



THIRUVANANTHAPURAM REGIONAL CO.OPERATIVE MILKPRODUCERS' UNION LTD.
KSHEERA BHAVAN, PATTOM, THIRUVANANTHAPURAM -695 004
Phone Nos. 2558850, 2446845 Fax: 2449567, E-mail ID - trcmpuproj@gmail.com

NOTICE INVITING TENDER

The Managing Director, Thiruvananthapuram Regional Co-operative Milk Producers Union Ltd (TRCMPULtd) invites online bids from reputed Manufacturers / Authorized dealers for the Supply, Installation, Testing & Commissioning of **5 KL BMC's and Connected Accessories** at Thempamoodu Milk Producers Co-operative Society, Pullampara, Thiruvananthapuram.

1.	Tender Notice No. & Date	791/TRU/PC/2026	Dated 15.05.2026
2.	Item of Work	Supply, Installation, Testing & Commissioning of a 5 KL BMC's and Connected Accessories at Thempamoodu Milk Producers Co-operative Society, Pullampara, Thiruvananthapuram.	
3.	Specification	Attached	
4.	Estimated Amount	Rs 17 Lakhs	
5.	Bid Submission Fee	Rs.1000/-	
6.	Earnest Money Deposit	Rs.17,000/-	
7.	Date and Time of Publication of e- tender.	15.05.2026, 02.30 PM	
8.	Date of Submission of e-tender	15.05.2026, 02.30PM to 25.05.2026, 02.30PM	
9.	Date and time of opening of e-tender	26.05.2026, 02.30PM	
10.	Place of Opening	TRCMPU Ltd., KsheeraBhavan, Pattom Thiruvananthapuram-695004.	
11.	Bid Validity	60 Days	
12.	Warranty	12 months warranty from the date of commissioning.	
13.	Completion Period	Within 45 days from the date of Confirmed order.	

Terms & Conditions for e-Procurement

This tender is an e-Tender and is being published online for work / supplying of equipment as mentioned in the Invitation to bid. The tender is invited in two cover system from the registered and eligible manufacturers / suppliers through e-procurement portal of Government of Kerala (<http://www.etenders.kerala.gov.in>). Prospective bidders willing to participate in this tender shall necessarily register themselves with above mentioned e-procurement portal.

The tender timeline is available in the critical date section of this tender published in www.etenders.kerala.gov.in.

A) Online Bidders registration process:

Bidders should have a Class II or above Digital Signature Certificate (DSC) to be procured from any Registration Authorities (RA) under the Certifying Agency of India. Details of RAs will be available on www.cca.gov.in. Once, the DSC is obtained, bidders have to register on www.etenders.kerala.gov.in website for participating in this tender. Website registration is a one-time process without any registration fees. However, bidders have to procure DSC at their own cost.

Bidders may contact e-Procurement support desk of Kerala State IT Mission over telephone at 0471-2577088/188/388 or 0484-2336006, 2332262 or 0497-2764788, 2764188 or 0483-273294 or through e-mail: etendershelp@kerala.gov.in or helptender@gmail.com for assistance in this regard.

B) Online Tender Process:

The tender process shall consist of the following stages:

- i. **Downloading of tender document:** Tender document will be available for free download on www.etenders.kerala.gov.in from the date & time of publication of e-tender, till the last date & time for online submission of e-tender. However, tender document fees should be payable at the time of bid submission as stipulated in this tender document. Downloading of tender documents will not be possible after the date specified above.
- ii. **Pre-bid meeting:** Refer page 3 of the tender document
- iii. **Publishing of Corrigendum:** All corrigendums shall be published on www.etenders.kerala.gov.in and shall not be available elsewhere.
- iv. **Bid submission:** Bidders have to submit their bids along with supporting documents to support their eligibility, as required in this tender document to www.etenders.kerala.gov.in. No manual submission of bid is allowed and manual bids shall not be accepted under any circumstances.
- v. **Opening of Technical bid and bidder short-listing:** Technical bids will be opened, evaluated and shortlisted as per the eligibility and technical qualification. All documents in support of technical qualification shall be submitted online as well as offline within the due date and time. Failure to submit the documents will attract disqualification. Bids shortlisted by this process will be taken up for opening the financial bid.
- vi. **Opening of financial bids:** Bids of the qualified bidders shall only be considered for opening and evaluation of the financial bid on the date and time mentioned in the critical date section

C) Documents comprising bid:

i. First Stage (Pre qualification or Technical cover based on 1 cover or 2 cover tendersystem):

Pre-Qualification or Technical proposal should contain the scanned copies of the following documents which every bidder has to upload.

- A. Copies of original documents defining the constitution or legal status, place of registration and principal place of business of the company or firm or partnership or if a joint venture, of each party there to constituting the bidder.
- B. Copies of Sales tax & service tax registration certificate.
- C. Details of experience and past performance of the bidder (or of each party to a joint venture) on works of similar nature, and details of current work in hand and other contractual commitments should be submitted. Customer's full address, contact persons, contact telephone number and e-mail ID are to be furnished.
- D. The bidder should be in same business as Supplier / manufacturer for which the bid is invited for a minimum period of 5 years at the time of bid opening. If an authorized dealer participates in the bid they should produce documentary evidence for establishing that their principal supplier should be in the same business for a minimum period of 5 years. Copy of authorized dealership certificate issued by the principal supplier or manufacturer should also be uploaded along with bid document.
- E. The bidder's annual financial turnover during any one of the last two years should not be less than twice the estimated cost as specified in the Invitation to Bid.
- F. The bidder should have completed at least 5 number of similar installations for which this invitation to bid is issued during the last 5 years.
- G. The bidder should furnish a copy of the Income tax Returns for the previous year in original or certified true copies.

The department doesn't take any responsibility for any technical snag or failure that has taken place during document upload.

ii. The Second Stage (Financial Cover or as per tender coversystem):

The Bidder should complete the Price bid as per format given for download along with this tender.

Note: - The blank price bid should be downloaded and saved on bidder's computer without changing file-name otherwise price bid will not get uploaded. The bidder should fill in the details in the same file and upload the same back to the website.

Fixed price: Prices quoted by the Bidder should be fixed during the bidder's performance of the contract and not subject to variation on any account. A bid submitted with an adjustable/variable price quotation will be treated as non-responsive and rejected.

D) Tender Document Fees and Earnest Money Deposit (EMD)

The Bidder should pay a tender document fee and Earnest Money Deposit or Bid Security as given in the Tender Inviting Notice. The Bid security is required to protect the purchaser against risk of Bidder's conduct, which would warrant the forfeiture of security.

Online Payment modes: The tender document fees and EMD can be paid in the following manner through e-Payment facility provided by the e-Procurement system:

State Bank of India Multi Option Payment System (SBI MOPS Gateway): Bidder are required to avail Internet banking facility in any of the below banks for making tender remittances in e-Procurement system.

A) Internet Banking Options (Retail)			
1	Allahabad Bank	29	JanataSahakari Bank
2	Axis Bank	30	Karnataka Bank
3	Andhra Bank	31	KarurVysya Bank
4	Bandan Bank	32	Kodak Mahindra Bank
5	Bank of Bahrain and Kuwait	33	Lakshmi Vilas Bank
6	Bank of Baroda	34	Mehasana urban Co-op Bank
7	Bank of India	35	NKGSB Co-operative Bank
8	Bank of Maharashtra	36	Oriental Bank of Commerce
9	Bassein Catholic Co-operative Bank	37	Punjab and Maharastra Co-operative Bank
10	BNP Paribas	38	Punjab National Bank
11	Canara Bank	39	Punjab and Sind Bank
12	Catholic Syrian Bank	40	RBL Bank
13	Central Bank of India	41	Saraswat Cooperative Bank
14	City Union Bank	42	ShamraoVithal Cooperative Bank
15	Corporation Bank	43	South Indian Bank
16	Cosmos Bank	44	Standard Chartered Bank
17	DCB Bank	45	State Bank of India
18	Dena Bank	46	Syndicate Bank
19	Deutsche Bank	47	Tamilnadu Mercantile Bank
20	Dhanalaxmi Bank	48	Tamilnadu Cooperative Bank
21	Federal Bank	49	The KalyanJanathaSahakari Bank
22	HDFC Bank	50	TJSB Bank(erstwhile Thane JanataSahakari Bank)
23	ICICI Bank	51	UCO Bank
24	IDBI Bank	52	Union Bank of India
25	Indian Bank	53	Vijaya Bank
26	Indian Overseas Bank	54	YES Bank
27	Indus Ind Bank	55	United Bank of India
28	Jammu & Kashmir Bank		
B) Internet Banking Options(Corporate)			
1	Bank of Baroda	19	KarurVysya Bank
2	Bank of India	20	KodakBank
3	Bank of Maharashtra	21	Lakshmi Vilas Bank
4	BNP Paribas	22	Oriental Bank of Commerce
5	Canara Bank	23	Punjab and Maharastra Coop Bank
6	Catholic Syrian Bank	24	Punjab and Sind Bank
7	City Union Bank	25	Punjab National Bank
8	Corporation Bank	26	RBL Bank
9	Cosmos Bank	27	ShamraoVithal Cooperative Bank
10	Deutsche Bank	28	South Indian Bank
11	Development Credit Bank	29	State Bank of India
12	Dhanalaxmi Bank	30	Syndicate Bank
13	Federal Bank	31	UCO Bank
14	HDFC Bank	32	Union Bank of India
15	ICICI Bank	33	UPPCL
16	Indian Overseas Bank	34	Vijaya Bank

17	JanataSahakari Bank	35	Axis Bank
18	Jammu & Kashmir Bank		

During the online bid submission process, bidder should select SBI MOPS option and submit the page, to view the **terms and condition** page. On furtherer submitting the same, the e-Procurement system will redirect the bidder to MOPS Gateway, where two options, mainly **SBI and other banks*** will be shown. Here, bidder may proceed as per below.

- a. .SBI Account holders should click **SBI** option to with its Net banking facility, where bidder can enter their internet banking credentials and transfer the tender fee and EMD amount.
- b. .Other bank account holders may click **other banks** option t view the bank selection page. Here bidder can select from any of the 54 banks to proceed with its net banking facility, for remitting the tenderpayments.

*Transaction charges for other banks vide SBI Letter No. LHO/TVM/AC/2016- 17/47- 1% of transaction value subject a minimum of Rs.50/- and maximum of Rs.150/-

Any transaction charges levied while using any of the above modes of online payment has to be borne by the bidder. The supplier/contractor's bid will be evaluated only if payment status against bidder is showing "Success" during bid opening.

E) SUBMISSIONPROCESS:

For submission of bids, all interested bidders have to register online as explained above in this document. After registration, bidders should submit their Technical bid and financial bid online on www.etenders.kerala.gov.in along with online payment of tender document fees and EMD. For page-by-page instructions on bid submission process, please visit www.etenders.kerala.gov.in and click "Bidders Manual Kit" link on the home page.

It is necessary to click on "Freeze bid" link/icon to complete the process of bid submission otherwise the bid will not get submitted online and the same shall not be available for viewing/opening during bid opening process.

SPECIAL TERMS & CONDITIONS

1. Eligibility and qualification requirements:

1.1 To be eligible for the award of contract, bidder should provide satisfactory evidence to the Thiruvananthapuram Regional Co-op Milk producers Union Ltd regarding their eligibility, capacity and adequacy of resources to carry out the contract effectively. To this end all bids submitted should include the following information.

- a. Copies of original documents defining the constitution or legal status, place of registration and principal place of business of the company or firm or partnership or if a joint venture, of each party there to constituting the bidder.
- b. Copies of Sales tax & service tax registration certificate.
- c. Details of experience and past performance of the bidder on works of similar nature, and details of current work in hand and other contractual commitments should be submitted. Customer's full address, contact persons, contact telephone number and e-mail ID are to be furnished.

1.2 For the purpose of this particular contract, bidder should meet the following qualifying criteria as minimum:

1. The bidder should be in same business as Supplier / manufacturer/Service providers for which the bid is invited for a minimum period of 5 years at the time of bid opening. If an authorized dealer participates in the bid they should produce documentary evidence for establishing that their principal supplier should be in the same business for a minimum period of 5 years. Copy of authorized dealership certificate issued by the principal supplier or manufacturer should also be uploaded along with bid document.

2. The bidder should have completed at least 25 installations of similar nature to the type specified in the schedule of requirements in satisfactory operation for atleast 5 years on the date of tender opening.
3. The bidder should furnish a copy of the Income tax Returns for the previous year in original or certified true copies.
4. The bidder should furnish at least 5 Numbers of performance certificates from different customers.
5. The Bidder should setup service arrangement in Kerala / South India to attend the units within 24 hours in case of failure / breakdown of the machine
6. **Tender Fee & Earnest Money Deposit**
 - a. The Tender fee and EMD as given in the invitation to bid shall be accepted through online NEFT transaction through the site www.etenders.kerala.gov.in.
 - b. The EMD of the successful bidder shall be released after the signing of the agreement and submission of performance security.
 - c. EMD of the unsuccessful tenderer shall be released after the award of the contract and execution of agreement by the successful tenderer.
 - d. No interest shall be paid for the EMD for the period for which it lies in deposit.
 - i. **Agreement:** - The successful bidder has to execute a contract agreement on a Kerala stamp paper worth Rs.200/- within 15 days of receipt of order.
 - e. **Delivery Address:** -

Thempamoodu Milk Producers Co-operative Society,
T87(D) APCOS, Pullampara P.O., Venjaramoodu.
Thiruvananthapuram -695607,
Kerala.

4. Billing Address: -

The Unit Head
Thiruvananthapuram Diary
PB. No.4 Ambalathara, Poonthura P.O
Thiruvananthapuram-695 026
PH: 0471-2382148,2382562
GST No.32 AAAAT9795J3ZV

5. Terms of payment : Payment shall be made from TRCMPU, Head Office as follows

- 30% of the order value shall be released as advance against submission of bank gurantee for the equal amount.
- 30% of the order value shall be released on supply of the equipment at the above specified delivery address.
- 10% of the order value shall be released on successful completion of

installation, testing and commissioning of the equipment at the above specified delivery address.

- 10% of the total value will be released on satisfactory completion of guarantee period of twelve months from the date of commissioning in all respect. However the said amount will be paid against a Bank guarantee valid for twelve months from the date of commissioning.

6. The Tender should be submitted as follows

Online Cover I

1. Details of Tender fee and EMD details.
2. Documents to prove the qualifying criteria as mentioned in clause 1 above.
 - Scanned copy of GST registration certificates.
 - Scanned copy Income Tax returns filed for last two years.
 - Copy of audited P&L statement and Balance Sheet for the past two years.
 - Details of previous executed orders along with address of clients, contact person, contact no, e-mail ID etc.
 - Details of contracts on hand and other contractual commitments.

Online Cover - II

Price bid in the prescribed form available as BOQ in the website www.etenders.kerala.gov.in

3. Note to Bidders:

- i. Bidders are advised to note the Tender Id and Tender No. & Date for reference.
- ii. All uploaded documents should contain the signature and the office seal of the bidder/authorized persons.
- iii. The Managing Director, TRCMPU Ltd., is empowered to reject any or all the bids without assigning any reason.
- iv. The TRCMPU does not blind itself to accept the lowest offer and reserve the right to accept any offer without assigning any reason. The bidders shall not have any claim in this regard.

TECHNICAL SPECIFICATION

1. Bulk Milk Cooler Tank

SI.No	Particulars	Technical Specification
1	Standard applicable and cooling time required at	ISO 5708 Type 2II(latest version) for 2 milk collections: a. Cooling 50% of first milk collection of its

	43°C ambient conditions	<p>rated capacity in 3 hrs. from 35°C to 4°C</p> <p>b. Cooling of 100 % of milk volume after 50 % of milk is added from second milk collection (average temp 10°C to 4°C) in 1 hr. 30 minutes</p> <p>c.</p>
2	Rated Capacity - Liters	5000L
3	Gross Capacity - Liters	10% of rated capacity - Liters (must be 10% more than rated capacity
4	Material of Construction	AISI 304
5	Type	Closed type
6	Tank Evaporator	<p>* The tank evaporator plate should have adequate surface area ensuring that the milk is cooled in the local ambient conditions of 43°C and in the time prescribed as specification above.</p> <p>*Laser weld with operating pressure of 30 bars and crash test pressure of 60 bars. The evaporator shall be fixed at the bottom plate of the inner tank</p> <p>The total evaporative area shall be divided and separate into two sections connecting to each compressor</p>
7	Tank orientation	<p>* The preferred space of the tank shall be circular/ horizontal, * 5000 Liter BMC Tanks shall be completely closed type in cylindrical/ elliptical orientation with circular / elliptical dish ends and manhole of size 450mm minimum on top with lockable cover</p> <p>*The shape of the BMC tank shall confirm to international sanitary design</p>
8	Evaporative plate thickness	2 mm bottom and 0.8mm top
9	Thickness of inner/ outer shell of tank	Inner: 2.0mm, outer: 1.6 mm
10	Agitators	5708 Type 2 II (Latest version) compliance ensuring even distribution of the milk fat when milk is agitated
11	Ball Feet	AISI 304 adjustable ball feet tamper proof and lockable with 50 mm height adjustment (Preferred 4 nos.)
12	Tank Fittings & accessories	<p>Closed type</p> <p>No- foam type inlet</p> <p>Outlet valve with locking arrangement and blank union. All SS fittings shall be of SMS standards.</p> <p>Air vent in SS construction with vermin proof design, top Manhole with locking</p>

		arrangement SS Ladder to be provided for approaching top manhole
13	Type of Insulation	Injected CFC Free PUF 40 Kg/Cu.m
14	Thickness of insulation	40 Kg/ Cu.m density 50mm (min) in the walls & 90 mm below the evaporator to allow 1 Deg. C temperature rise at given ambient conditions in 4 hours after milk is brought to 4 Deg. C and when the BMC is not operating
15	Efficiency of Insulation	0.019 W.m/k
16	Facility to measure milk volume	1 No. Dip Stick of AISI 304 3mm thick on wall of tank. Calibration accuracy 0.5%, Laminated calibration chart.
17	Product contact surface	2 B Finish
18	Weld surface finish	min. 150Grit. All joints minimum 25mm radius curvature
19	Tank cleaning Brushes	1 tank Cleaning Brush and 1500 mm long pipe cleaning brush 6 no. SS pipe hooks for 5KL BMC
20	CIP Facility	Would require selecting the facilities for CIP. CIP Spray balls & SS piping from balance tank through milk pump to BMC and back to balance tank and other necessary accessories required.

2. Twin Condensing Unit with Two Scroll Compressor (Danfoss Make MLZ48)

Sl. No	Particulars	Technical Specification
1	Standard	ARI standard 520-2004 & ISO 5708 Type 2A II (Latest version)
2	Design Parameters	0°C evaporation and applicable discharge temperature minimum 60°C condensing temperature.
3	Type	Direct Expansion
4	Type of Refrigerant	R407 C/R404a or CFC free refrigerant.
5	Cooling capacity of each compressor	<ul style="list-style-type: none"> Adequate capacity to ensure milk cooling time periods specified and ambient conditions of 48 Deg. C mentioned above. Compressor selected should be compatible for multiple refrigerants including future refrigerant R 407 C
6	Number of compressor	Two

7	Type of compressor	Hermitically sealed reciprocating/ scroll (preferably Danfoss make MLZ48)
8	Type of condenser	Air Cooled. Condensing temperature should not be less than 60°C.
9	Condenser volume	Standard
10	Receiver	Min 4 Liters
11	Condenser fan	With internal thermal protection device
12	Pump down system	Required
13	Removable filter pad/ mesh	To be provided in front of condenser and protective grill
14	Expansion valve	Thermostatic expansion valve
15	Drier, solenoid valve, sight glass, HP/LP	To be supplied by bidder
16	Accessories	Isolation valve at suction & discharge sides of compressors, all pipes, valves fittings and control shall comply with latest relevant BIS code applicable, copper piping between tank and Condensing Unit shall be supported / routed by cable tray and cable tray supports Condenser units should be placed on platforms

3. Refrigeration Control Panel

Sl. No	Particulars	Technical Specification
1	Control Panel	Required
2	Wall or Tank mounted	Wall mounted
3	MOC of Panel & Thickness	AISI 304/1.6mm
4	Temperature Display	LCD. 0 to 100 Deg. C with one decimal accuracy
5	Cooling & agitation control	Required controls for management of cooling control and agitation provision for cut- off / restart intermitted operation of agitator auto & manual facility
6	Battery Back - up	Required
7	RS 232 port for Temperature sensor	RS 232 connectivity for temperature data transfer shall be provided
8	Refrigeration	Required

	Control Panel	
9	Wall mounted	Wall mounted
10	MOC of Panel & Thickness	AISI 304/1.6mm
11	Rating of contactors	Standard to meet functional requirements of the Refrigeration
12	UV/OV trip facility	Required
13	Neutral Protection unit	Required
14	Timer On Delay	Required
15	Auto / Manual Mode (Selector Switch)	Required
16	Make of components	Load break Switch, Contactors, MCB- L&T / Siemens make

Main control panel with servo voltage stabilizer, 25KVA, 3 Phase

Sl. No	Particular	Technical Specification
1.	Servo voltage Stabilizer	Required for stabilizing the power supply to BMC from grid or DG set.
2.	Voltage Range	<ul style="list-style-type: none"> 300 to 500 for 3 phase BMC
3.	Rating	<ul style="list-style-type: none"> 25 KVA-3 phase for 5 kl BMC
4.	MOC, thickness and type of structure	MS power coated, 1.6 mm & pipe structure
5.	Accessories for 3 Phase stabilizer	40 A MCCB for incoming, 40 A phase selector, change-over and bypass switch, LED lamps, Servo controlled correction transformer. Digital V, I, F indicator for input and output, 63 A terminal blocks OV/UV trip with delay time, single phasing preventer, static type energy meter with 0. 60 A capacity, Brass metal glands MCB's (TPN 40A -2 no's, TPN 32 A-1 no. TPN 16-A1no) Metallic pump socket, Servo Motor
6.	Operating features	Cable entry from top, response time-5 milliseconds, should withstand 150% load on surge duty, capacity of terminals should be 150% rated current Dimmer with CGRO core separate Auto manual facility plug in type control card for each phase, correction speed-105 viz. Efficiency 99.5%
7.	Preferred make	Reputed brand. Brand name to be mentioned in tender.

5. Data Logger (Optional)

The data logger should automatically monitor and record all parameters of BMC tank, allowing conditions to be measured, documented, analyzed and validated. The device should be used as

computer as a real time data recording system.

6. **SS304 Pipes and Fittings, 38mm (Approx.20 Mtr with 3 Plug Valves)**

The pipe line shall be 38mm. You should quote rates for the pipes and fitting works for 20 Mtr. Actual payment shall be made on the basis of actual quantity of work executed, ie based on the actual measurement verified by authorized officials of TRCMPU Ltd

7. **Plug Valves**

You should supply 3 nos of 38 mm SS plug valves.

8. **SS304 Balance Tank Cap: 220L**

SI.No	Description	Specification Requirement
	Balance Tank with SS strainer	The tank and strainer to be fabricated out of 1.6 mm SS304 sheet. General arrangement drawing shall be approved by TRCMPU Ltd
	Balance tank capacity	Minimum 220L
	Tank accessories	<ul style="list-style-type: none"> • Outlet with butterfly valve with expandable union and adjustable ball feet (Min 50mm vertical) • SS removable cover with handles. • Outlet to end in cup type for easy draining of milk and CIP solution.

9. **Milk Dump Tank (Capacity - 500 Ltr) with SS INLINE Strainer**

SI.No	Particulars	Item Specification
1	Milk dump tank cap 500L	SS 304 Minimum 2mmthick sheet, 500 Litre (Gross) <u>rectangular in shape</u> , Slope-1:15 Towards outlet (from all 3 sides) All weld joint ground smooth. All SS Surfaces to be polished to 150 grit. All inside corners shall have minimum radii of 25 mm. The top edges of the tank shall be bent outward smoothly with SMS 51 mm BFV valve at outlet.
2	Strainer	SS Inline strainer of reputed make to be fixed at Dump tank Outlet

10. Milk Pump:

Sl.No	Particulars	Technical Specification
1	Milk Pump	2 Nos (1Working (3 Phase)+ 1 Stand by (Single Phase)
2	Material of Construction	SS 304
3	Flow Rate	10000 LPH
4	Head	10MWC
5	Pump inlet /outlet	38/38 mm SMS union
6	Power rating	1.5 Hp

11. Electronic Weighing Machine cap: 300Kg (suitable to keep 4 nos. 40L SS cans)

Sl. No.	Item	Details
1	Capacity	300 Kg (Accuracy +/-0.2%)
2	Resolution	20 gm
3	Load cell	Stainless Steel, bending beam, resistive strain gauge type, and Load impact 300%, Shear, resistive strain gauge type IP - 68 protection.
4	Power	12 Volt DC/220 Volt AC
5	Over Protection	Load Required
6	Shock Protection	Load Required
7	Auto Facility	Tare Required
8	Auto Zero	Required
9	Computer Connectivity	Required
10	Stamping	The EWS shall be stamped from weights & measures department at site.
11	Platform Material	Stainless Steel, 1.5 mm
12	Base Material	frame Stainless Steel
13	Platform size	To be hold the legs of balance tank
14	Levelling Type	screw SS 304 Required
15	Over Charge Protection	Required
16	Display	7 Segment, Green/Red LED digits
17	PC Interface	RS 232
18	Platform	To hold the balance tank with milk steadily and

	requirement	provide accurate reading
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12. DG Set

1	Capacity	25kVA, 415V, 3Phase
2	Engine	Water-cooled diesel engine
3	Alternator	Brushless alternator
4	Enclosure	Acoustic enclosure (CPCB compliant)
5	Fuel Tank	Minimum 8 hours operation capacity
6	Standards	CPCB norms for emission and noise

13. Installation & Commissioning, trial runs and putting the BMCU in operation on milk

Installation & Commissioning, trial runs and putting the BMCU in operation on milk	
Particulars	Work required to be carried out.
Installation of BMCU and supporting accessories	<p>The installation work should be carried in the best workman like manner in conformity to the relevant codes of practice of BIS standards applicable for mechanical & electrical installation.</p> <p>Installation of all equipments & interconnecting piping, including minor civil works such as earthing pit & chamber, providing stainless steel pipe support, SS base plates, clamps, valves union etc. required to secure the equipments and piping to walls and floors is to be provided.</p> <p>Supply, laying, connecting terminating a;; necessary electrical and control cables through the cable trays. GI pipes/conduits, cable gland sockets at ends, isolators, junction boxes etc. are included in the scope of the work.</p> <p>Cable trays and supporting steel members such as Galvanized angles/channel/flats shall be used and fixed/installed at appropriate place to ensure safe installation.</p> <p>The laying of cables on the floor or used the floor is</p>

	not permitted. Copper piping between BMC tank and condensing unit shall be supported/routed by cable tray and cable tray support.
Interconnecting piping for the entire plant	SS 304 piping 38mm dia.1.6mm thick. Provide and install extended pipe for connecting milk hose for milk tanker loading-unloading.
Tool box with required tools	A standard tool box of GI sheet with necessary tools form normal maintenance. It should include Electric tester, Screw Driver Set. Allen Key 3 mm &6 mm. Pipe Wrench 12" Long. Screw Spanner 6". Fix spanner Set6-27,Gasket for SS Unions/valves-3 sets and extra mechanical seal for pump.
Operation manuals	2 set in English
P&I Drawing for the complete system offered	Drawing to be provided.
Commissioning	Supplier shall arrange commissioning & performance trial runs of the bulk milk cooling system ensuring that BMC meets all performance parameters. In case of unavailability of Milk. Supplier gas to take trial on Water.

Training	Supplier shall arrange for training of the operating team of DCS for efficient operation and maintenance of the complete system for a min 3 days.
Warranty	All equipment (including bought out items) supplied and installed by the contractor shall have a comprehensive warranty of 12 months from date of commissioning/ 18 months from the date of supply whichever is earlier.
Inspection	Client reserves right to inspect all the components of the bulk milk cooling system during fabrication/manufacturing stage, finished stage before dispatch of the equipments. The milk cooling tank shall be checked with dye penetration test for welding defect. Surface roughness check, water tightness test/hydraulic test

TECHNICAL COMPLIANCE & PARTICULARS TO BE FILLED BY BIDDER

Sl. No.	Particulars	Bidder's Offer/Details
1	Name of Bidder	
2	Manufacturer / Authorized Dealer	
3	Years of Experience in same field	
4	Number of similar installations completed	
5	Service support available in Kerala/South India (Yes/No)	
6	Offered BMC total Capacity (Litres)	
7	BMC Standard (ISO 5708 Type 2II)	
8	Make of BMC Tank	
9	Material of Construction of BMC Tank	
10	Cooling time compliance confirmed (Yes/No)	
11	Make and model of Compressor	
12	Compressor Rating (TR / HP)	
13	Type of Compressor	
14	Refrigerant Offered	
15	Make of Condensing Unit	
16	Make of Refrigeration Control Panel Components	
17	Make of Contactor/MCB	
18	Make of Servo Voltage Stabilizer	
19	Rating of Servo Voltage Stabilizer (KVA)	
20	Make of DG Set	
21	DG Set Rating (kVA)	

22	Make of Milk Pump	
23	Capacity of Milk Pump (LPH)	
24	Make of Electronic Weighing Machine	
25	Capacity of Electronic Weighing Machine (Kg)	
26	SS304 Piping included (Yes/No)	
27	CIP Facility included (Yes/No)	
28	Installation & Commissioning included (Yes/No)	
29	Training included (Yes/No)	
30	Warranty Offered	
31	List of Deviations, if any	

GENERAL TERMS & CONDITIONS

1. Inspection:

The equipment under the purview of your supply should be inspected by your own technical experts at your works, and such Inspection Report should be forwarded to us in triplicate. However the TRCMPU reserves its right to inspect at any stage of fabrication / manufacture of the equipment / material. You should intimate TRCMPU without fail when the equipment is ready for inspection, including the stage wise inspection. You should not proceed with further manufacture and / or dispatch of equipment, without obtaining a clearance certificate after inspection or our written permission. You should forward to us the Test Certificates wherever applicable, obtained from concerned authorities / principal manufacturers either regarding quality of any other details of the items utilized in the process of manufacture / fabrication.

2. Dispatch Instructions:

The materials are to be dispatched to the project site by the mode of transport specified in the order under intimation to us. Depending on the type of material, you shall have to carry out proper packing / crating to avoid breakages in transit. Other details of dispatch such as marking consignee's particulars etc. are mentioned in the Purchase Order. For using any mode of transport other than the specified one, prior concurrence from us in writing should be obtained. All consignments should be dispatched on freight paid basis irrespective of price basis. In the event of freight payable extra by us, you should have to obtain our prior approval and produce necessary documentary evidence in support of your claims. Unless otherwise stated, the original RR/LR should be sent by Registered Post directly to the consignee along with a copy of invoice and 2 copies of Delivery Challan / Packing List.

3. Insurance

You should have to arrange all transit risk insurance, warehouse to warehouse basis including storage risk coverage for a period of 6 months from the date of arrival of goods at destination for the items to be supplied by you. In cases where orders are placed on ex-works basis, the premium shall be paid by us at actual to you against production of documentary evidence. In the event of any damage to / loss of consignment in transit, it will be your responsibility to lodge necessary claims with the carriers / underwriters and pursue them till settlement. Since the insurance policy will be obtained in our name, we shall, if required, give you necessary authorization letter authorizing you to lodge and pursue claims on our behalf with the carriers / under writers. You should also have to make good the losses / damages occurring in transit by making replacement / payment to us in the first instance; if claims are settled by the underwriters and any amounts are realized by us, the amounts thus realized in settlement of claims shall be reimbursed to you. In other words, the prima facie responsibility for getting compensation for the damages / losses incurred, due to all transit hazards, if any, rests with you.

In cases where the purchase order is placed on "free delivery at site" basis, no insurance premium will be paid by us. However in such cases also, all transit risk insurance policy must be obtained to safeguard your own interest and to protect the material against transit hazards.

4. Delivery

The stipulated delivery time given in the Purchase Order is the essence of this contract. You must therefore, strictly adhere to the delivery schedule mentioned in the Order.

5. Demurrage

You should bear and reimburse to us full demurrage if any, paid by reason of delay on your part in forwarding the original dispatch documents at the destination mentioned in the Purchase Order.

6. Rejection:

We reserve the right to reject the goods either in part or full if at the time of delivery, if it is noticed that the goods supplied do not conform to the specifications / description given in the Purchase Order. The rejection, if any, will be intimated to you in writing within a reasonable time. You will be liable to repair/replace the rejected goods within the stipulated time. Till the repair / replacement is made, the rejected goods should be lying at your risk, cost and responsibility. If you do not arrange to repair / replace the rejected goods within the period stipulated by us, we may dispose of such goods at your risk and in the manner which we think fit. We shall be entitled to retain the proceeds of disposal either in part or full towards the expenses incurred on storage, handling and disposal of the rejected goods. We shall also be entitled to recover the expenses made by us on storage and handling of such rejected goods till the goods are removed from our premises/stores.

7. Liquidated Damages and Recovery of Advance:

The accepted delivery schedule of supply and/or installation should be governed by the Liquidated Damages and Recovery of Advance clause. Each unit of an item should be delivered to destination and ready for operation not later than the delivery date specified in the purchase order. If you fail to deliver any of the goods or perform the services within the time period(s) specified in the purchase order, TRCMPU shall without prejudice to its other remedies under this purchase order, deduct from the order price as liquidated damages, a sum equivalent to 0.5% of the full Purchase order value for each week of delay. The total amount so deducted should not exceed 5% of the purchase order value. Once the maximum is reached the TRCMPU may consider cancellation / termination of purchase order.

In case you fail to supply the equipment within the stipulated delivery period plus 20% of the same as grace period, subject to a minimum of 15 days, the purchase order shall stand cancelled and the supplier should refund the advance, if paid, along with interest at the rate of 18% per annum compounded quarterly on the last day of March, June, September and December, on the advance paid, for the entire period for which the advance was retained by the supplier. This will be without prejudice to other remedies like risk purchase etc. Any incremental taxes, duties and levies on account of the delay in the execution of the purchase order by you will be to your account.

8. Guarantee

The supply of equipment as well as installation, if entrusted, should have to be carried out by you to the entire satisfaction of TRCMPU. You should also guarantee to repair / replace without any extra cost, the items or parts thereof, if found defective due to bad designing, workmanship or substandard material brought to your attention within 12 months from the date of putting on use / commissioning or 18 months from the date of receipt of material at site whichever is earlier. If it is necessary to send the defective equipment or parts thereof to your works for repair / replacement, without forming any precedence, the cost of repacking, loading, unloading, transportation from the site to your works and back to site should have to be borne by you.

The guarantee however does not cover any damage resulting from normal wear and tear or improper attendance or mishandling of the equipment during repairs by personnel other than the supplier or his authorized agents.

In case of installation jobs you should have to guarantee the complete installation for satisfactory performance for a minimum period of 12 months from the date of commissioning of the plant / equipment. Any defect arising out of faulty erection / installation or use of substandard material or workmanship should have to be rectified by you at your cost.

9. Warranty

You must provide a warranty for a minimum period of 12 months from the date of commissioning of the equipment for satisfactory performance of the supplied equipment according to the designed / rated / installed capacity or any other norms fixed by

TRCMPU.

10. Specifications & Manuals :

Operation and maintenance manuals and service instructions along with the drawings showing details of part list against each item of your supply be sent to us in triplicate.

You should also furnish us service requirements like water, electricity, lubricant, air etc., for each equipment wherever applicable.

You should provide a list of spare parts, which will be required for the equipments supplied by you for at least one year of normal operation with the names and the addresses of the manufacturers from whom they can be procured. The list should contain the code numbers of the parts which are required to be procured, in addition to the machine number, models etc.

11. Submission of Bills :

Bills in triplicate under Registered Post, stating therein our Purchase Order reference along with necessary copies of Dispatch documents are to be sent to the respective Office. Unless otherwise stated the payment should be made to you by Crossed Account Payee cheque by post according to the terms of payment mentioned in the Purchase Order.

12. Drawings.

Drawings of the equipment with all structural details/dimensions, material specifications, bill of materials, etc should be forwarded to the TRCMPU Ltd to enable them to prepare the site to facilitate installation of the equipment immediately on receipt of the same. It is your responsibility to take site measurement, prepare detailed drawing and submit the same for your approval. The drawing should include all the items for completing the work in all respects.

13. Cancellation of Contract

We shall be free to cancel our order either in part or full, in the case of non-delivery of material / non-completion of installation within the stipulated delivery period or breach of any of the clauses mentioned herein. Consequential losses if any, on account of our getting installation done or obtaining supplies from alternative sources besides payment of higher price shall be recovered from you.

14. Sub- Contract

In the event of awarding sub contract to any party / parties by you for the manufacture / supply /erection of any parts / spares / components that will be used in the ordered equipment, you must furnish us details about your sub signature of bidders, their experience, specialization etc. The sub-contract can be awarded by you only after obtaining written approval from us. In the event of sub-contract also the prima facie responsibility rests on you regarding quality, quantity, guarantee / warranty of the materials supplied by the sub-signature of bidders.

15. Force Majeure

The terms and conditions mutually agreed upon shall be subject to Force Majeure Clause. Neither the supplier nor the purchaser should be considered in default in performance of his / their obligations here under if such performance is prevented or delayed because of war, hostilities, revolution, civil commotion, strike, epidemic accident, fire, wind, flood, earthquake or because of any law order proclamation, regulation or ordinance of any Government or of any act of God or any other cause whether of similar or dissimilar nature, beyond the reasonable control of the party affected. Should one or both the parties be prevented from fulfilling his / their contractual obligations by a state of Force Majeure lasting continuously for a period of six months, the two parties should consult each other regarding the future implementation of the contract / purchase order.

16. Power

Power will be supplied free of cost at one point. The bidder should make his own arrangements to provide necessary cables isolators etc to tap the power to the point of requirement during erection work, as per standards.

17. Arbitration

In case of any dispute, the Registrar of Co-operative Societies of Kerala State shall be the sole Arbitrator as per the provisions of Kerala Co-operative Societies Act 1969.

18. Employees state insurance

The contractor should arrange for insurance etc. of his people employed for erection and installation work as per ESIC act workman compensation and any other provision to meet statutory requirement of various labour Act / Rules. In case of accident to any of the workers during the period of installation, TRCMPU shall not bear any liability what so ever, the entire responsibility primary and final in this respect will be that of contractor.

19. Jurisdiction

THIRUVANANTHAPURAM (KERALA) Only

**RARARAJ R KAS
MANAGING DIRECTOR**