

**THE ICHHAMATI
CO-OPERATIVE MILKPRODUCERS' UNION LIMITED**
[A Govt. of West Bengal Project]

HATIPUKUR ROAD, BARASAT-700124, NORTH 24-PARGANAS

Regd. No. 3/IMU (N-24 Pgs.) of 1997

email : ichhamati123@gmail.com/mdichhamati@gmail.com

Website:www.ichhamatimu.com

Memo NO. IMUL/e TENDER /138/26-27 / 308

Date: 09/06/2026

The Ichhamati Cooperative Milk Producers' Union Limited invites Tender/ Reverse Auction for procurement installation and commissioning of 10 AMCUs as per specification terms and conditions mentioned hereunder:

Pre-Bid Meeting & Demonstration with all equipment to be supplied is mandatory on the date fixed by NCDFI.

Scope of Work	Procurement installation and commissioning of 10 AMCUs along with 3 years of Comprehensive maintenance. Schedule -I
Estimated Cost of Work	15 lakhs.
EMD to be submitted	30000/- (Thirty thousand)

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Statutory & Non Statutory Documents which is required to be uploaded in NCDFI e-Market platform	<ol style="list-style-type: none">1. Company Profile which consists of Registration Certificate of Company. MOA & AOA must be furnished. Declaration that the Company is operational for 3 years.2. GSTIN (GST Registration Certificate)3. PAN CARD4. Company must have valid PF Registration & ESI Registration certificate for past 3 years.5. Minimum Turnover of 1 crore in last 3 years. Audited Balance Sheet of 2 years (2023-24),(2024-25). Companies with decreasing turnover shall not be considered.6. Income Tax Return of 3 years (2023-24) ,(2024-25).7. Minimum 3 years of work experience in supply, installation, testing and commissioning of at least 300 AMCUs in at least 10 Milk Unions/Milk Federations. Work Order and Completion Certificates as proof of Experience must be uploaded.8. Duly filled Annexure-I.9. Declaration that the company is neither blacklisted by NDDDB, any Milk Union or Milk Federation.10. Details of Manufacturing Unit, Service Unit with Staff strength designation, qualification and experience must be uploaded.11. The bidder must be manufacturer of Milk Analyzer, Stirrers, Electronic Weighing Scales. Document in support of the same must be uploaded. Bidder must upload a valid license for repairing weighing scales.12. Bidder must provide performance verification report for milk analyzer regarding its accuracy obtained from National Dairy Development Board.13. Bidder must provide letters of authorization from principal companies like HP/DELL/LENOVO for supply and service of computers for 3years as per terms and conditions of the tender.14. Bidder must provide letters of authorization letters from principal company EPSON for supply and service of printers for 3 years as per terms and conditions of the tender.15. Bidder should furnish a list of make and model of components to be supplied against this tender along with Compliance Statement.16. Bidder should have unified Service Ticket Management System for managing the Service. Declaration in support of this claim must be uploaded.
VALIDITY OF BID	2 years
RATE TO BE QUOTED BY THE BIDDER	AS PER ANNEXURE-III
<i>List of documents are to be submitted to NCDFI for Technical Bid. Financial bid of Technically qualified bidders shall only be accepted for evaluation.</i>	

GENERAL TERMS & CONDITIONS

1. During evaluation the Milk Union may summon any bidder and seek clarification/information regarding bids within the stipulated time frame. In case the bidders fail to clarify any query during the stipulated time frame the bid shall be liable for rejection.
2. **The Milk Union may reject any bid from any party with unsatisfactory performance with the Milk Union or any other Milk Union in the past.**
3. Inspection of materials may be undertaken at the supplier's premises whenever necessary by the Tendering Authority/ any officer authorized by the undersigned.
4. Bidders are required to go through the Tender Documents understand the requirement the location of the installation and commissioning and then quote their rate. Rate once quoted by the bidder shall be deemed to be quoted by the bidder after understanding the requirements of the Milk Union. Rates once quoted are final and no alteration in rate shall be allowed.
5. The Bidders must have local arrangement (within the District of the Milk Union) for 'prompt after sale service' of the installed unit as and when required within warranty period free of cost. The service must be attended within 24 hours from the receipt of the information. The Milk Union can provide room for service arrangements.
6. Milk union shall approve the technicians to be deployed in the DCS level. The deployed technicians should be conversant with AMCU system and must possess requisite knowledge of the following:
 - a. Knowledge of repair and maintenance of household electrical circuits.
 - b. OS installation & Activation.
 - c. Backup, Recovery, Hardware & Software Trouble shooting & testing peripherals.
7. Deployed technicians should be given proper authorization and requisite Identity cards. Personnel deployed without I-cards and authorization shall not be entertained.
8. It shall be 365 days operations hence technicians should manage leaves accordingly.
9. Hardware & Software support of the entire operations has to be given by the supplier. Milk union shall provide necessary training to the supplier's technicians.
10. It is the discretion of the milk union to operate in either NDDDB developed AMCS application or any other application as deemed fit by the milk union. If the milk union shifts operation through a different software, IT support has to be given by the supplier. Milk union shall provide requisite training to the technicians for the same.
11. 5% of Backup AMCU set must be given to the milk union which shall serve as standby and this shall be kept at the custody of Service Engineer/Technician of the supplier.
12. Milk union shall allot separate room/warehouse for storing supplier's standby devices. Failure to keep 5% of Backup AMCUs shall lead to non-release of performance guarantees.
13. Supplier must maintain requisite spare which is to be kept in the custody of technicians deployed. The Milk Union may verify the spares available with the supplier's technicians. If any site is down for more than 24 hours due to requirement of spare parts not available to the technician of the supplier then a liquidated damage of Rs. 500/- per day shall be levied upon the supplier and this shall be deducted either from bills or Performance Guarantee.
14. It is to be noted that if any spare is changed by the supplier's technician it should be replaced with new original spare of approved make as installed in other AMCUs. The new spare shall be verified by the personnel of the Milk Union and then it shall be fitted into the machine. Changed spare must be warranted till the tenure of the Contract.
15. Any call must be addressed within 24 hours when a call requires change of spares it must be addressed to actual condition within 24 hours. In case any call is likely to get resolved after 48 hours, standby equipment has to be provided to the DCS. Failure to which liquidated damage of Rs. 500/- per day shall be imposed and deducted from the performance guarantee.
16. Any technician/personnel deputed found involved into monetary transaction with DCS or found to be involved into any unfair means or unethical adopting/ theft/ gambling/ intoxication/misbehavior which is contrary to industry standards shall be straight away rejected and shall not be allowed in the DCSs, BMCs and chilling stations of milk union. The supplier must immediately abstain such element. Repetitions of such activities shall lead to forfeiture of performance guarantee and the supplier shall be blacklisted by the milk union.
17. **Site Inspection & Demonstration: It is obligatory for the bidder to perform site inspection and provide demonstration of the Units to be at his own expense. Nondemonstration of one complete unit of AMCU shall be treated as disqualification of the bidder (s). In any case submission of the tender without demonstration of the unit shall straight way reject the bid(s) of the bidder(s). Mere participation in the tender without undergoing any site inspection and demonstration shall lead to disqualification of the Tender. During demonstration the demonstrated unit shall only be supplied. Supply not conforming specifications shall not be accepted and failure to supply materials as per specifications shall lead to rejection of Tender and forfeiture of EMD.**

18. **Price:** Price of 10 AMCU Set including all taxes and levies with 3 years of Comprehensive warranty and 2 years of comprehensive maintenance shall be quoted by the party. Price must include cost of supply deployment and installation of equipment with deployment of 1 no(s) of support engineers for 5 years who shall be liable to provide the service. All risks and cost including backup machinery to provide uninterrupted service must be taken into consideration by the supplier.
19. **Bid Validity:** The rate once quoted in this Tender shall remain valid for a period of 1 years from the date of Financial Bid Evaluation. Bidders are therefore required to assess their rates before quoting them.
20. **Warranty:** All the spares and components of the AMCU listed above must be warranted by the supplier for a period of 5 years from the date of installation. If any component is found to be non-functional due to any manufacturing defect or because of poor workmanship the component must be immediately replaced with a new component by the supplier within 24 hours. In case the replacement is likely to take a longer period then the supplier must arrange for a substitute within 48 hours.
Warranty Extension: The warranty of equipment would be extended if equipment remains down during the warranty period, for more than period mentioned below: -
- ✦ If equipment has been down for more than 10 days in a year, warranty would be extended by one Month,
 - ✦ If equipment has been down for more than 30 days due to malfunctioning of the any part supplied by bidder or want of spares/ consumable, warranty would be extended by one Year.
 - ✦ If equipment has been down for more than one year due to malfunctioning of the any part supplied by bidder or want of spares/ consumable, warranty would be extended by 5 (Five) Years.
21. **Payment:** Payment shall be released in 3 phases in NEFT/RTGS to the Bank Account of the supplier after submission of 3 copies of invoice along with documents mentioned in Documentation clause which are as follows:
- a. **First Phase:** 70% payment shall be released after receipt of the materials (all the components) as per the technical specification in good condition certified by the Concerned Official and approved by the Competent Authority. EMD shall also be released after receipt of an intimation in writing from the supplier.
 - b. **Second Phase:** 20% payment shall be released after 2 months of successful installation, commissioning and trial run of all the units supplied. All the required training to be imparted to the DCS personnel and official of the Milk Union for release of this payment. 2 months shall count from the very first day when the entire installation commissioning and trial run with necessary training has been imparted.
 - c. **Third Phase:** Remaining 10% payment shall be released within 60 days after receipt of equivalent amount of Performance Bank Guarantee valid for 5 years. The 5 years shall count from the days of last successful installation date. In case the party fails to provide maintenance and support as per the requirement of the Milk Union or is found to act in a way which jeopardizes the Milk procurement, the Performance Bank Guarantee shall be forfeited after giving a Notice to the supplier in writing and the supplier shall be debarred from participating into any tender in future. Performance Bank Guarantee shall be released within 60 days of successful execution of the Contract.
22. **EMD & Security Deposit:** EMD shall not carry interest. EMD of the successful bidders shall be converted into Security Deposit and shall be released along with the first phase of payment.
23. **Insurance:** - The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. If the equipment's is not commissioned and handed over to The Bhagirathi Co- Operative Milk Producers Union Ltd. within specified period, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to The Bhagirathi Co-operative Milk Producers' Union Ltd.
24. **Penal Measure:** Time being the essence of the contract, failure to supply the materials within due time or delay in installation and commissioning of the materials shall invite penalty.
- I. **Liquidated damages of 0.5%** per day subject to a maximum of 10% of the total cost of materials shall be charged if goods are not delivered installed or commissioned in time and the amount will be deducted from the Security Deposit and bills submitted by the supplier.
 - II. For violation of any terms and conditions of the contract the Bhagirathi Milk Union reserves the right to cancel the contract without assigning any reason thereof. On termination of Contract the Security Deposit will be forfeited and the resultant loss shall be recovered from the company. The subsequent company will be blacklisted for 3 years.
27. **Loading and Unloading** of goods is the responsibility of the supplier. If the Milk Union makes its own arrangement for the unloading of the materials the respective cost of the same shall be deducted from the bidder.

28. **Documentation:** Complete documentation like principal warranty papers, operation manuals, document of technical specifications and guarantee cards have to be furnished by the supplier. Failure to submit any of the above document in hard copies at the time of supply of the materials shall lead to non-acceptance of the material.
29. **Inspection of AMCU Units:** The Milk Union shall make a detailed inspection of all components of the AMCU Unit prior to the acceptance of the material. The Milk Union can also conduct joint inspection or engage a third party for inspection of the components. Consumables provided like cleaning solution must contain date of manufacture and expiry along with test report which mentions the pH level of the solution. Consumables not accompanied by manufacture or expiry date or without any test report shall not be accepted.
30. **Delivery, Installation and Commissioning:** The materials must be delivered in the Office of
The **ICHHAMATICO-OPERATIVE MILKPRODUCERS' UNION LIMITED**
HATIPUKUR ROAD, BARASAT-700124, NORTH 24-PARGANAS, West Bengal .

Phase	Quantity to be delivered in no(s)	Pre-Installation Inspection by Milk Union (in days)	Installation & Commissioning	Expected Completion Date
Phase-I	10 nos	Within 15 days of complete delivery	10 days after pre installation inspection	September 2026

The installation and commissioning of the Unit shall be across the DCSs of North 24 Parganas District. Delivery installation and commissioning must be complete as per above schedule. If a system remains down for more than time specified in Warranty clause the warranty tenure shall be extended and subsequently the performance guarantee shall be extended. The dispatch of machines must be as per the above table as the milk union shall have to arrange floor space for safe keeping of materials till installation.

27. **Standards:** The Goods supplied under this Agreement shall conform to the standards mentioned in the Technical Specifications and when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin.
28. **Registration of Goods:** If required under the Applicable Law, Goods supplied under the Agreement shall be registered for use in India.
29. **Patent Rights:** The Supplier shall indemnify the Purchaser against all third party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.
30. **Packing:** The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Purchase Order.
31. **Incidental Services:** Following incidental services are required, the price of which will be quoted by the Suppliers in the BOQ sheet in the **Annual Maintenance Contract** cell in the Financial Bid.
- Annual Maintenance for the supplied Goods, for a period of 4 years. This service shall not relieve the supplier of any warranty obligations under this agreement.
 - Training of the Purchaser's personnel, at the Purchaser's site, in assembly, startup, operation, maintenance and/or repair of the supplied Goods.
 - AMC includes onsite comprehensive maintenance which both preventive and corrective maintenance. Preventive maintenance should be carried twice in a year in 6 month's interval which shall include earthing and voltage checks, battery cleaning, water refilling in batteries, cleaning of computers, analyzers, weighing scales, printers, RDUs and trouble shooting them to keep the system in good condition. Corrective maintenance includes replacement of defective components with new ones, free of cost. Burnt components and items damaged due to sheer negligence in handling by the DCS personnel or by the official of the Milk Union shall not come under this clause. Minimum two preventive visit per year and visit as and when the equipment is under breakdown within 24 hours shall be required. Both preventive and corrective maintenance logs shall be submitted by the supplier's technicians to the Milk Union which shall be cross verified. Failure to provide preventive maintenance in 6 months shall lead to penalty of Rs. 2000/- per unit on half yearly basis.
 - Burnt and broken components/spears:** During installation the supplier's technician must check voltage, earthing and probability of electrical surges in the DCS. In case any burning or breakdown issues, which may occur due to voltage, earthing or electrical surges for which DCS is not liable shall be in the scope of the supplier. The unit must be restored by changing burnt or broken spares with original ones by the supplier and no cost for the same shall be payable to the supplier. For damage of components due to the sheer negligence of DCS shall be changed by the supplier with original ones at the cost of the milk union but the components must be changed within the prescribed timeline. The supplier shall provide this service keeping liaison with the principal supplier and the milk union shall not interfere in this context. It shall be the duty of the supplier to get the job done in due time.

- e) If vinyl tubes inside the analyzer are dislocated during the warranty period due to the use of chemicals it should be replaced by the supplier without any extra cost.
35. **Termination for Default** The Purchaser, without prejudice to any other remedy for breach of the Agreement, by written notice of default sent to the Supplier, may terminate this Agreement in whole or in part:
- If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Purchase Order, or within any extension thereof granted by the Purchaser; or
 - If the Goods do not meet the Technical Specifications or registration requirement (if any) stated in the Agreement; or
 - If the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, in competing for or in executing the Agreement; or
 - If the Supplier fails to perform any other obligation(s) under the Agreement.
36. **Termination for Insolvency:** The Purchaser may at any time terminate the Agreement by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent.
37. **Termination for Convenience:** The Purchaser, by written notice sent to the Supplier, may terminate the Agreement or the Purchase Order, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Agreement or Purchase Order is terminated, and the date upon which such termination becomes effective. The Goods that are already supplied before the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the terms and prices described in the Agreement and the Purchaser order.
38. **Dispute Resolution** Any dispute arising out of the Agreement, which cannot be amicably settled between the parties, shall be referred to adjudication/arbitration in accordance with the Arbitration and Conciliation Act of 1996 of India. The venue of adjudication/arbitration shall be Kolkata. The language of arbitration shall be English.
39. **Applicable Law:** The Agreement shall be interpreted in accordance with the laws of Union of India.
40. **Force Majeure:** If, at any time during the subsistence of this contract, the performance in whole or in part by either party of any obligation under this contract is prevented or delayed by reasons of any war or hostility, act of public enemy, civil commotion, sabotage, fire, floods, explosion, epidemics, quarantine restriction, strikers lockout or Act of God (hereinafter referred to as events) neither party shall have any claim for damages against other in respect of such non-performance or delay in performance.
41. The undersigned reserves the right to accept or reject any tenders and to cancel the entire tender process without assigning any reason whatsoever.



Managing Director
The Ichhamati Milk Union

Schedule-I

SPECIFICATION OF COMPONENTS OF AMCUs
NDDB: AMCU – Technical Specifications
TECHNICAL SPECIFICATIONS
AUTOMATIC MILK COLLECTION UNIT (AMCU)

1. Functional Requirements:

1.1

The unit shall be suitable for:

- Instant weighing of milk
- Measuring fat content
- Capturing derived/calculated SNF content through the system
- Calculating the amount payable to the member based on the prevailing rate chart of the concerned DCS/Milk Union
- Printing the calculated amount along 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 cooperative society/BMC.

1.2

The Unit shall:

- Measure milk components, viz., fat from 0.5% to 12%
 - Weigh milk up to 200 kg per batch at a time
 - Process a minimum of 70 milk samples per hour
-

2. Design & Other Requirements:

The AMCU specifications detailed below represent the minimum required specifications.

The bidder shall provide all components/tools/software necessary for meeting operational and functional requirements.

Bidders may offer better and higher version specifications, if available, which may be considered without any additional weightage.

2.1 Operating Environment:

All components of the AMCU shall be rugged and capable of operating in dusty, hot, and humid village environments where power outages and supply fluctuations are frequent.

Operators may not be skilled personnel and may not be conversant with electronic equipment.

Power Supply:

160 to 260 +10% V (AC); 50 Hz + 3% / 12 V (DC)

Ambient Temperature: 5 – 50°C

Relative Humidity: 50% – 95%

2.2 Operational Provisions:

2.2.1 Installation and Commissioning:

All components of the AMCU shall be assembled, configured, commissioned, and demonstrated by the supplier for smooth milk collection to the satisfaction of the user.

The bidder shall install and provide all inputs/materials required for proper earthing as per local Electricity Board regulations.

2.2.2 Warranty:

All components included in the AMCU shall be covered under a **3 (three) years comprehensive warranty**.

However, warranty shall not cover burning or breakage of items during operations after successful installation.

The supplier shall ensure installation and commissioning of proper earthing before commencement of actual operation of the AMCU.

2.2.3 Annual Maintenance Service:

Comprehensive Annual Maintenance Service (AMC) for **2 (two) years** shall be included and indicated separately.

- Placement of one technician at field level per 50 AMCU units shall be ensured for repair and maintenance.
- The system must be made available by the next milk collection shift.
- Burnt and broken items are not covered under AMC.

The Dairy Cooperative Society shall arrange to send the Milk Analyser for servicing at the nearest BMCU Centre/Chilling Centre. In case of large coverage areas, the supplier shall provide servicing at site.

During the **3-year warranty period** and **2-year AMC period**, technician deployment shall be as follows:

- AMCU installed (Nos.) ≤ 20: To be attended within 24 hours.
- AMCU installed (Nos.) > 25 and up to 50: Posting of one technician.
- Thereafter, one technician per additional 50 AMCUs.

2.2.4 Training:

Comprehensive training shall be provided as follows:

- 2 days classroom training.
- Hands-on training for 4 milk collection shifts.
- Training shall cover all operational aspects of the Analyser and other AMCU components.

Training shall be provided to:

- DCS/BMC staff at village level.
- Other officers of Midnapore Milk Union.

Training shall be conducted between the 1st and 2nd month of installation.

Refresher training in groups shall be imparted at a nodal location.

2.2.5 Operational & Cleaning SOPs (Including Troubleshooting Leaflet):

SOPs in English and local language shall be provided in laminated wall chart format.

The chart shall indicate important steps involved in:

- Operation of Milk Analyser
- Cleaning procedures
- Troubleshooting guidelines

The SOP shall be displayed at the DCS.

3.0 Basic Operations at Society

Sl. No.	Particulars	Specification
3.0	Basic Operations at Society (Continued)	<ul style="list-style-type: none">• All operations at the society level are manual or semi-automated.• Regular power supply is not available.• Power fluctuations are very high.• Clean and dust-free environment cannot be guaranteed.• Operators may not be IT savvy. <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• Purchase of Cattle Feed• Purchase of Ghee• Other Purchases• Expenditure for Services• Other Expenditures• Local date 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 shall be suitable for instant weighing of milk.• Measuring fat content.• Calculating the amount payable to the member based on fat and weight.• Printing the calculated amount along with member identification details. <p>The Unit shall also be used for maintaining the complete record of the Dairy Cooperative Society together with the details of all transactions of the producers/BMC.</p> <p>It is recommended to incorporate capability for:</p> <ul style="list-style-type: none">• Online data transfer to Milk Union.• Online data transfer to designated local banks.• Direct transfer of payments to milk producers in their bank accounts.

5.0	Computer Hardware and Software	Models of PC offered shall be of Enterprise/Business Class Desktop PC (OEM) . Home/SMB Class Desktop PCs shall not be accepted.
		Brand and OEM Eligibility: <ul style="list-style-type: none"> • The offered Desktop PC shall be from an OEM of national or international repute. • Minimum five years' experience in manufacturing and supplying desktops/laptops in India under the same brand name. • Minimum average annual turnover of ₹100.00 crore from computer hardware products during the last three financial years. • Valid ISO 9001:2015, ISO 14001:2015, and BIS certifications. • Nationwide onsite service support network covering at least 10 Indian States. • Models from newly formed or lesser-known local/SMB-class OEMs shall not be considered.
5.1	Processor	11th or 12th Generation or above Intel Core processor, 6 MB Cache, 64-bit, 4 Core Processor.
5.2	Form Factor	Tower Model.
5.3	Chipset	Intel Chipset supporting the above processor.
5.4	Memory	8 GB DDR3 1333 MHz SDRAM, expandable to 16 GB.
5.5	Internal Storage	512 GB SSD Hard Disk Drive.
5.6	Removable Media	NA
5.7	Graphics	Integrated Intel HD Graphics supporting 1600 × 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 LED Backlit TFT Color HD Monitor with 1366 × 768 native resolutions.
5.11	Input Devices	USB standard Keyboard and USB Optical 2-button Scroll Mouse with Pad.
5.12	Ports & Connectors	<ul style="list-style-type: none"> • 3 Serial Port • 1 Parallel Port • 1 VGA Port • 1 Microphone / Headphone jack • 1 RJ45 Port • 1 HDMI Port
5.13	USB Ports	6 USB 2.0 Ports (Minimum two on front and two on rear side).
5.14	PCI Slots	Minimum 2 free PCI Slots.
5.15	Compatibility	64-bit Windows 11.
5.16	Operating System & MS Office (Factory Pre-Loaded)	Licensed Windows 11 Professional 64 bit or higher.
5.17	Certificates	Microsoft Windows 11 Compatibility certificate.

5.18	Type of Wireless Connectivity	Wi-Fi 6 + Bluetooth 5.0.
5.19	5.19 Anti-Virus	Norton / Symantec / eTrust / McAfee / Trend Micro / Quick Heal Latest version with three (3) years license.
5.20	Warranty Obligation	<ul style="list-style-type: none"> • Call shall be attended by next business day. • Problem to be resolved within 24 hours of attending the call. • Within 48 hours in case a part is to be replaced.
5.21	Scope of Work	Installation and configuration.
5.22	Application Software	<p>If the purchaser provides the software and wishes to avail software implementation and application support from the supplier, the following conditions shall apply:</p> <ul style="list-style-type: none"> • The purchaser shall provide the software along with implementation training to the supplier. • Any update required in the software shall be managed by the purchaser. • The supplier shall implement the software. • The supplier shall provide training to the end users. • The supplier shall undertake data migration, if required. • The supplier shall be responsible for all post-implementation support of the software application.
5.23	Extension Board	Heavy duty 6 Amp, 4 sockets with 3 m cable length extension board.
6.0	Dot Matrix Printer	
	6.1 Print Method	Impact Dot Matrix external printer
	6.2 Pins in Head	24 pins / 9 wire.
	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.
	6.5 Printable Column	80 (10 CPI).
	6.6 Paper Handling	Pull Tractor unit
	6.7 Paper Path	<ul style="list-style-type: none"> • 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.
	6.8 MTBF (Hours at 25% Duty Cycle)	10,000 POH (25% Duty).
	6.9 Copy Capability	Original + 3 copies.
	6.10 Cartridge	Ribbon Cartridge Black, with 2.5 million characters.
	6.11 Compatible OS	With drivers: Windows 10 Professional / Windows 11 Professional.
	6.11 Compatible OS	With drivers: Windows 10 Professional / Windows 11 Professional.
	6.12 Accessories	Roll stand.

	7.0 Electronic Weigh Scale
	7.1 Functional Requirement To electronically weigh and digitally display 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 Department and confirming to: <ul style="list-style-type: none"> • IS: 9281 (Part 1 & 2) – 1979 • IS: 9281 – 1981 • IS: 9281 (Part 4) – 1983 (as amended up to date)
	7.6 Display Resolution 1/10,000 Accuracy: Class 3.
	7.7 Load Cell Single, IP 67, grade SS of certified and approved make.
	7.8 Overload & Shock Load Protection 300% to take impact of loading, with audio (beep) and visual indication.
	7.9 Platform Size 600 mm × 600 mm.
	7.10 Platform MoC AISI SS 304, 1.6 mm thick, 150 grit top plate.
	7.11 Platform Under Frame Material / Design <ul style="list-style-type: none"> • Cold rolled mild steel box of adequate size. • Hot dip galvanized after fabrication. • All screws, bolts, nuts, fixtures to be of SS.
	7.12 Indication in Display (EW Unit) Quantity – 7 Segment RED LED, 6 digits, minimum 13 mm height. Display for mode of operation – zero, tare, Kg/L (by default Litre).
	7.13 Display Unit Mounting <ul style="list-style-type: none"> • Pole mounted type with sturdy base. • SS 304, 38 mm diameter pipe, 1.2 m height. • 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. • Separate cable and connectors for individual equipment.
	7.14 Calibration Protection & Sealing Arrangement <ul style="list-style-type: none"> • Special arrangement to house PCB & sealing arrangement. • Password protection at user end.
	7.15 Load Cell Cable

		Load cell cable from platform to display unit with reinforced heavy duty PVC conduit.
		7.16 Battery for Working on Power Failure In-built, 6 V capacity minimum for 12 hours.
		7.17 Power Supply As given above with minimum 1 m power cable with plug top AC/DC.
		7.18 Model Approval Certificate Manufacturer to have model approval certificate of regulatory authority / Government of India (Weights & Measures Unit).
		7.19 Connectors and Ports <ul style="list-style-type: none"> • 9 Pin RS232 Male Connector • 5 V Power Supply on #9 pin • #2 pin: Rx • #3 pin: Tx • #5 pin: Ground
		7.20 Stamping at Site Supplier shall arrange stamping of each scale at site from the local Weights & Measure Inspector before installation. It shall be the responsibility of the supplier to obtain necessary verification / re-verification and stamping of weighing scales supplied as per statutory compliance from W&M office(s) of the State for the warranty period as well as post-warranty Maintenance Contract duration.

8.0 Milk Analyser

8.1 Functional Requirement

To test and display Fat, SNF, and Added Water of sample milk.

8.2 Type

Ultrasonic principle-based milk analyser for testing Fat, SNF & Added Water.

Measuring Parameters:

- **Fat:** 0.5% to 12%
 - Accuracy: $\pm 0.1\%$
 - Resolution: 0.01%
 - Repeatability: $\pm 0.05\%$
- **SNF:** 6% to 12%
 - Accuracy: $\pm 0.2\%$
 - Resolution: 0.01%
 - Repeatability: $\pm 0.5\%$
- **Added Water:** 0% to 60%
 - Accuracy: $\pm 5\%$
 - Resolution: 1%
 - Repeatability: 0.5%
- Measuring Cycle: 40 seconds per sample
- Average Testing Speed: 70 samples per hour
- Pump type arrangement to circulate sample for testing
- Display Size: 128 mm \times 64 mm or as per design
- OTP-based password protection type calibration arrangement
- Data of each calibration activity to be recorded and exportable for analysis
- Repeatability:

- ±0.05% for Fat
 - ±0.05% for SNF
 - 0.5% for Added Water
-

8.3 Operational Abilities

- Mode selection for type of milk:
 - Cow
 - Buffalo
 - Mixed / Single curve
- Cleaning mode
- Calibration mode
- System error list display
- Automatic Start-up Cleaning facility
- Automatic Standby Cleaning facility
- Mandatory Auto Cleaning on Start-up
- Configurable Idle Time-Based Cleaning with minimum cleaning cycle configuration

System operation data must be stored within the analyser.

Provision to extract historical logs anytime through USB.

8.4 MoC for Enclosure

AISI 304, 0.75 mm thick minimum.

8.5 Display Size

2 lines, 16-character LCD display,
10 mm character height.

8.6 Loose Accessories

- Holding bottom tray for spillage – 01 No.
- RS 232 Serial Cable – 01 No.
- AC Power Cable with Plug Top – 01 No.
- Measuring Mugs – 04 Nos.

Cleaning Solutions:

- Daily Cleaning Solution – 3 Bottles
(Minimum 200 ml each or equivalent)
- Weekly Cleaning Solution – 3 Bottles
(Minimum 200 ml each or equivalent)

OR

- Monthly Cleaning Solution – 3 Bottles
(Minimum 200 ml each or equivalent)
-

8.7 Manual

Operating manual in English and preferably in local language to be supplied with every AMCU.

9.0 Ultrasonic Milk Sample Stirrer

9.1 Functional Requirement

To remove air from fresh milk sample by vibration created in the water bath before testing of milk.

9.2 Type

Tabletop, Ultrasonic Stirrer.

9.3 Stirrer for Ultrasonic Stirrer

SS Ball type.

9.4 Ultrasonic Frequency

20–25 KHz (Variable).

9.5 Timer

1–99 (Max.) seconds, selectable.

9.6 Environment

Suitable for dusty/humid village environment.

Operating temperature: 05 to 50 Degree Centigrade.

9.7 Connecting Cables

Minimum 1.5 metre 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

Metallic, 1.2 mm thick minimum.

9.10 Operating Voltage

230 Volts $\pm 10\%$, Single phase AC, 50 Hz
and
12 Volts DC $\pm 8\%$.

9.11 Power Consumption

As per design.

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

- Member's code: 3 to 16 digits
 - Cattle Type: 1 character
 - Milk Weight: 5 digits
 - Fat %: 4 digits
 - SNF %: 4 digits
 - Rate in Rs.: 5 digits
 - Amount in Rs.: 6 digits, generally to meet the need of the users.
-

10.4 Connectors and Ports

- Interface: RS-232 / USB Host
 - 9 Pin RS232 Male Connector
 - 5 V Power Supply on #9 number pin
 - #2 number pin should be Rx
 - #3 number pin should be Tx
 - #5 number pin should be Ground
-

10.5 Interface

RS-232 / USB Host.

10.6 Display Type

7 Bright segments, Red LED, 25 mm,
33 Nos., 11 in each row with 3 rows
(or suitable to meet the requirement).

10.7 Labels for Display

Screen printed.

10.8 Environment

Dusty, humid, preferably housing to be with IP 55 or equivalent protection, rust proof powder coated metallic.

10.9 Connecting Cables

- Minimum 5 m power cable with plug top.
 - Minimum 5 m data cable with connector at both ends.
(Separate cable for individual equipment).
-

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 Backup Time (Full Load)

3 hours minimum (in one shift).

11.5 Output Wave Form

Line Wave / Quasi Line Wave.

11.6 Voltage at Input

160 – 280 V \pm 0%.

11.7 DC Voltage Bus

24 V.

11.8 Voltage at Output

(With mains as well as with battery) with in-built AVR:

220 V \pm 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

50 Hz \pm 3 Hz, No correction.

Sl. No. | Particulars | Specification

11.0 UPS (Continued)

11.12 Battery Charging

- Preferably to take place even at 130 V & 300 V with SMPS charger.
 - Boost charging at minimum 7 A.
 - Battery overcharge protection.
-

11.12.1 Battery No. and Type

02 Numbers 100 AH Tubular, Acid filled, low maintenance battery with level indicator.

(Maintenance free battery desirable).

11.12.2 Charging Indicator

Battery charging indicator plus low battery/fault indicator to be provided.

11.12.3 Battery Steel Rack

Required.

11.12.4 Leads Between UPS & Battery

Flexible, Cu conductor PVC, minimum 1.5 m with lugs at both ends.

11.12.5 Warranty of Battery

05 years against manufacturing defect.

11.13 Steel Rack for UPS

Required to place UPS above floor.

11.14 No Load Loss at 24 Volt When UPS is ON

Minimum.

12.0 Earthing – Earth Electrode (Gel Type)

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

03 meters.

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 diameter suitable for interconnection.

12.12 Filling Compound

Adequate.

12.13 Civil Works

- Chamber to secure the earthing.
 - Earthing: Bidder shall install and provide all inputs/material for proper earthing as per IS code / Local Electricity Board Regulation.
 - Scope includes excavation for earth pit, construction of chamber, filling with necessary materials and complete with cover.
 - Supplier shall test and demonstrate the resistance as per local EB requirement and furnish record as required.
-

13.0 Other Terms / Requirements

13.1 Calibration of Analyzer

Secured independent tool for calibration of Analyser by Milk Union needs to be provided.

Perpetual usage rights of the tool shall be made available to Milk Union at no additional cost.

However, on-demand calibration lies under the scope of work of the supplier.

13.2 Warranty Obligation

03 years comprehensive onsite warranty with the following SLA:

- Burnt electrical/electronic components after SPV charger panel are also included in warranty terms, even though SPV charger panel is not burnt due to spike in grid lines (excluding physical damage of body due to mishandling).
 - Call shall be attended by next business day.
 - Problem shall be resolved within 24 hours of attending the call.
 - Within 48 hours in case of parts replacement.
-

13.3 Training

- Hands-on training on usage of supplied components like milk analyser and other components to DCS staff and other officers of the Union/Federation.

- Comprehensive training for 2 days in classroom & hands-on training for 4 shifts of milk collection on all operational aspects of the milk analyser and other AMCU components to DCS/MCC staff at village level and other officers of the PI.
 - Between 1st & 2nd month of installation refresher training in group shall be imparted at a nodal location.
-

13.4 Specific Functional Requirement

The Unit shall 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 along with member identification details.

The Unit shall also be used for maintaining:

- Main records of the collection centre.
- Details of milk business transactions of the village dairy cooperative society / BMC Centre / MCC.
- Required reporting functions.

The required application software shall be provided along with the hardware.

Milk Union has the choice of software to choose from the following options:

- NDDDB's developed AMCS application.
- Supplier's developed AMCS application.

Sd/-
Managing Director
The Ichhamati Milk Union

Annexure – I

AFFIDAVIT

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

1. I/We the undersigned solemnly declare that all the statements made in the documents, records etc., attached with this application are true and correct to the best of my/our knowledge.
2. I/We the undersigned do hereby certify that neither my/our firm/company has been blacklisted by any Milk Union, Milk Federation or NDDB in the past.
3. I/We the undersigned do hereby certify that we have understood the terms and conditions and shall unconditionally comply to the terms and conditions of the Tender/Reverse Tender document.
4. I/We the undersigned authorize (s) and request any bank / person / firm / corporation / Government Departments to furnish pertinent information deemed necessary and requested by The Bhagirathi Cooperative Milk Producers' Union Ltd. to verify the statement made by me/us or to assess my/our competence and general reputation.
5. I/We the undersigned, understand(s) that further qualifying information / clarifications on the statement made by me / us may be requested by The Ichhamati Cooperative Milk Producers' Union Ltd and agree(s) to furnish such information/clarification within seven days from the date of receipt of such request from The Ichhamati Cooperative Milk Producers' Union Ltd.
6. I/We agreed to execute a formal Agreement embodying the terms & conditions of the Tender.

Dated Signature of Applicant with Seal:

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

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

(Title of the Officer)

(Title of the firm/Company)

(Date)

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

..... (Seal).

(Signature of the Notary Public)