



THE ODISHA STATE CO-OPERATIVE MILK PRODUCERS' FEDERATION LTD.

D-2, SAHID NAGAR, BHUBANESWAR-751 007.

Phone: (0674) – 2540273 / 2546030 / 2540417

Tele Fax: (0674)-2540974, E-mail: omfed@yahoo.com

TENDER DOCUMENT

FOR

Supply, Installation, Commissioning & Testing of Bulk Milk Cooler, DG Set, Road Milk Tanker, Automatic Milk collection Unit (AMCU), Electronic Milk Tester (EMT), Milk testing Equipment (MTE), Aluminium Milk can 40 Liter capacity, SS Milk can 5 liter capacity .

Date of Commencement for Bidding	24.12.2022, 10 AM onwards
Last Date & Time for Bidding	10.01.2023 (Up to 5.00 PM)
Date & time for receipt of the hard copies of Demand Draft for paper cost & EMD	24.12.2022 to 10.01.2023 (10.00 AM to 5.00 PM)
Date & Time of opening of Technical Bid (After evaluation of Technical Bid, the date of opening of Commercial Bid shall be informed to the qualified bidders)	11.01.2023 & 12.01.2023

RECEIPT OF TENDER PAPERS :
PLACE OF OPENING OF TENDER :
ADDRESS FOR COMMUNICATION :

**THE ODISHA STATE COOPERATIVE
MILK PRODUCERS' FEDERATION LTD
(OMFED)
D-2, SAHIDNAGAR,
BHUBANESWAR- 751007**

**The Odisha State Cooperative, Milk Producers' Federation Ltd.
D-2, SAHID NAGAR, BHUBANESWAR-751 007.
Ph No- 2546030 / 2540273 / 2540417, Fax No (0674)2540974**



www.omfed.com

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D- Sahid Nagar, Bhubaneswar-751007
Ph. No- (0674) 2546030 /2540273/ 2540417,
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TENDER NOTICE

FOR

Supply, Installation, Commissioning & Testing of Bulk Milk Cooler, DG Set, Road Milk Tanker, Automatic Milk collection Unit (AMCU), Electronic Milko Tester(EMT), Milk testing Equipment (MTE), Aluminium Milk can 40 Liter capacity, SS Milk can 5 liter capacity .

OMFED invites sealed and separate offers for Technical & Commercial bids from reputed Manufacturers/ Distributors for supply, installation, commissioning, testing and running of Bulk Milk Cooler, DG Set, Road Milk Tanker, Automatic Milk collection Unit (AMCU), Electronic Milko Tester (EMT), Milk testing Equipment (MTE), Aluminium Milk can 40 Liter capacity, SS Milk can 5 liter capacity . Tender document can be down loaded from web site www.omfed.com against payment of required amount in shape of Demand Draft drawn in favour of OMFED drawn on any nationalized bank payable at Bhubaneswar. The Tender document should be duly filled & submitted on due date along with the cost of paper .

The sealed technical & commercial bid along with required EMD (inside commercial bid) should reach the above addressed office by Dt. - 10.01.2023 up to 5 PM hours. The Bid shall open on 11.01.2023 & 12.01.2023 at 11 A.M. to 4.00 P.M. in presence of interested bidders. For details please visit our website www.omfed.com

The corrigendum/ amendment to this notice required shall be published only in the OMFED website and will not be published again in newspapers.

OMFED reserves the right to cancel partial or whole tender without assigning any reason thereof.

Sd/-

MANAGING DIRECTOR



The Odisha State Cooperative, Milk Producers' Federation Ltd.

D-2, Sahid Nagar, Bhubaneswar-751 007.

Ph. No- 2546030/2540273/2540417, Fax No (0674)2540974

Bid Identification No. 498 / CSS / NPDD / SL(Vol-II) /

Sl no	Items	Capacity	Quantity	Estimated total cost (in lakhs)	Cost of tender Paper (Rs.1000/- + GST 18%)	Availability of Tender Document for online bidding (Date)		Date of Opening	EMD (in Lakh)
						From	To		
01	Bulk Milk cooler (BMC) of different capacity with D G Set , Servo voltage stabilizer and weighing scale of in line capacity on composite basis	1KL	02	14.40	Rs.1180.00	24.12.22	10.01.23	11.01.23 11.00 AM	0.29
		2 KL	20	167.00	Rs.1180.00				3.34
		5 KL	05	55.00	Rs.1180.00				1.10
02	DG Set	15 KVA(3 Phase)	30	84.00	Rs.1180.00	24.12.22	10.01.23	11.01.23 at 12.30 PM	1.68
		15 KVA (1 Phase)	19	53.20	Rs.1180.00				1.06
		30 KVA	19	61.75	Rs.1180.00				1.24
03	Road Milk Tanker	2KL (with chassis & barrel)	1	16.00	Rs.1180.00	24.12.22	10.01.23	11.01.23 at 2.30 P.M.	0.32
		5KL (with chassis & barrel)	1	20.00	Rs.1180.00	24.12.22	10.01.23		0.40
04	AMCU (Automatic milk collection unit) with soft ware loaded	One Unit	227	65.00	Rs.1180.00	24.12.22	10.01.23	11.01.23 at 4.00 P.M.	1.30

05	DPMCU	One Unit	150	150.00	Rs.1180.00	24.12.22	10.01.23	12.01.23 at 11.00 AM	3.00
06	Aluminum milk cam	40 Ltr	400	15.20	Rs.1180.00	24.12.22	10.01.23	12.01.23 at 11.30 A.M.	0.30
07	SS Milk can	5 Ltr	5000	20.00	Rs.1180.00	24.12.22	10.01.23	12.01.23 at 12.00 noon	0.40
08	MTE (Milk Testing Equipment)	Set	100	25.00	Rs.1180.00	24.12.22	10.01.23	12.01.23 at 2.30 P.M.	0.50
09	Electronic Milko testers	Set	80	20.00	Rs.1180.00	24.12.22	10.01.23	12.01.23 at 3.30 P.M.	0.40

OMFED invites Technical & Commercial offer from original equipment manufacturer or their authorized channel partner for supply, installation, commissioning of above Machineries at different sites for our Milk Unions. The open tender is invited by OMFED & web. Portal is www.omfed.com. The bidders should have gone through this portal for participating in this open tender.

2. Bid documents consisting of specifications, the schedule of quantities and the set of terms and conditions of contract and other necessary documents can be seen and downloaded in the website: www.omfed.com. The corrigendum/amendment to this notice if required shall be published only in the OMFED web site www.omfed.com and will not be published again in news paper.

3. The **Bid documents for bidding will be available** in the website: www.omfed.com from **24.12.22 to 10.01.23 (10.00 AM to 5.00 PM)**

4. (i) The tender paper cost (in shape of D/D) & EMD (in shape of D/D) in original, to be submitted

(ii) Photo Copy of GST, PAN, Registration Certificate of firm, Experience Certificate, other documents as per detail tender call notice(DTCN) with duly signed by the bidder (Only Papers relating to Technical Bid) is to be submitted.

(iii) Financial Bid in a separate closed envelope captioned as "**Financial Bid**" on the envelope.

As mentioned **4 (i), (ii) & (iii)** shall have to be deposited in different sealed envelopes within **10.00 A.M. of 24.12.22 to 05:00PM of 10.01.23** at the OMFED Corporate office, Bhubaneswar.

Non submission of cost of bid document and bid security within the period shall debar from participating.

5. Bids shall be received only **on or before 5.00 PM of 10.01.2023**

6. Bids received shall be opened (technical) **on 11.01.23 & 12.01.2023 (time as mentioned)** at OMFED Corporate office in the presence of the bidders. If the office happens to be closed on the last date of opening of the bids as specified, the bids will be opened on the next working day at the same time and venue.

7. The cost of bid documents & EMD in demand draft issued from any **Nationalized Scheduled Bank may be prepared in favour of OMFED, payable at Bhubaneswar.**

8. The Co-operatives, Govt. bodies, NSIC and MSME registered firms are exempted from submitting required EMD.

9. Other details can be seen in the bidding documents.

10. The Financial bid will be opened among the technically qualified bidders & it will be intimated in due time

11. The management reserves the right to cancel any or all bids without assigning any reason thereof.

12. Any corrigendum / addendum will be displayed only in the OMFED web site (www.omfed.com)

13. Defaulters in earlier supply to Omfed or Black listed anywhere in the country are not allowed to participate in the tender.

14. Jurisdiction – The court at Bhubaneswar alone will have jurisdictions for any legal dispute which may arise out of this tender

Sd/-

Managing Director,

OMFED

GENERAL TERMS & CONDITIONS:

1. Eligibility Criteria

- 1.1 The manufacturing company should provide after sale service for the supplied Laboratory items.
- 1.2 The average annual sales turnover of the manufacturing company detailed out below.

Sl. No	Item Description	Minimum Average Annual sales turn over (Rs) for the year 2019-20 to 2021-22
1	Bulk Milk Cooler	15.00 Crore
2	D.G Set	10.00 Crore
3	Road Milk Tanker	10.00 Crore
4	DPMCU	3.50 Crore
5	AMCU	7.00 Crore
6	Aluminium Milk Can- 40 liter capacity	50.00 Lakhs
7	S.S Milk Can- 5 liter Capacity	30.00 Lakhs
8	Milk Testing Equipment	30.00 lakhs
9	Electronic Milko Testers	30.00 Lakhs

1.3 The bidder should have supplied above Machineries to different Milk Unions/Milk Federations/Dairy Plants for the year 2019-20 to 2021-22& should submit the proof along with the copy of Purchase Order.

2. Specification: Each supply of these materials must conform to the Technical Specification enclosed as **Annexure – I to Annexure - XI** .

3. Quantity Requirement: Attached separately as **Annexure - A**

3.1 The quantity may vary and will be as per rate that will be finalised & at the discretion of OMFED.

4. Offer Price/Rate: Quoted price should be FOR inclusive of all taxes, transport & insurance charges, installation, commissioning, Training etc.

4.1 In case there is any increase/reduction in Government taxes, excise, levis, the same will be made effective immediately.

5. Delivery Time: Supply, commissioning, testing & running within **60 days** from the date of acceptance of the order, directly at site.

05.1. The default penalties during deliveries of goods at all destination/site shall be in your accounts and no any extra charges paid for the same.

05.2. The goods to be supplied, shall be fully insured by supplier against loss/ damage incidental to manufacturer or acquisition, transportation, storage and delivery in the manner specified in the condition.

05.3. If any loss/damage occurs, the supplier shall make arrangement for repair and replacement of the same within the stipulated time.

6. EMD/Security deposit:

06.1. You are required to pay EMD/security deposit by demand draft drawn in favour of **OMFED**, payable at Bhubaneswar as per the terms of the business.

06.2. This EMD/Security Deposit will carry no interest & shall be refunded only after completion of orders/contract satisfactorily and after obtaining clearance certificate from member unions that there are no outstanding dues to be recovered from you.

7. Change in terms, conditions & specifications: In case of any midyear change in terms, conditions & specifications decided by OMFED management, we reserve the right to cancel the contract with you in part or in full. However, in such instance, we shall provide you with adequate notice period.

8. Inspection: OMFED reserves the right to depute either our representatives or representatives of our member-unions or of any independent body for inspection of materials while the same are under manufacturing, installation/commissioning etc. To facilitate inspections as and when necessary, you will be required to give prior intimation as to when you are likely to finish manufacturing of equipments. In case during such inspection the result is found unsatisfactory, we reserve the right to take whatever action is necessary to protect our interests. However; at our destination we may decide not to carry the inspection. But we may rely on the certificate of the supplier confirming that equipments manufactured as per the laid down specifications & standards.

9. Insurance For supply

The manufacturer shall have to arrange **all transit risk insurance warehouse to warehouse basis**, including strike clauses, for an amount equal to 110 % of the FOR destination value of the Goods, valid for a period of not less than 3 months after the expected date of arrival of Goods at destination.

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 in our name, if required, we shall give you necessary authorisation letter authorizing you to lodge and pursue claims on our behalf with the carriers/ underwriters. Also you shall have to make good the losses/ damages occurred in transit by making replacement /payment to us in the first instance and 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 rests on you for getting compensation of the damage/losses incurred if any, due to all transit hazards.

10. Transportation

The contractor is required to deliver the Goods FOR Destination, by road. Transport of the goods to the destination shall be arranged through a reputed and Bank approved transporter having local offices at destination and Bhubaneswar, and shall be paid for by the contractor.

11. Incidental services

11.1 The contractor is required to provide the following services:

- a) Performance of on-site assembly, installation, hooking-up to existing system, Start-up, testing, performance trial and handing over of the supplied goods;
- b) Furnishing of tools, tackles, jack and spanner etc. required for assembly and maintenance of the supplied goods;
- c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;
- d) Operation, maintenance and repair of the supplied goods for a period of 30 days, provided that this service shall not relieve the contractor of any warranty obligations under this contract; and
- e) Conduct of training of the OMFED'S personnel, on-site, in assembly, start-up operation, maintenance and repair of the supplied goods, if required.

11.2 Prices charged by the contractor for the preceding incidental services are to be included in the price of the contract.

12. Spare parts

12.1 The contractor may be required to provide any or all of the following materials and notifications pertaining to spare parts manufactured or distributed by the contractor:

- a) Such spare parts as the OMFED may elect to purchase from the contractor, provided that this election shall not relieve the contractor of any warranty obligations under the contract; and
- b) In the event of termination of production of the spare parts:
 - (i) Advance notification to the OMFED of the pending termination, in sufficient time to permit the OMFED to procure its needed requirements; and

(ii) Following such termination, furnishing at no cost to the OMFED, the blueprints, drawings and specifications of the spare parts, if and when requested.

12.2 Contractors shall carry sufficient inventories to assure ex-stock supply of consumable spares such as gaskets, plugs, washers, belts, etc. other spare parts and components shall be supplied as promptly as possible but in any case within six months of placement of order.

12.3 The obligation of contractor stated in Para 13.1 shall continue even after expiry of the contract.

13. WARRANTEE:

13.1 The contractor warrants that the goods supplied under the contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the contract. The contractor further warrants that the goods supplied under this contract shall have no defect arising from design, material of workmanship or from any act or omission of the contractor that may develop under normal use of the supplied goods in the conditions. The contractor also guarantees that the goods supplied shall perform satisfactorily as per the designed/rated/ installed capacity as provided for in the contract.

13.2 This warranty / guarantee shall remain valid for 12 months after the goods, or any portion thereof as the case may be, have been delivered & handed over to the OMFED after the performance of 30 days trial run period.

13.3 The OMFED shall promptly notify the contractor in writing of any claims arising under this warranty.

13.4 Upon receipt of such notice, the contractor shall, with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the OMFED.

13.5 If the contractor, having been notified, fails to remedy the defects(s) within a period of 30 days, the OMFED may proceed to take such remedial action as may be necessary, at the contractor's risk and expense and without prejudice to any other rights which the OMFED may have against the contractor under the contract.

This warranty/ guarantee shall not cover any damage/s resulting from normal wear and tear or improper handling by the OMFED or his authorized.

14. Terms of payment:

- Bills in triplicate shall be submitted along with a copy of P.O.
- 75 % on safe receipt of material at site in good condition.
- 15 % after successful commissioning/testing & running/report of equipment supplied.
- PSD @ 10 % of billed value shall be retained by ordering authority for a period of 02 years from the date of successful commissioning and shall be released subject to satisfactory performance.
- Any other statutory deduction like TDS etc. as applicable

15. Penalty:

Penalty @ 0.5 % of the order value per week shall be imposed for delay in execution beyond the time frame. The penalty amount will be Limited to 10% of the order value.

16. Termination for default

- 16.1 The OMFED may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the contractor, terminate the contract in whole or in part,
- (a) If the contractor fails to delivery an or all the goods within the time period (s) specified in the contract,
- Or
- (b) If the contractor fails to perform any other obligation(s) under the contract.

16.2 Termination for Insolvency

The OMFED may at any time terminate the contract by giving written notice to the contractor, without compensation to the contractor, if:

- (a) The contractor becomes bankrupt or otherwise insolvent,
- (b) The contractor being a company is wound up voluntarily by the order of a court receiver, liquidator or manager appointed on behalf of the debenture holders or circumstances shall have arisen which entitle the court or debenture holders to appoint a receiver, liquidator or a manager,
- Provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the OMFED.

17.0 Termination for Convenience

- 17.1 The OMFED, may by written notice sent to the contractor, terminate the contractor, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is of the OMFED'S convenience, the extent to which performance of work under the contract is terminated, and the date upon which such termination becomes effective.
- 17.2 The goods that are complete and ready for shipment within 30 days after the contractor's receipt of notice of termination shall be purchased by the OMFED at the contract terms and prices. For the remaining goods, the OMFED may elect:
- (a) To have any portion completed and delivered at the contract terms and prices; and /or
- (b) To cancel the remainder and pay to the contractor an agreed amount for partially completed goods and for material and parts previously procured by the contractor.

18. Settlements of Disputes

- 18.1 If the contractor considers any work demanded of him to be outside the requirements of the contract, or considers any drawings, record or ruling of the engineer on any matter in connection with or arising out of the contract or the carrying out of the work to be unacceptable, he shall promptly ask the engineer in written instructions or decision. There upon the engineer shall give his written instructions or decision within a period of fifteen days of such request.
- 18.2 Upon the receipt of the written instructions or decisions the contractor shall promptly proceed without delay to comply with such instructions or decisions.

18.3 If the engineer fails to give his instructions or decisions in writing within a period of fifteen days after being requested, or if the contractor is dissatisfied with the instructions and decisions, he shall appeal to the OMFED, which shall afford an opportunity to the contractor to be heard and to offer an evidence in support of his appeal. The OMFED shall give a decision within a period of thirty days after the contractor has given the said evidence in support of his appeal.

18.4 If the contractor is dissatisfied with this decision, the contractor within a period of thirty days from the receipt of the decisions shall indicate his intension to refer the dispute to arbitration, failing which the said decision shall be final and conclusive.

19. Arbitration

All disputes or differences in respect of which the decision is not final and conclusive shall, on the initiative of either party, be referred for adjudication as per the Arbitration And Conciliation Act 1996

20. Applicable law

The contract shall be interpreted in accordance with the laws of the union of India.

21. Notices

21.1 Any notice given by one party to the other pursuant to the contract shall be sent in writing or by telegram/ fax/ cable and confirmed in writing to the address specified for that purpose in the special conditions of contract.

22.2 A notice shall be effective when delivered or on the notice's effective date, which ever is later.

23.0 Taxes and Duties

The contractor shall be entirely responsible for GST, all taxes, duties, license fees etc compliance to the labour law. incurred until handing over of the goods and services to the OMFED. All Government fees paid for inspections and approvals by statutory authorities shall be reimbursed by OMFED on production of copy of treasury Challan for same. Service charges for depositing the govt. fees or submission of requisite forms with the statutory authorities shall be not being admissible.

24. Documents to be submitted in technical bid:

- Certificate from the clients with detail contact address to establish supply of the items.
- Proof of sales turn over(Audited Profit & Loss Account) with copy of P.O. 2019-20 to 2021-22Undertaking by the bidder that the bidder is not black listed by any Co-operative Milk Union/ State Milk Federation/Govt. Agencies.
- Audited profit and loss account for the year 2019-20 to 2021-22
- IT returns for the financial year 2019-20 to 2021-22
- Credentials in support of supply of these laboratory equipment.
- Performance certificate issued by the clients are to be furnished.
- Demand Draft towards tender paper cost.

- Demand Draft towards EMD.
- Printed technical literature / catalogue of these laboratory equipment
- Duly filled in Manufacturers' authorization letter (for authorized channel partner)
- Xerox copies of PAN / GST.
- Valid NSIC/MSME certificate holders are exempted from the EMD (subject to submit the copy of said certificate for verification).

25. Other Terms and Condition:

- The bidder cannot stipulate any terms and condition of his own beyond the tender requirements.
- The bid shall be rejected if not completed with tender requirement.
- All statutory approval is within the scope of the bidder.
- It is mandatory on the part of bidder to quote for the entire item as mentioned in the BOQ failing which the offer shall not be considered.
- All the required documents relating to Technical bid must be submitted.

26. VALIDITY OF OFFER:

02 year from the date of notification.

Signature:

Seal:

Date:

TECHNICAL BID

SI. No.	Description	Details
1	Name of the Company	
2	Office address	
3	Phone no, Fax no, E-mail	
4	Corporate Head quarter address & Contact no	
5	Local office address & contact no. in Odisha	
6	Website address	
7	Nature of Ownership	
8	Firm Regd. No. with date	
9	Details of Statutory Certificate/ License/ Clearance	
10	ISO Certification no./ Validity	
11	GST Registration No	
12	GSTIN No	
13	TIN. No	
14	PAN	
16	DD for tender cost	
17	DD for EMD	

Signature & Seal

Name:

Address:

Mail Id:

Mobile No:

Land Line No:

Documents to be submitted along with Technical Bid should be tick marked

Sl. No	List of Documents required for Technical Bid	Information	Tick Mark
01	Tender cost (Non- refundable)		
02	EMD		
03	Audited Financial statement for 2019-20 to 2021-22		
04	I.T return for last 03 Years i.e. FY 2019-20 to 2021-22		
05	PAN No(Photo Copy To Be Attached)		
06	GST Registration Certificate		
07	Banker's detail of bidders along with a cancelled cheque		
08	GST return (GSTR – I & GSTR – 3B) from April 2021 to October 2022.		
09	Registration certificate of the Company/ Firm		
10	Authorization letter from Original Manufacturers		
11	Client list		
12	Performance certificate given by the existing clients during last five years		
13	Experience during last five years		
14.	Service/Maintenance/replacement capability		
15	Sale and Support service capability		
16	Compliance Sheet of the Technical specification of the item		
17	Printed literature of the Item for which Tender being offered		
18	Previous Purchase order of other organization		
19	Self declaration of not black-listed any where in India		
20	Whether all the documents are properly signed with seal		
21	Whether Envelope 'Technical bid' and 'commercial bid' properly written.		
22	Whether the main envelope containing 'Technical bid ' & "Commercial bid ' properly sealed /signed and properly super scribed.		
23	Certificate by the farm that they have quoted the lowest rate		

COMMERCIAL BID

SI No	Description	Quantity	Make/ Name of Manufacturer	Unit Price FOR including installation & Commissioning (without Taxes) (In Rs.)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)

Signature of the Bidder:**Seal:****Date:**

COMMERCIAL BID FORMAT FOR BMC (Combo Unit)

SI No	Description	Quantity	Make/ Name of Manufacturer	Unit Price FOR including installation & Commissioning (without Taxes) (In Rs.)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
1KL BMC Unit (2 no)	BMC- 1 KL	02					
	D.G.- 15 KVA (1phase)	02					
	Stabiliser- 15 KVA (1phase)	02					
	Weighing Balance	02					
	Total						
2 KL BMC Unit (20 no)	BMC- 2 KL	20					
	D.G.- 15 KVA (1/3phase)	20					
	Stabiliser-15 KVA (1/3 phase)	20					
	Weighing Balance	20					
	Total						
5 KL BMC Unit (5 no)	BMC – 5 KL	5					
	D.G.- 25 KVA (3phase)	5					
	Stabiliser- 25 KVA (3 phase)	5					
	Weighing Balance	5					
	Total						

COMMERCIAL BID FORMAT FOR D.G. SET

Sl No	Description	Quantity	Make/ Name of Manufacturer	Unit Price FOR including installation, Commission (without Taxes) (In Rs.)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
1	15 KVA (single phase)	19					
2	15 KVA (Three phase)	30					
3	30 KVA (Three phase)	19					

COMMERCIAL BID FORMAT FOR ROAD MILK TANKER (RMT)

Name of the item	Technical specification	Make	Rate (in Rs.)	GST (in Rs.)	Total (in Rs.)
Road Milk Tanker combined with Chassis, driver's cabin and Insulated body	2000ltr	Chassis-TATA/ Mahindra/ Ashok Leyland / Eicher			
Rupees-----					

MANUFACTURER'S AUTHORIZATION FORM**To,****Date-****The Managing Director**

The Odisha State Co-operative Milk
Producers' Federation Ltd,
D-2, Sahid Nagar, Bhubaneswar-751007.

Ref: Tender notice No- Dated-

Sub: MANUFACTURER'S AUTHORIZATION LETTER.

Dear Sir,

We, M/s. (company name and address), who established and reputable manufacturers of (Name of The Item.....) having factories at (factory address.....),do hereby authorized M/s (Company name and address with GST No submit tender.....) to submit the tender for the goods manufactured by us.

No Company or Farm or Individuals other than M/s (Name and address of the company) are authorized to tender for the goods manufactured by us.

We hereby extended our full guarantee and warranty as per tender for the goods and services offer for the supply by the above firm.

For (name of the manufacturer)

Signature with Designation:

Seal:

Date:

TECHNICAL DEVIATION STATEMENT FORM

The following are the particulars of deviations from the requirements of the tender specifications.

CLAUSE	DEVIATION	REMARKS (Including justification)
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Dated-

Signature and seal of the

Manufacturer / Bidder

Note:

- (1) Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".
- (2) The technical specifications furnished in the bidding document shall prevail over those of any other document forming a part of our bid, except only to the extent of deviations furnished in the statement.

POINTS BIDDERS SHOULD BEAR IN MIND

- I. BIDS CONTAINING DEVIATIONS FROM BIDDING DOCUMENT TERMS AND OTHER CONDITIONS MAY BE REJECTED.
- II. BIDS NOT ACCOMPANIED BY BID SECURITY (EARNEST MONEY DEPOSIT) SHALL BE SUMMARILY REJECTED.
- III. NON-COMPLIANCE WITH EVEN A MINOR TECHNICAL REQUIREMENT SHOULD BE SPECIFICALLY STATED BY THE BIDDERS.
- IV. BIDDERS SHOULD FURNISH THEIR COMPLETE ADDRESS FOR THE PURPOSE OF FURTHER CORRESPONDENCE PERTAINING TO BIDDING DOCUMENT.
- V. CORRECTIONS IN THE BID SHOULD BE NOTED OVER AND INITIALED AT THE PLACE OF CORRECTIONS.
- VI. NEGLIGENCE OF THE BIDDER IN PREPARING THE BID CONFERS NO RIGHT TO WITHDRAW THE BID AFTER IT WAS OPENED.
- VII. SPECIFICATIONS, CONDITIONS, SCHEDULES AND DRAWINGS OF BIDDING DOCUMENT CONSTITUTE AN INTEGRAL PART OF THE BID.
- VIII. ALL THE BIDS ALONGWITH ENCLOSURES, DRAWINGS AND TECHNICAL LITERATURE SHOULD BE IN ENGLISH ONLY.
- IX. BIDDING DOCUMENT SHALL BE GOVERNED AND INTERPRETED ACCORDING TO THE SYSTEM AND COMPONENTS UNDER TROPICAL CONDITIONS.
- X. ALL THE BIDDERS SHOULD SUBMIT QUALIFICATION APPLICATION IN THE GIVEN FORMATS WITH REQUIRED DOCUMENTATION.
- XI. BIDS SHOULD BE KEPT VALID FOR ACCEPTANCE FOR A PERIOD OF 90 DAYS FROM THE DAY BIDS ARE OPENED.
- XII. THE BIDDING DOCUMENT SHALL BE GOVERNED AND INTERPRETED ACCORDING TO THE LAWS OF THE UNION OF INDIA.
- XIII. ALL BIDDERS ARE URGED TO SUBMIT PROMPTLY WRITTEN REQUESTS ON MATTERS WHERE CLARIFICATIONS OR ADDITIONAL INFORMATION ARE DESIRED, NOT LATER THAN SEVEN DAYS BEFORE BIDS ARE DUE TO OPENING. NO EXTENSION IN DUE DATE OF SUBMISSION OF BIDS WILL BE ALLOWED ON THIS GROUND.
- XIV. ALL THE BIDDERS SHOULD QUOTE FOR THE ITEMS AS PER THE SPECIFICATIONS AND DETAILS GIVEN IN THIS BIDDING DOCUMENT ONLY. IN CASE, ALTERNATIVE DESIGNS ETC. ARE TO BE OFFERED BY THE BIDDERS, THEY MAY DO SO BUT THIS SHOULD BE STATED SEPARATELY IN THE OFFER. ORISSA STATE CO-OPERATIVE MILK PRODUCERS' FEDERATION LIMITED RESERVES ITS RIGHT TO ACCEPT OR REJECT SUCH ALTERNATIVE OFFERS, WITHOUT ASSIGNING ANY REASONS THEREOF TO THE BIDDERS.
- XV. THE BIDDERS WHO QUOTE FOR SUPERVISION OF ANY VANS SHOULD ALSO INDICATE THE PRICES IN THE BID SEPARATELY.
- XVI. MANAGING DIRECTOR, ORISSA STATE CO-OPERATIVE MILK PRODUCERS' FEDERATION LTD. RESERVES THE RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS WITHOUT ANY EXPLNATION TO BIDDERS.

DECLARATION REGARDING NOT BLACKLISTED

To,

Date-

The Managing Director

The Odisha State Co-operative Milk
Producers' Federation Ltd.,
D-2, Sahid Nagar, Bhubaneswar-751007.

Ref : Tender notice No- Dated-

Sub : DECLARATION REGARDING NOT BLACKLISTED.

Dear Sir,

We M/s- (Name of the company and address.....)
declare that our company was not blacklisted by any Govt. Offices / govt.
Undertakings / Organisations / UNO agencies / PSU etc.

This is for your Kind Information please.

For

(**Name, Seal, Signature, Date.**)

DECLARATION

(To be filled in party's Letter Pad)

I/WE DECLARE THAT THE ABOVE INFORMATION IS TRUE IN ALL RESPECTS AND WE UNDERTAKE TO INFORM YOU IF ANY CHANGE IN THE ABOVE PARTICULARS REGARDING OUR BUSINESS FROM TIME TO TIME.

I/WE HAVE GONE THROUGH THE ABOVE MENTIONED CONDITIONS IN DETAIL BEFORE FILLING UP OUR RATES AND SUBMISSION OF THE TENDER PAPER.

I/WE ARE AGREEING TO ABIDE WITH THESE CONDITIONS UNTIL THE FINALISATION OF THE TENDER.

Enclosures:

Signature:

Name of Firm:

TIN/CST No.

Address:

Date:

Telephone No:

Annexure - I**TECHNICAL SPECIFICATION OF BULK MILK COOLER
BULK MILK COOLER (VERTICAL TYPE)****FUNCTIONAL REQUIRMENTS****(Bulk Milk Cooling Unit includes Bulk Cooler, DG set, Servo Stabilizer & Weighing Scale)**

The Bulk cooling units shall be used to cool raw milk at the village level co-operative milk societies from the ambient temperature to 4 degree centigrade in conformity to specified ISI 5708 2A II standard.

The cooling tank shall be used for immediately cooling the milk after milking so as to conserve the quality of milk and check the growth of microorganism. It is intended for daily collection of milk. It is a hygienic container built to sanitary standards, which besides cooling also serves as buffer storage prior to transfer of milk for onwards transportation for further processing.

Two milking system has been configured such that volume of each milking is as under.

- | | |
|--|-----|
| i) Milking in the morning (upto 10 AM) | 60% |
| ii) Milking in the evening | 40% |

The agitator provided in the cooling tank works intermittently and at a very gentle speed to avoid damage to the fat globules of milk . The agitator works only at temperatures below 20-25°C so as to conserve butter fat structure.

TECHNICAL DATA

The bulk cooling tanks shall confirm to ISO 5708 standard with categorization under Type 2AII.

Bulk Milk Cooler with Cover and Standard Accessories

Tank inner, outer, bottom laser evaporator jacket and to open able cover shall be fabricated from Stainless Steel AISI 304 material and welded with TIG process. The inner shell and all other product contact surface shall be polished up to minimum 150 grit.

The tank shall be complete with following.

- Top un-insulated cover with locking arrangement, inspection window, provision for agitator mounting an specially configured milk inlet. The top cover shall be hinged with a rugged arrangement comprising oil filled cylinders and mechanical springs to facilitate complete opening of tank cover for inspection and tank cleaning. A proper lifting handle in SS 304 construction is provided.
- Milk inlet complete with specially designed funnel terminating in no foam inlet arrangement with SS fine wire mesh.
- Outlets complete with specially designed lockable butter fly valve size 51 mm and terminating in proper en connection with blank union.
- The insulation of the tank shall be done by injection, in situ, of high-density(minimum 40 kg/.m³, CFC free and environmental friendly) polyurethane foam without having any imperfection and hygroscopicity. The efficiency of insulation is confirmed as per the requirement of ISO 5708 2A II (latest version) when the refrigeration unit is not working.

- Ball feet specially made to prevent tempering, which could result in erratic measurement.
- Agitator in SS 304 construction complete with direct mount specially designed motor. The agitator is designed for producing uniform distribution of fat in milk.

1.2 Milk Filter

Each system shall be provided with one AISI 304 filters with SS fine mesh suitable to filter extraneous matter such as dust particles, hay flies, cow dung etc. The filter shall be on balance tank. The filter shall be designed and installed in such a way that it can frequently & easily be cleaned. This milk filter shall be provided with balance tank only.

- 1.3 Stainless Steel Sanitary Milk Pump for loading and unloading of milk :** A sanitary design mono block pump of 10 KLPH @ 10 MWC and driven by three phase motor in standard design for all the BMC Modules is included in the scope. The pump shall have SS vis carbon seal and will be provided with 38 mm inlet and 51mm outlet connections. The pump shall be shrouded with SS 304 cover and the impeller and product conduct parts in SS 304 material.

1.4 CIP Solution Holding Tank for BMC

The bulk milk storage tank and the piping system are designed for manual cleaning. As required one number AISI 304 plain un-insulated tank for capacity 500 ltrs. with cover shall be separately provided to prepare CIP solution for use white cleaning. The CIP solution shall be prepared in hot water manually. It shall be provided only for gravity feed systems. For pumped feed the balance tank shall serve as CIP Solution Preparation and Holding.

2.0 Refrigeration Unit

The refrigeration system is designed for operation on R22 refrigerant for reciprocating/scroll compressors. The condensing units shall meet the latest safety standards. The System has to run on **SCROLL/RECIPROATING COMPRESSOR**.

The refrigeration system should be designed with twin condensing units. The total evaporator circuit is divided in two segments and each segment is connected to an independent condensing unit in case of twin condensing unit.

2.1 Compressor – Hermetically sealed reciprocating/Scroll compressor complete with drive motor. The motor is fully enclosed suitable for specified electrical supply. It is confirmed that the hermetic is provided with thermostat temperature sensor for protection against excess heating due to over loading and short – circuiting.

2.2 Condenser – Air-cooled, screen protected compact condenser unit comprising of finned condenser coils in several rows. Condenser fans of reputed make are fitted for the duty. The air circulation fans shall be induced draft type that will ensure blowing the air from inside to outside thereby making the system suitable for dusty and dry areas.

2.3 Receiver - A suitable size liquid receiver is included in the circuit of each condensing unit that would hold the refrigerant during maintenance and otherwise during the pump down cycle at the end of operation.

2.4 Thermostatic Expansion Valve – A thermostatic expansion valve shall be maximum operating pressure (MOP) type to ensure optimum quantity of refrigerant to the evaporator. It shall be ECTL make with suitably sized orifice if ECTL condensing units are considered and Danfoss Make if Danfoss condensing units are considered.

2.5 Evaporator – The Tenderer should ensure maximum efficiency of supplied system by using Laser welded evaporator having max. 5mm-9mm welding for max. cooling surface area with operating pressure of 30 bars and crash test pressure of 60 bars. Tenderer can be asked to show the sample of evaporator plate used. The evaporator shall be laser welded plate jacket put at the bottom plate of the inner tank. The total evaporator area is divided and separated in to two sections and each section shall be operated by one condensing unit. All connecting pipes terminating outside the tank are of stainless steel construction. The evaporator plate should be laser welded for all capacity bulk milk cooling tank.

2.6 Refrigerant Pipes & Fittings and Controls – Compressors are provided with isolation valves to ease the maintenance. Copper/SS tubing for refrigerant shall be properly laid to facilitate attending the leakage if occurred during operation without dismantling the total system. All pipes are properly clamped on fixed support and sponge insulated for protection.

3.0 ELECTRICAL CONTROL PANEL

Three control panels namely.

- 1) Main control panel with servo voltage stabilizer
- 2) Refrigeration control panel
- 3) Milk tank control panel are included in the scope.

Refrigeration control panel and milk tank control panels and the main control panel shall be conforming to following specifications:-

3.1 Main Control Panel with Servo Stabilizer 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 pump. The DG set should be hooked up with this panel through a '**manual change-over-switch**' in order to operate the DG set in place of State Electricity Board supply and & when required. It should be provided with necessary phase indication lamps (LED type), contractors, MCBs, ammeter, Voltmeter, energymeter, 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 (charge indications shall be displayed on the panel) should be provided.

3 phase Voltage stabilizer (servo type) and single phase preventor: The system should have Voltage Stabilizer conforming to following features and single phase preventer of suitable rating:

- Input Range Phase – 300 to 325 VAC (three phase power supply)
- Output self adjustable for a range of $\pm 5\%$
- Supply Frequency - 47 to 53 Hz
- Load & Line Regulation – 1%
- Output A.C. Voltage correction for wide input variations
- No output waveform distortion
- Fast correction of output voltage :20V/sec.
- Auto/manual operation facility

- Under –voltage and over voltage cut-out arrangement □ Voltmeter with facility to read input or output voltage
- High efficiency
- Compact and modular construction for ease in servicing
- M.C.B. on input circuit
- The ratings considered for BMC 63 KVA

3.3 Refrigeration Control Panel :

One number control panel in dust and vermin proof design in stainless steel enclosure suitable for mounting on the wall is included. The panel is pre-wired to terminal connections and shall comprise of the following:

- In coming MCB to receive power from main control panel (In stabilizer)
□ Line voltage Controller to guard the compressor against voltage supply fluctuation.
- Sequential controller with timer delay arrangement to avoid surge on power supply.
- Selector switch for auto/manual mode of operation.
- One number Switchgear i.e. contractors and overload relay for the motor of compressor, condenser and agitator.

3.4 Milk Tank Control Panel

This panel shall be mounted on the bulk milk storage tank together with refrigeration control panel. It is a pre manufactured control panel in SS 304 construction in dust and vermin proof design comprising the following:

- Digital Temperature Indicator and display range (0 to 100 Deg.C)
- Selector facility for selecting operation of agitator and compressors on auto or manual arrangement.

3.5 Cables & Electrical Switch Gears

The electrical switchgears as required are included in the control panels mentioned above. All power and control cabling between Main Control Panel, Refrigeration Panel and milk panel shall be flexible un-armoured, wherever laid through conduits. The conduits shall be heavy duty PVC type.

Earthing shall be standard copper plate earthing should be provided for DG set Body earthing of all panels and Neutral line conforming to IE rules. Supply of cables including earthing cable is within the scope of the bidder.

4.0 Pumped Feed System

Inter connecting and Fittings : One lot of SS pipes and fittings shall be supplied to interconnect the bulk cooler with balance tank, milk pump and tanker unloading hose. The piping shall include necessary butterfly valves, SS unions and support pipe holders. SS prop support shall be used to hold SS pipe holders for supporting from walls/floor. The SS 304 inline strainer shall be provided before the balance tank.

Balance Tank: A plain un-insulated construction balance tank cap 500 L for complete with cover, SS ball feet, and inlet and outlet connection is included to receive milk after weightment by direct tipping. A design of the balance tank shall be such that no milk should leave in the balance tank after reception.

Tanker loading Hose 38mm: A nylon braided hosepipe for unloading milk from the cooling tank shall be supplied. A length of 10 mtrs. is considered in the scope of supply.

4.1 . **INSTALLATION, COMMISSIONING & TRAINING**

Installation

The price quoted for installation and commissioning is considering that the entire lot of bulk coolers shall be supplied installed, commissioned and handed over for use within the period specified.

The necessary pre-requisites on building, water and mains supply shall be made available timely including the availability of technical/skilled operator to be trained.

Milk Unions shall make necessary arrangements at respective sites to store the dispatched material including its safe custody in case the site is not ready to take up installation. The payments against supply shall be made in the building as per pre-decided time schedule and the work shall be taken up only when the site is complete as per requirement and handed over for installation.

The scope of installation shall be within specified battery limits and exclusions.

4.2 Commissioning :

The commissioning of the bulk coolers along with the performance trial shall be done at each bulk-cooling site. In case milk is not available in adequate quantity the performance test i.e. capacity trial shall be conducted on water with the results deemed to have concluded the performance trial.

A period of two/three days at each collection center is estimated and included for performance trial and commissioning to have over the installation.

4.3 Training

Tenderer shall arrange for training of the team of DCS staff for efficient operation and maintenance of the complete system. **8.4 Tool Box and Operation Manual**

A GI Sheet toolbox containing one set of all necessary tools required for regular maintenance of the unit shall be supplied along with the BMC.

Two set of operation & maintenance manual in Hindi and English containing complete details of starting, putting off, critical checks and day-to-day maintenance of the complete system shall be supplied. The manual shall also have the required electrical circuit diagrams.

TECHNICAL DATA SHEET FOR BULK COOLING UNIT.

Sl no.	Description	1000/2000/5000 Litter per Day (Single/3 Phase)
A.	MILK TANK	
1.	Capacity – RATED/GROSS	Rated 1000/ 2000/5000 L Gross –
2.	Make and model	To be specified by Bidder
3.	Material used for construction (SS304/3016)	To be specified by Bidder
4.	Overall dimensions (without CDU) (LXWXH)	To be specified by Bidder
5.	Weight (with CDU)	To be specified by Bidder
6.	No. and RPM of agitators	To be specified by Bidder
7.	CIP facility	To be specified by Bidder
8.	Thickness of Inner shell	To be specified by Bidder
9.	Thickness of Outer shell	To be specified by Bidder
10.	INSULATION:	
11.	Type	To be specified by Bidder
12.	Thickness (mm)	To be specified by Bidder
13.	Density	To be specified by Bidder
14.	Efficiency	To be specified by Bidder
15.	Facility to measure milk volume	To be specified by Bidder
16.	Type of Refrigerant	To be specified by Bidder
B.	REFRIGERATION UNIT (Two independent unit one standby & one operational)	To be specified by Bidder
17.	Condensing Unit Model for two numbers (DANFOSS/EMERSON/ EQUIVALENT)	To be specified by Bidder
18.	Model of Compressor for two numbers (DANFOSS/EMERSON/ EQUIVALENT)	To be specified by Bidder
19.	Condenser Cooling	Air Cooled
20.	No. of Compressor	Two
21.	Cooling capacity	Two
22.	Cooling capacity of compressor at 0 deg evaporating and +50deg condensing temp.(Kcal/Hr)	Two

Signature with Seal:

Date

Annexure - II**DIESEL GENERATOR****TECHNICAL SPECIFICATION OF D.G.SET**

SI no.	Description	Specifications Required
1.	General Operating and Design conditions	<p>The DG set shall be of capacity:</p> <ul style="list-style-type: none"> • 15 KVA single/three phase, air or water cooled for 1 KL / 2 KL BMC & • 25 KVA three Phase, air or water cooled for 5 KL BMC. <p>The DG set should be heavy duty design , industrial type, rated for continuous operation for the refrigeration system, milk tank agitator & milk dispatch pump, hot water geyser (approx. 2,0 kW), AMCU, Lightings, Ceiling fan.</p> <p>The diesel engine and alternator should be mounted on specially designed combination base plate and MS structure of extremely rigid fabrication. The base frame should be suitable for mounting the set on AVM pads over the foundation.</p>
2.	Confirmation to regulatory norms for environment and Approval from Local authorities	<ul style="list-style-type: none"> • DG set should carry a valid approval certificate issued as per CPCB norms complying with the provision of the Environment (Protection) second Amendment Rules 2002, vide notification no G. S. R. 371 (E), dated 17th May 2002& amended by GSR 448 (E) dt.12/07/2004. • Also compliant with new CPCB II norms applicable from April 1, 2014. • The exhaust pipe with exhaust muffler with insertion loss of minimum 25 dB (A) is connected to the exhaust manifold preferably with flexible bellows. • In case the DG Set is located within the BMC building, the exhaust pipe with insulation & cladding of adequate length be provided extending the original pipe over the roof of the building to avoid pollution in and around the location. • Supplier to obtain the approval of Local authorities in case it is required by the rules.
3.	Diesel Engine	<ul style="list-style-type: none"> • The diesel engine should be suitable for Power Generation application type air or water cooled and capable of developing required BHP when running at 1500 rpm under NTP conditions. • The engine should be built to IS 10000/ISO 3046/BS 5514/649 and rated for continuous running of 24 hours with an overload capacity of 10 % for a period not exceeding 1 hour in any 12 hours running. Diesel engine up to 20 kW should have valid BIS license and certificate clearly mentioning use for 'General purpose

		<p>application as per IS 10001 norms.</p> <ul style="list-style-type: none"> • Engine ratings should be for operation at full load condition and should be suitable to take 100% block load. • Self-starting arrangement with 12V suitable rated heavy-duty Lead Acid accumulator type battery with Solid-state battery charging arrangement and cables. • Standard set of tools. First fill of Lubricating oil, First fill of coolant, Lubricating oil pressure & temp. gauge, • Standard set of tools. First fill of Lubricating oil, First fill of coolant, Lubricating oil pressure & temp. gauge, • Control panel for engine with engine safety temperature, V-belt failure, low lub oil pressure, low water level in radiator auxiliary failure, air cleaner choke indicator. • Steel Diesel Storage barrel of 200 lit capacity with manual pump
4.	Engine Instrument Panel (Mechanical and/or electronic gauges)	Consist of Ignition key, Starting push button, Lubricating oil pressure gauge, Temperature gauge for cooling water, Temperature gauge for lubricating oil, RPM meter (Analog type), Battery charging ammeter
6.	Alternator	The engine should be closely / flexible coupled to suitable selfexcited, self regulated (through an AVR) alternator developing required KVA at 0.8 power factor, 1 phase/3 phase, 50 cycle/sec, 230 volts AC power supply under NTP conditions when running at 1500 RPM. The alternator should be brushless type, screen protected and fitted with end shield and ball roller bearings. The alternator shall have 'H' class of insulation. It shall conform to IS13364 (Part 1) 1992 up to 20 KVA, IS 13364 (part II) 1992 or IS 4722 of 1992 above 20 KVA.
5	Control Panel	<p>The diesel generating set to have suitable control panel duly prewired with the following instruments:</p> <p>One ammeter with selector switch, One energy meter with selector switch, Hour meter, One suitable capacity MCCB with overload and short circuit protection to disconnect power supply in case load of generating set increases beyond permitted limits. The rupturing capacity of the MCCB should not be less than 25 kA. One set of indicating lamps and control fuses.</p>

Signature:

Seal:

Date:

Annexure - III**THECHNICAL SPECIFICATIONS FOR STABILIZERS**

Sl no.	Particulars	Technical Specifications
1.	Servo Voltage Stabilizer	Required for stabilizing the power supply to BMC from grid or DG set. 15 KVA - 1 or 3 Phase for 1 KL / 2 KL BMC 25 KVA - 3 Phase for 5 KL BMC
2.	Voltage range	90 to 260 V for 1phase and 260 to 500 for 3 phase BMC
	Voltage Out Put	230 V +/- 1% for Single Phase 415 V +/- 1% for 3 Phase
	Voltage correction	35V/Sec
3.	Rating	15 KVA- 1 or 3 Phase 25 KVA - 3 Phase
4.	MOC, thickness & type of structure	MS powder coated , 1.6 mm & pipe structure
5.	Accessories for 1 phase stabilizer	63A MCCB for incoming , 63 A phase selector, changeover and bypass switch, LED lamps, Servo controlled correction transformer, Digital V,I,F indicator for input & output, 63 A terminal blocks, OV/UV trip with delay time, single phase preventer, static type energy meter with 10-60 A capacity, Brass metal glands, MCB's (DP 63 A-2nos, DP 32 A-1 no, Dp 16A-1 no), Metallic pump socket, Servo Motor.
6.	Accessories for 3 Phase stabilizer	40 A MCCB for incoming , 40A phase selector, change-over and bypass switch, LED lamps, Servo controlled correction transformer, Digital V,I,F indicator for input & output, 63A terminal blocks, OV,UV trip with delay time, single phase preventer, static type energy meter with 10-60A capacity. Brass metal glands, MCB's (TPN 40A – 2 nos , TPN 32 A-1no, TPN 16 A-1no), Metallic pump socket, Servo Motor.
7.	Operating features	Cable entry from top, response time -5 milliseconds, should withstand 150% load on surge duty, capacity of terminals should be 150% of rated current, Dimmer with CRGO core, Separate Auto/manual facility, plug in type control card for each phase, correction speed-105 v/s, Efficiency-99.5%.

Annexure - IV

SPECIFICATION OF WEIGHING BALANCE

Platform type Electronic Weighing Machine CAS Brand

Model DB-1 H with SS Plat form size 500 MM X 500 MM

Display digit - 5 Nos. Power source - AC 220V/50HZ

Capacity : 200 Kg. X 20 Gms.

- Soft Touch tact switch
- Easy to read VFD Display
- Unique design steel frame with metallic grey powder coating
- Solid Back Rail
- single piece frame work system
- Hold function
- *Operating Temp (10°C to 40 °C)*

N.B: Stamping & verification of Weighing Machine by the weights & measure Deptt. shall get done by the Machine supplier at their own cost.

Annexure - V

TECHNICAL SPECIFICATIONS OF ROAD MILK TANKER

Specification of barrel for 2000 / 5000 Liter capacity Road Milk Tanker

The barrel for RMT shall be of single compartment design, elliptical construction. The inner shell and outer shell shall be fabricated from 2mm and the inner and outer dished end shall be made from 2.5mm SS 304 material. The inner vessel shall be insulated and shall have 100 mm thick insulation. The tanker shall have the following fittings & mountings.

1. 4.5mm SS insulated manhole with dust cover
2. SS catwalk way with SS 304 dimpled plate
3. 1 no. outlet valve 51mm with valve box – 2mm thick SS 304
4. Separate saddle – 3.15 mm SS 304
5. 1 No spray ball for CIP-STD SS 304
6. Heavy duty rear bumper with SS ladder – 20, OD STD SS 304
7. SS mudguard over wheels – 1.6mm thick SS 304
8. SS dimple platform on the rear side made from 2mm thick SS sheet
9. 2nos. SS foot rest with dimpled top
10. 1no blank nut permanently fixed with barrel by SS chain
11. Necessary stiffening arrangement with inner and outer shell
12. Barrels shall be mounted on 2nos. MS 5.0 Thick runners.
13. 1 no railing at top & one no railing at the side.
14. 1 no graduated deep stick
15. Rear valve box and manholes at the top shall be lockable type.
16. The barrel should be suitable for mounting on TATA chassis Model No- SFC-407 or equivalent model of Mahindra / Eicher / Ashok Leyland.

Test:

- (1) The tanker shall be tested for water tightness for the inner vessel before insulation.
- (2) Dye penetration test CDO for welds of inner vessels before insulation.

State of Inspection:

When the inner vessel of both the barrels are ready, supplier shall intimate the Boudh District Cooperative Milk Producers Union Ltd. for inspection of thickness of the materials, DP test and test for water tightness. 2nd state inspection shall be done after finishing of the barrel before dispatch.

Finish

Internal & External surfaces shall be finished to 150 grit. External MS surfaces shall be painted two anti corrosive coats.

Note :

The above is only broad specification of the barrel. The manufacturers shall prepare detail fabrication drawings and submit to us for approval. Fabrication of the tanker shall be taken up as per approved drawings.

Other Specifications for Road Milk Tanker

- i. The vehicle should be equipped with Global Positioning system (GPS)
- ii. The successful bidder should inform for pre-dispatch inspection well in advance. The chassis (TATA/ Mahindra/ Ashok Leyland / Eicher) of Road Milk Tanker shall be purchased in the name of General Manager, Boudh District Milk Producer's Union Ltd., Boudh with temporary Registration No.
- iii. The vendor should maintain the temperature rise in 8hr at 45-50⁰C atmospheric temperature.

N:B: The vehicle shall be inspected by a technical team of OMFED at the time of delivery.

TERMS & CONDITIONS FOR ANNUAL MAINTAINANCE CONTRACT:

1. The AMC shall be for a period of three years after expiry of the warranty period.
2. The authorized service person shall attend the vehicle quarterly and shall clean / replace the Air filter, diesel oil filter, the lube oil etc. as per recommendation in the users' manual.
3. The service person shall suggest the list of essential spare parts along with price break up for supply, labour charges and taxes as applicable.
4. Besides, the service person shall visit two more times if any requirement arises i.e. at the time of any breakdown; beyond the quarterly visit.

Name of the item	Technical specification	Make	Rate (in Rs.)	GST (in Rs.)	Total (in Rs.)
Road Milk Tanker combined with Chassis, driver's cabin and Insulated body	2000ltr	Chassis-TATA/ Mahindra/ Ashok Leyland / Eicher			
Rupees-----					

Annexure - VI

AMCU

Technical specifications for Automatic Milk Collection Unit

1.0 Functional Requirements:

1.1 The Unit should be suitable for instant weighing of milk, measuring fat & SNF content, calculating the amount payable to the member based on fat and/or fat & SNF weight, printing the amount calculated thereof with member identification details. The Unit shall also be used for maintaining the main records of the collection centre together with the details of milk business transactions of the village co-operative society /MCC.

1.2 The Unit should be able to measure milk component contents viz. fat from 0.5 % to 12 % & SNF from 6% to 12 % and able to weigh milk up to 200 kg per batch at a time. This should process approximately 70 samples of milk per hour.

2.0 Design & Other Requirements:

The AMCU specs detailed below are minimum required specification. The vendor has to provide for all the components/ tools/ software required for meeting operational & functional requirement. Bidders can offer better & higher version specs if available with them which could be considered, but without any extra weight age.

2.1 Operating Environment:

All the components of the AMCU should be rugged and must operate in dusty, hot and humid village Environment where power outages and supply fluctuations are frequent. The operators may not be Skilled persons and not conversant in using electronic equipment:

- **Power supply**
- **Ambient Temperature** : 5 - 50 C □ **Relative Humidity** : 50 % to 95 %

2.2 Operational provisions:

2.2.1 Installation and Commissioning: This is a complete job for supply, installation, testing and commissioning of the AMCU and any item not mentioned in this document but necessary for the proper functioning of the unit shall be provided by the supplier free of cost. All the components of the AMCU should be assembled, configured, commissioned and demonstrated for the purpose of smooth milk collection by the supplier to the satisfaction of the user. The bidder should install and provide all the inputs/materials for the proper earthing as per local Electricity Board Regulations.

2.2.2 Warranty: All the components included in the AMCU shall be warranted for 3 year comprehensive warranty except Burnt & broken items are not covered. Supplier to ensure the installation and commissioning of proper earthing before start of actual operation of AMCU.

Sl. No.	Particulars	Description
3.0	Basic operations at society	<p>All operations are manual or semi-automated at society level. No regular power supply is available and Fluctuation in power supply is very high.</p> <p>Clean and dust free environment cannot be guaranteed. The operators may not be IT savvy.</p> <p>Major Activities at Society</p> <ul style="list-style-type: none"> • Purchase of Milk • Payments to producers for milk poured, government subsidies, incentives for quality etc • Purchase of Cattle Feed • Purchase of Ghee • Other Purchases • Expenditure for Services • Other Expenditures • Local Sale of Milk • Supply/Sale of Milk to the Union • Sale of Cattle Feed • Sale of Ghee • Support for AH, AI etc • Income from Services • Other Income
4.0	AMCU- Functional Requirements	<ul style="list-style-type: none"> • The Unit should be suitable for instant weighing of milk, measuring fat, SNF & water content, calculating the amount payable to the member based on fat, SNF & weight, printing the amount calculated thereof with member identification details. • This unit should also be used for maintaining the complete record of the collection centre as above • together with the details of all transactions of the producers/MCC. • Recommended to incorporate capability for online data transfer to Milk Union and designated local • Banks for transfer of payments to milk producers in their bank accounts directly.
5.0	Computer Hardware and Software	<p>Models of PC offered should be of Enterprise/Business Class Desktop PC (OEM). Home/SMB Class Desktop PC shall not be accepted.</p>

5.1	Processor	4th Generation Intel Core i5-4460 , 6 MB Cache, 64 bit, 4 Core Processor with Turbo Boost technology.
5.2	Form Factor	Tower Model
5.3	Chipset	Intel Chipset supporting the above processor
5.4	Memory	4 GB DDR3 1333 MHz SDRAM expandable to 8 GB
5.5.	Internal Storage	500 GB SATA II Hard Disk Drive
5.6	Removable Media	DVD+/-RW Writer.
5.7	Graphics	Integrated Intel HD Graphics supporting 1600x 1200 resolutions
5.8	Audio	Integrated high definition audio
5.9	Network	10/100/1000 Mbps Gigabit Ethernet
5.10	Display Monitor	18.5" wide screen LCD/LED Backlit TFT Color HD Monitor with 1366x 768 native resolutions
5.11	Input Devices	USB standard Keyboard and USB Optical 2 button Scroll Mouse with Pad
5.12	Ports & Connectors	2 Serial Port, 1 Parallel Port,1 VGA Port, 1 Microphone / Headphone jack, 1 RJ45 Ports
5.13	USB Ports	6 USB 2.0 Ports (Min. two on front and two on rear side).
5.14	PCI Slots	Minimum 2 free PCI Slots.
5.15	Compatibility	5.15 Compatibility Windows 8/Windows 7 / Vista /2008/2012, Linux Compliant.
5.16	Operating System	Licensed Windows 8.1 Professional 64 bit Preloaded with OS Recovery Media Driver CD
5.17	Anti Virus	Norton/ Symantec, eTrust, MacAfee, Trend Micro, Quick Heal latest version with three (3) years license
5.18	Warrantee obligation	Call should be attended by next business day Problem resolved within 24 hours of attending the call within 48 hours in case any part is to be replaced.
5.19	Scope of work	Installation and configuration
5.20	Application Software	<ul style="list-style-type: none"> The purchaser would provide the software, developed by NDDDB along with implantation training to the supplier Any update required in the software would be managed by the purchaser.

		<ul style="list-style-type: none"> • Supplier would implement the software, provide the training to end users and undertake data migration (if required). • Suppliers would be responsible for all post implementation support of the software application also. • Supplier would install and manage the Union and Federation portal as required.
6.0	DOT MATRIX PRINTER	
6.1	Print Method	Impact dot Matrix external printer
6.2	Pins in head	24 pins
6.3	Print Direction	Bi-direction parallel interface USB 2.0 (Full speed)
6.4	Print speed	300 cps high speed draft, LQ and other features
6.4	Print speed	300 cps high speed draft, LQ and other features
6.5.	Printable column	80 (10 cpi
6.6	Paper Handling	Pull tractor unit
6.7	Paper Path	Manual insertion- front or rear in – top out; Push Tractor- front or rear in – top out, Pull Tractor – front or rear or bottom in and top out. 6
6.8	MTBF (hrs at 25% duty cycle)	10000 POH (25% Dut6y)
6.9	Copy Capability	Original + 3 copies
6.10	Cartridge	Ribbon cartridge Black, with 2.5 million characters6
6.11	Compatible OS with drivers	MS Windows 8/7/Vista/XP(32 bit/64 bit),Windows Server 2003/2008/2012 (32 bit/64 bit), Mac OS X v 10.3.9,10.4, 10.5,10.6, UNIX, LINUX
6.12	Accessories	Roll stand
7.0	Electronic Weigh Scale	
7.1	Functional Requirement	To Electronically weigh & digital display of milk quantity in litre in a container
7.2	Capacity	200 kg
7.3	Least Count	20 gm
7.4	Weight Accuracy	20 gm as per Standards of W & M Rules 1987 medium accuracy Class III

7.5	Certification & Stamping	Duly certified and stamped by W&M Dept. and confirming to IS :9281(pt 1&2)1979, IS:9281 :1981 and IS:9281(Pt.4) 1983 as amended up-to-date
7.6	Display Resolution	1/10,000, (accuracy class III)
7.7	Load Cell	Single, IP 67, grade SS of certified and approved make
7.8	Over load & shock load protection	300% to take impact of loading, with audio (beep) visual indication
7.9	Platform Size	600 mm x 600 mm
7.10	Platform MoC	AISI SS 304,1.6 mm thick,150 grit top plate
7.11	Platform under frame	Cold rolled mild steel box of adequate size. Hot dip
	Material / Design	Galvanised after fabrication All screw/bolts/nuts to be of SS
7.12	Indication in display EWS unit	Quantity-7 Segment RED LED ,6 digits, minimum 13 mm height , display for mode of operation- zero, tare , kg/litre, by default KG
7.13	Display Unit mounting	Pole mounted type with sturdy base and SS 304, 38 mm dia. Pipe-1.2 m high <ul style="list-style-type: none"> • SS 304 Body IP 55, Tactile switch keys with feedback response, auto calibration & auto span with drift correction, • RS 232 serial port with protocol to meet requirement of IBM compatible
7.14	Calibration protection & Sealing Arrangement	<ul style="list-style-type: none"> • Special arrangement to house PCB & sealing arrangement. • Pass word protection at user end.
7.15	Battery for working on power failure	In built, 6 V capacity minimum for 12 hrs.
7.16	Power Supply	As given above with minimum 1 m power cable with plug top AC/DC
7.17	Model Approval Certificate	Manufacturer to have model approval certificate of regulatory authority/ Govt of India (Weight & Measure Unit)
7.18	Stamping at site	Supplier to arrange stamping of each scale at site from local Weights & Measure Inspector before Installation.

8.0	Milk Analyzer	
8.1	Functional Requirement	To test & display fat, SNF & added water of sample milk
8.2	Type	Ultrasonic principle based milk analyser for testing fat, SNF & added water <input type="checkbox"/> Measuring parameters: 1) Fat – 0.5% to 12% , with accuracy +/- 0.1%, with Resolution: 0.01% and Repeatability: +/-0.05 % 2) SNF – 6% to 12% , with accuracy +/- 0.2, with Resolution: 0.01% and Repeatability: +/-0.05 % 3) Added water – 0% to 60% , with accuracy +/- 5%, with Resolution: 1% and Repeatability 0.5% <input type="checkbox"/> Measuring cycle-40 Sec per sample <input type="checkbox"/> Average testing speed - 70 samples/ hr
8.3	Operational abilities	Mode selection for type of milk – (1) Cow, Buffalo, Mixed / Single Curve with Cleaning, Calibration, System error list etc.
8.4	MoC for enclosure	AISI 304 0.75 mm thick minimum
8.5	Loose Accessories	Holding bottom tray for spillage- 1 No. <ul style="list-style-type: none"> • RS 232 Serial Cable- 1 No. • A C Power cable with plug top- 1 No. • Measuring mugs-2 No • Daily cleaning solution – No. of Bottle 3 (Quantity minimum 200 ml or equivalent). • Weekly cleaning solution - No. of Bottle 2 (Quantity minimum 200 ml or equivalent) or • Monthly cleaning solution - No. of Bottle 1 (Quantity minimum 200 ml or equivalent)
8.6	Manual	Operating Manual each in English & Local language per AMCU supply
9.0	Ultrasonic Milk Sample Stirrer	
9.1	Functional Requirement	To remove air from fresh milk sample by vibrations created in the milk before testing of milk.
9.2	Type	Table top, Ultrasonic Stirrer
9.3	Stirrer for Ultrasonic Stirrer	SS Ball type
9.4	Ultrasonic Frequency	20-25 KHz (Variable)
9.5	Timer	1-99 Sec selectable
9.6	Environment	Suitable for dusty/humid village environment, operating temperature -5 to 50 Degree C
9.7	Connecting Cables	Minimum 1.5 m Power cable with plug top.

9.8	Complete ready to use	Item complete in all respect with required electric/electronic parts, ready for use at site.
9.9	MoC for body	AISI 304, 1.2 mm thick minimum
9.10	Operating Voltage	230 Volts +/-10, AC,50 Hz and 12 Volts DC
10.0	REMOTE DISPLAY UNIT (RDU)	
10.1	Functional Requirement	To display pourer members milk collected & milk testing and other selected parameters in English/ Local Language
10.2	Type	Wall mounted type
10.3	Display Parameters -8 No	7 Bright segments, Red LED, 25 mm, 33 No., 11 in each row with 3 rows(or suitable to meet the requirement)
10.4	Labels for display	Screen printed
10.5	Environment	Dusty, Humid, preferably housing to be with IP 55 or equivalent protection, rust proof powder coated metallic.
10.6	Connecting Cables	Minimum 5 m Power cable with plug top with connector at both ends, Minimum 5 m Data cable with

		connector at both ends
11.0	UPS	
11.1	Functional Requirement	To give regulated AC power to AMCU from mains or attached battery
11.2	Type	Line-Interactive type
11.3	Capacity	1500 VA minimum
11.4	Back up time (Full Load)	3-hrs minimum (in one shift)
11.5	Output Wave Form	Sine Wave/Quasi Sine wave
11.6	Voltage at input	160-280 V (+10%)
11.7	D C Voltage Bus	24 V
11.8	Voltage at output (With Mains as well as with Battery)with in-built AVR	220V +/- 10%
11.9	Full protection	Inbuilt protection - Under / Over voltage, Short-circuit, Overload Cut off, Low Battery Cut-off , Spikes cut-off
11.10	Warning (LED+ Sound)	Low Battery & Overloads

11.11	Input/ Output Frequency	50Hz +/- 3Hz, No Correction
11.12	Battery switch over	Battery switch over in 3-10 milli seconds
11.13	Battery Charging	<ul style="list-style-type: none"> • Preferably to take place even at 130 & 300 V with SMPS charger • Boost charging at minimum 7A • Battery overcharge protection
11.14	Battery No and Type	2 No 90 AH Tubular, Acid filled, low maintenance battery with level indicator (Maintenance free Battery desirable)
11.15	Charging Indicator	Battery charging indicator plus low battery/ fault indicator to be provided
11.16	Battery Steel Rack	Required
11.17	Leads between UPS & Battery	Flexible, Cu conductor PVC, Minimum 1 m with lugs at both ends.
11.18	Warranty of Battery	3 years against manufacturing defect.
11.19	Steel rack for UPS	Required to place UPS above floor
11.20	No load loss at 24 Volt when UPS is ON	Minimum
12.0	Earthing - Earth Electrode (Gel type) (Optional)	
12.1	Technology	Earth Electrode (Gel type) maintenance free earthing. Mineral Filling Compound (MFC), surrounded to earth electrode creates low resistance zone so that output is constant for longer life.
12.2	Pipe Material	Galvanized Pipe as per IS : 1239
12.3	Class of Pipe	Class-B
12.4	Diameter (Outer Dia.)	48 mm
12.5	Length	2 Meter
12.6	Wall Thickness	2.5 mm
12.7	Primary Electrode	Mild Steel Strip
12.8	Mild Steel Strip	2.12 m long, 32 mm wide and 6 mm thick
12.9	MS Strip hot dip Galvanized thickness	110 micron

12.10	Gel Filled	Highly non-corrosive compound
12.11	Earth wire to connect Electrode with Power Supply.	Copper 8 m long & 8 mm dia suitable for interconnection
12.12	Filling compound	Adequate
12.13	Civil works	chamber to secure the earthling

2.2.3 The supplier should also provide Annual Maintenance Contract after warranty period on chargeable basis, if felt necessary by the purchaser.

2.2.4 Training – The supplier shall ensure proper and accurate functioning of all the components of the AMCU and impart training to the operating staff in operation, maintenance and routine check till the operating staffs are confident in operation and routine maintenance.

2.2.5 Operational & Cleaning SOPs (including leaflet on troubleshooting) - Provide laminated wall chart indicating important steps involved in operation & cleaning of the Milk Analyser for displaying in DCS.

Annexure - VII

DPMCU

Function:-The unit is suitable for instant weighing of milk, measuring FAT & SNF content, calculating The amount payable to the member based on FAT, SNF and weight, printing the amount calculated thereof with member identification details. This unit is also used for maintaining the complete record of the collection center together with the details of all transaction of the village co-operative society.

Scope of Supply:-

1- Electronic Weighing Scale (EWS)

The weighing scale conforms to provisions of “Standards of Weight and Measures (General) Rules,1987 (Medium Accuracy-III) and will duly certified and stamped by weight and measure department and conforming to IS: 9281 (pt. 1 & 2) 1979, IS 9281:1981 and IS 9281 (Pt.4) 1983 as amended up to date.

Specification:

- | | |
|---|--|
| 1-Capacity | - 200 kgs and above. |
| 2-Rsolution | - 20 gm |
| 3-Road Cell | - Stainless steel, bending beam, resistive strain gauge type |
| | Load impact 300%, IP-65 protection. |
| 4-Platform / Platter size | - Minimum of 600 mm x 600 mm and above, Made of SS-202, SS Pole, Material Steel Grade rust Protected. |
| 5- Power Supply | - 220 / 240 + %10 volts (AC), 50Hz. |
| 6-Display | - 7 segment GREEN/RED LED digital display of 25/14.22mm height, Tare, Net or Gross Weight Indication, RS 232 port. |
| 7-Battery Backup | - In built battery backup upto 24 hours at full charge. |
| 8-Auto Tare Facility | - Yes |
| 9- Stamping by Local Weight & Measure Department : Supplier to arrange first time stamping of each weigh scale from local Governments Weigh & Measure Inspector before installation. Stamping fee of Inspector shall be reimbursed by Purchaser. However Weigh Scale manufacture to have Proto type approval for weigh scale from Government. | |

2- Milk Analyzer :

Ultrasonic based Instant Measurement of FAT & SNF & added water to milk

Speed - Above minimum 90 tests per hour
and above.

Sample Volume - 20 to 25 ml

Temperature - 50 to 350

Use of Chemical - No

Power Supply - AC 180 – 240 V DC 12V, 6 Amp.

Power Consumption - Minimum of 30 watts to 50 watts

Interface - RS 232

Environmental Condition - 5 to 50 Degree C 50% humidity

MoC for enclosure - AISI 304, 0.75 mm thick minimum.

Accessories - Interface Cable, Battery Lead & Daily

Weekly Chemical

Measuring Range	Accuracy	Repeatability	
FAT	0.5% to 12%	±0.10%	±0.05%
SNF	6% to 15%	±0.20%	±0.05%
CLR	0.0% to 40%	±0.50%	±0.05%

Simple cleaning & Calibration Procedure

Operation - Auto drive

3-Data Processor

Data processor is to be used at village society level, so should be simple, rugged, easy to Operate with appropriate functional keys. Salient features of data processor are -

<u>S.N</u>	<u>Item</u>	<u>Specifications</u>
1.	Display	: LCD - 4 line x 20 character with back light or better than this.
2.	Memory	: Expandable memory
3.	Data Storage	: 999 members unlimited data storage
4.	Key Board	: 4x4 or higher matrix inbuilt keyboard, external QWERTY Key board (Optional)
5.	Processor Name	: High speed 32 bit cortex ARM Controller Speed

	or High speed 24 bit pic micro Controller Speed or as
per	
	Manufacturers design to meet functional requirement
Program Memory	: 128 KB Internal High Speed Flash
6. Language	: English
7. Storage / Media Type	: Micro SD / internal flash memory & external USB pen drive.
8. External Interface	: RS 232 ports /USB Ports as per requirement
9. Operative Conditions	: Operative Temperature: 0-50 degree Centigrade
Relative Humidity	: 5% to 85%
10. RS – 232 Interfaces	: For Analyzer, EWS, RDU, Printer
11. USB Port	: For Pen Drive
12. Real Time Clock	: Provided with inbuilt battery with password protection for changing the date & time
13. Power Supply	: DC Input up to 12 volt AC input : 210-240 volts, 50+/- 3% Hz.
14. Power Consumption	: 70 Watt.
15. Material of Construction	: Housing made of stainless steel of grade SS- 202 / special plastic.

4- Digital Indicators (Remote Display)

The indicator should display the weight of the milk, fat content and the amount to be paid to the member in bright 7 segments RED LED of minimum 20 mm height. There should be no visual errors.

It should be possible to mount the display indicators separately at any convenient point in the milk reception area. Display for FAT % - 4 Digits, SNF % - 4 Digits, Member Code – 3 to 4 Digits, Milk Rate(Rs.) – 4 Digits , Milk Weight – 4 or 5 Digits, Amount.(Rs.) – 6 Digits. Interface-Rs-232 / USB Host.

5- Ultrasonic Stirrer

Sample Size	- 25 ml.(Maximum)
Frequency	- 26 to 32 KHz or as per manufacturers design,
Variable type	
Timer	- Fixed or variable

Construction – Ultrasonic Type, Vibrating S S Probe, Housing – Powder Coated Steel or Special Plastic as per Manufactures design/ Standard, Table top type.

Power Supply – AC: $230 \pm 10\%$ Volts 50 HZ , DC : $12 \pm 10\%$ Volts.

Operating Temperature - 5 to 50⁰ C.

Power Consumption – Operating: 70 Watts (Maximum),

6- PRINTER

Dot Matrix Printer of reputed brand like EPSON / Wepro / TVS

It is required to print various reports required from DPMCU.

It can be **inbuilt into Data Processor** (Thermal type) or it can be external stand alone (DMP or Thermal).

Number of Print Columns 40 / 80, Number of Paper Paths Continuous Friction

Interface – Serial Yes (RS-232 Serial) , Input Buffer 16 KB

Print Media- Roll Paper , Power Consumption 100V/240V adapter-24 VESC/P & IBM

7-Earthing

Technology- Earth Electrode, Galvanized pipe as per IS:1239,B class pipe with 48 mm diameter, length approximate 2mtrs.wall thickness-2.5 meters. Earth wire to connect electrode with power supply-copper wire of 8 m long and 4 mm dia should used.mineral filling compounds -Adequate

8-Un Interrupted Power Supply (UPS)

Functional requirement-To give regulated AC power to DPMCU from main or attached battery.

Capacity- 1.5 KVA

Back up -Minimum 3 hrs of DPMCU Operation,

Voltage range- 50v to 300v

Single phase, Wave Form Quasi Sinewave

Connectivity- Line Interactive, Input 110 volts to 280 volts

Output 230 + 10% volts (AC),

Battery -as per (BIS13369:1992) 2 nos. 12volt 90 AH minimum Industrial Tubular Batteries (With level indicator) & a warranty of Minimum 2 years.

Brand - Reputed Brand, Full Protection Under / Over Voltage, Low battery Voltage, Overload,

Short circuit, No load, Protection against spikes, Performance Efficiency 85% & above

Frequency

Stability + 0.5%, Operating Environment Temp. 5⁰ C to 50⁰ C, 90% RH, Dusty Back up time (Full load) 3 hrs. minimum in one shift with rate of charging/discharging @C/10

Consumables & Accessories of DPMCU (For Complete Installation and Running)

15 M with paper each roll – 2 nos

Interface cable for electronic weigh scale

Cleaning solution: Daily & weekly for 2months consumption

Interface cable for remote display unit

Interface cable for milk analyzer/electronic milk tester

Memory Card: 8 GB 17 Inbuilt Printer No need for additional weighing scale.

Entering milk rate chart with 4 digits code to be stored through key board

Daily slip printing (Morning, Evening)

Payment report 10 day's , 15 days or monthly.

Producer's Ledger Report

Rate chart entry, Manually, Serial & USB

It generates the following reports:

1. Slip Printout for Member transactions
2. Shift End summary
3. Payment Register
4. Cumulative Summary

Note: DPMCU to be complete with all required firmware, software & memory to operate DPMCU & generate reports which are required for operating milk collection centre & sending milk data through Pen drive to concerned milk chilling centre.

Memory: Should be able to store more than 20 days of Data Software and cloud features:

Complete solution for milk collection, procurement, dispatch and billing.

Software is based on cloud and reports seen from any location.

Milk procurement data of farmer & live reports on

Milk collection from farmer.

Milk Dispatch to Chilling centre

Discrepancy report

Different rate charts

Machine health and cleaning

Calibration report

Cleaning report

Repair and service report

Rate chart checking reports for finance control

Direct payment to farmer

Stock discrepancy

POS point of sale

Discrepancy Village to MCC to plant

Multiple level of password control.

Different rate charts with future rates

Dashboard with cleaning report, calibration report, hardware report

Statistical and MIS reports.

Data encryption and security. No one can change the data.

POS system is working. Goods can be issued to the farmer and farmer bill can be generated after deducting the cost of items give to farmer.

Annexure - VIII**TECHNICAL SPECIFICATION****ALUMINIUM MILK CAN- 40 LTRS CAPACITY WITH CAN LID****SHAPE AND DIMENSIONS -****Legends : 40 Liter capacity of Aluminium Milk Can**

Height of the Can	: 591 + 4 (mm)
Depth of the Can	: 575 + 3 (mm)
Inside dia of the Can	: 340 + 3 (mm)
Mouth of the Can	: 200 + 5 (mm)
Dia of Bottom Bend	: 352 + 3 (mm)
Wall Thickness	: 2.00 (mm)
Bottom Thickness	: 3.00 (mm)
Shoulder Thickness	: 2.50 (mm)
Weight Milk can with lid	: 6.42 K.G ± 100 gm
Only Milk can Lid	: 0.928 K.G ± 50 gm

- Cans shall be made from one-piece monoblock design.
- Cans have a minimum hardness of 85 BHN and higher body thickness to withstand dents from handling.
- Bottom ring of milk can is press shrink fitted and then fully Mig welded all around for extra strength and longer life
- Handles are properly bent with ends chamfered, which ensures firm grip.
- Can lids are spot welded at five places and brazed all around with sanitary finish, which ensures hygiene.
- Can and lids are pretreated and then anodized.
- Adequate air space should be provided in order to adjust the volume of milk.

Annexure - IX**TECHNICAL SPECIFICATION****STAINLESS STEEL (SS) MILK CAN OF 5 LTRS CAPACITY**

1-SHAPE AND DIMENSIONS - The cans shall be manufactured in accordance with the shape and dimensions as given below.

LEGENDS: 5 liter stainless Steel Milk Can

Materials of construction : ISS 304 SS Grade.

Height with lid	: 248 MM +- 4 MM
Hardness in BHN	: 85
Bottom Dish	: 165 MM + 3 MM
Thickness	: 0.8+-0.05 (mm)
Lid Dia	: 139 MM +- 1 MM
Lid Depth	: 30.5 MM
Weight	: 815 grm +/- 5 grm
Can Lid	: 100 +-10 gm
Internal Diameter	: 176mm+-3mm
Neck Diameter	: 130mm+-1mm

2-The Minimum Thickness of different parts of the cans (in mille meter)

Part

- Body 0.5 mm
- Bottom 0.6mm
- neck 0.4mm
- Lid(saucer/Outer) 0.5mm

Cans are made from SS 304 grade of stainless steel material only.

SS Bucket type mono block design without having any welding joint.

CAPACITY – The can should be designed to accommodate at least 5.5ltr of water.

SCOPE - This standard prescribes the requirement for stainless steel milk cans used for collection and distribution of fluid milk.

DESIGN- can have to be designed in such a way that it shall transport its contents safely without spillage and with minimum of churning. It shall also withstand rough handling, occupy minimum space on trucks or Lorries, allow a high degree of sterilization and shall also facilitate cleaning. Further, it has to be light and durable.

BODY -Cans shall be formed in a single piece construction made in SS 304 grade.

LID –The lid should be single piece construction without any welding joint, made out of AISI 304 grade (IS:5522) only. The can lid should be single PCS dome shape should be in such that water is not logged or Dust particular during its transportation or storage of Milk Cans. The lid should have collapsible handle.

WELDING- The can shall be welded by TIG or MIG process with argon as inert gas medium and only, AWS ER 308 L filler wire shall be used. 5.6.6 Finish On visual examination there shall be no cracks, notching or porous patches in the welded surfaces and the surface adjacent to the weld. The weld surface shall be regular and even. All welded joints, inside surface and outside surface shall be finished smooth to minimum 220 grit or maximum Ra value 0.48 µm to provide a sanitary finish.

Common condition for SS Can & Aluminium Can :-

MARKING - Each can shall be marked legibly and permanently with at least following particulars:

- a) Manufacturer's name or initial or trademark, if any
- b) The rated capacity of the Can in Liters.
- c) Batch or code number and year of manufacture
- d) Buyer's logo or identification mark
- e) Material of Construction 304 grade/ IS: 1825/1983.
- f) Capacity mark on inside surface of the can

Sample: Sample should be furnished along with the tender. The tenders without sample will be summarily rejected. The Federation is not liable to pay any cost for samples.

Annexure - X**List of Milk Testing Equipments with specification – 1 Set**

SI No	Name of Milk Collection Equipments/ Accessories and Milk Testing	Qty/No	Unit Price FOR including all Taxes (in Rs.)	Total Amount (in RS.)
1	Milk Collection Tray, made 1.2mm thick S S 304, size 440x590x65mm,Minimum weight -4200gm.	1		
2	Milk Sampler, Made from 1.2mm thick S S 304. Minimum weight -90gm	1		
3	Lactometer Cylinder, made from S S 304 Pipe having 1.6mm wall thickness ,Minimum weight 270 gm	1		
4	Funnel with Strainer, made from 1.2mm thick S S 304. Minimum weight -1600gm	1		
5	Strainer Sieve for Funnel, Material S S 304	1		
6	Measure 100 ML, Made from 1.25mm thick S S 304. Minimum weight 125gm	1		
7	Measure 200 ML, made from 1.25mm thick S S 304. Minimum weight -180gm	1		
8	Measure 500ML, made from 1.6mm thick S S 304. Minimum weight- 425gm	1		
9	Measure 1000ML, made form 1.6mm thick S S 304. Minimum weight- 650gm	1		
10	Milk Can Plunger, made from SS 304. Minimum weight-650gm	1		
11	Milk Bucket, made from S S 200 series, seamless with bottom ring,15 litre capacity. Minimum weight -1600 gm	1		
12	Centrifuge machine Gerber 24 tests (Manual)	1		
13	Lock Stoppers, Brass (Dozen)	2		
14	Lock Stopper Keys (Aluminium)	2		
15	Lactometer Zeal type ,0 to 40 with ½ division, Calibrated at 84 F, Accuracy+_0.25 LR	2		
16	Thermometer(Alcohol), 0 to 1000 C, yellow back, accuracy 100%	2		
17	Pipette 10.75 ml ,ISI mark Double tested	2		

	(Borosil)			
18	Test tubes 18 X 150 mm (Borosil)	6		
19	Butyrometers (ISI Make), double tested, for milk 0-10%, accuracy 100%	30		
20	Porcelain dish , 3 Inch	1		
21	Spirit lamp stainless steel,100ml	1		
22	Graduated pipettes 10 ml (Borosil)	2		
23	Butyrometers shaking stand ,12 holes(HDPE)	2		
24	Steel sample bottle,50 ml with cap, made from food grade	60		
25	Steel tray for holding 24 nos sample bottle securely, made from food grade .	2		
26	Tray for reagents, size 16 x12inches, made from food grade.	1		
27	Plastic tilt measure 1 ml for alcohol with rubber cork & plastic bottle of 250 m.l	2		
28	Plastic tilt measure 1 ml for alcohol with rubber cork & Plastic bottle of 500 ml	2		
29	Test tube Stand for 12 tubes of size 18x150 m.m, aluminium	1		
30	Nylon Brush for cleaning Butyrometers, full length bristle	5		
31	Nylon Brush for cleaning pipettes nylon length 4 Inches, total length 12 inches., full length bristle	5		
32	Nylon Brush for cleaning 50 ml milk sample bottle nylon length 4 Inches, with tail & thick steel wire	5		
33	Plastic measuring jug for acid dilution,1litre	1		
34	Plastic hammer for can opening	1		

Annexure - XI

SPECIFICATION OF ELECTRONIC MILK TESTERS (EMT)

Measuring Range	:	Up to 13%
Capacity	:	120 – 150 samples per hours
Accuracy (sd)	:	0 - 5 % fat : 0.06 %
		5 – 8 % fat : 0.10 %
		8 – 13 % fat : 0.20 %
Repeatability (sd)	:	0 - 5 % fat :03%
		5 – 8 % fat :04%
		8 – 13 % fat : 0.08 %
Sample Volume	:	0.5 ml / test
Diluent Volume	:	6.5 ml / test
Power supply	:	AC : 220 – 240V Maximum + 10%
		Minimum 15%
		DC : 12 V, 6A, Max, 6V, Min 10.5
		A fully charged 120 amp / hr. battery Will last for at least 10 hours operation
Ambient temperature	:	5 – 45 ^o C

TECHNICAL DEVIATION STATEMENT FORM

The following are the particulars of deviations from the requirements of the tender specifications.

CLAUSE	DEVIATION	REMARKS (Including justification)
--------	-----------	--------------------------------------

Dated-

Signature and seal of the

Manufacturer / Bidder

Note:

- (3) Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "No Deviations".
- (4) The technical specifications furnished in the bidding document shall prevail over those of any other document forming a part of our bid, except only to the extent of deviations furnished in the statement.

POINTS BIDDERS SHOULD BEAR IN MIND

- XII. BIDS CONTAINING DEVIATIONS FROM BIDDING DOCUMENT TERMS AND OTHER CONDITIONS MAY BE REJECTED.
- XIII. BIDS NOT ACCOMPANIED BY BID SECURITY (EARNEST MONEY DEPOSIT) SHALL BE SUMMARILY REJECTED.
- XIV. NON-COMPLIANCE WITH EVEN A MINOR TECHNICAL REQUIREMENT SHOULD BE SPECIFICALLY STATED BY THE BIDDERS.
- XV. BIDDERS SHOULD FURNISH THEIR COMPLETE ADDRESS FOR THE PURPOSE OF FURTHER CORRESPONDENCE PERTAINING TO BIDDING DOCUMENT.
- XVI. CORRECTIONS IN THE BID SHOULD BE NOTED OVER AND INITIALED AT THE PLACE OF CORRECTIONS.
- XVII. NEGLIGENCE OF THE BIDDER IN PREPARING THE BID CONFERS NO RIGHT TO WITHDRAW THE BID AFTER IT WAS OPENED.
- XVIII. SPECIFICATIONS, CONDITIONS, SCHEDULES AND DRAWINGS OF BIDDING DOCUMENT CONSTITUTE AN INTEGRAL PART OF THE BID.
- XIX. ALL THE BIDS ALONGWITH ENCLOSURES, DRAWINGS AND TECHNICAL LITERATURE SHOULD BE IN ENGLISH ONLY.
- XX. BIDDING DOCUMENT SHALL BE GOVERNED AND INTERPRETED ACCORDING TO THE SYSTEM AND COMPONENTS UNDER TROPICAL CONDITIONS.
- XXI. ALL THE BIDDERS SHOULD SUBMIT QUALIFICATION APPLICATION IN THE GIVEN FORMATS WITH REQUIRED DOCUMENTATION.
- XXII. BIDS SHOULD BE KEPT VALID FOR ACCEPTANCE FOR A PERIOD OF 90 DAYS FROM THE DAY BIDS ARE OPENED.
- XII. THE BIDDING DOCUMENT SHALL BE GOVERNED AND INTERPRETED ACCORDING TO THE LAWS OF THE UNION OF INDIA.
- XIII. ALL BIDDERS ARE URGED TO SUBMIT PROMPTLY WRITTEN REQUESTS ON MATTERS WHERE CLARIFICATIONS OR ADDITIONAL INFORMATION ARE DESIRED, NOT LATER THAN SEVEN DAYS BEFORE BIDS ARE DUE TO OPENING. NO EXTENSION IN DUE DATE OF SUBMISSION OF BIDS WILL BE ALLOWED ON THIS GROUND.
- XIV. ALL THE BIDDERS SHOULD QUOTE FOR THE ITEMS AS PER THE SPECIFICATIONS AND DETAILS GIVEN IN THIS BIDDING DOCUMENT ONLY. IN CASE, ALTERNATIVE DESIGNS ETC. ARE TO BE OFFERED BY THE BIDDERS, THEY MAY DO SO BUT THIS SHOULD BE STATED SEPARATELY IN THE OFFER. ORISSA STATE CO-OPERATIVE MILK PRODUCERS' FEDERATION LIMITED RESERVES ITS RIGHT TO ACCEPT OR REJECT SUCH ALTERNATIVE OFFERS, WITHOUT ASSIGNING ANY REASONS THEREOF TO THE BIDDERS.
- XV. THE BIDDERS WHO QUOTE FOR SUPERVISION OF ANY VANS SHOULD ALSO INDICATE THE PRICES IN THE BID SEPARATELY.
- XVI. MANAGING DIRECTOR, ORISSA STATE CO-OPERATIVE MILK PRODUCERS' FEDERATION LTD. RESERVES THE RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS WITHOUT ANY EXPLNATION TO BIDDERS.

ANNEXURE - 'A'

REQUIREMENT OF MATERIALS/ITEMS

Sl. No.	Description of Materials	Total Qty.	1 st Phase/Milk Union (2022-23)	2 nd Phase/Milk Union (2023-24)	3 rd Phase/Milk Union (2024-25)
1	BMC – 1 KL (Combo)	02	02 Boudh	0	0
	BMC – 2 KL (Combo)	20	14 Puri -07, Balasore-01, BKN-02 & Boudh-04	6 KMNR-04, Dhenkanal-02	0
	BMC – 5 KL (Combo)	05	04 Puri-01, Balasore-01, BKN-02	1 BKN-1	0
2	DG-15 KVA (Single phase)	19	19 Cuttack	0	0
	DG-15 KVA (3 Phase)	30	20 Puri-08, Balasore-04, BKN-03, Keonjhar-03, Ganjam-02	07 Puri-03, Balasore-02, KMNR-02	03 Balasore-02, Puri-01
	DG-30 KVA (3 Phase)	19	19 Cuttack-02, Puri-04, Sambalpur-06, Balasore-03, BKN-03, Dhenkanal-01	0	0
3	Road Milk Tanker- 2 KL	01	01 Boudh	0	0
	Road Milk Tanker- 5 KL	01	01 Boudh	0	0

4	AMCU with software loaded	227	10 Boudh	108 Boudh-20, Cuttack-50, KMNR-12, BKN-10, Dhenkanal-12, Ganjam-04	109 Boudh-20, Cuttack-50, KMNR-12, BKN-10, Dhenkanal-13, Ganjam-04
5	DPMCU	150	0	75 Puri-75	75 Puri-75
6	Aluminium Milk Can- 40 liter	400	80 Boudh	160 Boudh	160 Boudh
7	SS Milk Can- 5 liter	5000	1000 Boudh	2000 Boudh	2000 Boudh
8	MTEs	100	20 Boudh	40 Boudh	40 Boudh
9	EMT	80	10 Boudh	35 Boudh-20, Ganjam-15	35 Boudh-20, Ganjam-15