



The Bhagirathi Co-operative Milk Producers' Union Limited
(A Govt. of West Bengal Project)

BU/MDO/RIDFXXIX/1605

Date: 06.01.2026

Reverse Auction for Supply, Installation and Commissioning of 10 no(s) Advanced FTIR based Raw Milk Quality and Adulteration Screening Analyzer with earthing along with 5 years of comprehensive onsite warranty and service support (2nd Call).

Scope of Work

- Supply, installation, commissioning, and successful trial run of Advanced FTIR based Raw Milk Quality and Adulteration Screening Analyzer with earthing. The Equipment should be able to detect percentage Fat, SNF, and Protein in raw milk and should be able to detect presence of adulterants as given in the technical specification.
- The analyzer should generate reports which must seamlessly integrate with the ERP or LMIS portal through RS 232 or LAN.
- The bidding agency should undertake quarterly preventive maintenance to keep the Equipment in operation.
- Comprehensive hand on training must be imparted to the lab personnel which includes, SOPs, Preventive and Corrective maintenance, Dos and don'ts, calibration etc.

Estimated Cost: 80,00,000/-

EMD: 1,60,000/-

Quantity: 10 Nos.

Tentative Delivery/ Supply Schedule: Within 60 days from the date of placement of the AOC/Purchase Order.

Technical Specification: As per Annexure-A

Bid validity: 365 Days

Documents to be furnished by bidder for Technical Bidding:

- Bidding Firm must be an OEM or Authorized distributor/dealer of OEM. In case of Authorized partner of OEM, Authorization Certificate from OEM against the Reverse Auction Notice must be provided. The OEM Certificate must also conform compliance of the Reverse Auction with all its terms and conditions.
- Minimum 5 years of experience in supply of at least 40 no(s) of **Advanced FTIR based Raw Milk Quality and Adulteration Screening Analyzer**. Purchase Orders and Completion Certificate in support of the same must be uploaded. The Milk Union may verify the sanctity of the documents uploaded. In case of Authorized partner of OEM, Credentials of OEM shall be accepted.
- GST Registration Certificate.



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

- Compliances & Certificates to be furnished: ISO Certificate, AOAC, IDF, etc.
- PAN Card.
- Average Annual turnover of Rs. 10 crore in the last 3 years (2021-2022), (2022-2023), (2023-2024). Audited Balance Sheet in support of the same must be uploaded.
- Make, Model, Product Specification and Specification compliance sheet must be uploaded.
- Declaration as per **Annexure-B**.

General Terms and Conditions:

1. Price to be quoted shall consist of cost of Equipment along with 5 years of onsite comprehensive maintenance, inclusive of all taxes and levies, transit insurance, freight, packing, loading, unloading and any other incidental charges. Kindly note that all cost should be taken into consideration while quoting the rates. During 5 years of comprehensive maintenance, the cost of consumables shall be borne by the Milk Union.
2. Inspection of materials may be undertaken at the supplier's premises whenever necessary by the Tendering Authority/ any officer authorized by the undersigned.

3. Pre bid meeting and demonstration of Equipment to be supplied is mandatory.

4. Inspection of Equipment:

- **After delivery:** The Milk Union shall conduct joint inspection with the supplier's Engineer to verify whether goods have been delivered in good condition or not. Materials not delivered in good condition shall be rejected outright. Materials received in good condition shall be accepted and further procedure for release of payment shall be initiated.
 - **After Installation:** Delivered Equipment shall be installed by the supplier's Engineer in the Chilling Plant & BMC point in various blocks of Murshidabad district. The Milk Union shall provide all the necessary infrastructure for installation. The Installation Calibration and commissioning have to be done by the service Engineer to full satisfaction of the Quality Control In-charge.
5. Bidder should have local arrangement (within West Bengal) for prompt after sale services of the installed unit as and when required within warranty period free of cost. The service must be attended within 24 hours the receipt of the information.
 - Supply, Installation & Commissioning of the ordered item with all accessories must be completed within 60 (thirty) days from the date of order. Trial – run of the whole unit will be done in presence of Milk Union's authorized personnel. Trial run report shall be submitted duly signed by the authorized personnel. Comprehensive hand on training must be imparted to the lab personnel which includes, SOPs, Preventive and Corrective maintenance, Dos and don'ts, calibration etc.



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

7. **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.
8. **Place of Delivery:** The office of The Bhagirathi Cooperative Milk Producers' Union Ltd. Feeder Dairy, Panchantala, Berhampore, Murshidabad, Pin742101, West Bengal.
9. **Place of Installation and Commissioning:** 10 CPs & BMCPs of Bhagirathi in Murshidabad district.
10. **Delivery/Supply Schedule:** Within 60 days of placement of Purchase Order cum AOC.
11. **Payment:** Payment shall be released in 3 phases in NEFT/RTGS to the Bank Account of the supplier after submission of 3 copies of invoice along with documents mentioned in Documentation clause which are as follows:
 - **First Phase:** 80% payment shall be released after 30-45 days of 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.
 - **Second Phase:** 10% payment shall be released after 1 month of successful installation, commissioning and trial run of all the units supplied. All the required training to be imparted to the lab personnel of the Milk Union. 1 month shall count from the very first day when the entire installation commissioning and trial run with necessary training has been completed and duly documented.
 - **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 operation, 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 after 5 years.



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

12. **Penal Measure:** Time being the essence of the contract failure to supply the materials within due time or delay in installation and commissioning of the materials shall invite penalty as follows:

- Liquidated damages of 0.5% per day subject to maximum of 10% of the total cost of the materials shall be charged if goods are not delivered in time and the amount will be deducted from the EMD and bills submitted by the supplier.
- 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 EMD will be forfeited, and the resultant loss shall be recovered from the company. The subsequent company will be blacklisted for 3 years.

13. **EMD:** EMD of the lowest bidder shall be refunded after receipt of material in good condition in a month. EMD of unsuccessful bidders shall be refunded as per NCDFI e-Market norms. EMD shall not carry interest.

14. **Mode of transportation:** Mode of transportation for the supply of the goods to our site will be arranged by the bidder.

15. Materials dispatched from the bidder until or unless reaches the Milk Union is the sole responsibility of the supplier. The Milk Union will not be responsible for any damage in the transit, loading or unloading and no claim in this regard will be entertained.

16. **Documentation:** Supplier to submit the following documents at the time of delivery:

- a. Commercial/E-Invoice.
- b. E-Way bill
- c. Packing List
- d. Equipment Brochure comprising of Technical Specifications & Compliance Sheet
- e. Operating Manual & User Manual (Easy to follow)
- f. Cleaning & Maintenance Manual
- g. Warranty Card.
- h. Acceptance Copy of Purchase Order/Award of Contract.

(Failure to submit any of the above documents shall lead to non-release of payment)

17. **Maintenance of Equipment:**

- **Preventive maintenance:** should be done by the supplier's Service Engineer in each quarter. Preventive maintenance must comprise of cleaning of hardware, peripherals, voltage check, calibration and other requisites required to maintain health of the equipment.



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

- **Corrective maintenance:** Corrective maintenance must be done on call within 24 hours when the system is down and not in operation. The supplier must keep all spares in custody for speedy remedy. Equipment down must be brought into operation within 48 hours.
 - Cost involving preventive and corrective maintenance for 5 years should be taken into consideration while quoting the rates.
18. **Warranty:** All the spares and components of the Milk Analyzer 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 24 hours.
19. **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.
20. **Service Issues & Resolution:** Issues arising due to calibration, operation and maintenance must be effectively handled by the supplier. The Equipment should be operational at all times. If at any point of time if the equipment is not in operation due to maintenance issues, requirement of spares, consumables already informed to the supplier after 48 hours, a penalty of Rs. 2000/- per day shall be imposed by the Milk Union on the supplier subjected to a maximum of 10% of the total cost and it shall be realised from the Performance Guarantee deposited to the Milk Union till the day the machine is brought back to operation. It is also be noted that warranty shall be extended as per warranty extension clause.
21. **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.
22. **Registration of Goods:** If required under the Applicable Law, goods supplied under the Agreement shall be registered for use in India.



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

23. **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.
24. **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.
25. **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.
26. **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.
27. **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.
28. **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.
29. **Applicable Law:** The Agreement shall be interpreted in accordance with the laws of Union of India.
30. **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



The Bhagirathi Co-operative Milk Producers' Union Limited
(A Govt. of West Bengal Project)

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.

31. The undersigned reserves the right to accept or reject any tenders and to cancel the entire tender process without assigning any reason whatsoever.

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



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

ANNEXURE-A

TECHNICAL SPECIFICATION

1. Raw milk Quality and Adulteration Screening Analyzer should be based on the Advanced FTIR Technology i.e. approved by global agencies like AOAC International (Association of official Analytical Chemists), IDF (International Dairy Federation) and ISO (International Standards Organization) ISO 9622:2013(E), which recommends the application of FTIR Technology for liquid milk analysis.
2. It should use the recommended FTIR technology only for both composition and adulteration analysis.
3. It should include an inbuilt calibration including a detailed “fingerprint” of the Milk Sample’s chemical composition.
4. It should compare the spectrum of the Sample Raw Milk with the spectrum of Pure Raw Milk that is built-in the FTIR analyser using statistical techniques (commonly used technique in spectroscopy).
5. It should be able to give direct measurement of FAT, SNF and PROTEIN and not a software calculated display.
6. It should be able to screen maximum number of common adulterants by the same FTIR technique at different concentration levels and qualify the milk as “Abnormal Milk/Adulterated Milk”.
7. The equipment should be able to screen the adulterants as per below mentioned adulterant list:
 1. Vegetable Oil
 2. Sodium Chloride
 3. Sucrose
 4. Whey
 5. Urea
 6. Neutralizer
 7. Added Water
 8. Protein powder
 9. Detergent
 10. Formalin
 11. Starch
 12. Glucose
 13. Maltodextrin
8. Adulterants displayed should have the specificity and not to be displayed in a group or generic class.



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

9. The equipment should be capable to screen adulteration by Urea, Sucrose, maltodextrin, starch, glucose, sorbitol etc, which enhance the SNF part of Milk. Also, if these adulterants are added within limits of detection (LOD), then machine should not record higher value of SNF attributed due to added adulterants within limit of detection.
10. It should be able to analyse raw unhomogenized Milk sample for Fat, SNF & Protein in the range of minimum to maximum of 0-13% Fat, 0-8% Protein, 0-14% SNF.
11. Accuracy of the FTIR spectrophotometer milk parameters to be submitted by the bidder:
 - a) Fat \leq 0.14 SD
 - b) Protein \leq 0.10 SD
 - c) SNF \leq 0.14 SD
12. Repeatability of the FTIR spectrophotometer milk parameters to be submitted by the bidder:
 - a) Fat \leq 0.05 SD
 - b) Protein \leq 0.05 SD
 - c) SNF \leq 0.10 SD
13. The instrument should have different inlet and outlet, and it should be complete unidirectional flow system from sampling to discard.
14. Analysis speed required : 40-50 seconds
15. Instrument warm up time : Maximum 20-30 Minute
16. Sample Volume : Should not be more than 20 ml
17. Display : LCD, Graphical Display
18. Calibration : 2 step/ Finger print authentication
19. Data Acquisition & Transfer : Facility of – PC based software should be provided. RS-232 and/or SD Card. 1 year Calibration & Cleaning log must be available.

20. EARTHING

EARTHING

Make & Model	As per IS Standard
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.
Pipe Material	Galvanized Pipe as per IS: 1239
Class of Pipe	Class – B
Diameter (Outer Dia.)	48 mm
Length	3 Meter
Wall Thickness	2.5 mm
Primary Electrode	Mild Steel Strip



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

Mild Steel Strip	3.24 m long, 32 mm wide and 6 mm thick
MS Strip Hot dip Galvanized thickness	110 micron
Gel Filled	Highly non- corrosive compound
Earth wire to connect Electrode with Power supply.	Copper 10 m long & 8 mm diameter suitable for interconnection
Filling compound	Adequate
Civil works	Closed pit/chamber to secure the earthing. Earthing: Bidder should install and provide all inputs / material for proper earthing as per IS Code / Local Electricity Board Regulation. The scope of work includes excavation for earth pit, construction of chamber, filling with necessary materials (filling compound) and complete with cover. Supplier will test and demonstrate the resistance as per WBSEDCL requirement and furnish record as required. Earthing Test Report must be submitted for approval prior to commissioning.

Sd/-

Managing Director
The Bhagirathi Cooperative
Milk Producers' Union Limited



The Bhagirathi Co-operative Milk Producers' Union Limited

(A Govt. of West Bengal Project)

ANNEXURE-B

DECLARATION

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

1. I/We the undersigned solemnly declare that all the statements made in the documents, records etc., attached with this application are true and correct to the best of my/our knowledge.
2. I/We the undersigned do hereby certify that neither my/our firm/company nor any of its constituent partners have abandoned any work/works of similar nature and magnitude in India, in the past.
3. I/We the undersigned do hereby certify that any of the contracts awarded to me/us has not been terminated rescinded, due to breach of contract on my/our part in the past.
4. I/We the undersigned do hereby certify that we have not been blacklisted by NDDDB or any dairy industry or any other industry in the past.
5. I/We the undersigned do hereby certify that the goods to be supplied against the Contract shall be original and genuine. We further declare that no refurbished component or spare shall be supplied.
6. 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.
7. I/We the undersigned, understand(s) that further qualifying information / clarifications on the statement made by me / us may be requested by The Bhagirathi Cooperative Milk Producers' Union Ltd and agree(s) to furnish such information/clarification within SEVEN Days from the date of receipt of such request from The Bhagirathi Cooperative Milk Producers' Union Ltd.
8. I/We the undersigned do hereby declare that spare of Equipment and consumables shall be available for 10 years.
9. I/We agreed to abide by the terms and conditions of the Reverse Auction Notice.

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)