Committee. Bidders shall upload all the necessary documents in the Technical Folder which will be verified and evaluated by the Tender Committee.
Financial Bid	<p>Rate shall be quoted in the Financial bid</p> <p>The bidder shall quote the rate online through Computer only in the space marked for quoting rate in the Bill of Quantities (BOQ). Only downloaded copies of the above documents, digitally signed by the bidder are to be uploaded (Excel file).</p> <p>The rate quoted per unit item by the tenderer shall be inclusive of all elements of taxes and duties, demands, tolls etc. The tenderer shall include income tax, GST etc as applicable, octroi if any and all other charges if applicable while quoting the rate, FOR (freight on road) delivery of the material in the place of delivery installation and commissioning.</p>
Validity of Bid	365 days
E Tender registration and bidding	<p><b>ONLINE BID SUBMISSION:</b></p> <p>The bidders are required to submit the Technical and Financial bid documents ONLINE i.e. uploading of the documents complete in all respect by following the Online Bid submission procedure.</p>
Download of Tender	<p>1. <b>Download of Tender</b></p> <p>Tender to be downloaded only from the e-Tendering portal of Govt. of West Bengal i.e. <a href="https://wbtenders.gov.in">https://wbtenders.gov.in</a> .The tender will be submitted in two bid system i.e. Technical bid &amp; Financial bid only through online.</p>

	<p><b>2. Online Bid submission procedure</b></p> <p>i. <b>Registration of Bidders:</b> Agencies/Bidders who are interested in participating e-tenders will have to get enrolled &amp; registered with the Government e-Procurement system. through logging on to <a href="https://wbtenders.gov.in">https://wbtenders.gov.in</a></p> <p>ii. <b>Digital Signature certificate (DSC):</b> Each bidders is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) having Signing and Encryption certificate for submission of tenders from the approved service provider of the National Information's Centre (NIC) on payment of requisite amount or any service provide as may be allowed by the Finance Department, Govt. of West Bengal.</p> <p>iii. <b>Tender Download:</b> The bidders can search &amp; download NIT &amp; Tender Documents electronically from computer once he logs in to the e-Tendering portal <a href="https://wbtenders.gov.in">https://wbtenders.gov.in</a> using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.</p> <p>iv. <b>Submission of Tenders:</b> General process of submission, Tenders are to be submitted through online to the stipulated website in two folders, (one is Technical Bid &amp; the other is Financial Bid) before the prescribed date &amp; time using the Digital Signature Certificate (DSC). The documents are to be uploaded duly digitally signed. The documents will get encrypted (transformed into non readable formats).</p>
<p><b>Award of Contract</b></p>	<p>The bidder selected after evaluation of financial bid by the tender committee will be given Award of Contract, subject to fulfillment of Terms and Conditions provided in the tender.</p>
<p><b>Publication of Tender</b></p>	<ol style="list-style-type: none"> <li>1. E-Procurement Portal Govt. of West Bengal (<a href="https://wbtenders.gov.in">https://wbtenders.gov.in</a>)</li> <li>2. Website of the Milk Union (<a href="http://www.bhagirathimilk.com">www.bhagirathimilk.com</a> )</li> <li>3. Office Notice Board</li> </ol>

## DETAILED TECHNICAL SPECIFICATIONS AND SCOPE OF SUPPLY

### 1. General Description

Design, supply, installation & Commissioning of direct expansion type of bulk milk cooling system including all accessories & items given in the detailed scope of work.

### 2. Functional Requirement.

These system would be installed in village dairy cooperative society (DCS)/village milk collection center which collects the milk every day in the morning & evening from milk producers, The milk collected shall be stored in the bulk milk cooler cooled from ambient temperature to 4<sup>0</sup>C. The stored milk shall be dispatched to dairy plant through insulated road milk tanker once in a day.

### **3. Supply.**

The bulk milk cooler shall be a complete unit with the refrigeration system, Agitator, lockable inlet & outlet valve with line strainer (Disc Type) to dump tank outlet. Also includes supply of AISI-304 balance tank with SS filter for pumped system SS piping & milk hose unions & milk transfer pump of 10000LPH SS 304 pipes & fittings, food grade quality flexible hose of adequate length. Erection materials, pipe supports, floor plates, pipe clamps, cable conduits shall also be supplied. Earth pit CI covers & earthing as required by local electrical regulation. The indicative distances between SS collection tray to balance tank – 2m, between balance tank to bulk milk cooler – 5 m, BMC to Mains power point & DG set – 20m may be considered for calculating cable & SS piping requirement, The exact distances for SS piping, electrical cabling to panels & DG sets shall be as per site conditions and complete piping & cabling necessary for installation shall be supplied. Power cables should be copper armored with standard cross sectional area \* required core as per power load requirement.

### **4. Design requirement.**

The net capacity of the bulk milk cooler should be as mentioned below; however, the gross capacity in all sizes shall be around 10% higher than the rated capacity to avoid agitation or accidental spillage of milk. Tank capacity 5000 lit.

### **5. Constructional features.**

**I. Material used for construction:** Rated capacity 5000 lit. Gross 5500 lit. BMC tank inner, outer, bottom top open able cover shall be fabricated from stainless steel AISI304 Material. The Skid made out of heavy M.S. box section and shall be hot dip galvanized on which refrigeration unit is mounted. All piping, fitting, lockable cover, agitator shaft & blade adjustable ball feet made out of AISI304 dipstick, outlet & inlet valves, blank flanges, ladder & manhole of about 45 centimeters diameter for closed type milk cooling tank etc. made out of AISI304.

**II. Shape & orientation:** 5000 lit. Horizontal Cylindrical closed type tank.

### **6. Tank fittings & accessories.**

The tank shall be provided with stainless steel inlet with special “no-foam” design, outlet 38mm. butterfly valve & blank union with locking arrangement, a sampling cock lockable type at outlet before butterfly valve, Inspection window/manhole with locking arrangement. The digital type temperature indicator shall be provided in the control panel. Temperature sensor shall be permanently fixed at the bottom. It shall sense the temperature of the surface at the outlet & transmit the signal to the digital Indicator. The tank shall be provided with S.S. calibrated dipstick to measure the volume of milk inside the tank. The dipstick shall be graduated from 10% or less to not less than 100% of the rated volume. The tank shall be equipped with agitator capable of producing a uniform distribution of fat in the milk.

**I. All S.S. Fittings shall be of SMS STANDARD.**

BMC shall be provided with AISI-304. Filter with SS fine wire mesh. The filter shall be designed and installed in such way that it can frequently and easily be cleaned.

## **7. INSULATION.**

The insulation of the tank shall be done by injection in situ of high density, 40kg/m<sup>3</sup> polyurethane foam insulation. The efficiency of insulation should be such that at maximum 50<sup>0</sup>C ambient temperature. The rate of rise of the mean temperature of the milk shall not exceed by 1<sup>0</sup>C in 12 hours when the rated milk volume initially at about 4<sup>0</sup>C is allowed to stand undisturbed when refrigeration unit is not working.

## **8. CLEANING IN PLACE (CIP).**

For closed type tank configuration facilities for cleaning-In-Place shall be provided which shall include CIP spray balls and piping from milk reception / balance tank through milk transfer pump to bulk milk cooler.

## **9. BALANCE TANK AND TANKER LOADING ARRANGEMENTS.**

200 lit. Capacity Stain less steel balance tank should be provided with 5000 Lit capacity Bulk Milk Cooler. From BMC the milk shall be transferred to road milk tanker (RMT) Through food grade quality Flexible hose of adequate (min 10 m) length. SS304 Pipes of 38mm size will be provided from the Balance tank via in-line filter & Milk Transfer by pump up to BMC. Balance tank should be provided with 38mm stop valve 38mm SS piping for 5 KL BMC should be minimum 25m with MS bend & unions fittings 4 valves. 38mm SMS union-minimum 12 no(s), bends minimum- 8 no(s), Supports - minimum -12 no(s).

## **10. REFRIGERATION SYSTEM**

The refrigeration system shall be designed to comply with ARI Standard 520 -2004 & to meet the requirements of milk collection system of ISO 5708, class 2. The refrigeration system shall be of direct expansion type with freon-22 or CFC free environmental friendly refrigerant to cool the raw milk from reception temp. to 4<sup>0</sup>C in the prescribed period mentioned. The evaporators of the system shall form a part of the milk tank body as dimpled jacket in the bottom plate in case of rectangular open tank or at least up to 1/3 height of circular closed tank. The refrigeration system shall be direct expansion type to perform cooling function in an ambient temperature of 46<sup>0</sup>C with air cooled condenser.

### **I. COMPRESSOR**

The refrigeration compressor shall be adequate enough to ensure that milk is cooled to 4<sup>0</sup>C. In the prescribed time limit & suitable to operate at 0<sup>0</sup>C Suction temp & 60<sup>0</sup>C condensing temperature (air cooled condenser) assuming 46<sup>0</sup>C ambient Temperature. The refrigeration compressor(s) shall be energy efficient hermetically sealed reciprocating/scroll. The compressors selected should be energy efficient consume least power to meet the cooling load requirements.

### **II. CONDENSER**

The condenser shall be air cooled finned tube type having sufficient heat transfer area designed for extremely high ambient temperature given above.

### **III. RECEIVER**

For refrigeration circuit a suitable size liquid receiver mounted on the skid near compressor to assist system to store refrigerant during pump down cycle as well as in case of maintenance.

### **IV. THERMOSTATIC EXPANSION VALVE.**

Suitable size & capacity Thermostatic expansion valve should be provided in the refrigeration circuit of the bulk milk cooler. TX valve should be maximum operating pressure type and of adequate capacity to feed optimum of refrigerant to the milk cooling tank evaporator.

### **V. REFRIGERANT PIPE , FITTINGS & CONTROLLS**

All pipes, valves, fittings & controls shall comply with the latest relevant BIS code applicable. Isolation valves at suction & discharge sides of compressors is provided for compressor isolation, during maintenance of the system All the pipes shall be clamped properly with fixed support. In case of double compressor system, pipe fitting & control should be designed in such a way that both the compressors can run independently. The tubing shall be insulated wherever necessary.

## **11. ELECTRICAL CONTROL PANNEL**

### **I. Control Panel**

Three control panels shall be provided, one for the main power supply tapping, second for the refrigeration unit and third for the milk tank. Each panel shall be provided with MCBs of suitable ratings for switching and protection as per the system requirement. The incoming and outgoing power supply terminals shall be covered and secured with a lead seal to prevent tampering. The door of the panels should be provided with lockable handles.

### **II. Main Control Panel**

This panel should be suitable to tap the incoming State Electricity Board supply and feed the refrigeration unit, agitator motor and milk unloading pump (from balance tank) and dispatch pumps. The DG set should be hooked up with this panel through a Change-over-switch in order to operate the DG set in place of state Electricity Board supply as & when required. It should be provided with necessary phase indication lamps (LED type), contactors, MCBs, ammeter, voltmeter, energy-meter, frequency-meter, push buttons, DG set running hour meter etc. A battery charger to trickle charge the battery when the DG set is in operation should be provided (charge indications to be displayed on the panel).

**Note:** The switch gears, contractor, relays, used in all the panels should be of reputed makes. L & T / Siemens/ ABB make

### **III. Refrigeration Control Panel**



The panel shall be provided with motor starters, ON/OFF push buttons & necessary MCBs, control wiring, line voltage controller to guard the compressor is provided in the refrigeration system, the control panel shall be provided with a sequence controller & timer to start one compressor at a time to avoid power supply surge. The panel shall also have facility to operate refrigeration unit on auto/ manual mode. As soon as the milk temperature reaches to pre-set value, the compressor should be switched off to avoid freezing of milk.

## **12. Voltage Stabilizer (Servo type) and single-phase preventer:**

The system should have Voltage stabilizer conforming to following features and single phase preventer of suitable rating individually correct the voltage of each phase. Auto low – high cut out. Phase sequence Preventer. Stabilizer should be supplied as per BMC load (electrical) capacity.

## **13. Cables & Electrical Switch gears.**

All electrical switchgears, controls & electrical cables required for the complete system shall be of suitable rating & of standard company. All cables flexible or armored should be as per site measurement & site load. Switch make Copper armored cable should be provided from MSEB meter to stabilizer & Stabilizer to generator minimum 30m of specific size & above if required as per site condition.

## **14. EARTHING**

The earthing should be carried as per IS: 3043-1987(reaffirmed 2001)-“code of practice for earthing”. The chassis, framework and the fixed parts of the metal casing of the tanks where used shall be provided with two separate earthing terminals, Earthing for Alternator & Panels. The earthing terminals shall be of adequate size, be protected against corrosion and shall be metallically clean. Under no circumstances shall a movable part of the enclosure be insulated from the part carrying terminal when the movable part is in place. The earthing terminal shall be identified by means of the “[ ]” marked in a legible and indelible manner on or adjacent to the terminals.

## **15. INSTALLATION**

The installation work should be carried in best workman like manner in conformity to the relevant codes of practices of BIS standards applicable for mechanical & electrical installation. Installation shall take place in Murshidabad district in the vicinity of the Dairy cooperative Societies of Bhagirathi at Murshidabad District.

## **16. COMMISSIONING**

Supplier should arrange commissioning & performance trial runs of the bulk milk cooling system to the satisfaction of the client The supplier shall supply all the consumables required during commissioning of the plant.

## **17. TOOL BOX**

A GI sheet tool box containing one set of all necessary tools required for regular maintenance of the unit shall be supplied along with the BMC 1000-1400 RPM blower - 1No.

## **18. MANUAL**

One sets of operation & maintenance manual, containing complete details of starting up, putting off, critical checks and day to day maintenance of the complete system shall be supplied .The manual should also have the required electrical circuit diagrams.

## **19. FIRE EXTINGUISHER:**

BMC should have fire extinguisher with unit.

## **20. DIP STICKS:**

Facilities to measure Milk Quantity SS Dip sticks of AISI304 with calibrated chat.

## **21. WATER HEATER (Geyser):**

Instant Electric water of capacity heater 20 liters with suitable output capacity of hot water with each BMC (with ISI mark).

**TECHNICAL SPECIFICATION FOR 5000 LIT CAP BMCU MILK TANK:**

<b>SR. NO</b>	<b>DESCRIPTION</b>	<b>DETAILS</b>
<b>A</b>	<b>MILK TANK AND EQUIPMENTS</b>	<b>CYLINDRICAL HORIZONTAL CLOSED TYPE</b>
1	Capacity-net	5000 Liters
2	Capacity- gross	5500 Liters
3	MOC	AISI-304
4	Type	Horizontal cylindrically Closed type
5	Overall dimension Surface finished	Minimum 220 grits/ Pvc coated
6	Overall, Weight	As per ISO 5708 2AII (Latest Version)
7	Thickness -Inner shell -Outer shell	As per ISO 5708 2AII (Latest Version)
8	Overall dimension	As per ISO 5708 2AII (Latest Version)
9	CIP Facility	Using Balance Tank and Rotating Disc & Nozzle Spray System in tank to cover all the internal surface.
10	No. of Agitator	1(one)
11	RPM of Agitator (output)	21-30
12	Type of Insulation	By injection in situ of high density (min 40kg/m <sup>3</sup> ) CFC free Polyurethane Foam without any imperfection and hygroscopicity.
13	Thickness of Insulation	60 mm
14	Density of insulation	40 Kg/ m <sup>3</sup>
15	Facilities to measure Milk Quantity	SS Dip sticks with calibrated chart. Digital dip stick.
16	Man hole cover	SS 304 with SS fastening.
17	SS 3-way plug valvs , Pipes, Support for Clamping Of SS Line, SS bends & unions, 2way SS Butterfly valve	Pipe clamp should be of SS 304 with wing nut And support to be given from sealing and support material should be of SS 304 pipe (38 mm) and clamp as per required.
18	Milk Pump	Alfa Laval / Fristamp / Swastik / Zeutech/ABB make 3HP three phase with outlet 38 mm having SSshroud. Impeller and body also stainless steel 304, with adjustable legs coupled with motor. L&T Make Dol Type Starter Having Relay of suitable Range To Be Provided.
19	Tank Leveling	The tank shall be with adjustable ball feet to adjust the level as per ground surface at location.
20	Ladder	Suitable SS 304 quality ladder shall be provided with the tank to enter the tank for manual cleaning when needed.
21	Inner Vessel	All inner joint should be TIG welding and attachments should have finish not less than 150 grit.
22	Filter	AISI 304 SS fine wire mesh

<b>B</b>	<b>REFRIGERATION</b>	<b>3 PH, 2 CU (ARI Standard 520 - 2004)</b>
1	Type	Direct Expansion
2	Make of Compressor	Emerson/Danfoss, hermetically sealed scroll Type
3	Model	Suitable to meet the cooling time 3 hour to bring down the Milk temp from 35 to 4°C as per ISO 5708 2 AII norms.
4	Cooling capacity of compressor,R-22	22000 Kcal/Hr at 0 °C Evaporating temperature and 55 °C condensing temperature.
5	Cooling capacity of condenser, R-22	38640 Kcal/hour at Ambient Temp.
6	Make of Condenser	Emerson/Danfoss
7	Model of Condenser	Copper Construction Fin & Tube Type
8	No. of Condenser	2 for each BMC
9	No. of Fans	4 (Four) 18" sweep Dia.
10	Thermo static Expansion Valve, make.	8 Lit * 2 nos.
11	Thermo static Expansion Valve, make.	Emerson, MOP
12	Type of Refrigerant	Freon R-22
<b>C</b>	<b>DESIGN PARAMETERS</b>	
1	Manufacturing standards	ISO 5708/2A II
2	Ambient temp.	48 °C
3	Maximum Cooling time for I <sup>st</sup> milking	3 hour, 35 to 4 °C
4	II <sup>nd</sup> milking	1.5hour, 10 to 4 °C
5	Safe Operating Temp.	43 °C
<b>D</b>	<b>VOLTAGE STABILIZER</b>	<b>SERVO CONTROLLED SINGLE PHASE</b>
1	Make & Capacity	ASABA/Luminous/ABB India/Globe : 40 KVA
2	Input Voltage	340V- 480V
3	Out Voltage	415V
4	Protection	<ol style="list-style-type: none"> <li>1. High/Low voltage output cut off</li> <li>2. Over load Protection</li> <li>3. Short Circuit Protection</li> <li>4. By-pass Arrangement</li> <li>5. Single Phasing</li> <li>6. Noise Filtering</li> <li>7. Phase Failure Relay- VSPD2</li> <li>8. Input/ Output Volt Meter on GEB and DG Set</li> </ol>
<b>E</b>	<b>ELECTRIC CABLE AND ELECTRICAL SWITCH GEARS</b>	<ol style="list-style-type: none"> <li>1. Cable should be of Polycab / Finolex supply cable from DG set to stabilizer should be of 6 sq.mm x 4 core and supplier will have to provide also cable of 10sq.mm x 4 core copper cable from GEB Meter to Wall mount Change over switch.</li> <li>2. Cable Laying should be in conduit pipe.</li> <li>3. Cable 30 meter in supplier scope.</li> <li>4. Switch gears make - L&amp;T/ SEIMENS / ABP.</li> </ol>

<b>F</b>	<b>EARTHING AS PER I.E STANDARD</b>	<p>It should be carried as per IS: 3043 - 1987 (reaffirmed 2001) - "Code of practice for earthing". Earthing as per comprising of following:</p> <ol style="list-style-type: none"> <li>1. Maintenance free earthing electrode of 3 meters as per IS 3043.</li> <li>2. Earth pit would be 3m deep</li> <li>3. Distance between two plate would be at least 2m</li> <li>4. Earth Link test would be carried out and should be less than 1ohm.</li> <li>5. Earthing connection wire should be of copper and it should be cased and dressed properly.</li> <li>6. Earth pit chamber (Plastic/Composite/RC) should be installed to fit the earthing electrode.</li> </ol>
<b>G</b>	<b>ADDITIONAL REFRIGERATION SPARES TO BE SUPPLIED</b>	<p>Thermostatic Expansion Valve, Dryer Filter, High &amp; Low pressure tripping safety switch. 2 sets for each BMC unit must be supplied.</p>

- The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and when no applicable standard is mentioned, to the latest Indian Standards.

## GENERAL TERMS & CONDITIONS

1. The documents submitted by the bidders should be properly indexed & digitally signed.
2. During the scrutiny, if it comes to the notice to the tender inviting authority that the credential(s) and/or any other paper(s) has/have been of any bidder found incorrect/ manufactured/ fabricated, that bidder will not be allowed to participate in the tender process and that application will be rejected outright. The Bhagirathi Cooperative Milk Producers' Union Ltd. Reserves the right to cancel the N.I.T. at any time without showing any reason and no claim in this respect will be entertained.
3. During evaluation the Committee may summon any bidder and seek clarification/information regarding bids within the stipulated time frame. In case the bidders fail to clarify any query during the stipulated time frame the bid shall be liable for rejection.
4. The Milk Union may reject any bid from any party with unsatisfactory performance with the Milk Union or any other Milk Union in the past.
5. Inspection of materials may be undertaken at the supplier's premises whenever necessary by the Tendering Authority/ any officer authorized by the undersigned.
6. 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.
7. Bidders are required to go through the Tender Documents understand the requirement the location of the installation and commissioning and then quote their rate. Rate once quoted by the bidder shall be deemed to be quoted by the bidder after understanding the requirements of the Milk Union. Rates once quoted are final and no alteration in rate shall be allowed. All the pages of this NIT must be duly signed, sealed and uploaded by the bidder as a token of acceptance of the Terms and Conditions of the NIT.
8. **Price:** Price charged by the supplier for goods delivered under the contract shall not vary from the prices quoted by the supplier in its bid. Price consists of the cost of the equipment along with installation and commissioning of the unit along with trial run and satisfactory operational training of the entire unit with 3 years of comprehensive warranty along with all taxes and levies.
9. **Bid Validity:** The rate once quoted in this tender shall remain valid for a period of 365 days from the date of Financial Bid Evaluation. Bidders are therefore required to assess their rates before quoting them.
10. **Warranty:** All the spares and components of the BMC Set must be warranted by the supplier for a period of 3 years from the date of successful installation and commissioning. If any component is found to be non-functional due to any manufacturing defect or as a result of poor workmanship the component must be immediately replaced by the supplier within 24 hours free of cost and the replaced spare should have the warranty period of 3 years.

**Warranty Extension:** The warranty of equipment would be extended if equipment remains down during the warranty period, for more than period mentioned below: -

- If any major equipment has been down for more than 10 days in a year, warranty would be extended by one Month,
  - If any major equipment has been down for more than 30 days due to malfunctioning of the any part supplied by supplier or want of spares/ consumable, warranty would be extended by 1 Year.
11. **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:
- a. **First Phase:** 70% payment shall be released after 1 month of successful delivery of the entire Unit in good condition certified by the Concerned Official and approved by the Competent Authority. EMD shall also be released after receipt of intimation in writing from the supplier.
  - b. **Second Phase:** 20% payment shall be released after successful installation and commissioning of the entire Unit certified by the Concerned Official and approved by the Competent Authority.
  - c. **Third Phase:** 10% payment shall be released after 3 months of submission of equivalent amount of bank guarantee valid for a period of 3 years. This shall serve as Performance Guarantee. 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 operations of the Milk Union, 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.
12. **EMD & Security Deposit:** EMD shall not carry interest. EMD of unsuccessful bidders shall be refunded within 2 working days after finalization of Award of Contract. EMD of the successful bidder shall be converted into Security Deposit and shall be released along with the first phase of payment.
13. **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 installation, testing, commissioning and handing over of the goods to The Bhagirathi Co-operative Milk Producers' Union Ltd.
12. **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 week subject to a maximum of 10% of the total cost of materials shall be charged if goods are not delivered installed or commissioned 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.

13. **Loading and Unloading** of goods is the responsibility of the supplier. If the Milk Union makes its own arrangement for the unloading of the materials the respective cost of the same shall be deducted from the bidder.
14. **Site Preparation:** Preparation of site for installation and commissioning the Unit shall be arranged by the Milk Union.
15. **Documentation:** Complete documentation like principal warranty papers, operation manuals, document of technical specifications and guarantee cards have to be furnished by the supplier. Failure to submit any of the above documents in hard copies at the time of supply of the materials shall lead to non-acceptance of the material.
16. **Delivery, Installation and Commissioning:** The materials must be delivered installed and commissioned in the vicinity of the Village Level Cooperatives of Murshidabad district in West Bengal as mentioned in Installation Section of Technical Specification. The installation and commissioning of the unit must be completed within 60 days from the acceptance of the Purchase Order. It is critically important to coordinate with the Milk Union before dispatch of materials.
17. **Inspection:** BMC unit after delivery are subject to inspection at dairy plants before acceptance. If rejected due to any defect, deficiency transit damage or wrong supply, the report of our inspector in this respect shall be final and no correspondence on the subject would be entertained. The rejected goods should be removed from our premises by the Supplier within 15 days after receipt of our inspection report.
18. **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' to the latest Indian Standards.
19. **Registration of Goods:** If required under the Applicable Law, Goods supplied under the Agreement shall be registered for use in India.
20. **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.
21. **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.
22. **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.
23. **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.
24. **Termination for Convenience:** The Purchase, 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.
25. **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 Arbitration and Conciliation Act of 1996 of India. The venue of adjudication/arbitration shall be Kolkata. The language of arbitration shall be English.
26. **Applicable Law:** The Agreement shall be interpreted in accordance with the laws of Union of India.
27. **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, floods, explosion, epidemics, quarantine restriction, strikers lockout or act of God (hereinafter referred to as events) neither party shall have any claim for damages against other in respect of such non-performance or delay in performance.
28. The undersigned reserves the right to accept or reject any tenders and to cancel the entire tender process at any point of time without assigning any reason thereof.

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

Copy forwarded to:

1. E-Procurement portal of Govt. of West Bengal (<https://wbtenders.gov.in> )
2. Official Website ( [www.bhagirathimilk.com](http://www.bhagirathimilk.com) )

**Annexure – I**

**AFFIDAVIT**

**(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 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.
5. 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.
6. I/We agreed to execute a formal Agreement embodying the terms & conditions of the said online tender and the General Terms & Conditions.

**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)

The above named deponent has understood the contents well and solemnly and sincerely declared and affirmed by the deponent in my presence at.....and signed before me on this day of ..... (Seal).

**(Signature of the Notary Public)**