

# 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-omfed@yahoo.com T

ENDER DOCUMENT

FOR

Supply, Installation, Commissioning & Testing of Bulk Milk Cooler, Automatic Milk Collection Unit (AMCU), Milk analyzer & Weighing Machine

Date of Commencement for Bidding	17.01.2025 10 AM onwards
Last Date & Time for Bidding	( 31.01.2025 up to 5.00 PM)
Date & time for receipt of the hard copies of Demand Draft for paper cost & EMD	From 17.01.2025 to 31.01.2025 (10.00 AM to 5.00 PM)
Date of opening of Technical bid	01.02.2025

RECEIPT OF TENDER PAPERS:

PLACE OF OPENING OF TENDER:

ADDRESS FOR COMMUNICATION: ,

THE ODISHA STATE COOPERATIVE MILK

PRODUCERS FEDERATION LTD(OMFED)

D-2 SAHID NAGAR

**BHUBANESWAR** 

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

The Odisha State Cooperative Milk Producers' Federation Ltd. D- Sahid Nagar, Bhubaneswar-751007 Ph. No- (0674) 2546030 /2540273/ 2540417, Fax no (0674) 2540974

# **TENDER NOTICE**

#### **FOR**

# Supply, Installation, Commissioning & Testing of Bulk Milk Cooler, Automatic Milk collection Unit (AMCU), Milk Analyser

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, Automatic Milk collection Unit (AMCU), Milk analyser& weighing machine .Tender document can be down loaded from web site <a href="www.omfed.com">www.omfed.com</a> 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. 31.01.2025 up to 5 PM hours. The Bid shall open on 01.02.2025 at 11 A.M. to 4.00 P.M. in presence of interested bidders. For details please visit our website <a href="https://www.omfed.com">www.omfed.com</a>

The corrigendum/ amendment to this notice required shall be published only in the OMFED website and will not be published again in newspapers.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

C1					CSS / NPD	· · · · · · · · · · · · · · · · · · ·			EMD
Sl no	Items	Capaci ty	Quan tity	Estimate d total cost (in	Cost of tender Paper (Rs.10000	online biddi	ng (Date)	Date of Opening	EMD (in Lakh)
				lakhs)	/- + GST 18%)	From	То		
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	2KL	16	176.00	11,800.00			01.02.2025	3.52
02	Bulk Milk cooler (BMC) of different capacity with D G Set, Servo voltage stabilizer and weighing scale of in line capacity on composite basis	5KL	05	80.00	11,800.00	17.01.2025	31.01.25	at 11 AM to 4PM	1.60
02	AMCU (Automatic milk collection unit)	One Unit	350	455.00	11,800.00			01.02.2025 11 AM to 4PM	9.10
03	Milk Analyser	One unit	500	200.00	11,800.00	17.01.2025	31.01.2025	01.02.2025 at 11AM to 4PM	4.00

04	Weighing Machine	One unit	200	7.00	11,800.00	17.01.2025	01.02.2025 at 11AM to 4PM	

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 <a href="https://www.omfed.com">www.omfed.com</a>. 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: <a href="www.omfed.com">www.omfed.com</a>. The corrigendum/amendment to this notice if required shall be published only in the OMFED website 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 17.01.2025 to 31.01.25 (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 singed 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. to 05:00PM wef 17.01.25 to 31.01.25 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 31.01.2025
- 6. Bids received shall be opened (technical) on 01.02.25 (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 website (<a href="https://www.omfed.com">www.omfed.com</a>)
- 13. Defaulters in earlier supply to Omfed or Black listed anywhere in the country Sd/-

Managing Director, OMFED

# **GENERAL TERMS & CONDITIONS:**

# 1. Eligibility Criteria

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

SI. No	Item Description	Minimum Average Annual sales turn over (Rs) for the year 2021-22 to 2023-24
1	Bulk Milk Cooler	1.00 Crore
2	AMCU	2.0 Crore
3	Milk Analyser	1.0 Crore
4	Weighing Machine	0.05 Crore

- 1.3 The bidder should have supplied above Machineries to different Milk Unions/Milk Federations/Dairy Plants for the year 2021-22 to 2023-24 should submit the proof along with the copy of Purchase Order.
- Specification: Each supply of these materials must conform to the Technical Specification enclosed asper Annexure I-VIII
- 3. Quantity Requirement: Attached separately as Annexure I-VIII
- 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 equipment. 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 equipment 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

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 handing 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 excluding GST 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 Incometax, TDS, GSTTDS etc. as applicable

# 15. Penalty:

Penalty @ 0.5 % of the order value per week / or part there of shall be imposed for delay in execution beyond the time frame. However 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 Act1996...

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

# 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, copy of PO for Financial year 2021-22 to 2023-24

- Undertaking by the bidder that the bidder is not black listed by any Cooperative Milk Union/ State Milk Federation/Govt. Agencies.
- Audited profit and loss account for the year 2021-22 to 2023-24 as prrof of Sales.
- IT returns for the financial year 2021-22 to 2023-24
- 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.

02 year from the date of notification.

- 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.

# **VALIDITY OF OFFER:**

Seal:	<b>,</b>	Signature:
		Date

# **TECHNICAL BID**

SI. No.	Description	S i	Details
1	Name of the Company	g n	
2	Office address	a t	
3	Phone no, Fax no, E-mail	u r	
4	Corporate Head quarter address & Conta	e ct no &	
5	Local office address & contact no. in Oc	lish <b>§</b>	
6	Website address	e a	
7	Nature of Ownership		
8	Firm Regd. No. with date	N a	
9	Details of Statutory Certificate/ License/ Clearance	m e	
10	ISO Certification no./ Validity	•	
11 A	GST Registration No		
12 <sup>d</sup>	GSTIN No		
13 e	TIN. No		
14 S	PAN		
16	DD for tender cost		
₩ a	DD for EMD		

mail ld:

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 2021-22 to 2023-24		
04	I.T return for last 03 Years i.e. FY 2021-22 to 2023-24		
05	PAN No(Photo Copy To Be Attached)		
06	GST Registration Certificate		
07	Banker's detail of bidders along with a cancelled cheque		
08	return (GSTR – I & GSTR – 3B) from April 2023 to October		
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		

# Annexure-I COMMERCIAL BID FORMAT FOR BMC (Combo Unit) 2KL

Item	Description	Quan tity	Make/ Name of Manufa cturer	Unit Price FOR including installation & Commissioning (without Taxes)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
	BMC- 2 KL	16					
2 KL BMC	D.G 15 KVA (1/3phase)	16					
Unit (20 no)	Stabiliser-15 KVA (1/3 phase)	16					
	Weighing Balance	16					
	Total						

# **COMMERCIAL BID FORMAT FOR BMC (Combo Unit) 5KL**

Item	Description	Quan tity	Make/ Name of Manufa cturer	Unit Price FOR including installation & Commissioning (without Taxes)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
	BMC- 5 KL	5					
5 KL BMC	D.G 25 KVA (3phase)	5					
Unit (20 no)	Stabiliser-25 KVA (3 phase)	5					
	Weighing Balance	5					
	Total						

Signature &Seal Name:

Address: Mail Id: Mobile No: Land Line No:

# **COMMERCIAL BID FORMAT FOR AMCU**

Item	Description	Quan tity	Make/ Name of Manufa cturer	Unit Price FOR including installation & Commissioning (without Taxes)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
AMCU	AMCU with accessories along with AMCU operation software cost	350					

# **COMMERCIAL BID FORMAT FOR Milk Analyzer**

Item	Description	Quantity	Make/ Name of Manufacturer	Unit Price FOR including installation & Commissioning (without Taxes)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
Milk Analyzer	Milk Analyzer with accessories like Stirrer, Thermal Printer & external Key board	500					

# **COMMERCIAL BID FORMAT FOR Weighing Balance(100Kg)**

Item	Description	Quan tity	Make/ Name of Manufa cturer	Unit Price FOR including installation & Commissioning (without Taxes)  (In Rs.)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
Weighing balance 100Kg	Weighnig balance 100Kg	200					

Signature &Seal Name:

Address: Mail Id: Mobile No: Land Line No:

# **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
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 requiremen	ts of the tender specifications.
CLAUSE		DEVIATION	REMARKS (Including justification)
Dated- Manufacturer	/ Bidder		Signature and seal of the
Note:	(1)	Where there is no deviation, the statement	should be returned duly signed

- d with an endorsement indicating "No Deviations".
- The technical specifications furnished in the bidding document shall prevail (2) 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 - II**

# TECHNICAL SPECIFICATION OF BULK MILK COOLER BULK MILK COOLER (VERTICAL TYPE) FUNCTIONAL REQUIRMENTS

# (<u>Bulk Milk Cooling Unit includes Bulk Cooler, DG set, Servo Stabilizer</u> & 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 evening40%

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** Aircooled, 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** <u>Thermostatic Expansion Valve</u> 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 ± 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 one 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.

# 3.5Cables & 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 confirming to IE rules. Supply of cables including earthing cable is within the scope of the bidder.

#### 4.0 Pumped Feed System

<u>Inter connecting and Fittings</u>: 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 weighment 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.

	Description	2000/5000 (Single phase/3 Phase)
A.	MILK TANK	
1.	Capacity – RATED/GROSS	ন্থ্ৰিচ্চেক্ডাদ্ভঙ্গাth Seal: 2 <b>99</b> %/5000 L
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.	Туре	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	
16.	Type of Refrigerant	To be specified by Bidder
В.	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

# **DIESEL GENARATOR**

# **TECHNICAL SPECIFICATION OF D.G.SET**

SI no.	Description	Specifications Required
1.	General Operating and Design conditions	<ul> <li>The DG set shall be of capacity:</li> <li>15 KVA single/three phase, air or water cooled for I KL / 2 KL BMC &amp;</li> <li>25 KVA three Phase, air or water cooled for 5 KL BMC. The DG set should be heavy duty design, industrial type, rated for continuous operation for the refrigeration system, milk tank agitator &amp; milk dispatch pump, hot water geyser (approx. 2,0 kW), AMCU, Lightings, Ceiling fan.</li> <li>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.</li> </ul>
2.	Confirmation to regulatory norms for environment and Approval from Local authorities	<ul> <li>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&amp; amended by GSR 448 (E) dt.12/07/2004.</li> <li>Also compliant with new CPCB IVnorms applicable from June, 2024.</li> <li>The exhaust pipe with exhaust muffler with insertion loss of minimum 25 dB (A) is connected to the exhaust manifold preferably with flexible bellows.</li> <li>In case the DG Set is located within the BMC building, the exhaust pipe with insulation &amp; cladding of adequate length be provided extending the original pipe over the roof of the building to avoid pollution in and around the location.</li> <li>Supplier to obtain the approval of Local authorities in case it is required by the rules.</li> </ul>
3.	Diesel Engine	<ul> <li>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.</li> <li>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</li> </ul>

		Signature:
5	Control Panel	The diesel generating set to have suitable control panel duly prewired with the following instruments:  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.
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.
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
		<ul> <li>application as per IS 10001 norms.</li> <li>Engine ratings should be for operation at full load condition and should be suitable to take 100% block load.</li> <li>Self-starting arrangement with 12V suitable rated heavy-duty Lead Acid accumulator type battery with Solid-state battery charging arrangement and cables.</li> <li>Standard set of tools. First fill of Lubricating oil, First fill of coolant, Lubricating oil pressure &amp; temp. gauge,</li> <li>Standard set of tools. First fill of Lubricating oil, First fill of coolant, Lubricating oil pressure &amp; temp. gauge,</li> <li>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.</li> <li>Steel Diesel Storage barrel of 200 lit capacity with manual pump</li> </ul>

Signature:

Seal:

Date:

# **Annexure - IV**

# **THECHNICAL SPECIFICATIONS FOR STABILIZERS**

SI	Particulars Particulars	Technical Specifications
no.	r ai ticulai s	recinical opecinications
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
		230 V +/- 1% for Single Phase
	Voltage Out Put	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 - V**

# **SPECIFICATION OF WEIGHING BALANCE**

Platform type Electronic Weighing Machine Standard

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 road 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 - VI

# **Technical specifications for Automatic Milk Collection Unit (AMCU)**

# 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 - 500 C Relative

**Humidity** : 50 % to 95 %

# 2.2 Operational provisions:

- 2.2.1Installation 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 earthling before start of actual operation of AMCU.

Sr.No	Particulars	Specification
1.0	Basic Operations at	All operations are manual or semi-automated at society
	Society	level.
		No regular power supply is available and fluctuation in
		power supply is very high.
		Clean and dust free environment cannot be guaranteed.
		The operators may not be IT savvy.
		Major Activities at Society.
		. 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 of AH, Aletc
		. Income from Services
		. Other Income
2.0	AMCU-Functional	. The Unit should be suitable for instant weighing of milk,
	Requirements	measuring record fat content, calculating the amount payable to
		the member based on fat & 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.
3.0	Computer Hardware and	Models of PC offered should be of Enterprises/Business
	Software	Class Desktop PC (OEM).Home/SMB Class Desktop PC
		shall not be accepted with Manufacturer Warranty
3.1	Processor	. 11thGeneration Intel Core,64 Bit, I-5 Processor
3.2	Form Factor	. Tower Model
3.3	Chipset	Intel Chipset supporting the above processor
34	Memory	. 8 GB DDR3 1333 MHz SDRAM expandable to 16 GB
3.5	Internal Storage	. 1 TB Sata II Hard Disk 512 GB SSD
3.6	Removable Media	. DVD+/- RW Writer
3.7	Graphics	. Integrated Intel HD Graphics supporting 1600x1200 Resolutions
3.8	Audio	
3.8	Audio	. Integrated high definition audio

3.9	Network	. 10/100/1000 Mbps Gigabit Ethernet
3.10	Display Monitor	. 18.5" wide screen LCD/LED Backlit TFT Color HD Monitor
		with 1366x 768 native resolutions.
3.11	Input Devices	. USB Standard Keyboard and USB Optical button Scroll
		Mouse with Pad.
3.12	Ports & Connectors	. 3 Serial Port, 1 Parallel Port, 1 VGA Port, 1 Microphone/
		Headphone Jack, 1 RJ45 Port
3.13	USB Ports	. 6 USB 2.0 Ports (Min. two on front and two on rear side)
3.14	PCI Slots	. Minimum 1 free PCI Slots
3.15	Compatibility	. Window 11
3.16	Particulars Operating System-11	Specification  Licensed Windows 11 professional 64 bit Preloaded with OS
3.10	Operating System-11	Recovery Media Driver CD.
3.17	Anti Virus	.Norton,Symantec,etruat,Macfee,TrendMicro,Quick Heal Latest version with three (3) years license.
3.18	Warrantee obligation	. call should be attended by next business day.
	_	.problem resolved within 48 hours of attending the call.
		within 48 hours in case any part is to be replaced.
3.19	Scope of work	. Installation and configuration
3.20	Application Software	. Supplier to develop and provide Integrated AMCU Software
		for all functions & requirements of Milk collection centre.
		Supplier to finalize requirements from EIA for all Milk
		Collection centers, develop/modify a software and install in
		each AMCU with a texting period of software for 6 months
		from the date of installation of software and subsequent one
		time modifications in the software based on feedback /request
		from EIA/Milk Collection centers to be done without extra
		charges.
		.Software should be Bi-Lingual (English Language)
		. Data generated from the new system should be compatible
		with the format in which the data is accepted by the existing
		system.
		.The Software should be user friendly, menu driven and provide
		help facility in local language.
		.The data input forms, reports, menus etc. should be in English.
		. The application software, if felt essential by the user may be
		modified/upgraded to meet the need of the milk collection
		centre.
		. The software should have provision of connectivity of such
		milk collection center with milk collection agencies head office
		in the future.
		. The supplier should also make necessary changes on case-to-

		case basis, wherever required. The application package should
		contain legal copy of the database used.
4.0	DOT MATRIX	
	PRINTER	
41	Print Method	Impact dot Matrix external printer
4.2	Pins in head	24 pins
4.3	Print Direction	Bi-direction parallel interface USB 2.0 (Full speed)
4.4	Print Speed	300 cps high speed draft, LQ and other features
4.5	Printable column	80 (10 cpi)
4.6	Paper Handing	Pull tractor unit
4.7	Paper path	Manual insertion front or rear in top out: Push Tractor front or rear in top out –front or rear or bottom in and top out.
4.8	MTBF (Hrs at 25% duty cycle)	10000 POH (25% Duty)
4.9	Copy Capability	Original 3 copies
4.10	Cartridge	Ribbon cartridge Black with 2.5 million characters
4.11	Compatible OS with Drivers	MS Windows 8/7/Vista/XP(32bit/64 bit),Windows Server
		2003/2008/2012 (32 bit/64 bit)
4.12	Accessories	Roll Stand
5.0	<b>Electronic Weigh Scale</b>	
5.1	Functional Requirement	To Electronically weigh & digital display of milk quantity in litre in a container
5.2	Capacity	200 kg
5.3	Least Count	20 gm
5.4	Weight Accuracy	20 gm as per Standards of W & M Rules 1987 medium accuracy Class III
5.5	Certification & Stamping	Duly Certified and stamped by W&M Dept. and confirming to IS:9281(pt 1&2) 1979, IS:9281 and IS:9281 (pt.4) 1983 as amended up-to-date.
5.6	Display Resolution	1/10,000 (accuracy, Class-III)
5.7	Load Cell	300kg S/S ADI
	OI 1 01 1- I 1	2000/ to take imment of loading with audio (been) wiewel
5.8	Over Load & shock Load	300% to take impact of loading with audio (beep) visual
5.8	Protection	indication
5.8		
	Protection	indication

	material/design	after fabrication
		. All screw/bolts/nuts to be of SS.
5.12	Indication in display EWS	Quanitity-7 segment RED LED,6 digits,minimum 1.3 mm
	Unit	height,display for mode of operation zero,tare,kg/litre,by
		default KG.
5.13	Display Unit Mounting	.Pole mounted type with sturdy base and SS 304,38 mm
		dia,pipe 1.2 m high.
		. 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.
5.14	Calibration protection &	.Special arrangement to house PCB & Sealing arrangement
	Sealing Arrangement	
5.15	Load Cell Cable	Load Cell cable from platform to display unit with reinforced
		heavy duty PVC conduit.
5.16	Battery for working on	In built, 6 V capacity minimum for 6 hrs.
	power failure	
5.17	Power Supply	As given above with minimum 1 m power cable with plug top
		AC/SC
5.18	Model Approval Certificate	Manufacturer to have model approval certificate of regulatory
		authority/ Govt of India (Weight & Measure Unit)
5.19	Stamping at Site	Supplier to arrange stamping of each scale at site from local
		weights & measure inspector before installation. Supplier
		should include the cost of stamping in the unit of AMCU for
		the 1st year only. Stamping of each weighing scale from 2nd year
		onwards will be in the scope of EIA.
5.20	Repairing License	
Sl.No	Particulars	Specification
6.0	Milk Analyzer:	(Single Unit) with Blue tooth wi-Fi facility with
		Price display
6.1	Analyzer Type	Ultrasonic principle based milk analyzer for testing FAT,SNF
		and added water.
6.2	Analyzer CPU	32- Bit Dual ARM Cortex Processor
6.3	Analyzer CPU Speed	120 MHz or Above
6.4	Power Supply	External power supply adapter to avoid power line interference
		and easy maintenance.
		12v, 30W (Average power during measurement)

6.5	Rate chart facility	Facility to create rate chart using 5-methods and
		import/exportRate chart via USB flash drive directly.
6.6	Per Liter Price on Analyzer.	Analyzer Display per liter Price
		As Omfed Kg fat and Kg snf price structure
6.7	Data Storage	Option to store customer ID, Quantity (Manual ), and at least
		4000 test results.
6.8	Computer Interface	RS232 & USB Connectivity
6.9		Real time cloud based app. Test result updation( Test result
	WiFiCloud connectivity	updation, Offset correction, Chart updation, Password updation
		and machine statistics updation)
6.10	Bluetooth Android app	Real time android app. Test result updation
	connectivity	
6.11	Android app. Machine	Testing, cleaning and password change
	operational control	Remotely control the machine
6.12	OTP based login facility	OTP send to the android app. All settings and correction
6.13	Measuring Method	Ultrasonic technology
6.14	Password protection	Setup, Calibration
6.15	Centralized Rate chart	From Cloud server.
	updation	
6.16	Display	High contrast blue back light 4-line LCD display.
6.17	Samples per hour	120 samples
6.18	Sample volume	20 ml
6.19	Measuring cycle	Under 27 Seconds at specified conditions
6.20	Sample milk Temperature	1 Deg. To 40 Deg. Celsius (+/- 1 Deg. C)
6.21	Fat	0.5% to 15% (+/- 0.1%)
6.22	Fat Repeatability	0.5% to 12% (+/- 0.1%)
		12% to 15% (+/- 0.2%)
6.23	Solid Non-Fat (SNF)	3% to 15% (+/- 0.15%)
6.24	CLR	15 to 40 (+/- 1)
6.25	SNF Repeatability	0.15% (+/- 0.15%)
6.26	Added Water in Milk	0% to 99% (+/- 3%)
6.27	Protein	2% to 7% (+/- 0.1%)
6.28	Lactose	0.01% to 6% (+/- 0.2%)
6.29	Per Lt Price	Show On Display, Per Liter cost display on screen. As Omfed Kg fat Kg Snf Price.
6.30	Cleaning methods	Automatic & Manual with plunger
Sr.No	Particulars	Specification
6.31	Calibration and correction	Separate function for calibration and correction ( Password

	control	protected)
6.32	Cleaning Time and count	Programmable Cleaning Time and count
	control	
6.33	System operational history	Show total tests, cleanings, cleaning skip
6.34	Test sample take	Automatic Intake
6.35	Output Readings	Fat, SNF, CLR, Protein, Lactose, Temperature, Added water
		etc(Show/Hide programmable Display arrangement)
		Enable/Disable
6.36	Separate Channel for	COW, BUFFALO and MIX
	calibration and correction	
6.37	Advance weight entry	Manual
	facility	
6.38	External peripheral	Interface with multimedia keyboard and Pen drive connectivity
	connectivity	( Export reports/Chart update )
6.39	External Display	Wired
	connectivity	
6.40	Multiple Analyzer output	Selectable multiple models analyzers output data facility and
	format	serial printer connectivity
6.41	Result Printing format	Output printing Parameters can be Programmable (Enable /
		Disable) External receipt printer
6.42	Real time clock	Day Collection Manual updation and Server time updation
6.43	Enclosure	Corrosion Free, Light weight Portable ABS Plastic
6.44		Collection report, Farmer report, shift report, Dispatch report
	Reports	and collection summary (Generate farmer ID based or Date to
		date)
6.45	Cleaning solution	One set of Daily and weekly cleaning solution should be
		provided.
6.46	Warranty	3-Year
7.0	Ultrasonic Milk Sample	
	Stirrer	
7.1	Functional Requirement	To remove air from fresh milk sample by vibrations created in
		the milk before testing of milk.
7.2	Туре	Table Top,Ultrasonic Stirrer
7.3	Stirrer for Ultrasonic Stirrer	Frequency and Timer setting
7.4	Ultrasonic Frequency	20-25 KHz (Variable)
7.5	Timer	1-99 Sec selectable

temperature -5 to 50 Degree C  7.7 Complete Ready to Use Item complete in all respect with required electric/electric parts, ready for use at site.  7.8 body Poweder Coated Metal, 1.2 mm thick minimum  7.9 Operating Voltage 230 Volts +/-10, AC,50 Hz and 12 Volts DC  8.0 REMOTE DISPLAY	
parts, ready for use at site.  7.8 body Poweder Coated Metal, 1.2 mm thick minimum  7.9 Operating Voltage 230 Volts +/-10, AC,50 Hz and 12 Volts DC	
7.8 body Poweder Coated Metal , 1.2 mm thick minimum 7.9 Operating Voltage 230 Volts +/-10, AC,50 Hz and 12 Volts DC	ronic
7.9 Operating Voltage 230 Volts +/-10, AC,50 Hz and 12 Volts DC	
8.0 REMOTE DISPLAY	
KENTOTE DISTERT	
UNIT (RDU)	
8.1 Functional Requirement To display pourer members milk collected & milk testi	ng and
other selected parameters in English/ Local Language	
8.2 Type Wall mounted type	
8.3 Display Parameters -8 No 7 Bright segments, Red LED,	
8.4 Labels for display Screen Printed	
8.5 Environment Dusty, Humid, preferably housing to be with IP 55 or	
equivalent protection, rust proof powder coated metalic	<b>3.</b>
8.6 Connecting Cables Minimum 5 m Power cable with plug top with connect	or at
both ends, Minimum 5 m Data cable with connector at	both
ends	
9.0 Inverter & Battery	
	attached
9.1 Functional Requirement To give regulated AC power to AMCU from mains or	
9.1 Functional Requirement To give regulated AC power to AMCU from mains or battery	
battery	
battery  9.2 Type Line-Interactive type	
9.2 Type Line-Interactive type 9.3 Capacity 1500 VA minimum	
9.2 Type Line-Interactive type 9.3 Capacity 1500 VA minimum 9.4 Back up time (Full Load) 3-hrs minimum (in one shift)	
battery  9.2 Type Line-Interactive type  9.3 Capacity 1500 VA minimum  9.4 Back up time (Full Load) 3-hrs minimum (in one shift)  9.5 Output Wave Form Sine Wave/Quasi Sine wave	
battery  9.2 Type Line-Interactive type  9.3 Capacity 1500 VA minimum  9.4 Back up time (Full Load) 3-hrs minimum (in one shift)  9.5 Output Wave Form Sine Wave/Quasi Sine wave  9.6 Voltage at input 160-280 V (+10%)	
battery  9.2 Type Line-Interactive type  9.3 Capacity 1500 VA minimum  9.4 Back up time (Full Load) 3-hrs minimum (in one shift)  9.5 Output Wave Form Sine Wave/Quasi Sine wave  9.6 Voltage at input 160-280 V (+10%)  9.7 D C Voltage Bus 24 V	
battery  9.2 Type Line-Interactive type  9.3 Capacity 1500 VA minimum  9.4 Back up time (Full Load) 3-hrs minimum (in one shift)  9.5 Output Wave Form Sine Wave/Quasi Sine wave  9.6 Voltage at input 160-280 V (+10%)  9.7 D C Voltage Bus 24 V  9.8 Voltage at output (With 220V +/- 10%)	
battery  9.2 Type Line-Interactive type  9.3 Capacity 1500 VA minimum  9.4 Back up time (Full Load) 3-hrs minimum (in one shift)  9.5 Output Wave Form Sine Wave/Quasi Sine wave  9.6 Voltage at input 160-280 V (+10%)  9.7 D C Voltage Bus 24 V  9.8 Voltage at output (With Mains as well as with	
battery  9.2 Type Line-Interactive type  9.3 Capacity 1500 VA minimum  9.4 Back up time (Full Load) 3-hrs minimum (in one shift)  9.5 Output Wave Form Sine Wave/Quasi Sine wave  9.6 Voltage at input 160-280 V (+10%)  9.7 D C Voltage Bus 24 V  9.8 Voltage at output (With Mains as well as with Battery)with in-built AVR	,
battery  9.2 Type Line-Interactive type  9.3 Capacity 1500 VA minimum  9.4 Back up time (Full Load) 3-hrs minimum (in one shift)  9.5 Output Wave Form Sine Wave/Quasi Sine wave  9.6 Voltage at input 160-280 V (+10%)  9.7 D C Voltage Bus 24 V  9.8 Voltage at output (With Mains as well as with Battery)with in-built AVR  9.9 Full protection Inbuilt protection - Under / Over voltage, Short-circuit	,
9.2 Type Line-Interactive type 9.3 Capacity 1500 VA minimum 9.4 Back up time (Full Load) 3-hrs minimum (in one shift) 9.5 Output Wave Form Sine Wave/Quasi Sine wave 9.6 Voltage at input 160-280 V (+10%) 9.7 D C Voltage Bus 24 V 9.8 Voltage at output (With Mains as well as with Battery)with in-built AVR  9.9 Full protection Inbuilt protection - Under / Over voltage, Short-circuit Overload Cut off, Low Battery Cut-off, Spikes cut-off	,
battery  9.2 Type Line-Interactive type  9.3 Capacity 1500 VA minimum  9.4 Back up time (Full Load) 3-hrs minimum (in one shift)  9.5 Output Wave Form Sine Wave/Quasi Sine wave  9.6 Voltage at input 160-280 V (+10%)  9.7 D C Voltage Bus 24 V  9.8 Voltage at output (With 220V +/- 10%  Mains as well as with Battery)with in-built AVR  9.9 Full protection Inbuilt protection - Under / Over voltage, Short-circuit Overload Cut off, Low Battery Cut-off, Spikes cut-off  9.10 Warning (LED+ Sound) Low Battery & Overloads	,

		charger
		Boost charging at minimum 7A
		Battery overcharge protection
9.14	Battery No and Type	2 No 100 AH Tubular, Acid filled, low maintenance battery
		with level indicator (Maintenance free Battery desirable)
9.15	Charging Indicator	Battery charging indicator plus low battery/ fault indicator to be
		provided
9.16	Battery Steel Rack	Required
9.17	Leads between UPS &	Flexible, Cu conductor PVC, Minimum 1 m with lugs at both
	Battery	ends.
9.18	Warranty of Battery	3 years against manufacturing defect.
9.19	Steel rack for UPS	Required to place UPS above floor
9.20	No load loss at 24 Volt when	Minimum
	UPS is ON	
10.0	Earthling -	Earth Electrode (Gel type) (Optional)
10.1	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.
10.2	Pipe Material	Galvanized Pipe as per IS: 1239
10.3	Class of Pipe	Class-B
10.4	Diameter (Outer Dia.)	48 mm
10.5	Length	2 Meter
10.6	Wall Thickness	2.5 mm
10.7	Primary Electrode	Mild Steel Strip
10.8	Mild Steel Strip	2.12 m long, 32 mm wide and 6 mm thick
10.9	MS Strip hot dip Galvanized	110 micron
	thickness	
10.10	Gel Filled	Highly non-corrosive compound
10.11	Earth wire to connect	Copper 8 m long & 8 mm dia suitable for interconnection
	Electrode with Power	
	Supply.	
10.12	Filling compound	Adequate
10.13	Civil works	chamber to secure the earthling

- 10.14 The supplier should also provide Annual Maintenance Contract after warranty period on chargeable basis, if felt necessary by the purchaser.
- 10.15 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.
- 10.16 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.

### **COMMERCIAL BID FORMAT FOR BMC (Combo Unit) 2KL**

No	Description	Quan tity	Make/ Name of Manufa cturer	Unit Price FOR including installation & Commissioning (without Taxes)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
	BMC- 2 KL	16					
2 KL BMC	D.G 15 KVA (1/3phase)	16					
Unit (20 no)	Stabiliser-15 KVA (1/3 phase)	16					
	Weighing Balance	16					
	Total						

# **COMMERCIAL BID FORMAT FOR BMC (Combo Unit) 5KL**

No	Description	Quan tity	Make/ Name of Manufa cturer	Unit Price FOR including installation & Commissioning (without Taxes) (In Rs.)	GST (In Rs.)	Unit Price inclusive of all (In Rs.)	Total Amount (In Rs.)
	BMC- 5 KL	5					
5 KL BMC Unit (20 no)	D.G 25 KVA (3phase)	5					
	Stabiliser-25 KVA (3 phase)	5					
	Weighing Balance	5					
	Total						

### Annexure-VII

### **Specification of Analyser& stirrer**

# Analyzer& stirrer with Battery Backup inbuilt Charging by Solar & Electricity

A.1.0	Milk Analyzer	Analyzer Inbuilt with Lithium battery Backup			
		Stand by $-5-6$			
		hours, virtual charging by Electric / Solar			
		panel Cap-50watt.			
		Satire Runs with Same power supply to			
		Analyzer			
1.1	Functional	To test & display FAT, SNF & Added			
	Requirement	water/Per Liter Price Lactose/Protein/ Salts,			
		/Temp/Density sample Milk.			
1.2	Type	Direct FAT:0.5% to 12%			
		accuracy+/-0.1%			
		Measuring 12% to 15%			
		accuracy+/-0.2%			
		Parameters: SNF: 6% to 15%			
		accuracy+/-0.15%			
		Temperature: 1°C to 40°C			
		Calculated CLR:15 to 40			
		accuracy+/-1			
		Parameters: Protein :2% to 7%			
		accuracy+/-0.1			
		Lactose: 0.01% to 6%			
		accuracy+/-0.2			
		Resolution: Added Water In Milk 0% to 99%			
		Accuracy+/-3%			
		FAT,SNF,Lactose,Protein,Salts: 0.01%			
		Temperature : 1°C			
		CLR:0.5, Added Water:1% Repeatability: FAT: +/-0.07%			
		SNF: +/-0.1%,			
		CLR: +/-0.5			
		Milk Testing Time( Measurement) – <b>25 Sec to</b>			
		35			
		Milk Price Per Liter On Display			
1.3	Technical's	Milk Temperature: 1 to 40°C			
1.5	recimical s	Measurement Time: 25 Sec to 35			
		Sample Volume: 15 ml			
		Average Speed: 120 samples/hr			
		Number of Calibration: 3			
		Operation Time Limit: Continuous			
		Display: High contrast			
		blue / green			
		backlight 4 line			
		20 character LCD Display.			
		Average Speed: 120/hr			
		Environmental: Ambient			
		Temperature 10°C to 40°C			
		Conditions: Relative Humidity			
		30 to 80%			
1.4	Price Per Liter	Display on Analyzer,			
1.5	Battery Charging	Display on Machine			
_	. , , , , ,				

	Indicator	
1.6	Test & Cleaning	Can save test &clining count
	Log	
1.7	Storage Data on	20 days
	Analyser	
1.8	Electricals	Power Input: 160-240V AC, 50HZ
		Voltage 12 +/-0.05V
		DC/10A (Max)
		Output: Average Power
		30W
		Peak Power
		120W
1.9	Manual	Operating Manual each in English & Local
		language per AMCU supply
2.0	Clinning	Auto Buzzer Required,
2.1	Storage	Per day collection storage
B. 2.2	Ultrasonic Milk	Detachable
	Sample Stirrer	
2.3	Functional	To remove air from fresh milk sample by
	Requirement	vibrations created in the milk before testing of
		milk.
2.4	Type	Table Top, Ultrasonic Stirrer
2.5	Stirrer for	Frequency and Time Setting
	Ultrasonic Stirrer	
2.6	Ultrasonic	20-25 KHz (Variable)
	Frequency	
2.7	Timer	1-99 Sec selectable
2.8	Environment	Suitable for dusty/humid village environment,
		operating temperature -5 to 50 Degree C
2.9	Complete Ready to	Item complete in all respect with required
	Use	electric/electronic parts, ready for use at site.
2.9	MoC For body	AISI 304, 1.2 mm thick minimum
10.0	Operating Voltage	230 Volts +/-10, AC,50 Hz and 12 Volts DC

## <u>C. Printer Specification</u> – Thermal Printer detachable

- 1. Printing Paper Size 53-58 mm
- 2.Operating voltage 12v
- 3. Interface -RS 232.
- 4. Printing Parameters –FAT, SNF, CLR, PROTINE, LACTOSE, SALT, ADDED WATER, RATE
- 5. MOC GI- COATED

#### D. External Key Board

- 10.14 The supplier should also provide Annual Maintenance Contract after warranty period on chargeable basis, if felt necessary by the purchaser.
- 10.15 Training The supplier shall ensure proper and accurate functioning of all the components of the Milk Analyzer and impart training to the operating staff in operation, maintenance and routine check till the operating staffs are confident in operation and routine maintenance.
- 10.16 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-VIII**

#### **SPECIFICATION OF WEIGHING MACHINE**

Sr.No	Particulars	Specification		
10	Electronic Wei h Scale	IOOKG KG/LTR FACILIT		
1.1	Functional Requirement	To Electronically weigh & digital display of milk quantity in litre in a container		
1.2	Ca aci	100k		
1.3	Least Count	10 m		
1.4	Weight Accuracy	10 gm as per Standards of W & M Rules 1987 medium accurac Class III		
1.5	Certification & Stamping	Duly Certified and stamped by W&M Dept. and confirming to IS:9281(pt 1&2) 1979, 199281 and 199281 (pt.4) 1983 as amended u -to-date.		
1.6	Dis la Resolution	1/10,000 accuracy, Class-Ill		
1.7	Load Cell	200k S/S ADI		
1.8	Over Load & shock Load Protection	300% to take impact of loading with audio (beep) visual indication		
1.9	Platform Size	400 mm X 400 mm		
1.10	Platform Moc	AISI SS 304, 1.6 mm thick, 150 Late it to		
1.11	Platform under frame material/design	Cold rolled mild steel box of adequate size, Hot dip galvanized after fabrication . All screw/bolts/nuts to be of SS.		
1.12	Indication in display	Quanitity-7 segment RED LED,6 digits, minimum 1.3 mm		
1.12	EWS Unit	height, display for mode of operation zero,tare,kg/litre,by default KG.		
1.13	Display Unit Mounting	Pole mounted type with sturdy base and SS 304,38 mm dia,pipe 1.2 m high.  . 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 com table.		
1.14	Calibration protection &Sealin Arran ement	Special arrangement to house PCB & Sealing arrangement		
1.15	Load Cell Cable	Load Cell cable from platform to display unit with reinforced hea du PVC conduit.		
1.16	Battery for working on ower failure	In built, 6 V capacity minimum for 6 hrs.		
1.17	Power Supply	As given above with minimum 1 m power cable with plug top AC/SC		
1.18	Model Approval Certificate	Manufacturer to have model approval certificate of regulatory authori / Govt of India Wei ht& Measure Unit		
1.19	Stamping at Site	Supplier to arrange stamping of each scale at site from local weights & measure inspector before installation. Supplier should include the cost of stamping in the unit of AMCU for the 1 styear only. Stamping of each weighing scale from 2 <sup>nd</sup> year onwards will be in the SCOPE of EIA.		
1.20	Legal Metrology	Party Having State Legal Metrology License Both Dealer/Repair should be Produce.		

### **TECHNICAL DEVIATION STATEMENT FORM**

The following are the particulars of deviation	ns from the requiremen	nts of the tender specifications.
CLAUSE	DEVIATION	REMARKS (Including justification)
Dated- Manufacturer / Bidder		Signature and seal of the
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

- BIDS CONTAINING DEVIATIONS FROM BIDDING DOCUMENT TERMS AND OTHER CONDITIONS MAY BE REJECTED.
- 2. BIDS NOT ACCOMPANIED BY BID SECURITY (EARNEST MONEY DEPOSIT) SHALL BE SUMMARILY REJECTED.
- 3. NON-COMPLIANCE WITH EVEN A MINOR TECHNICAL REQUIREMENT SHOULD BE SPECIFICALLY STATED BY THE BIDDERS.
- 4. BIDDERS SHOULD FURNISH THEIR COMPLETE ADDRESS FOR THE PURPOSE OF FURTHER CORRESPONDENCE PERTAINING TO BIDDING DOCUMENT.
- 5. CORRECTIONS IN THE BID SHOULD BE NOTED OVER AND INITIALED AT THE PLACE OF CORRECTIONS.
- 6. NEGLIGENCE OF THE BIDDER IN PREPARING THE BID CONFERS NO RIGHT TO WITHDRAW THE BID AFTER IT WAS OPENED.
- 7. SPECIFICATIONS, CONDITIONS, SCHEDULES AND DRAWINGS OF BIDDING DOCUMENT CONSTITUTE AN INTEGRAL PART OF THE BID.
- 8. ALL THE BIDS ALONGWITH ENCLOSURES, DRAWINGS AND TECHNICAL LITERATURE SHOULD BE IN ENGLISH ONLY.
- 9. BIDDING DOCUMENT SHALL BE GOVERNED AND INTERPRETED ACCORDING TO THE SYSTEM AND COMPONENTS UNDER TROPICAL CONDITIONS.
- 10. ALL THE BIDDERS SHOULD SUBMIT QUALIFICATION APPLICATION IN THE GIVEN FORMATS WITH REQUIRED DOCUMENTATION.
- 11. BIDS SHOULD BE KEPT VALID FOR ACCEPTANCE FOR A PERIOD OF 90 DAYS FROM THE DAY BIDS ARE OPENED.
- 12. THE BIDDING DOCUMENT SHALL BE GOVERNED AND INTERPRETED ACCORDING TO THE LAWS OF THE UNION OF INDIA.
- 13. 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.
- 14. 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.
- 15. THE BIDDERS WHO QUOTE FOR SUPERVISION OF ANY VANS SHOULD ALSO INDICATE THE PRICES IN THE BID SEPARATELY.
- 16. 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.