

THE ICHHAMATI
CO-OPERATIVE MILK PRODUCERS' 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

SET OF TENDER DOCUMENTS (ON LINE)
FOR

**SUPPLY, INSTALLATION AND COMMISSIONING OF DAIRY PLANT EQUIPMENTS
ALONG WITH NECESSARY PIPELINES ETC AT THE MILK PROCESSING UNITS,
BERACHAMPA, DEGANGA, NORTH 24 PARGANAS DISTRICT, WEST BENGAL..**

EACH SET CONTAINS:

1. NOTICE INVITING e- TENDER
2. GENERAL TERMS & CONDITIONS.
3. SPECIFICATION OF THE ITEM
4. INSTRUCTION TO THE BIDDERS & ELIGIBILITY FOR QUOTING
5. APPLICATION FORMAT (ANNEXURE-I)
6. ANNEXURE-IIIA
7. ANNEXURE-IV

MANAGING DIRECTOR
ICHHAMATI CO-OPERATIVE MILK PRODUCERS' UNION LTD.

THE ICHHAMATI
CO-OPERATIVE MILK PRODUCERS' 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

NOTICE INVITING e- TENDER

NIT NO. MU/e TENDER /92/2026/579

Date: 15.10.2026

Supply, Installation and Commissioning of Dairy Plant Equipments along with necessary pipelines etc. at the Milk Processing Units, Berachampa, Deganga North 24 Parganas District, West Bengal,

(Submission of Bid through e-tender portal <https://rfq.ncdfiemarket.com/> & Viewing through Website: www.NCDFIeMarket.com)

Online bids are invited from the eligible, reputed Manufacturers/ suppliers having enough experience in this field and have credentials to execute such work with State Milk Federation / District Milk Union /Govt. Dairies, etc. for supply, installation and commissioning of Dairy Plant Machinery.

- A) Technical Specification with scope of supply of Dairy Plant Equipments along with necessary pipelines.

Functional requirement: The Equipment shall be used at the Milk Processing Unit for Milk processing, Packaging and Storage of Processed Milk and Milk Products under specified terms & conditions.

Scope of supply: Started from delivery of the items as per specification mentioned below at the Milk Processing Unit, Units, Berachampa, Deganga North 24 Parganas District, West Bengal, installation, commissioning of the item, demonstration & training to the operator/ technical person of the Milk Union.

Supply, installation & commissioning is to be completed within 60 days from the date of issue of Supply **Order**.

General Terms and Conditions:

1. The bidding system is on internet platform. The site can be accessed through www.ncdfiemarket.com maintained by National Cooperative Dairy Federation of India Ltd (NCDFI), which will be the venue for online bid submission.
2. All the registered members of the NCDFI eMarket, on deposit of EMD, are eligible to participate in the bidding.
3. **Earnest Money:** The Earnest Money will be deposited by the electronically: online- through his net banking enabled bank account, maintained at any bank or: offline- **through your registered bank in NCDFI member escrow account.**
4. **NO INTEREST SHALL BE PAYABLE BY THE MILK UNION FOR THE SECURITY DEPOSIT and “EARNEST DEPOSITR.”**

5. Both **Technical Bid** and **Financial Bid** are to be submitted concurrently duly signed in the e tender portal.

6. Tender documents may be downloaded from website www.ncdfiemarket.com and submission of technical Bid and Financial Bid will be done as per Time Schedule stated in Sl. No. 15.

7. The **FINANCIAL OFFER** of the prospective tenderer will be considered only if the **Technical Bid** of the tenderer is found qualified by the “Tender Evaluation Committee.” The decision of the ‘Tender Evaluation Committee’ will be final and absolute in this respect.

8. Eligibility criteria for participation in the tender.

a. The prospective bidders shall have satisfactorily completed **as a prime agency** during the last 5(five) years from the date of issue of this Notice with at least **on work of similar nature / as specified under authority of State / Central Government / State Milk Federation / Milk Union, State / Central Government undertaking / Statutory Bodies Constituted under the Statute of the Central/ State Government and having a magnitude of Rs 1.00 Crore of the amount put to tender.**

b. Income Tax Return Acknowledgement for the last 3 Assessment years, P.T. Deposit Challan for the year 2025-2026 or self-declaration for exemption if any, Pan Card, Valid 15- digit Goods and service Taxpayer Identification Number (GSTIN) under GST Act, 2017, valid Trade License or manufacturing license or certificate/ Factory license, Labour contractor License [Non statutory documents] are to be accompanied with the Technical Bid Documents.

c. The prospective bidders or any of their constituent partners shall neither have abandoned any work nor have any of their contract have been rescinded during the last 5 (*five*) years. Such abandonment or rescission will be considered as disqualification towards eligibility. (A declaration in this respect through affidavit has to be furnished by the prospective bidders.)

d. In case of Proprietorship, Partnership firms and Company, Tax Audit Reports are to be furnished along with schedules forming the part of Balance Sheet and Profit & Loss Account should be in favor of the applicant. No other name along with applicant’s name in such enclosure will be entertained.

e. Registered Partnership Deed for Partnership firm is to be submitted. The Company shall furnish the Article of Association and Memorandum. Where an individual person holds a digital Certificate in his own name duly issued to him against the company or the firm of which he happens to be a director or partner, such individual person shall, while uploading any tender for and on behalf of such company or firm, invariable **upload a copy of registered power of attorney showing clear**

authorization in his favor, by the rest of the directors of such company or the partners of such firm, to upload such tender.

f. Joint Ventures will not be allowed.

9.Security Deposit:

i)The successful bidder will have to retain 10% of the Bill / Invoice value as security money deposit throughout the tenure of Guarantee / warranty period.

ii) Earnest Money will be refunded after satisfactory completion of supply and commissioning of the Units after adjusting the transaction charges @ 0.40% of total trade value which is exclusive of GST. TDS (u/s 194-O) @ 0.1% of contract value.

iii) No proportionate refund of E.M./ S.M. will be allowed in any case.

10.The agency shall have to arrange transportation, labors, insurance, delivery at site, loading / unloading etc. for successful supply and commissioning of the units at their own cost and responsibility.

11.Statutory deduction by STDS is liable to be deducted as per provision of GST Act, 2017 and other, if any, order of the Government.

12. Tax liability of the concerned work contract has to be borne as per prevailing GST Act, 2017 by the agency.

13. All statutory deduction will be made from the contractor's bill based on the prevailing norms/ Acts of the Government.

14. Bids shall remain valid for a period not less than 90 days (*Ninety days*) from the date of opening of Financial Bid. If the bidder withdraws the bid during the e-tender process or fails / deny to execute the agreement or fails to execute the supply order within the scheduled time period, the earnest money as deposited will be forfeited forthwith without assigning any reason thereof.

15. Date and Time Schedule:

Sl no	Particular (S)	Date & Time
1	Date of Publishing of e-Tender	15.10.2026 FROM 5.00 PM
2	Documents download / sale start	15.10.2026 FROM 5.00 PM
3	Bid submission start date (online)	16.10.2026 FROM 11.00 AM
5	Bid submission closing date (online)	31.10.2026 UP TO 6.00 PM
6	Bid opening date for Technical Proposals (online)	02.11.2026 AFTER 11.00 AM

16. The Bidder, at his own responsibility and risk is encouraged to visit and examine the site of supply / work and its surroundings and obtain all information that may be necessary for preparing the Bid and entering into contract for the work as mentioned in the Notice inviting e-Tender, before submitting offer with full satisfaction, the cost of visiting the site shall be at his own expense.

17. The intending Bidders shall clearly understand that whatever may be the outcome of the present invitation of Bids, cost of Bidding shall not be reimbursed by the Ichhamati Co-operative Milk Producers' Union Ltd.

18. Conditional / Incomplete tender will not be accepted under any circumstances.

19. The intending tenderers are required to quote the rate for entire Supply, Installation and Commissioning of Dairy Plant Equipments along with necessary pipelines etc. at the Milk Processing Units.

20. Contractor shall have to comply with the provisions of (a) the contract Labour (Regulation Abolition) Act, 1970 (b) Apprentice Act, 1961 and (C) minimum wages Act, 1948 of the notification thereof or any other laws relating thereto and the rules made and order issued there under from time to time.

21. During scrutiny, if it comes to the notice of the tender inviting authority that the credential or any other paper found incorrect/manufactured / fabricated without any prejudice.

22. The Managing Director, Ichhamati Co-operative Milk Producers' Union Ltd. reserves the right to cancel the N.I.e-T due to unavoidable circumstances and no claim in this respect will be entertained.

23. Before issuance of the PURCHASE / SUPPLY ORDER, the tender inviting authority may verify the credential and other documents of the lowest tender, if found necessary. After verification, if it is found that the documents submitted by the lowest tenderer is either manufactured or false, in that case, the work order will not be issued in favour of the said tenderer under any circumstances, and the earnest money will be forfeited.

24. This N.I.e-T. shall form a part of the contract document. The successful bidder on acceptance of the bid by the Accepting Authority, shall have to sign the contract consisting of N.I.e-T, all tender documents forming part of the bid as uploaded at the time of invitation of bid, the rates quoted online at time of submission of bid.

25. Cost of Contract Documents:

The successful bidder shall have to pay the cost contract documents @ Rs. 500.00 (Rupees five hundred) only at the time of formal agreement.

26. The e-Tender must be supported by ONLY SCAN COPY/ COPIES OF ORIGINAL DOCUMENTS as mentioned in General Terms & conditions for submission of e-Tender.

- a) Each tender will have to deposit **Earnest Money 2% of Trade Value** in NCDFI Escrow Account.
- b) Scanned ORIGINAL PAN Card.
- c) Scanned Professional tax Clearance Certificate / Challan. (2025-2026 & thereafter).or self-declaration for exemption if any
- d) **Valid Trade License issued by competent authority for Similar nature of works or manufacturers / Manufacturing License Certificate/ Factory License**
- e) Scanned valid 15 digit Goods & Services Taxpayers Identification Number (GSTIN) under GST Act, 2017.
- f) Scanned N.I.e-T. including Terms & Conditions, Specification, etc. Signed / digitally signed will have to be uploaded as a token of acceptance.
- g) Labour contractor License
- h) Scanned copy of CHECK LIST.
- i) Printed Brochure / Literature of the quoted items.
- j) IT returns for 25-26, 24-25 & 23-24
- k) Up to date Income Tax clearance certificate/ Acknowledgement
- l) Scanned original copy of credential-Documentary evidence of credentials of similar work of value Rs **One Crore** only.

Documents must be submitted (online) in scan of original. Scanned attested photo –copy will not be considered in on-line submission as valid documents. All the uploaded documents shall be either in **English or in Hindi**. If any document produced in language other than English and Hindi, **translated version** of such document **in English** shall be uploaded duly self attested. Failure to submit English Translated version shall make the tender invalid. All **Bidders(S) will have to sign the terms & conditions of N.I.e-T. before execution of agreement, if selected.**

No Tender will be accepted, if the same is not supported with all the above documents.

Hardcopy of Statutory/ Non-Statutory Documents is /are NOT required to be submitted physically . The selected bidder will have to submit hard copy of Statutory/ Non-Statutory Documents at the time of execution of formal agreement.

27. Uniform Basic Rates should be quoted NET in figure inclusive of delivery (up to sit, packing, forwarding, insurance, loading & unloading charges, commissioning , training, demonstration, etc. at BOQ(Bill of Quantities) in financial Bid (BID-B). THE OFFERED RATE SHOULD BE VALID FOR NOT LESS THAN 90 DAYS. Rates of GST, OTHERS TAXES, IF ANY, MUST BE INCLUDED IN THE TOTAL PRICE PER UNIT. GST, OTHER TAXES, IF ANY MUST BE SHOWN SPARATELY IN THE BILL /TAX INVOICE.

28. Any dispute / difference arising out of this Tender, which cannot be amicably settled between the parts, shall be referred to the adjudication / arbitration in accordance with the Arbitration and Conciliation Act of 1996 of India. The venue of adjudication / arbitration shall be at Ichhamati Co-operative Milk Producers' Union Ltd. North 24 Parganas District ,West Bengal

The offered rate should be valid for Not less than 90 days from the date of opening of financial Bid but the period may be extended at the discretion of the undersigned / Tender Committee Tendering Authority & requirement.

Managing Director
Ichhamati Co-operative Milk Producers' Union Ltd.

THE ICHHAMATI CO-OPERATIVE MILK PRODUCERS' 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

2. Eligibility criteria

- 2.1. Only manufacturers having valid manufacturing license issued by competent authority/Authorized Agent of the manufacturer are eligible to participate in the tender.
- 2.2. Any **loss making Firm** would not be eligible to participate in the Tender. This would be assessed on the basis of their Financial Performance for the last 2 Financial Years i.e. **2024-25 & 2025-26** and any Company in respect of which the Average Profit Before Tax for the last 2 Financial Years (as certified by Chartered Accountant) is in negative shall not be eligible to apply.
- 2.3. Original Manufacturers including M.S.M.E. units shall have minimum five years manufacturing & marketing experience is only eligible.
- 2.4. Authorised Agent of the manufacturer including M.S.M.E. units shall have minimum five years marketing experience is only eligible.
- 2.5. Original Manufacturer/Authorised Agent of the manufacturer shall have minimum average annual turnover of Rs. **2 CRORES** (Rupees Two crores Fifty Lakhs) per year for the year **2024-25 & 2025-26**.
- 2.6. In case of M.S.M.E. Units of the State of WB the minimum average annual turnover would be **Rs.1.22 crores** (Rupees one crore & twenty-two Lakhs only) per year for the year **2024-25 & 2025-26**
- 2.7. **The bids of the following bidders will not be accepted:-**
 - (A) The Bidders who were declared debarred/blacklisted by any Govt. Concern/Govt. Institution in the Country as a whole or, for any item/ items (quoted in this tender) are also not eligible to participate in the current tender as a whole or, for that item or items.

3. APPLICATION FORMAT & CHECK-LIST

- 4.1. Prescribed application format is to be uploaded (**ANNEXURE-I**) duly filled in, signed and affix with the seal of firm by indicating full communicating address with PIN, Telephone, Fax, E-mail address, Website number, NIT number & date.
- 4.2. Prescribed Check-list (**ANNEXURE-II**) should be properly filled in & uploaded.

5. DOCUMENTS TO BE UPLOADED IN TECHNICAL BID

- 5.1.. All the required documents are to be arranged in serial as per Table & Serial Number should be indicated on the right side top of the corner and uploaded in e-tender portal.
- 5.2. All the uploaded documents shall be either in **English or in Hindi**. If any document produced in language other than English and Hindi, **translated**

- version** of such document **in English** shall be uploaded duly self-attested. Failure to submit English Translated version shall make the tender invalid.
- 5.3. All original documents are to be produced at the time of scrutiny, when asked for.
- 5.4. In the event of failure to upload any required document, the bid shall become invalid. No documents will be accepted physically except e-challan of EMD & Sample/ Literature.
- 5.5. Disclosure of rate/discounts/special offers in the Technical Bid will be treated as disqualification & such offers will be rejected.
- 5.6. **Intending bidders should upload the following documents.**

Sl.	Name of the documents
STATUTORY DOCUMENTS : BID A	
1.	Application form duly signed (ANNEXURE-I).
2	Copy of terms & conditions of NleT digitally signed
3	.
5	Scanned original documents of Latest (renewed & up-to-date) Manufacturing Licence for the items quoted in the tender AND Authorized Distributor Certificate from the manufacturer to be uploaded in original (if applicable).
6.	Declaration of the bidder/products for neither blacklisted nor suspended for quoted items in last 2 (Two) years and Declaration having 5 (Five) years manufacturing and marketing experience or 5 (Five) years marketing experience for Authorized Agent of the manufacturer in the form of Affidavit from Class-I Magistrate or Notary (ANNEXURE-IV) on Non-judicial Stamp Paper worth Rs.10/-.
7	Scanned Original Certificate issued by Practicing Chartered Accountant stating Average Annual Turnover of the bidder (ANNEXURE-III A)
8	Scanned original Labour contractor License (Latest) issued by competent authority Concerned.
9	Abstract of the quoted items to be uploaded by the bidder
10	Literature Submission declaration duly signed
11.	Agreement between Bidder & Distributor for the out-of-state bidder (if bidder wants to supply through distributor) on Non-judicial Stamp Paper worth Rs.10/-.
12.	Agreement between Manufacturer and Bidder (if any).

(II).NON-STATUTORY COVER/ MY SPACE - containing the following documents:

S 1.	Category	Sub Category Description
1	CERTIFICATES- ✓ All certificates are to be furnished in English Vernacular not in other languages ✓ Affidavits are not valid. ✓ Scanned original copy	i) PAN Card issued by IT Dept., Govt. of India. ii) Valid 15 digit GSTI Number GST Act, 2017. iii) Up to date income tax clearance certificate/ Acknowledgement. iv) IT returns for FY 25-26, 24-25 & 23-24

2	COMPANY DETAILS ✓ All certificates are to be furnished in English Vernacular not in other languages <i>Scanned original copy</i>	i) Trade License or manufacturing License or Factory License valid up to 31.3.2027 . or thereafter ii) P T clearance Certificate (2025-26 or thereafter) or self declaration for exemption if any iii) Labour contractor License
3	CREDENTIAL ✓ All documents are to be furnished in English Vernacular not in other languages <i>Scanned original copy</i>	i) Documentary evidence of credentials of similar work of value Rs One Crore only . ii) Technical specification, Manual, Drawings of the quoted items

6. EARNEST MONEY DEPOSIT

6.1. Each tender, unless the bidder is exempted under the existing order of the Govt. of West Bengal or Govt. of India, will have to deposit **Earnest Money 2% of trade value** in escrow account. In no circumstances, Demand Draft, Bankers' cheque, Pay Order, T.R. Challan, Cash, G.P. Note, Pass Book, Fixed/Term Deposit, Token of Bank, A/c. Payee Cheque will be accepted save & except those mentioned above as Earnest Money Deposit.

- (i) This Milk Union will not be liable for deposition of excess of Earnest money.
- (ii) Earnest Money deposited before the date of issue of this N.I.T. will not be accepted. Earnest Money Deposit of previous tender will not be adjusted/ considered for this tender.
- (iii) Earnest Money will be released after finalization of tender and in the following cases:-
 - a. Tender documents which are not valid.
 - b. Sample(s) furnished by them is/are not acceptable.
 - c. Expiry of validity of rate contract subject to successful supply, installation & commissioning.
 - d. Since a panel of 2nd Lowest Rate(s) is/are to be maintained the Earnest Money Deposit(s) of such firm(s) **will be retained up to 2(two) months from the date of approval of 1st Lowest Rate** due to obvious reason. For such retention of EMD for that period no interest shall be payable.
 - e. In other cases, it will be released in due course.

6.2. The Earnest Money Deposit shall not carry interest and Earnest Money Deposit of previous tender will not be adjusted or considered for this tender. Earnest Money Deposited before the date of issue of this N.I.T. will not be accepted.

7.IT RETURN & ANNUAL TURNOVER REQUIREMENT

7.1. ORIGINAL IT Return for three Assessment years i.e. **2023-24 , 2024-25 & 202-26** are to be uploaded.

7.2 Average Annual Turnover for the financial year **2023-24, 2024-25 & 2025-26** should be uploaded.

7.3 Average Annual turn over Certificate (**ANNEXURE-III A**) for bidder to this effect issued by Practicing Chartered Accountant should be uploaded in the e-tender portal.

7.4 Participants below the said stricture are not eligible & their offer will be rejected.

8. TRADE LICENCE

8.1 Scanned copy of valid trade license should be uploaded. The Bidder who has Branch Office in the State of West Bengal shall upload their Trade License.

9. MANUFACTURING LICENCE

9.1 Scanned original documents of valid manufacturing license which is in vogue shall be uploaded. The License should be renewed & up-to-date.

9.2. In the event of Manufacturing License applied for renewal, it is desired to upload the validity certificate from the Licensing authority in respect of their License that it continues to be valid during the period of tender process. License issued for Test and Analysis shall not be considered.

9.3. The tenders uploaded without proper license shall be liable for rejection.

9.4 For all imported products, attested photocopy of valid import license issued by competent authority in India, Bill of Entry/Lading, Invoice of overseas supplier & Certificate of Origin **shall be uploaded. In case of imported items**, license for sale in India issued concerned licensing authority duly attested shall also be uploaded.

9.5 In case of Authorised Agents of the Manufacturer, documentary evidence in support of Authorised Distributorship Certificate for the items quoted by the bidders should be uploaded.

10. APPOINTMENT OF DISTRIBUTOR

10.1. The out-of-state bidder may supply directly or may supply through their authorized distributor provided they have no Regional Sales Depot /C&F Agent in the State. Legal document to be made on non-judicial stamp paper worth Rs.10/- is to be uploaded regarding appointment of distributor. Distributor means authorised distributor who shall facilitate the process of collection of order, ensuring timely supply & collecting payment on behalf of the manufacturer.

10.2. **Local MSME /local Bidders are however not allowed to engage Distributors.**

10.3. The Bidder may propose that the order & payment are to be made in favour of the Bidder & the Bidder will supply and effect distribution directly or through local depot /C&F Agent in the State.

- 10.4. If **out-of-State** bidder proposes that order and payment are to be made in the name of the Distributor; such Distributor must be an authorized distributor of the Bidder with minimum annual turnover of Rs. 2.0 crore for the year **2024-25 & 2025-26**.
- 10.5. The bidder will have to upload their Authorized Distributor's Document i.e. PAN issued by IT Dept, GSTIN Registration certificate, Trade License, Labour contractor License.
- 10.6. The matter related to Way Bill is the responsibility of the Manufacturer/Direct Importer/authorized distributor and the procuring authorities will not issue any way bill.
- 10.7. It is, however, made clear that agreement in pursuance of the accepted tenders will be executed only with the Bidder who will be responsible for the supply.

11. PERIOD OF RATE CONTRACT

- 11.1. Rate quoted shall hold well for a period of **ONE YEARS from the acceptance of rate** and/or any extended period, if situation arises.
- 11.2. They must supply the items at the approved rates within the validity period and refusal to supply will be dealt with as per tender rules.

12. GSTIN REGISTRATION CERTIFICATE

- 12.1. Each bidder should upload ORIGINAL Goods & Services Taxpayers Identification Number (GSTIN) Registration Certificate obtained from competent authority.

13. PAN

- 13.1. ORIGINAL PAN card issued by competent authority is to be uploaded.

14. SELF-DECLARATION

- 14.1. Each bidder should upload self-declaration for quoted items and 5 (Five) years manufacturing & marketing experience in the form of affidavit from Class –I Magistrate or Notary.

15. DECLARATION OF PRODUCT LITERATURE SUBMISSION

- 15.1. Each bidder will have to submit product literature for the quoted items through online along with Tender documents and a declaration is to be submitted

16. RATE

- (i) The quoted rate should be inclusive of all charges viz. Entry Tax, Supply, transportation charges up to the Milk Processing Unit, packing & forwarding, loading, unloading, insurance, Installation and commissioning, etc. should be included in the Unit Rate.
- (ii) Rates quoted which are not as per specification mentioned in the Tender/Catalogue will not be accepted.
- (iii) Rate should be quoted in unit mentioned in the N.I.e.T. Tender with split rate & quantity will be rejected. Under no circumstances enhancement of rate whatsoever will be accepted after closing of stipulated time of submission of tender, whatever the reasons given thereafter save & except for any tax imposed by the

Govt. Photocopy of Govt. Order in respect is to be submitted while claiming such increase.

(iv) Abnormally low rate of any item(s) quoted by a tendering firm in the offer with some mala fide intention will not be accepted, if detected.

17. VALIDITY

(i) The offered rate should be valid for **not less than 90 days** from the date of opening of Financial Bid but the period may be extended or curtailed at the discretion of the undersigned/Tender Committee/Tendering Authority & requirement.

(ii) Rate shall be valid throughout the period to be covered by the contract to be executed with successful bidder along with any extension as may be fixed by the competent authority from time to time.

(iii) Any addendum/ corrigendum / Extension of validity period will be notified at our MILK UNION Website: www.ichhamatimu.com as it is not possible to inform any individual.

18. AFTER SALE SERVICE:

The Bidders should ensure the AFTER SALES SERVICES of the item as and when required for the entire period of warranty/guaranty of minimum one Year from the date of supply at free of cost.

19. WARRANTY:

Warranty period shall be MINIMUM TWELVE (12) months from the date of commissioning of the item.

20.. SECURITY MONEY DEPOSIT:

i) The successful bidder will have to retain 10% of the Bill/Invoice value as security money deposit throughout the tenure of Guarantee/warranty Period. The payment may be released after submission of Performance Bank Guarantee valid for the specified period.

ii) Earnest Money will be refunded after satisfactory completion of supply and commissioning of the Unit(s).

iii) No proportionate refund of E. M./S.M. will be allowed in any case.

21. SUPPLY:

Supply and Installation of the ordered items (as per specification) must be completed within 60 days from the issuance of sales order.

IT IS OBLIGATORY FOR THE BIDDER TO NOTE THAT FAILURE TO MAINTAIN DELIVERY& I/C SCHEDULE OF ORDERED ITEM WILL LEAD TO SEVERE DISLOCATION IN CARRYING OUT PUBLIC SERVICE FOR WHICH SUCCESSFUL BIDDER WILL BE HELD RESPONSIBLE & ACTION WILL BE TAKEN STRICTLY AS PER TENDER RULES LAID DOWN HEREIN WITHOUT ANY PREJUDICE ANY

SHORT OF PLEA WILL BE CONSIDERED, SAVE & EXCEPT ANY INCIDENT OCCURRED 'BY **ACT OF GOD**' OR NON READINESS OF SITE BY ANY MEANS MAY BE CONSIDERED ONLY.

22. AGREEMENT (OFFLINE)

(i) The successful bidder will have to enter into a contractual agreement with the Ichhamati Co-operative Milk Producers' Union Ltd in the standard format embodying the tender terms & conditions in Non-Judicial Stamp Paper worth Rs.50/- (Rupees Fifty) only.

(ii) If the contractor fails to execute the contract satisfactorily at the tendered rate, the security deposit will be forfeited by the Union.

(iii) If the Union/Society incurs any loss / additional expenditure due to the negligence of the contractor in connection with the work during the period of contract, the same shall be recovered together with all charges and expenses from the bidder.

(iv) The breakages or damages, if any, caused by the contractor to the property of the Union/Society, the cost will be recovered from the bidder.

23. SUPPLY/DELIVERY

(i) Supply must be completed within specified timeframe from the date of placement of supply order and execution of Agreement.

(ii) Supply will normally be accepted on all working days between 11 am & 3 pm. Successful bidder must provide requisite number of labors to execute the supply order. No supply will be accepted on Sundays & Govt. Holidays unless otherwise desired by the receiving authority.

(iii) IT IS OBLIGATORY FOR THE BIDDER TO NOTE THAT FAILURE TO MAINTAIN DELIVERY SCHEDULE WILL LEAD TO SEVERED DISLOCATION IN CARRYING OUT PUBLIC SERVICE FOR WHICH SUCCESSFUL BIDDER WILL BE HELD RESPONSIBLE & ACTION WILL BE TAKEN STRICTLY AS PER TENDER RULES LAID DOWN HEREIN WITHOUT ANY PREJUDICE, ANY SORT OF PLEA WILL NOT BE CONSIDERED, SAVE & EXCEPT ANY INCIDENT OCCURRED "**BY ACT OF GOD**"MAY BE CONSIDERED SYMPATHETICALLY.

(iv) The replacement of supply against any rejected consignment must be made positively within given time frame from the date of intimation, failing which action will be taken as per tender rule.

24.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 Ichhamati Cooperative 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 Ichhamati Cooperative Milk Producers' Union Ltd.

25. PENAL MEASURE

- 1) The Earnest money Deposit furnished by bidder will be forfeited in full (including excess amount of earnest money, if deposited), if the bidder fails/withdraws tender as a whole or for any particular item at any stage during the tenure of execution/refuse to execute to enter into written agreement once the rate for any/all items is/are accepted within the time specified when requested to do so by the authority and/or refuses to deposit security money.
- 2) The Liquidated Damages be imposed for the delayed supply /erection and commissioning at 0.5% per day.
- 3) Time being the essence of contract no variation shall be permitted in the delivery time as prescribed in the delivery schedule. If the bidder fails to supply and execute the work in full or part of the order as per the delivery schedule, the Ichhamati Milk Union Ltd. (IMUL) shall reserve the right to cancel the order besides forfeiture of Earnest Money &/ Security Money Deposit.
- 4) For violation of any of the terms and conditions of the contract, the Milk Union reserves the right to terminate the contract without assigning any reason thereof.
- 5) On termination of contract, the Earnest Money &/ Security Deposit is liable to be forfeited and any of the resultant loss beyond Security Deposit will be recovered from the contractor by legal means apart from forfeiture of any amount due to the contractor.
- 6) (a). If the bidder defaulted in any of the previous tenders to execute agreement or to pay Security Deposit or to supply ordered quantity either in part or full will not be eligible from participating in this tender.
(b). If the successful bidder defaulted to execute agreement or to pay Security Deposit or to supply ordered quantity either in part or full shall be debarred from participating in this subsequent tender for a period of 3 years.
- 7) In consequence of submission of false or fabricated documents or any deviation in technical specification by any **firm**/company, if proved later on shall liable to be Black Listed for 3 (three) years.

26. PAYMENT

- a) Tax Invoice against all supplies is to be sent in **TRIPPLICATE** and should invariably be submitted along with supply documents (Challan, e-waybill etc.).

27.PAYMENT TERMS:

Terms of payment shall be as below

- (A) 40 % (Forty percent) of the total work order value may be paid after receipt of the materials(all components) as per the Technical specification in good condition certified by the Concerned Official and approved by the Competent Authority.
- (B) 30 % (Thirty percent) of the total work order value along with taxes in full shall be paid after successful installation, commissioning, trial run and training of entire unit.

Payment of part supplies of the ordered quantity of materials, thus, will not be allowed save and except in exceptional circumstances in which there are just and valid reasons for not being able to make the full supply and will be allowed only at the sole discretion of Managing Director, Ichhamati Milk Union. Further such provision by Managing Director will only be granted at his discretion when part supply is within the delivery period and there is clear evidence and commitment on the part of the supplier that the rest of the ordered quantity of material would be supplied within the delivery period itself. But if the delivery period of supply expires the payment will only be released after completion of the entire supply.

(c) 20% (Twenty percent) work order value shall be paid after successful running/usage of the machineries for at least 30 (thirty) days and on submission of necessary satisfactory work done certificate from respective In-Charge of the site.

(d) The rest 10% (Ten percent) will be released after one year from the completion of entire work or submission of a fresh performance bank guarantee of equivalent amount.

28. GENERAL

28.1. No Tender/Tender pre-requisites such as Earnest Money Deposit, Sample etc., will be accepted after date & time of scheduled closing. Any bidder with repacking license will not be considered as manufacturer.

28.2. Conditional Tenders and Tenders not accompanied with the documents as mentioned shall be summarily rejected without any reference made to the bidder and no correspondence will be entertained.

28.3. Submission of hard copy of financial bid (BOQ) is totally prohibited & only be uploaded through e-tender portal. Disclosure of rate in the technical bid will lead to rejection of bid.

28.4. Any addendum/corrigendum/extension of validity period will be notified at our Milk Union website www.ncdfiemarket.com as it is not possible to inform each.

28.5. The uploaded document in the tender without containing necessary enclosures and incomplete or tampered documents shall be rejected at the time of evaluation without any further notice to the bidder.

28.6. The offer may go to the next bidder, if the successful bidder fails to perform the contract.

28.7 No negotiation/enquiry/subsequent representation regarding rate/quantity/quality or otherwise will be entertained after scheduled closing time. No import license, any sort of permit etc. in respect of any item will be provided from this Directorate and the tendering firm should have rely on their own resources.

28.8 The undersigned reserves the right to reject any or the entire tender at any stage without assigning any reason thereof.

29.MISCELLANEOUS:

i) Tender pre-requisites such as/Drawing/Brochure/NIT/application etc., will not be accepted after scheduled date & time.

ii) Conditional Tenders & Tenders not accompanied with the documents as mentioned in clause shall be summarily rejected without any reference made to the bidder and no correspondence will be entertained. Moreover, the bidder will have to quote for whole job mentioned in the BOQ turnkey basis, no partial bidding will be entertained and summarily rejected.

iii) If the submission and opening of tender is not possible on the scheduled date & time due to any unavoidable circumstances, the same will be done on immediate next working day at the same time prescribed in the tender. The bidder shall not be informed separately in this regard.

iv) The offer may go to the next bidder, if the successful bidder fails to perform the contract.

V) No negotiation/enquiry/subsequent representation regarding rate/quantity/quality or otherwise will be entertained after closing of Bid submission (on line) Tender.

vi) No Import License, any permit, etc. in respect of any item will be provided from this Office and the Tendering Firm should have relied on their own resources.

vii) The undersigned reserved the right to reject any or all of the tenders at any stage without assigning any reason thereof and will not be bound to accept the Lowest Tender Rate.

viii) Any dispute /difference arising out of this Tender will be referred to the sole arbitrator to be appointed by the undersigned and the same will be held at Kolkata. Arbitrator will have the power to pass interim order and will be guided by the Arbitration & Conciliation Act, 1996.

ix) When a Tendering Firm submitted their tender in response to this Notification, they will be deemed to have understood fully the contents, the requirement, term & conditions of this tender. No extra payment will be made on the pretext that the Tendering Firm did not have a clear idea of any particular point. Any offer made in response to this tender when accepted by the Tendering Authority will constitute a contract between the parties.

x) Non-compliance to any terms & conditions laid herein shall constitute a breach of contract and penalty for non-compliance shall be enforced very rigidly.

xi) Firm quoting rates on behalf of its Principal should indicate that it is a DIVISION of the principal firm.

xii) All notice intended to be served on the bidder will be deemed to have been duly served, if sent under certificate of posting or Registered post to the address mentioned in the tender or by any other process permissible under civil law.

xiii) ALL INSTRUCTIONS GIVEN EITHER IN THE SPECIFICATION OF ITEMS, TENDER NOTICE, TENDER & ORDER FORM ARE BINDING ON THE BIDDER & ARE PART OF TERMS & CONDITIONS.

xiv) In the event of delay/non-availability/garbled printout/inconvenience in getting access to the Website for downloading tender documents, the authority will not be held responsible, if there is any discrepancy arises inbetween

printing of downloaded tender documents, the master copy available at the office will be acceptable and intending bidders shall have to abide by.

30. MANAGING DIRECTOR, ICHHAMATI MILK UNION RESERVES THE RIGHT TO CHANGE THE ABOVE SCHEDULE IN CASE OF ANY EXIGENCIES AFTERPUTTING UP A NOTICE IN THE WEBSITE OF ICHHAMATI MILK UNION.

31. During the scrutiny, if it comes to the notice to tender inviting authority that the credential or any other paper found incorrect / manufactured/ fabricated , that bidder would not allowed to participate in the tender and that application will be out rightly rejected without any prejudice.

32. The Undersigned/Tender Selection Committee reserves the right to cancel the N.I.T. due to unavoidable circumstances and no claim in this respect will be entertained.

Sd/-

Managing Director
Ichhamati Milk Union

APPROVED FORMAT FOR PERFORMANCE BANK GUARANTEE

To

_____ [name of Employer]
_____ [address of Employer]

WHEREAS _____ [name and address of Contractor] (hereafter called "the Contractor") has undertaken, in pursuance of Contract No. _____ dated _____ to execute _____ [name of Contract and brief description of Works] (hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Contractor shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligation in accordance with the Contract;

AND WHEREAS we have agreed to give the Contractor such a Bank Guarantee :

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you on behalf of the Contractor, up to a total of _____ [amount of guarantee]* _____ (in words), such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of _____ [amount of guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the contractor before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between your and the Contractor shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 28 days from the date of expiry of the Defect Liability Period.

Signature and Seal of the guarantor _____
Name of Bank _____
Address _____
Date _____

* *An amount shall be inserted by the Guarantor, representing the percentage the Contract Price specified in the Contract including additional security for unbalanced Bids, if any and denominated in Indian Rupees.*

UNDERTAKING
(ON-NON JUDICIAL STAMP PAPER OF RS.10/-)

I, the undersigned do hereby undertake that our firm M/s
_____ agree to abide by this bid for a period _____
days for the date fixed for receiving the same and it shall be binding on us and may be accepted
at any time before the expiration of that period.

(Signed by an Authorised Officer of the Firm)

Title of Officer

Name of Firm

Annexure-I
Application Format

(To be furnished in the Company's Official Letter Head Pad with full Address with contact no. Telephone No. FAX No., e-mail id., Website Address)

To

The Managing Director

Ichhamati Co-operative Milk Producers' Union Ltd.

Hatipukur Road, Barasat, North 24 Parganas

Sub: NIT for Installation and commissioning of Dairy Plant Equipments along with necessary pipelines etc at the milk processing unit of Berachampa Plant at Deganga, in West Bengal.

Ref. no. MU/e TENDER /92/2026/579

Date: 15.10.2026

Sir,

Having examined the pre-qualification and other documents published in the NIT, I/We hereby submit all the necessary information and relevant documents for evaluations:

i. That the application is made by me/us on behalf of duly authorized to submit the offer. The authorization letter from the Company is attached with the name of the person authorized to enter into execute the agreement.

ii. I/We accept the terms & conditions as lay down in the NIT mentioned above and declare that we shall abide by it for throughout tender period.

iii. I/We are offering rate for the following item/items in the BOQ as per Specification mentioned in the NIT, described above and duly accepted by me/us.

iv. We have experience in the similar work since year and credential certificates are annexed.

v. I/We understand that the Tender Selection Committee/ Tendering authority reserves the right to reject any application without assigning any reason.

vi. I/We submit an AFFIDAVIT in a Twenty Rupees Non-Judicial Stamp paper duly Certified by Notary Public as per Annexure- II.

Signature of the Bidder with date

ANNEXURE- III – A TO BE UPLOADED

ANNUAL TURNOVER CERTIFICATE (BIDDER)

(Certificate from Chartered Accountant Firm in the official pad)

This is to certify that having been examined the audited Balance Sheet & P/L accounts and other records of M/S having its office at,

It is also certified that Annual Turnover Net of Taxes of the firm for the Financial years 2019-20 & 2020-21 are Rs.....Cr., & Rs.....Cr. respectively (as per P/L accounts & Balance Sheet of the firm submitted).

Signature of the Chartered Firm with Registration No

Signature of the authorised signatory (bidder)

Annexure – IV
AFFIDAVIT

TO BE UPLOADED

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

1) I/We _____ the Proprietor/Authorized nominee(s)
of the Firm M/s. _____ hereby declare that
our firm M/s _____ is
neither **blacklisted** nor debarred to participate in tender by any Government
/Authority in last 2 (*two*) years from the date of Affidavit.

2) The undersigned is also declaring that our firm M/s _____
_____ is having years manufacturing &
marketing experience.

3) Certified that I have applied in the Tender in the capacity of individual/ as
a partner of a firm and I have not applied severally for the same job.

4). 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. If any declaration submitted is
found/ ascertain to be incorrect/ fabricated/ misrepresented/fraudulent etc.
accordingly tender will be liable to be cancelled/ terminated immediately & I/
my firm/ company shall also be liable to prosecuted under relevant Section of
Indian Penal Code, 1860 along with Indian Information & Technology Act 2008
& any other applicable law for the time being in force in addition to forfeiture of
Earnest Money/ Security Deposit.

5). I/We the undersigned authorize (s) and request any bank / person / firm /
corporation to furnish pertinent information deemed necessary and requested by
the IMUL to verify the statement made by me/us or to assess my/our competence
and general reputation.

6). I/We the undersigned, understand(s) that further qualifying information/
clarifications on the statement made by me / us may be requested by
the IMUL and agree(s) to furnish such information/clarification within SEVEN
Days from the date of receipt of such request from the IMUL.

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)

SCOPE OF SUPPLY
LIST OF ITEMS

Sl.No.	Description.	Capacity	Quantity
1	Milk Chiller	5000 LPH	1No.
2	Milk Pasteurizer	5000 LPH	1No.
3	Homogenizer	5000 LPH	1No.
4	Milk Feed Pump	5000 LPH	1No.
5	On-Line Cream Separator	5000 LPH	1No.
6	Curd Pasteurizer	1000Kg/Hr	1No.
7	Culture Tank	500 L	2Nos.
8	Lassi /Dahi Packing Machine double head	2400 pouch/h	1No.
9	Over head tank for Filling Machine	500L	1No.
10	Lassi Chiller	5000 LPH	1No.
11	Blast Freezer(-18°C)	12 ftX12ftX8ft	1No.
12	Ghee Clarifier	500 LPH	1No.
13	Paneer Coagulating Vat	1000 L	1No.
14	Paneer Hoops	10 kg each	10Nos.
15	Pneumatic Paneer Press Double Head		2Nos.
16	Air Compressor for Paneer Press	6kg/cm ²	1No.
17	Double head vacuum machine for Paneer & Peda		1No.
18	Air Compressor for Peda Stamping Machine	6 kg/cm ²	1Lot
19	Air Compressor for operation of overall processing	60 cfm	1No.
20	Diesel Fired Boiler	1000 kg/h	1No.
21	Ghee Filling and Scaling in plastic container machine automatic type		1No.
22	Effluent Treatment Plant(ETP)	30KL	1No.
23	R.O water Treatment & Water Softening Plant		Standard
24	Erection, Testing & Commissioning		1Lot
25	Packing, Transport & Insurance		1Lot
26	Laboratory setup chemical & microbiological		1No.

86
12/10/26

1. Raw Milk Chiller

Quantity	: 1 No.
Capacity	: 5KLPH
Chilling milk	: 35°C to 4°C Chilled
water:	2°C

MAKE : : Reputed make / Standard make

Functional requirement: The single section plate heat exchanger would be used for chilling raw milk with chilled water.

Scope of supply:

Plates: The plates would be made from SS 304/316 and will be sanitary design. All milk contact and exterior, surfaces will be easily accessible or readily removable for cleaning inspection.

Gaskets: The sealing gaskets will ensure complete sealing and prevent any cross leakage between product and service liquids. Gaskets will be of sanitary type. It will be continuously bonded to the heat transfer surface. The gasket material will be of food grade rubber and will withstand a water sterilization temperature of 100°C and 2% caustic solution at 80°C. Gasket material will be non-toxic, heat resistant, and nonabsorbent and will have smooth surface.

Supporting frame:

The supporting frame for the plate pack will be of a self-supporting design made of MS clad with SS sheet with a manually operated tightening device.

Finish: All welding joints will be ground smoothly. All SS surfaces will be polished.

Accessories:

Inlet / outlets: The inlets and outlets for chilled water and products will be provided with complete SS 304 SMS unions.

Thermo well: 3/4" SS pockets for thermometer on all the inlets and outlets. Digital thermometers with temperature display should be supplied.

Ball feet: The frame will be provided with adjustable SS ball feet with provision for height adjustment of 50mm - 4 Nos.

Tools: Essential special tools will be supplied.

Milk Pasteurization Plant

Capacity	: 5 KLPH
Quantity	: 1 No

Design Parameters:

Raw milk feed temperature	: 04/06 °C
Milk Take-Off Temperature to Centrifuge	: 50- 55 °C
Milk Take-Off Temperature to Homogenizer	: 60- 65 °C
Milk Pasteurization Temperature	: Up to 80 °C
Holding time for pasteurization.	: 20 s.
Finished milk discharge temp.	: 04°C
Heat regeneration	: 90 %
Chilled water feed temp.	: 01°C
Chilled water flow rate	: 3 times the milk flow Rate.

12/10/26

Pasteurizer will be equipped with:

1.1 Balance Tank:

Make	Reputed / Standard make
Capacity	: 100 L
Quantity	: 1No.
MOC	: SS 304

The float balance tank will be fabricated from 2mm thick SS sheet and provided with cover, sanitary type SS float valve with milk inlet, outlet, return milk inlet and adjustable ball feet.

1.2 Milk Pump

Make	Reputed / Standard make
Capacity	: 5 KLPH
Quantity	: 1No.
MOC	: SS 304
Type	: Centrifugal Sanitary type

Functional requirement: The pump would be used for transfer of milk from balance tank to PHE.

The pump will be of sanitary design as per dairy standard. It will be provided with mechanical seal. The pump will have TEFC motor fitted with SS shroud with air louvers for cooling and suitable arrangement for cable connections.

It is equipped with VFD for controlling the feed rate.

1.3 Plate Heat Exchanger:

Make	Reputed / Standard make
Capacity	: 5KLPH
Quantity	: 1No.

The plates will be made from SS conforming to SS 304/316 and will be of sanitary design. All the milk contact and exterior surfaces will be easily accessible for cleaning and inspection. All PHE plates will be fitted with Nitrile /EPDMCLIP-on food quality gasket and will ensure no cross leakage between product and service liquids.

The supporting frame for plate pack will be of self-supporting design made of SS clad MS with manually operated tightening device. The tightening device will be able to exert uniform pressure on all the parts of heat exchanger plates and inlet/outlet connection for product and cooling/heating media. The frame will be provided with adjustable SS ball feet with provision for 50 mm height adjustment.

2.4 Holding Tube:

MOC	: SS 304, (20 seconds holding)
Make	: Reputed / Standard make

Holding tube will be designed for the specified holding time considering the CIP clean ability and fastest particle velocity.

2.5 Heating Device:

Final stage of heating will be done with hot water. The hot water generation systems will be of plate type heat exchanger.

The plates will be made from SS conforming to SS 304 and will be of sanitary design. All the milk contact and exterior surfaces will be easily accessible for cleaning and inspection. All PHE plates will be fitted with food quality gasket and will ensure no cross leakage between product and service liquids.

The supporting frame for plate pack will be of self-supporting design made of SS clad MS with manually operated tightening device. The tightening device will be able to exert uniform pressure on all the parts of heat exchanger plates and inlet/outlet connection for product and cooling/heating media. The frame will be provided with adjustable SS ball feet with provision for 50 mm height adjustment.

2.6 Automatic Flow Diversion Valve (FDV):

Flow diversion will be provided to divert the milk from the heating section of the heat exchanger to the balance tank if the temperature of the milk is not reached to the set temperature. Automatic steam control valve (4-20 MA)

MAKE: Reputed /Standard make

12/10/20

2.7 Instrumentation and Control Panel: 1Set

The instrumentation and control panel shall be made in standard execution built to dust and vermin proof design. The control panel shall be leg supported and house the following components all pre-wired to terminal strip:

- PID controller for temperature of pasteurized product with display of set temperature and actual product temperature. The controller has a facility to automatically tune to the requirement of set temperature.
- **Chartless recorders shall be provided.**
- Audio alarm with hooter and acknowledge and reset push button.
- Auto manual selection switches and forced forward flow provision
- E/P convertor for steam control valve operation and electrically operated solenoid valve for air supply to flow diversion valve.
- Air pressure regulator cum moisture separator with isolating valve cum air filter to ensure proper air supply to the E/P convertor and solenoid valves.
- Incoming on/off switch for control supply.
- Six sets of 'on' and 'off' push buttons with indicating lamps and suitable inscriptions shall be provided for operation of motors of various modules. (two numbers spare push buttons are included)
- Indication lamp for showing the position of flow diversion valve (forward/diverted mode)

Pipes and fittings (SS 304): all inter connecting pipes with necessary fittings for product as well as service shall be supplied within the specified battery limits and exclusions

Product: the supply shall include all the necessary SS 304 pipes and fittings from float balance tank to the finished pasteurized product outlet as required interconnecting the above equipment.

Hot water: the supply shall also include necessary SS 304 pipes and fittings for pumping hot water to the heating section of the pasteurizer and return to the hot water set.

Tools: essential special tools shall be provided along with 20% spares gasket and 2 nos. each type of plate.

2.8 Interconnecting SS pipes & Fittings:

All the necessary SS pipes & Fittings required for integration of all components of HTST Milk Pasteurization plant will be provided.

The above components would be installed in SS304Skid Frame in compact modular construction.

3 Homogenizer:

Make	: Reputed / Standard make
Quantity	: 1No.
Capacity	: 5 KLPH
MOC	: Product contact part SS 304, Valve stellite
Stage	: Two stages (200bar+50bar)

One homogenizer for homogenizing the liquid milk at a pressure of up to 200 bars. The pressure is controlled by a hydro-pneumatic system.

Technical Specification:

Material of Construction: All parts in contact with product are of stainless steel. The machine will have dust and vermin proof design in epoxy painted stainless steel enclosure.

No of stage: 2(Two)

1st stage operating pressure: 175 bar

2nd stage homogenizing operating pressure: 35 bar

Pressure gauge: Pressure gauges to indicate the two stage homogenizing pressure

Type of homogenizing valve: Liquid whirl (LW) universal homogenizing valve

Valve housing:

Mono block poppet valves housing with removable valve seats, interchangeable poppet valves configuration.

The machine will be designed considering the CIP clean ability specifically for dairy applications & compliance with following standard.

LC
12/10/26

Main switch and starter provided separately and external to the machine along with all the auto switches and Relays.

Blower should be provided to remove hot air inside the cabinet.

Remote control Panel should be provided near the Homogenizer with the indicators as given below.

- (i) Indication Lamp for Water / Air Failure. (OPTIONAL)
- (ii) Indication Lamp for Irregular Lubrication Oil Pressure.
- (iii) Indication Lamp for Protection Intervention (For any electrical Problem)
- (iv) Indication Lamp for Product Failure (OPTIONAL)
- (v) Start and Stop Push Buttons with indication lamp.
- (vi) Pressure adjusting knob for 1st & 2nd with Push Locking arrangement.
- (vii) Emergency Stop
- (viii) Reset Push Button with indication lamp.
- (ix) 1st and 2nd Stage selector switches with indication lamp.
- (x) Hour meter to note the total running hours, which will help to follow the maintenance schedule.

Sanitary design Diaphragm type Pressure Gauge on 1st Stage having range of 0 - 200 Bar.

Oil level indicator and Lubrication oil pressure gauge on front side of the Homogenizer.

Air pressure gauge on front side to indicate the pressure on 1st and 2nd Stage.

- (a) Easily removable type SS enclosure along with bolting arrangement and handles.

4 Milk Feed Pump:

Capacity	:	5 KLPH
Quantity	:	1 No.
MOC	:	SS 304
Type	:	Centrifugal
Make	:	Reputed / Standard make

Functional requirement: The pump would be used for transfer of milk from balance tank to PHE.

The pump will be of sanitary design as per dairy standard. It will be provided with mechanical seal.

The pump will have TEFC motor fitted with SS shroud with air louvers for cooling and suitable arrangement for cable connections.

1. Cream Separator:

MAKE	:	Reputed /Standard make
Capacity	:	5KLPH
Quantity	:	1 No
Input Compression	:	1.5-2 bar
Working Temperature	:	45-51°C
Type	:	Solid bowl manual cleaning

Function: Separation, Clarification at the optimum temperature of 40-50°C.

Design: Centrifugal Cream Separator has two main assemblies, that is, bowl assembly and drive assembly.

Bowl assembly consists of a lower bowl part, distributor, separator discs, and upper bowl part and a locking ring between upper and lower bowl parts. All the contact parts are manufactured from stainless steel conforming to AISI-304 grade.

Drive assembly is underneath the bowl assembly with clutch and gears. A horizontal shaft is driven by the electric motor which in turn gives rotation to the vertical shaft held between high speed precision bearings. Whole drive assembly is submerged in an oil bath for lubrication. Lower part of the bowl is tightened over the upper thread ended of vertical shaft and held in place by a bowl nut with left hand (anticlockwise) threads which keeps it tightened as the bowl rotates clockwise.

Finish: All weld joints are ground smooth. All Stainless Steel surfaces are polished to 150grits.

Accessories:

- Lubrication System is splash type
- 2 No. Diaphragm type pressure gauges in stainless steel dial for monitoring milk and cream pressure.
- Bowl Gasket: From food grade material which is non-toxic, fat resistant and non-absorbent from PTFE (Teflon) Also gasket with centripetal pump for discharge of milk is from PTFE
- Electric Motor: 440V, 3-Phase, 50/60 Hz, 2hp provided with stainless steel protection cover.

8/12/10/23

Connections: Motor:

Bowl Speed: Sludge Space: Inlet Pressure: Outlet Pressure:

Separation of hot milk 5000 l/h Standardisation/ Clarification 7500 l/h

Inlet 38mm, Skimmilk outlet 38mm, Cream outlet 25mm

5.5 KW flange motor for 440 V, 50 HZ 3-Phase AC Motor drives bowl via friction clutch.

5900 r/min. (approx), 4.61 litres, 0.5 kg/cm² min.

As required for downstream equipment and determined by impeller sizes, etc.

Tools: Essential special tools are supplied with the machine.

2. Curd Pasteurizer:

Make	: Reputed / Standard make
Capacity	: 1000 LPH
Quantity	: 1No.
Product	: Cow milk, (4% milk fat)
Capacity	: 1000 LPH
Temp Program	: 4-28-90-45 °C
Holding time	: 10 min.

Process Operation:

Pasteurization temperature control (by advanced PID controller) and flow rate (by mechanical flow controller in case of pasteurizer) will be automatic. Flow will be diverted automatically with alarm if temp is below the past temp. Sequencing of production, sanitization and CIP will be manual. Detergent addition in the balance tank and concentration monitoring will be manual.

6.1. Balance tank:

Capacity	: 100 L
Quantity	: 1No.
MOC	: SS 304

The float balance tank will be fabricated from 2mm thick SS sheet and provided with cover, sanitary type SS float valve with curd inlet, outlet, return curd inlet and adjustable ball feet.

6.2. Feed Pump & Booster Pump:

Capacity	: 1 KLPH
Quantity	: 1No.
MOC	: SS 304
Type	: Centrifugal

Functional requirement: The pump would be used for transfer of curd from balance tank to PHE. The pump will be of sanitary design as per dairy standard. It will be provided with mechanical seal. The pump will have TEFC motor fitted with SS shroud with air louvers for cooling and suitable arrangement for cable connections. It is equipped with VFD for controlling the feed rate.

6.3. Plate Heat Exchanger:

MAKE	: Reputed / Standard make
Capacity	: 1 KLPH
Quantity	: 1No.

The plates will be made from SS conforming to SS 316 and will be of sanitary design. All the curd contact and exterior surfaces will be easily accessible for cleaning and inspection. All PHE plates will be fitted with Nitrile/ EPDM glue free food quality gasket and will ensure no cross leakage between product and service liquids. The supporting frame for plate pack will be of self-supporting design made of SS clad MS with manually operated tightening device. The tightening device will be able to exert uniform pressure on all the parts of heat exchanger plates and inlet/outlet connection for product and cooling/heating media. The frame will be provided with adjustable SS ball feet with provision for 50 mm height adjustment.

Holding tube:

Holding tube will be designed for the specified holding time of 10 min considering the CIP clean ability and fastest particle velocity. MOC is SS304. Holding tube will be made up of pipes and fittings to match the internal surfaces get the best hygienic construction.

Manual Flow diversion valve for CIP, diaphragm valve, with wetted parts in SS 304.

8/12/10/24

Pasteurization temp recorder:

The temp indicating and controller is micro processor based

Holding tube:

MOC	SS304
Holding time	Suitable for Dahi / culture

Holding tube will be designed for the specified holding time considering the CIP clean ability and fastest particle velocity.

6.4. Heating Device:

Final stage of heating will be done with hot water. The hot water generation system will be of plate type heat exchanger.

The plates will be made from SS conforming to SS304 and will be of sanitary design. All the curd contact and exterior surfaces will be easily accessible for cleaning and inspection. All PHE plates will be fitted with food quality gasket and will ensure no cross leakage between product and service liquids.

The supporting frame for plate pack will be of self-supporting design made of SS clad MS with manually operated tightening device. The tightening device will be able to exert uniform pressure on all the parts of heat exchanger plates and inlet/outlet connection for product and cooling/heating media. The frame will be provided with adjustable SS ball feet with provision for 50mm height adjustment.

6.5. Automatic Flow diversion valve (FDV):

Flow diversion will be provided to divert the curd from the heating section of the heat exchanger to the balance tank if the temperature of the curd is not reached to the set temperature.

6.6. Instrumentation and Control Panel: 1 Set

Control panel:

- MOC: SS 304, Duly pre-wired and tested, & consists of the following Instruments and Controls:
- PID Temperature Indicating Controller, for heating application with data logger.
- Alarm/Hooter with 'reset' switch to announce diversion of milk
- Manual/Auto switches for operating flow diversion valve.
- Modulating steam control valve with positioner
- Start/stop push buttons with indicating lamps for process pump (milk pump, hot water pump etc.)
- 1 No On/Off lockable switch with indicating lamp for incoming supply from 'Mains'

6.7. Interconnecting SS pipes & Fittings:

All the necessary SS pipes & Fittings required for integration of all components of HTST Curd Pasteurization plant will be provided. The above components would be installed in SS304 Skid Frame in compact modular construction.

3. Culture tank

Capacity	:	500L
Type	:	Cylindrical/ vertical, triple jacketed
Quantity	:	2Nos.
MOC	:	SS304

Functional Requirement: This will be used to prepare the curd milk for inoculation.

Functional Requirement:

The equipment shall be used for curd making and further mixing different ingredients in the curd for making Lassi.

Design Requirement:

Capacity: 500 L.

Constructional features: The equipment shall be triple walled. The inner shell and the dished bottom shall be made from 2 mm thick stainless steel conforming to AISI 304.

The outer shell and outer bottom shall be fabricated from 2 mm thick stainless steel conforming to AISI 304.

The space between the shell and the outer jacket shall be insulated with Rock wool or equivalent insulation to withstand steam temperature.

Legs: The whole unit shall be mounted on 4 nos. of SS 304 clad MS legs with adjustable SS ball feet.

Finish: - All surfaces coming in contact with the product shall be polished to 180 grits dull finish.

Markings: - Calibration in the inner jacket shall be made with 100 litres interval.

12/10/26

Accessories:

Hand hole/ Manway at the top

Inlet 1 no. 51 mm dia. Outlet fitted with SMS butterfly valve having SS flange at one end and SMS 51mm union at the other end.

1 No. Thermowell

1 no. vertical top hung type agitator complete with mounting geared motor 440 v, 3 Ph. of suitable capacity having R.P.M. of 100 and propeller type impeller, with VFD

1 no. rotating type spray ball assembly.

The vat shall be completed with inlet and outlet with Non-return and GM valve in the jacket portion, jacket drain cock, and safety valve.(Optional)

All SS pipes and fittings shall conform to AISI 304 SMS standards.

Provision for digital temperature indicator.

4. Lassi/Dahi Packing Machine- Double Head

MAKE	: Reputed /Standard make
Product	: Lassi/ Dahi
Feeding System	: Gravity Filler
Average Output	: 2400 Pouches/h.
Packaging Material	: Virgin Film
Type of Seal	: Overlap/Impulse seal
Vertical Seal	: The film will be overlapped and sealed into a tube by vertical electrode. The jaw will be mechanical cam operated and is water-cooled.

Down ward Feed: Downward movement of film tube will be controlled by a tube in the pouches is continuous, and these a ling takes place through the product.

Horizontal Seal: The Horizontal Sealing and Cutting takes place at the same time by horizontal electrode mounted on fixed horizontal jaw. The fixed horizontal jaw is water-cooled.

CIP Cleaning of Machine : The machine should be built suitable for in line cleaning- in-place from a central system. The float balance tank should be capable of withstanding the average pressure of 3.5 bar-85°C of the CIP solution. The filling nozzle will have a CIP solution collection cup.

Scope of Supply:

S.S. Float Balance Tank: Balance tank of at least 50 Litres capacity should be provided on the top of the pouch filling machine. Separate balance tank for each filling head.

Machine shall have following inbuilt feature / arrangement:

Equipped with PLC controller and HMI panel.

The machine shall be provided with photocell on each head with all mounting arrangement to control the length of pouch.

Film guard device to stop the machine when film gets exhausted.

Liquid level controller.

Fill Quantity adjustment through HMI.

Bag length can be controlled either through Eye Mark as well as through PLC i.e. both features.

Independent head operation facility.

Digital heat control system.

Pouch counter.

Apportioning device for 200 ml, 500 ml and 1000 ml pouch packing.

Each head of the machine shall have CIP hoses with adaptors for CIP of the machines.

Glass panelled door with handle lock and adjustable legs.

Electrical and electronic system of respective head shall be housed in cabinet.

Emergency switch to stop the machine is to be provided on front side of machine.

Servo Voltage Stabilizer:

KVA rating - 10 KVA.

Voltage output -440 volts 50 Hz.

No. of phase - 3 ph.

Suitable 4 core Armoured Al. conductor PVC insulated cable of standard make to connect voltage stabilizer output to machine - 10 Meters.

8/2/24

Batch Coding Machine: Online Batch Coding Machine, TTO type shall be installed on each head for MRP, Date & Time and batch no. printing on the milk pouch and controlled by PLC.

SS Pouch Milk Collection Tray with stand: For each head of the packing machine 01 no. of suitable size SS tray with stand are to be provided for collection of packed pouch milk coming out of from the packing machine.

Tools & Instruction manual: Essential special tools and instruction manual with spare part list shall be supplied along with each machine without charging any extra cost.

5. Overhead Tank for Filling Machine:

MAKE	:	Reputed /Standard make
Capacity	:	500L
Quantity	:	1No.
MOC	:	SS304

It will be used to store the product before feeding to filling machine.

Design Requirement:

Capacity: 500 L

Constructional features: The equipment shall be double walled. The inner shell and the bottom shall be made from 2 mm thick stainless steel conforming to AISI 304.

The outer shell and outer bottom shall be fabricated from 2 mm thick stainless steel conforming to AISI 304.

The space between the shell and the outer jacket shall be insulated with liquid PUF for insulation.

Legs: The whole unit shall be mounted on 4 nos. of SS 304 clad MS legs with adjustable SS ball feet.

Finish: All surfaces coming in contact with the product shall be polished to 180 grits dull finish.

Accessories:

Inlet/1 no. 51 mm dia. Outlet fitted with SMS butterfly valve having SS flange at one end and SMS 51mm union at the other end.

1 No. Thermowell

1 no. stationary type spray ball assembly.

The vat shall be completed with inlet and outlet

All SS pipes and fittings shall conform to AISI 304 SMS standards.

10. Lassi Chiller

MAKE	:	Reputed /Standard make
Capacity	:	5,000LPH
Quantity	:	1No.
Type	:	PHE (Single Section)

Design Requirements:

Milk feed temperature	-	42°C
Milk discharge temperature	-	4 °C
Chilled water feed temperature	-	1.5 °C
Maximum permissible chilled	-	3 times the milk flow rate
Water flow rate Maximum pressure drop on	-	1.0 Kg/mm ²

Functional Requirement: The single section plate heat exchanger would be used for chilling Lassi milk with chilled water.

Design parameters:

Feed temperature	:	20°C
Discharge temperature	:	5°C
Chilled water feed temperature	:	2°C

Scope of supply:

Plates: The plates would be made from SS304 and will be sanitary design. All milk contact and exterior, surfaces will be easily accessible or readily removable for cleaning inspection.

Gaskets: The sealing gaskets will ensure complete sealing and prevent any cross leakage between product and service liquids. Gaskets will be of sanitary type Nitrile EPDM glue free. It will be continuously bonded to the heat transfer surface.

The gasket material will be of food grade rubber and will withstand a water sterilization temperature of 100°C and 2% caustic solution at 80°C. Gasket material will be non-toxic, fat resistant, and non-absorbent and will have smooth surface.

12/10/24

Supporting frame: The supporting frame for the plate pack will be of a self-supporting design made of MS clad with SS sheet with a manually operated tightening device. The frame and tightening device will prevent the plates from deflecting under pressure differential will be minimum of 4kg/cm².

Finish: All welding joints will be ground smoothly. All SS surfaces will be polished.

Accessories:

Inlet/outlets: The inlets and outlets for chilled water and products will be provided with complete SS304 SMS unions.

Thermo-well: 3/4" SS pockets for thermometer on all the inlets and outlets. Digital temperature indicator should be supplied.

Ball feet: The frame will be provided with adjustable SS ball feet with provision for height adjustment of 50 mm -4Nos.

Tools: Essential special tools will be supplied.

Blast Freezer (12ftX12ftX8ft):

Quantity : 1No.
 Temperature : (-)18°C
 Make: Reputed /Standard make
 Inside Temperature:(-)18°C
 Type: Walk-in -type, PUF panels
 Capacity: 5000 L

Walk-In-Type with suitable anteroom, air cooled condensing unit to maintain room temp of -18 deg C. Shall have 2 nos of compressor units and 2 nos of evaporators. Pull down time of the product inside shall be 6 hours from 45 to 15 deg C for dahi pouches/cups. It is equipped all necessary equipment and accessories.

11. Ghee Clarifier:

Make: Reputed /Standard make
 Quantity : 1 No.
 Capacity : 500LPH
 MOC : SS304

Application:

Ghee from the settling tank is fed through the inlet placed at the top of Ghee clarifier. Separation takes place in a solid wall bowl where the Ghee residue, under the influence of centrifugal force, separates from Ghee and is collected in the sludge space of the bowl. The clear Ghee comes out through an outlet connection. All parts coming in contact with Ghee such as bowl hood, disc, and distributor are made of stainless steel. The bowl body is lined with stainless steel. The machine frame is cast iron.

Capacity: Rated hydraulic capacity 500 LPH. Through put for clarification of Ghee will depend on viscosity, density, and temperature and solids percentage.

Motor: A standard electric motor of suitable capacity for operation on 440 volts 50 Hz, 3 phases, AC supply.

12. Paneer Coagulating Vat

Make: Reputed /Standard make
 Capacity : 1000 L
 Quantity : 1 No.
 MOC : SS304

Paneer vat would be used for coagulating milk solids for production of paneer. The vat will be welded and jacketed in construction having rectangular cross section with semi circular ends.

Functional Requirements:

The paneer vat would be used for coagulating milk solids for production of paneer.

Design Requirements:

Capacity: 1000 L of milk intake

The volume of the vat shall be such that after filling the vat to rated capacity, the level of the milk remains 50 mm below the top of the vat.

Constructional Features: triple walled and welded construction having rectangular cross section.

12/10/26

Slope: The inner vat bottom and the jacket shall have slope of 1:25 slope towards the central line from sides (two direction slope).

Finish: All the inside weld joints of inner shell and outside welding joints of outer shell shall be ground flush and finished to 150 grits. Inside of the inner shell shall be finished to 150 grits and outer shell to 150 grits.

SCOPE OF SUPPLY

Inner vat: The inner rectangular vat with rounded ends shall be fabricated from 5 mm thick AISI 304 SS sheets.

Inner jacket: SS 304 4 mm thick

Outer vat: The outer rectangular vat with rounded ends shall be fabricated from 2 mm MS sheets.

ACCESSORIES

Agitator: 1 HP agitator with specially designed blades for complete mixing of milk and coagulant, 30 RPM.

Whey outlet: SS cup type outlet with 3" SMS valve. The outlet discharge shall be 200 mm from the floor level. A sliding type strainer manufactured from SS perforated sheet shall be provided if asked for.

Steam Distribution: Steam distribution system shall comprise of 1 no perforated steam distribution pipes of suitable size provided in the bottom jacket, 1 no. steam header and 1 no. steam inlet pipe ending in flange and counter flange.

Legs: Mild steel legs with stainless steel AISI 304 pipe cladding having SS ball feet assembly.

Overflow: 1 no. overflow pipes for the jacket ending near the floor level shall be provided.

Drain: A 38 mm diameter SS drain with SS ball valve shall be provided.

Water inlet: 38 mm diameter water inlet with GM valve shall be provided.

Painting: All mild steel pipes shall be coated with two coats of corrosion resistant epoxy primer.

Temperature probe: A temperature probe of SS 304 with suitable length and having digital thermometer.

Scope of supply:-

- Inner vat: SS 304
- Outer vat: SS 304
- Steam jacket
- Steam distribution system would be also be provided

13. Paneer Hoops:

Make:	Reputed /Standard make
Capacity	: 10kg each
Quantity	: 10Nos.

Functional Requirements:

The hoop shall be used to make the coagulated curd into rectangular block and drain out the excess moisture.

Design Requirements:

Size: 300 mm x 300 mm x 110 mm.

MOC: Stainless Steel AISI 304 of 3 mm thick

Finish: All the inside weld joints shall be ground flush and finished to 150 grits.

MOC : SS 304

for
12/10/26

SS hoops, each of 10kg wet paneer holding capacity consist of a top, separator and a bottom tub

The bottom of the mould will have 5 mm holes provided for insertion of 2 nos. SS pins to allow the forming of the mould prior to the filling of green paneer. The separator would inside the bottom and rest on the two SS pins. When filling operation of the mold is complete, the pins are pulled out of the bottom and the top lid is put on the separator. The top lid would be of a certain height to ensure proper closure of the paneer mold. 5mm holes would be drilled on the bottom, and the top to ensure proper removal of whey from green paneer.

14. **PaneerPress (Pneumatictype)**

Make	Reputed /Standard make
Quantity	2Nos.
MOC	SS304
Type	Double Head

It would be used to expel part of the moisture from paneer by pneumatically by compressed air.

15. **Air Compressor for Paneer Press:**

Capacity	6 kg/cm ²
Quantity	1Set

Make: Reputed /Standard make

- Capacity : Minimum 30 CFM at 7 bar free air delivery.
- Type : Reciprocal
- Controls : Suitable for automatic operation
- Accessories : Pre-filter, after cooler and control panel

(b) Air receiver complete with accessories:

Capacity: 200 L as per requirement

Material : Mild Steel

Type : Horizontal Cylinder Mounting

Supporting Ports, Fittings& accessories: Standard such as inlet & outlet nozzles, Auto drain valves Pressure transmitter, etc.

Refrigerated Air dryer complete with accessories: (Optional)

Capacity	: Suitable as per requirement
Material	: Mild Steel
Type	: Refrigerated
Refrigerant	: R 134 A
Pressure Dew Point:	2 to 4°C
Pressure Drop:	0.2 Bar.

Ports, Fittings& accessories: The system shall be complete with necessary filters and auto drain valve & moisture separator etc.

This air compressor will be comprised of:

- Tank Mounted Compressor with Motor & Starter (415 volt motor).
- Air and oil filter.
- Auto cut off

16.

17. **Double Head Vacuum Packing Machine for Paneer &Peda:**

Quantity: 1 No.

This is used for packing of pre-filled pouches of various products in a wide range of consumer packs with first creating vacuum inside the pouch to pack pouched. Sealing Length((mm) 400 mm

Phase	Single Phase/Three phase
Automation Grade	Automatic.
Sealing Length	10 inch

12/10/24

Sealing jaw: There shall be arrangement of double seal bar of length 830 mm. There shall be seal pressure arrangement pneumatic operated sealing jaws and diaphragm block valve.

Chamber Size (LXBXH) mm	440x420x75mm
Voltage	220V/415 V AC
Power	1.5 kW
Weight(Kg)	150Kg
Frequency	50 Hz
Power source	Electric
Sealing Speed	1-4times/min.

18. **Air Compressor for Stamping Machine:**

Capacity : 6 kg/cm²
Quantity : 1 Set

This air compressor will be comprised of:

- Tank Mounted Compressor with Motor & Starter. (415 volt motor)
- Air and oil filter
- Auto cut off controller.

19. **Air Compressor with accessories:**

Capacity : 60 cfm
Quantity : 1 Set

This air compressor will be comprised of:

- Tank Mounted Compressor with Motor & Starter. (415 volt motor)
- Air and oil filter.
- Auto cut off controller.

Boiler (Steam Generated):

MAKE : Reputed /Standard make Capacity:1 ton per hour (1000 kg/h) (Non IBR)

Quantity : 1 No.
Type of fuel : Diesel

BOILERSPECIFICATION:

1. One Pressure part assembly consisting of closely wound helical/ vertical membrane coil fabricated out of high temperature resistant ERW tubes and flats.
2. One double jacketed air casing with an aluminum radiator to enclose the pressure parts and serve as an integral combustion air pre-heater.

AUXILIARIES:

3. One pressure atomized, forced draft, down firing burner assembly suitable for LDO-HSD firing.
4. One Blower coupled with motor, mounted on bottom chassis, duly connected to the jacket
5. One Fuel pump coupled with motor, mounted on pumping module.
6. One water pump, with surge suppressor and relief valve, mounted on pumping module
7. One atmospheric economizer and heat optimizer to pre-heat feed water.
8. One dust protected pre-wired control panel with necessary switch gear, power and control circuitry.
9. One Set of toolkit.

86
12/10/26

PIPING:

One feedwater line between optimizer, economizer, feed pump and boiler.

One fuel oil line between fuel pump, Y-strainer, burner.

Mountings & Fittings:

One Set of isolating needle valves for indicating instruments.

A. Steam:

- One main steam stop valve.
- One auxiliary steam stop valve.
- One Single port spring loaded safety valve.

B. Water:

- One Y- Strainer
- One drain valve for economizer.
- One relief valve on feed water pump.
- One non-return valve on feed water line.
- One ball valve for coil blow-down.

C. Fuel:

- One strainer, "Y" type on fuel oil line.
- One main fuel filter.

Instruments, Controls & Safeties:

- One burner programmer with matching flame detector.
- One set audio-visual alarms for abnormal conditions.

A. Steam:

- One Steam pressure switches for burner On-Off control.
- One steam pressure gauge.
- One steam temperature indicator-cum-switch for high alarm.

B. Water:

- One low water level alarm switch on economizer.
- One blow-down valve limit switch.

C. Fuel:

- One Fuel Pressure indicator.

Feed Water Parameter:

Parameters:	Quantity
Appearance	Clear
Suspended matter, oil, greases	Nil
Total hardness (as CaCO_3)	Max. 2 to 5 ppm.
PH	8.5 to 9.5
Oxygen, free CO_2 , Free chlorine	Nil
Total alkalinity (as CaCO_3)	140 mg/l
Caustic alkalinity (as CaCO_3)	70 mg/l
Phosphates	70 mg/l
Total dissolved solids (TDS)	600 ppm

Dr
12/10/26

20. Ghee Filling & Sealing Machine:

Quantity : 1 no. (For jar of 50ml, 100ml, 200 ml, 500ml and 1000ml)

Necessary system for filling of ghee and sealing of containers.

21. ETP Section (Electro-Mechanical Parts):

Capacity : 30 kl/day

Quantity : 1 No.

Raw Effluent Parameters (at the Inlet of Inlet Channel & Screen Chamber) Treated Effluent Characteristics-(Tentative):

Parameter	Value
Flow, m ³ /day	50
PH	5.0-11.0
BOD, mg/l	2500
COD, mg/l	4000
TSS, mg/l	1000
TDS, mg/l	<2100
Temperature, °C	30-40
FOG, mg/l	50-100

Treated Effluent parameters after Tertiary Process shall be as indicated figure:

Parameter	Value
PH	7.0-8.5
BOD, mg/l	<30
COD, mg/l	<250
TSS, mg/l	<50
FOG, mg/l	<10
TDS, mg/l	<2100

(Above figure may vary depends upon quality of raw effluent)

Dr
12/10/26

22. R.O water Treatment & Water Softening Plant:**23.1 Water Softener:**

Capacity : 2000 liter/h
 Quantity : 1 No.

Multi grade sand filter:

One: FRP pressure vessel fitted with plastic internal fitting.

One: Set of plastic frontal piping, linking multi-port valve plastic ball valve to FRP vessel.

One: One complete charges of suitable filter media with supporting under bed media.

One: Pressure gauge.

Activated Carbon Filter:

One: FRP pressure vessel fitted with plastic internal fitting.

One: Set of plastic frontal piping, linking multi- port valve plastic ball valve to FRP vessel.

One: One complete charges of suitable filter media with supporting under bed media.

One: Pressure gauge.

23.2 RO Plant:

Capacity : 1000 liter/h.
 Quantity : 1 No.

23.3 RO Water storage Tank:

Capacity : 5000 liter
 Quantity : 1 No.

23.4 RO Water Transfer Pump:

Capacity : 500 liter/h
 Quantity : 1 No.

23. Erection and commissioning of the plant: 1Lot

Necessary pipelines (SS/MS/GI) along with all fittings (2 way and 3 way valve, insulated with electrical cable and panel) to be installed in the plant for successful running.

24. Packing, Transport and Insurance: 1Lot

Sr
12/10/20