

**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](mailto:ichhamati123@gmail.com) / [mdichhamati@gmail.com](mailto:mdichhamati@gmail.com)

Website: [www.ichhamatimu.com](http://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 Re-e-TENDER FOR THIRD CALL
2. GENERAL TERMS & CONDITIONS.
3. SPECIFICATION OF THE ITEM
4. INSTRUCTION TO THE BIDDERS & ELIGIBILITY FOR QUOTING
5. APPLICATION FORMAT ( ANNEXURE-I)
6. CHECK LIST IN PRESCRIBED FORMAT(ANNEXURE-II)
7. ANNEXURE-IIIA& ANNEXURE-IIIB
8. ANNEXURE-IV
9. FORMAL AGREEMENT COPY

***DATE OF PUBLICATION OF e- TENDER (ON LINE): 31.08.2024 FROM 11.00AM***

***STARTING OF BID SUBMISSION (ON LINE) :09.09.2024 FROM 11.00AM***

***Date of Pre-Bid Meeting: 06.09.2024 at 12.00 PM AT THE OFFICE OF  
THE MANAGING DIRECTOR,IMUL, BARASAT, NORTH 24 PARGANAS, W.B.***

***LAST DATE FOR ON LINE SUBMISSION OF TENDER: 21.09.2024 UP TO 6.00 PM***

***OPENING OF TECHNICAL BID : 24.09.2024 AFTER 12.00 PM***

***OPENING OF FINANCIAL BID : TO BE NOTIFIED LATER ON.***

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

# THE ICHHAMATI CO-OPERATIVE MILK PRODUCERS' UNION LIMITED

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## NOTICE INVITING Re-e-TENDER (4<sup>th</sup> Call)

NITNO. MU/e-TENDER/92/24-25/313/4

Date: 29-08-2024

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://wbenders.gov.in> & Viewing through Website: [www.ichhamatimu.com](http://www.ichhamatimu.com))*

*Online bids are invited from the eligible, reputed Manufacturers/ suppliers having enough experience in this field and having credential 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 Equipments 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 45 days from the date of issue of **Supply Order**.

## **General Terms and Conditions:**

### **1. Login by Bidder:**

For eTendering, the intending bidders are advised to note carefully the information and instructions as mentioned in 'Instructions to Bidders' stated in Section –A before tendering the bids. The intending bidders are further advised to keep in mind that the scanned copies of duly filled in different Forms and Affidavits as given in Section-B are to be uploaded in the respective folders as indicated in 'Instructions to Bidders'.

In the event of e-filling, intending bidder may download the tender documents consisting of this N.I.e-T, Instructions to Bidders different Forms, Schedule of Work (BOQ), and Addenda & Corrigenda (if any) from the *etender portal* <https://wbtenders.gov.in>, directly with the help of Digital Signature Certificate.

**2. 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 any bank by generating NEFT/RTGS challan from the e- tendering portal.** Intending Bidder will get the Beneficiary details from e-tender portal with the help of Digital Signature Certificate and may transfer the EMD from their respective Bank as per the Beneficiary Name & Account No., Amount Beneficiary Bank name & IFSC Code and e-proc Ref. No. Intending bidder who wants to transfer **EMD through NEFT/RTGS** must read the instruction of the challan generated EMD from E-Procurement site. **Bidders are also advised to submit EMD of their bid, at least 3 working days before the bid submission closing date as it requires time for processing of Payment of EMD.**

**3. NO INTEREST SHALL BE PAYABLE BY THE MILK UNION FOR THE SECURITY DEPOSIT and EARNEST DEPOSIT.**

### **4. Refund / Settlement process:**

On up-loading of the work / supply order in favour of the successful bidder to the e-procurement portal, the bank will refund, through an automated process, the EMD amount of the unsuccessful / disqualified bidders to the respective bidders' bank accounts from which they made the payment transaction.

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

6. Tender documents may be downloaded from website 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. The list of Qualified Bidders will be displayed in the website.

### **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 1.03Crore of the amount put to tender.**

b. Income Tax Return Acknowledgement for the last 3 Assessment years, P.T. Deposit Challan for the year 2024-2025 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 partner shall neither have abandoned any work nor 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 favour 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 favour**, 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.

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

iv) NO INTEREST SHALL BE PAYABLE FOR "SECURITY DEPOSIT" AND "EARNEST MONEY DEPOSIT".

10.The agency shall have to arrange transportation, labours, 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 *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	<b>Date of Publishing of e-Tender</b>	<b>31.08.2024 FROM 11.00AM</b>
2	<b>Documents download / sale start</b>	<b>31.08.2024 FROM 12.00 PM</b>
3	<b>Bid submission start date (online)</b>	<b>09.09.2024 FROM 11.00AM</b>
4	<b>Date of hosting of documents at Ichhamati Milk Union Website(<a href="http://www.ichhamatimu.com">www.ichhamatimu.com</a>)</b>	<b>31.08.2024</b>
5	<b>Date of Pre-Bid Meeting :</b>	<b>06.09.2024 at 12.00 PM at the office of the Managing Director,IMUL, Barasat, North 24 Parganas, W.B.</b>
6	<b>Bid submission closing date (online)</b>	<b>21.09.2024 UP TO 6.00 PM</b>
7	<b>Bid opening date for Technical Proposals (online)</b>	<b>24.09.2024 AFTER 12.00 PM</b>
8	<b>Date of uploading list for Technically Qualified Bidder (online)</b>	<b>After evaluation of Technical Bid</b>
9	<b>Date for opening of Financial Bid (online)</b>	<b>After uploading list of Technically Qualified Bidder</b>
10	<b>Date of uploading of list of bidders along with their Rates through (online), also if necessary for further negotiation through.</b>	<b>To be notified later on.</b>

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 understands 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 *online* in the space marked for quoting rate in the B.O.Q.

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 Re-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, unless the bidder is exempted under the existing order of the concerned State Government or Govt. of India will have to deposit Earnest Money of Rs. 412000/- (Rupees Four Lakhs twelve thousand ) only as per above manner or **Document Showing EMD Exemption to be uploaded. E.M.D.** in any other manner not acceptable.
- b) Scanned ORIGINAL PAN Card.
- c) Scanned Professional tax Clearance Certificate / Challan. (2024-2025 & 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) Scanned copy EMD deposit challan / authentic documents against EMD EXEMPTION.
- h) Labour contractor License
- i) Scanned copy of CHECK LIST.
- j) Printed Brochure / Literature of the quoted items.
- k) IT returns for 23-24,22-23,& 21-22
- l) Up to date Income Tax clearance certificate/ Acknowledgement
- m) Scanned original copy of credential-Documentary evidence of credentials of similar work of value Rs One Crore three Lakhs only.

Documents must be submitted (online) in 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. ***N.I.e-T.( DOWNLOAD PROPERLY AND UPLOAD THE SAME DIGITALLY SIGNED)***. The rate should be quoted in the B.O.Q Quoted rate will be encrypted in the B.O.Q under Financial Bid. In case quoting any rate in any other place, the tender is liable to be summarily rejected. All the tender documents including N.I.T, terms & conditions for submission of tender & B.O.Q will be the part & parcel of the bid documents.

29. Bidders will input amount as percentage against the estimated amount. PLUS PERCENTAGE will be summarily rejected.

30. **Lowest valid rate should normally be accepted**. However, the Tender Accepting Authority does not bind himself to do so and reserves the right to reject any/or all the tenders, for valid reasons.

**Abnormally LOW RATE of service charge quoted by the Bidder which prima facie appears to have malafide in tender space will not be accepted.**

31. 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 90days 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]

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Website: [www.ichhamatimu.com](http://www.ichhamatimu.com)

## Terms & Conditions for submission of online Re-e-tender:

NITNO. MU/e-TENDER/92/24-25/313/4

Date: 29-08-2024

## INSTRUCTION TO BIDDERS & ELIGIBILITY FOR QUOTING

### 1. INSTRUCTION TO BIDDERS

1.1. Intending bidders may download & upload the tender documents free of cost from the website <https://wbttenders.gov.in> directly with the help of Digital Signature Certificate.

1.2. Intending bidder may obtain Digital Signature Certificate from the approved service provider of Govt. of India.

**General guideline for Re-e-Tendering:** Instructions/Guidelines for electronic submission of the tenders have been annexed for assisting the bidders to participate in e-Tendering.

(i) **Registration of bidders:** Any bidder willing to take part in the process of e-Tendering will have to be registered with the Govt. e-Procurement System after obtaining DSC (Digital Signature Certificate).

(ii) **Digital Signature certificate(DSC):** Each bidder is required to obtain a Class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders from the approved service provider of the Govt. of India on payment of requisite amount.

(iii) **Tender Fees:** Tender documents may be downloaded at free of cost.

(iv) **Scanning:** All Statutory & non-statutory documents should be scanned in grayscale & 150-200dpi.

### 2. Eligibility criteria

2.1. Only manufacturers having valid manufacturing licence 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. **2023-24 & 2022-23** 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) per year for the year 2023-24 & 2022-23.
- 2.6. In case of M.S.M.E. Units of the State of WB the minimum average annual turnover would be **Rs.1.03 crores** (Rupees one crore & three Lakhs only) per year for the year **2023-24 & 2022-23**.
- 2.7. MSMEs registered in West Bengal are exempted from submission of EMD as per Finance Department, GO WB Notification 10500-F dated 19/11/2004, but their selection would be subject to the provisions of Notification No. 6142-F(Y) dated 10/10/2017 of the Finance Department, Government of West Bengal.
- 2.8. **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. SUBMISSION OF ON-LINE TENDER**

- 3.1. Tenders have to be submitted ON-LINE in two parts i.e. Technical Bid (Part-I) & Financial Bid (Part-II) in e-tender portal <https://wbtenders.gov.in> by using DSC.
- 3.2. All the desired documents have to be uploaded in Technical Bid (Part-I).
- 3.3. Eligibility of opening the Financial Bid (Part-II) for finalization of firms & rates will depend on the outcome of the documents uploaded in the Technical Bid (Part-I).
- 3.4. The Financial Bid shall consist of only the details of rates offered. Financial bids of those tenders who qualify in technical bid will only be considered for finalisation of firms & rates.
- 3.5. The intending bidders may please note that all the columns in the Financial Bid as well as Technical Bid are to be filled meticulously with precision along with documentary evidence wherever necessary.

### **4. 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 serialim as per Table & Serial Number should be indicated on the right side top of the corner and uploaded in e-tender portal <https://wbtenders.gov.in>.
- 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
<b>STATUTORY DOCUMENTS : BID A</b>	
1.	Application form duly signed ( <b>ANNEXURE-I</b> ).
2.	Check List duly signed ( <b>ANNEXURE-II</b> ).
3	<b>Copy of terms &amp; conditions of NIeT digitally signed</b>
4.	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 <b>Earnest Money Rs.412000/- (Rupees Four Lakhs twelve Thousand)</b> only irrespective of item quoted as per above manner or <u>Document Showing EMD Exemption to be uploaded.</u>
5	Scanned original documents of Latest (renewed & up-to-date) <b>Manufacturing Licence</b> for the items quoted in the tender <b>AND</b> Authorized <b>Distributor Certificate</b> 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 Authorised Agent of the manufacturer in the form of Affidavit from Class-I Magistrate or Notary ( <b>ANNEXURE-IV</b> ) on Non-judicial Stamp Paper worth Rs.10/-.
7	Scanned Original Certificate issued by Practicing Chartered Accountant stating <b>Average Annual Turnover</b> of the bidder ( <b>ANNEXURE-III A</b> ) & distributor (if any) ( <b>ANNEXURE-III B</b> ) is to be uploaded.
8	Scanned original <b>Labour contractor License</b> (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.	<b>Agreement between Bidder &amp; Distributor</b> for the out-of-state bidder (if bidder wants to supply through distributor) on Non-judicial Stamp Paper worth Rs.10/-.
12.	<b>Agreement between Manufacturer and Bidder</b> (if any).

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

<b>S 1.</b>	<b>Category</b>	<b>Sub Category Description</b>
1	<b>CERTIFICATES-</b> ✓ All certificates are to be furnished in English Vernacular not in other languages ✓ Affidavits are not valid. ✓ <i>Scanned original copy</i>	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 23-24, 22-23 & 21-22
2	<b>COMPANY DETAILS</b> ✓ 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 31.3.2025. or thereafter ii) P T clearance Certificate (2024-25 or thereafter) or self declaration for exemption if any iii) Labour contractor License
3	<b>CREDENTIAL</b> ✓ 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 three Lakhs only. ii) Technical specification, Manual, Drawings of the quoted items

**B. FINANCIAL COVER: BID- B:**

● **BOQ:**

❖ **The folder as “Financial Bid” shall contain**

a) RATE INCLUSIVE OF ALL TAXES ALONGWITH SUPPLY, DELIVERY, COMMISSIONING AND ANY OTHER EXPENDITURES RELATING TO SUPPLY & COMMISSIONING OF THE EQUIPMENTS AT THE MILK PROCESSING UNIT, ICHHAMATI MILK UNION, NORTH 24 PARGANAS DISTRICT SHOULD BE QUOTED IN SPECIFIED BOX OF PRESCRIBED FORMAT GIVEN UNDER BOQ.

b) Bidders will input amount as percentage against the estimated amount. PLUS PERCENTAGE will be summarily rejected.

c) **Rate is to be quoted in BOQ (Bill of Quantities) in FINANCIAL COVER.**  
*Disclosure of Rate anywhere other than BOQ will be a disqualification.*

❖ **SUBMISSION OF HARD COPY OF FINANCIAL COVER (BID-B) IS TOTALLY PROHIBITED AND ONLY BE SUBMITTED THROUGH ON LINE E-TENDER PORTAL.**

## 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 Rs.412,000/- (Rupees Four lakhs twelve Thousand)** only irrespective of item quoted as per above manner or Document Showing EMD Exemption to be uploaded. E.M.D. in any other manner not acceptable.

- (i) 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.
- (ii) This Milk Union will not be liable for deposition of excess of Earnest money.
- (iii) 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.
- (iv) The onus of proving that a bidder is exempted from depositing earnest money will be on them. Valid Exemption Certificate issued by competent authority for claiming exemption of depositing Earnest Money [viz. EM (Part-II), Acknowledgement thereof & Declaration of Product, Plant & Machinery Investment issued by D.I.C., Govt. of WB].
- (v) 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 2<sup>nd</sup> 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 1<sup>st</sup> 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 list of product manufactured & approved by MSME Registration authority will **only** be considered for exemption from depositing of earnest money and those listed items will **only** come under zone of consideration of price preference. If any bidder quoted products other than those covered under MSME Registration should accompany EMD. Authorized Officers of the undersigned may visit factory.

6.3. 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. Tender uploaded without earnest money deposit or valid exemption certificate will be summarily rejected. Tender received without EMD will be rejected

## 7.IT RETURN & ANNUAL TURNOVER REQUIREMENT

7.1 ORIGINAL IT Return for three Assessment years i.e. **2021-22 , 2022-23 & 2023-24** are to be uploaded.

7.2 Average Annual Turnover for the financial year **2021-22 & 2022-23 and 2023-24** should be uploaded.

7.3 Average Annual turn over Certificate (**ANNEXURE-III A**) for bidder and (**ANNEXURE- III B**) for distributor (if any) 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 (two) crore for the year **2022-23 & 2023-24**.

- 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 **TWO 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 as per **ANNEXURE-V** 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, 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 malafide intention will not be accepted, if detected.

<b>17.</b> <b>VALIDITY</b>
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(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](http://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.

<b>21.</b> <b>(OFFLINE)</b>	<b>AGREEMENT</b>
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(i) The successful bidder will have to enter in to 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.

**22.**

**SUPPLY/DELIVERY**

(i) Supply and commissioning of the ordered items (as per specification) must be completed within 45 (Forty five) days from the date of purchase order.

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

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

(iv) 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.

(v) 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.

**23.INSURANCE:**

The supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. If the equipment's is not commissioned and handed over to Ichhamati Cooperative Milk Producers' Union Ltd. Within specified period, the insurance will have to be extended by the supplier at the cost till the successful installation, testing, commissioning and handing over of the goods to the Ichhamati Cooperative Milk Producers' Union Ltd.

**24.**

**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.

## **25. PAYMENT**

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

## **26. PAYMENT TERMS:**

Terms of payment shall be as below:

(A) 10 % (Ten percent) of the total work order value may be paid after receipt of the materials (all components) as per the approval of the Competent Authority.

(B) 50 % (Fifty 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) 30% (Thirty 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.

#### **27. GENERAL**

- 27.1. 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.
- 27.2. 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.
- 27.3. **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.**
- 27.4. Any addendum/corrigendum/extension of validity period will be notified at our Milk Union website [www.ichhamatimu.com](http://www.ichhamatimu.com) as it is not possible to inform each.
- 27.5. 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.
- 27.6. The offer may go to the next bidder, if the successful bidder fails to perform the contract.
- 27.7. 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.
- 27.8. The undersigned reserves the right to reject any or the entire tender at any stage without assigning any reason thereof .

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

xv) Any addendum/ corrigendum / Extension of validity period will be notified at our departmental Web-site [www.ichhamatimu.com](http://www.ichhamatimu.com) as it is not possible to inform any individual.

## **29. DATES & INFORMATION:**

Sl no	Particular (S)	Date & Time
1	<b>Date of Publishing of e-Tender</b>	<b>31.08.2024 FROM 11.00AM</b>
2	<b>Documents download / sale start</b>	<b>31.08.2024 FROM 12.00 PM</b>
3	<b>Bid submission start date (online)</b>	<b>09.09.2024 FROM 11.00AM</b>
4	<b>Date of hosting of documents at Ichhamati Milk Union Website(<a href="http://www.ichhamatimu.com">www.ichhamatimu.com</a>)</b>	<b>31.08.2024</b>
5	<b>Date of Pre-Bid Meeting :</b>	<b>06.09.2024 at 12.00 PM at the office of the Managing Director,IMUL, Barasat, North 24 Parganas, W.B.</b>
6	<b>Bid submission closing date (online)</b>	<b>21.09.2024 UP TO 6.00 PM</b>
7	<b>Bid opening date for Technical Proposals (online)</b>	<b>24.09.2024 AFTER 12.00 PM</b>
8	<b>Date of uploading list for Technically Qualified Bidder (online)</b>	<b>After evaluation of Technical Bid</b>
9	<b>Date for opening of Financial Bid (online)</b>	<b>After uploading list of Technically Qualified Bidder</b>
10	<b>Date of uploading of list of bidders along with their Rates through (online), also if necessary for further negotiation through.</b>	<b>To be notified later on.</b>

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 BANK GUARANTEE FOR ADVANCE PAYMENT**

To

\_\_\_\_\_ [name of Employer]  
\_\_\_\_\_ [address of Employer]  
\_\_\_\_\_ [name of Contractor]

Gentlemen :

In accordance with the provisions of the Conditions of Contract, ("Advance payment") of the above-mentioned Contract, \_\_\_\_\_ [name and address of Contractor] (hereinafter called "the Contractor") shall deposit with \_\_\_\_\_ [name of Employer] a bank guarantee to guarantee his proper and faithful performance under the said Clause of the Contract in an amount of \_\_\_\_\_ [amount of Guarantee]\* \_\_\_\_\_ [in words].

We, the \_\_\_\_\_ [bank of financial institution], as instructed by the Contractor, agree unconditionally and irrevocably to guarantee as primary obligator and not as Surely merely, the payment to \_\_\_\_\_ [name of Employer] on his first demand without whatsoever right of obligation on our part and without his first claim to the Contractor, in the amount not exceeding \_\_\_\_\_ [amount of guarantee]\* \_\_\_\_\_ [in words].

We further agree that no change or addition to or other modification of the terms of the Contractor or Works to be performed there under or any of the Contract documents which may be made between \_\_\_\_\_ [name of Employer] 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 remain valid and in full effect from the date of the advance payment under the Contract until \_\_\_\_\_ [name of Employer] receives full repayment of the same amount from the Contractor.

Yours truly,

Signature and Seal : \_\_\_\_\_

Name of Bank /Financial Institution \_\_\_\_\_

Address : \_\_\_\_\_

Date : \_\_\_\_\_

\_\_\_\_\_  
\* *An amount shall be inserted by the Bank or Financial Institution representing the amount of the Advance Payment, and denominated in Indian Rupees.*

## **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 \_\_\_\_\_

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\* *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.*

## **INDENTURE FOR SECURED ADVANCES**

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

This indenture made the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_ BETWEEN \_\_\_\_\_ (hereinafter called the contractor which expression shall where the context so admits or implies be deemed to include his executors, administrators and assigns) or the one part and the Employer of the other part.

Whereas by an agreement dated \_\_\_\_\_ (hereinafter called the said agreement) the contractor has agreed.

AND WHEREAS the contractor has applied to the Employer that he may be allowed advanced on the security of materials absolutely belonging to him and brought by him to the site of the works the subject of the said agreement for use in the construction of such of the works as he has undertaken to executive at rates fixed for the finished work (inclusive of the cost of materials and labour and other charges)

AND WHEREAS the Employer has agreed to advance to the Contractor the sum of Rupees \_\_\_\_\_ on the security of materials the quantities and other particulars of which are detailed in Accounts of Secured Advances attached to the Running Account bill for the said works signed by the Contractor on \_\_\_\_\_ and the Employer has reserved to himself the option of making any further advance or advances on the security of other materials brought by the Contractor to the site of the said works.

Now THIS INDENTURE WITNESSETH that in pursuance of the said agreement and in consideration of the sum of Rupees \_\_\_\_\_ on or before the execution of these presents paid to the Contractor by the Employer (the receipt where of the Contractor doth hereby acknowledge) and of such further advances (if any) as may be made to him as a for said the Contractor doth hereby covenant and agree with the President and declare as follows :

(1) That the said sum of Rupees \_\_\_\_\_ so advanced by the Employer to the Contractor as aforesaid and all or any further sum of sums advanced as aforesaid shall be employed by the Contractor in or towards expending the execution of the said works and for no other purpose whatsoever.

(2) That the materials details in the said Account of Secured Advances which have been offered to and accepted by the Employer as security are absolutely the Contractor's own propriety and free from encumbrances of any kind and the contractor will not make any application for or receive a further advance on the security of materials which are not absolutely his own property and free from encumbrances of any kind and the Contractor indemnified the Employer against all claims to any materials in respect of which an advance has be made to him as aforesaid.

(3) That the materials detailed in the said account of Secured Advances and all other materials on the security of which any further advance or advances may hereafter be made as aforesaid (hereafter called the said materials) shall be used by the Contractor solely in the Execution of the said works in accordance with the directions of the Engineer.

(4) That the Contractor shall make at his own cost all necessary and adequate arrangements for the proper watch, safe custody and protection against all risks of the

said materials and that until used in construction as aforesaid the said materials shall remain at the site of the said works in the Contractor's custody and on his own responsibility and shall at all times be open to inspection by the Engineer or any officer authorized by him. In the event of the said materials or any part thereof being stolen, destroyed or damaged or becoming deteriorated in a greater degree than is due to reasonable use and wear thereof the Contractor will forthwith replace the same with other materials of like quality or repair and make good the same required by the Engineer.

(5) That the said materials shall not be any account be removed from the site of the said works except with the written permission of the Engineer or an officer authorized by him on that behalf.

(6) That the advances shall be repayable in full when or before the Contractor receives payment from the Employer of the price payable to him for the said works under the terms and provisions of the said agreement. Provided that if any intermediate payments are made to the Contractor on account of work done than on the occasion of each such payment the Employer will be at liberty to made recovery from the Contractor's bill for such payment by deducting there from the value of the said materials that actually used in the construction and in respect of which recovery has not been made previously, the value for this purpose being determined in respect of each description of materials at the rates at which the amounts of the advances made under these presents were calculated.

(7) That if the Contractor shall at any time make any default in the performance or observance in any respect of any of the terms and provisions of the said agreement or of these presents the total amount of the advance or advances that may still be owing of the Employer shall immediately on the happening of such default be repayable by the Contractor to be the Employer together with interest thereon at twelve per cent per annum from the date or respective dates of such advance or advances to the date of repayment and with all costs, charges, damages and expenses incurred by the **Employer** in or for the recovery thereof or the enforcement of this security or otherwise by reason of the default of the Contractor and the Contractor hereby covenants and agrees with the **Employer** to reply and pay the same respectively to him accordingly.

(8) That the Contractor hereby charges all the said materials with the repayment to the Employer of the said sum of Rupees \_\_\_\_\_ and any further sum of sums advanced as aforesaid and all costs, charges, damages and expenses payable under these presents PROVIDED ALWAYS and it is hereby agreed and declared that notwithstanding anything in the said agreement and without prejudice to the power contained therein if and whenever the covenant for payment and repayment here in before contained shall become enforceable and the money owing shall not be paid in accordance there with the **Employer** may at by time thereafter adopt all or any of the following courses as he may deem best :

(a) Seize and utilise the said materials or any part thereof in the completion of the said works on behalf of the contractor in accordance with the provisions in that behalf contained in the said agreement debiting the contractor with the actual cost of effecting such completion and the amount due to the contractor with the value of work done as if he has carried it out in accordance with the said agreement and at the rests thereby provided. If the balance is against the contractor, he is to pay same to the **Employer** on demand.

(b) Remove and sell by public auction the seized materials or any part there of and out of the moneys arising from the sale retain all the sums aforesaid repayable or



payable to the **Employer** under these presents and pay over the surplus (if any) to the Contractor.

(c) Deduct all or any part of the moneys owing out of the security deposit or any sum due to the Contractor under the said agreement.

(9) That except in the event of such default on the part of the contractor as aforesaid interest on the said advance shall not be payable.

(10) That in the event of any conflict between the provisions of these present and the said agreement the provisions of these presents shall prevail and in the event of any dispute or difference arising over the construction or effect of these presents the settlement of which has not been here-in-before expressly provided for the same shall be referred to the Employer whose decision shall be final and the provision of the Indian Arbitration Act for the time being in force shall apply to any such reference.

## **Letter of Acceptance**

(Letterhead paper of the Employer)

\_\_\_\_\_(Date)

To

\_\_\_\_\_(Name and address of the Contractor)

\_\_\_\_\_

\_\_\_\_\_

Dear Sirs,

This is to notify you that your Bid dated \_\_\_\_\_ for execution of the \_\_\_\_\_ (name of the contract and identification number, as given in the Instructions to Bidders) for the Contract Price of Rupees \_\_\_\_\_ ( \_\_\_\_\_) (amount in words and figures), as corrected and modified in accordance with the Instructions to Bidders<sup>1</sup> is hereby accepted by our agency.

We accept/ do not accept that \_\_\_\_\_ be appointed as the Adjudicator<sup>2</sup>. You are hereby requested to furnish Performance Security, in the form detailed in Para 34.1 of ITB for an amount equivalent to Rs. \_\_\_\_\_ within 21 days of the receipt of this letter of acceptance valid up to 28 days from the date of expiry of defects Liability Period i.e. up to \_\_\_\_\_ and sign the contract, failing which action as stated in Para 34.3 of ITB will be taken.

Yours faithfully,

Authorized Signature  
Name and title of Signatory  
Name of Agency

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<sup>1</sup> Delete "corrected and" or "and modified" if only one of these actions applies. Delete as corrected and modified in accordance with the Instructions to Bidders, if corrections or modifications have not been affected.

<sup>2</sup> To be used only if the Contractor disagrees in his Bid with the Adjudicator proposed by the Employer in the "Instructions to Bidders".

## **Agreement Form**

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

This agreement, made the \_\_\_\_\_ day of \_\_\_\_\_ between \_\_\_\_\_ (name and address of Employer) [hereinafter called "the (name and address of contractor) hereinafter called "the Contractor" of the other part.]

Whereas the Employer is desirous that the Contractor execute

\_\_\_\_\_  
(name and identification number of Contract) (hereinafter called "the Works") and the Employer has accepted the Bid by the Contractor for the execution and completion of such works and the remedying of any defects therein, at a cost of Rs.

NOW THIS AGREEMENT WITNESSETH as follows:

**1.** In this Agreement, words and expression shall have the same meanings as are respectively assigned to them in the conditions of contract hereinafter referred to and they shall be deemed to form and be read and construed as part of this Agreement.

**2.** In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to execute and complete the Works and remedy any defects therein in conformity in all aspects with the provisions of the contract.

**3.** The Employer hereby covenants to pay the Contractor in consideration of the Execution and completion of the Works and the remedying the defects wherein Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

**4.** The following documents shall be deemed to form and be ready and construed as part of this Agreement viz.

- (i) Letter of Acceptance
- (ii) Notice to proceed with the works;
- (iii) Contractor's Bid
- (iv) Condition of Contract
- (v) Contract Data
- (vi) Additional condition
- (vii) Drawings
- (viii) Bill of Quantities and
- (ix) Any other documents listed in the Contract Data as forming part of the Contract.

In witnessed whereof the parties there to have caused this Agreement to be executed the day and year first before written.

The Common Seal of \_\_\_\_\_ was hereunto affixed in  
the presence of :

Signed, Sealed and Delivered by the said \_\_\_\_\_

\_\_\_\_\_

in the presence of :

Binding Signature of Employer \_\_\_\_\_

Binding Signature of Contractor \_\_\_\_\_

**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. NIT NO. MU/e-TENDER/92/24-25/313/4**

**Date:29-08-2024**

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-II TO BE UPLOADED**  
**FORMAT FOR CHECK LIST**  
**Information about Bidders**  
**(To be furnished with the Tender)**

Serial Number	Description	Particulars		
1.	Name of the Firm			
2.	Registered Address with PIN code, Phone No., FAX, e-mail, etc.			
3.	Name of the person authorized to enter into & execute Contract Agreement.			
	Item	Please ✓ Mark		Page No.
		Yes	No	
4.	Application submitted in ANNEXURE-I			
5.	Authorization Letter of Signatory from Company			
6.	Scanned document of Authorized dealer/distributor certificate and agreement between the manufacturer and the Distributor/Bidder (if applicable)			
7.	Scanned document of PAN Card of the Authorized Signatory.			
8.	Scanned document of GST Registration Certificate.			
9.	Scanned document of Tax Clearance Certificate /Paid Challan.			
10.	Scanned document of Trade License.			
11.	Scanned document of Terms& Conditions of the tender duly digitally signed of each page			
12.	Check List duly signed whether uploaded <b>(ANNEXURE-II)</b> .			
13.	Scanned Original Certificate issued by Practicing Chartered Accountant stating Average Annual Turnover of the Firm <b>(ANNEXURE-III-A)</b> And the Distributor (if any) <b>(ANNEXURE – III-B)</b> is to be uploaded			
14.	EMD deposited or Valid Exemption Certificate for earnest money deposit <u>only for listed items</u> issued under Price Preference Rules & Registration Certificate for MSME units of the State of West Bengal whether uploaded.			
15.	Scanned original document of valid (renewed & up-to-date) Manufacturing Licence issued by competent authority for the products quoted by the bidder whether uploaded <b>AND</b> Authorized distributor certificate to be uploaded in original if applicable.			
16.	Declaration of the bidder/products for neither <b>blacklisted</b> nor suspended for quoted items in last <b>2 (Two) years</b> and Declaration having 5 (Five) years manufacturing and marketing experience or 5 (Five) years marketing experience for Authorised Agent of the manufacturer in the form of Affidavit from Class-I Magistrate or Notary <b>(ANNEXURE-IV)</b> on Non-judicial Stamp Paper worth Rs.10/-whether uploaded			
17.	Scanned ORIGINAL IT Return for two Assessment years i.e. 2022-23 & 2023-24 AND Audited Balance sheet of profit & loss account for the financial years <b>2021-22, 2022-23 &amp; 2023-24</b> to be uploaded.			
18.	Scanned document of Printed Literature/ Brochure/ Booklet /Drawings, Manuals whether enclosed			
19.	Digitally signed Scanned N.I.T. (Notice inviting Tender) duly uploaded			
20.	Proof of Site visit			
21.	Attendance proof of Pre-Bid meeting			

**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 2022-23 & 2023-24 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- III - B**

ANNUAL TURNOVER CERTIFICATE (DISTRIBUTOR)

**(Certificate from Chartered Firm in the official pad of CA firm for distributor)**

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 of the firm for the financial year **2022-23** is Rs..... or **2023-24** is Rs..... Cr. (as per P & L & Balance Sheet of the firm.).

Signature of the Chartered Accountant Firm with Registration No and Official seal.

Signature of the signatory (distributor)

**AFFIDAVIT**

**(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 onbehalf, the Firm/Company with company's seal)

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

(Title of the Officer)

(Title of the firm/Company)

(Date)

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

(Seal).

**(Signature of the Notary Public)**

## BOQ OF MACHINERY ITEMS & LABORATORY SETUP

SL NO	DESCRIPTON	QTY
1	MILK CHILLER 5000 LPH	1 NO.
2	MILK PASTEURIZER 5000 LPH	1 NO.
3	HOMOGENIZER 5000 LPH	1 NO.
4	MILK FEED PUMP 5000 LPH	1 NO.
5	ON LINE CREAM SEPARATOR 5000 LPH	1 NO.
6	CURD PASTEURIZER 1000 KG/H	1 NO.
7	CULTURE TANK 500 LIT	2 NOS.
8	LASSI/ DAHI PACKING MACHINE DOUBLE HEAD 2400 POUCH/H	1 NO.
9	OVER HEAD TANK FOR FILLING MACHINE 200 LIT	1 NO.
10	LASSI CHILLER 5000 LPH	1 NO.
11	BLAST FREEZER – 18°C	1 NO.
12	GHEE CLARIFIER 500 LPH	2 NOS.
13	PANEER COAGULATING VAT 1000 LIT	1 NO.
14	PANEER HOOPS 10 KG EACH 3MM SHEET	10 NOS.
15	PNEUMATIC PANEER PRESS DOUBLE HEAD	2 NOS.
16	AIR COMPRESSOR FOR PANEER PRESS 6KG/CM2	1 NO.
17	DOUBLE HEAD VACUUM PACKING MACHINE FOR PANEER & PEDA	1 NO.
18	AIR COMPRESSOR FOR PEDA STAMPING MACHINE 6 KG/CM	1 NO.
19	AIR COMPRESSOR FOR OPERATION OF OVERALL PROCESSING 60 CFM	1 NO.
20	DIESEL FIRED BOILER 1000 KG/H	1 NO.
21	GHEE FILLING AND SEALING IN PLASTIC CONTAINER MACHINE AUTOMATIC TYPE	1 NO.
22	EFFLUENT TREATMENT PLANT (ETP) 30KL	1 NO.
23	R O WATER TREATMENT PLANT & WATER SOFTENING PLANT	1 NO.(Standared)
24	ERECTION , TESTING & COMMISSIONING	1 LOT
25	PACKING, TRANSPORT & INSURANCE	1 LOT
26	LABORATORY SET UP CHEMICAL& MICROBIOLOGICAL	AS MENTIONED IN THE SCOPE OF SUPPLY.
	<b>TOTAL AMOUNT(18%GSTINCLUSIVE)</b>	<b>RS.20600000.00</b>

# **SCOPE OF SUPPLY**

## **LIST OF ITEMS**

<b>Sl.No.</b>	<b>Description.</b>	<b>Capacity</b>	<b>Quantity</b>
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	200L	1No.
10	Lassi Chiller	5000 LPH	1No.
11	Blast Freezer(-18°C)		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 <sup>2</sup>	1No.
17	Double head vacuum machine for Paneer & Peda		1No.
18	Air Compressor for Peda Stamping Machine	6 kg/cm <sup>2</sup>	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.

## 1. Raw Milk Chiller

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

MAKE : IDMC/TETRAPAK/KELVION

**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 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.

Pasteurizer will be equipped with:

### 1.1 **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 milk inlet, outlet, return milk inlet and adjustable ball feet.

### 1.2 **Milk Pump**

Capacity	:	5 KLPH
Quantity	:	1No.
MOC	:	SS 304
Type	:	Centrifugal

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:**

<b>Make</b>	<b>:</b>	<b>Plate pack shall be from IDMC/KELVION/TETRAPAK</b>
Capacity	:	5KLPH
Quantity	:	1No.

The plates will be made from SS conforming to SS 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 50mm height adjustment.

## **2.4 Holding Tube:**

MOC	:	SS 304, (20 seconds holding)
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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 50mm 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: IDMC/INOXPA/GEA/LKM

## 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:

- PLC 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
- I/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 i/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.

**PID Controller with**

## 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 SS304 Skid Frame in compact modular construction.

## 3 Homogenizer:

MAKE: : GOMA/ MICRON/IDMC

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)

1<sup>st</sup> stage operating pressure: 200 bar

2<sup>nd</sup> stage homogenizing operating pressure: 50 bar

**Pressure gauge:** Two 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.

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 1<sup>st</sup>& 2<sup>nd</sup> with Push Locking arrangement.
- (vii) Emergency Stop
- (viii) Reset Push Button with indication lamp.
- (ix) 1<sup>st</sup> and 2<sup>nd</sup> 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 1<sup>st</sup> 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 1<sup>st</sup> and 2<sup>nd</sup> Stage.

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

#### **4 Milk Feed Pump:**

Capacity	:	5 KLPH
Quantity	:	1No.
MOC	:	SS 304
Type	:	Centrifugal

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.

#### **5. Cream Separator:**

MAKE	:	TETRAPAK/GEA/SPX
Capacity	:	5KLPH
Quantity	:	1No



Input Compression	:	1.5–2 bar
Working Temperature	:	45-51°C
Type	:	Solidbowlmanual 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.

**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/cm<sup>2</sup> min.

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

**Tools:** Essential special tools are supplied with the machine.

## 6. Curd Pasteurizer:

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. FeedPump&BoosterPump:**

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:**

<b>MAKE</b>	<b>:</b>	<b>TERAPAK/IDMC/KELVION</b>
Capacity	:	1KLPH
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.

#### **Pasteurization temp recorder:**

The temp indicating and controller is micro processor based.

#### 6.4. 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.

#### 6.5. 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.

#### 6.6. 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.

#### 6.7. Instrumentation and Control Panel: 1Set

#### 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'

#### 6.8. 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.

### 7. 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.

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.

## **8. Lassi/Dahi Packing Machine- Double Head**

**MAKE : RMC/SAMARPAN/NICHROME**

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.

**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.

## **9. Overhead Tank for Filling Machine:**

Capacity : 200L

Quantity : 1No.

MOC : SS304

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

**Design Requirement:**

**Capacity:** 200 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.

**Lassi Chiller**

## **10.**

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<sup>2</sup>

**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.

**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/cm<sup>2</sup>.

**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 indicators should be supplied.

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

**Tools:** Essential special tools will be supplied.

**11. Blast Freezer:**

**Quantity :** 1 No.  
**Temperature :** (-)18°C

Make: Blue Star/ Rinac/ Carrier

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.

**12. Ghee Clarifier:**

**Quantity :** 1 No.  
**Capacity :** 500 LPH  
**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.

## **13. Paneer Coagulating Vat**

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.

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

**14. Paneer Hoops:**

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

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 as 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.

**15. PaneerPress(Pneumatictype)**

Quantity : 2Nos.  
MOC : SS304  
Type : Double Head

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

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

Capacity : 6 kg/cm<sup>2</sup>  
Quantity : 1Set



**Make: Ingersoll rand/ Elgi/Kaeser/Anest Iwata**

- 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

**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

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/cm<sup>2</sup>

Quantity : 1Set

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 : 1Set

This air compressor will be comprised of:

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

#### 20. Boiler (Steam Generated):

MAKE : ROSS/THERMAX/THERMODYNE

Capacity : 1 ton per hour (1000 kg/h)

Quantity : 1 No.

Type of fuel : Diesel

#### BOILER SPECIFICATION:

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.

#### 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 <sub>3</sub> )	Max.2 to 5 ppm.
PH	8.5 to 9.5
Oxygen, free CO <sub>2</sub> , Free chlorine	Nil
Total alkalinity (as CaCO <sub>3</sub> )	140 mg/l
Caustic alkalinity (as CaCO <sub>3</sub> )	70 mg/l
Phosphates	70 mg/l
Total dissolved solids (TDS)	600 ppm

**21. Ghee Filling & Sealing Machine:**

**Quantity : 1 no.**

Necessary system for filling of ghee and sealing of containers.

**22. 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 <sup>3</sup> /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 indicatedfigure:**

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)**

**23. 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.

**24. 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.

**25. Packing, Transport and Insurance: 1Lot**

## 26- LABOTAORY EQUIPMENTS(CHEMICAL&MICROBIOLOGICAL)

Sl. No.	ITEM DESCRIPTION	QTY
1	Auto Clave, 18*24 mm(95 Ltr) vertical type, Size: 18*24, all SS with presure gauge septi valve Steam release cock, Digital temp indicator cum controler with pressure control switch, central locking, Make : Reputed	1
2	Double Distillation unit, Cap:1.5ltr/Hr, make: Reputed .	1
3	Gerber Centrifuge , 8test with timer , break , speed indicator, Make: Reputed	1
4	Water bath for NDRT all SS 304 Grade with PID temp controler, with motorized stirrer celulogical type , temp ambient to 100deg C , Size : 15"*11"*8", Make : Reputed	1
5	Water bath 6 whole all SS 304 Grade PID temp indicator cum controler temp range ambient to 100 deg C , Make : Reputed	1
6	Hot Air Oven Size: 24"*24"*24", Circulating fan for uniform temp inside the chamber , inner body made pf SS 304 grade , outer body made of M.S powder coared with PID temp indicator cum controller , temp range ambient to 250 Deg C , with +1/-1 degree Accuracy , double wall high class wool insulation to resist heat loss , high class rubber gasket on door to stop heat loss, with J type sensor , Make: Reputed	1
7	Hot Air Oven Size: 24"*24"*24", Circulating fan for uniform temp inside the chamber , inner body made pf SS 304 grade , outer body made of M.S powder coared with PID temp indicator cum controller , temp range ambient to 250 Deg C , with +1/-1 degree Accuracy , double wall high class wool insulation to resist heat loss , high class rubber gasket on door to stop heat loss, with J type sensor , Make: Reputed	1
8	Hot Plate with top body SS 304, Range _ 50-300 deg C , ss top plate,thermostat	1
9	Incubator Size 15"*15"*18" digital temp indicator cum controller, Temp range ambient to 100 deg C, inner chamber SS, outer body M. S powder Coated , Make : Reputed	1
10	B.O.D incubator : Size 6 cft , inner body made of S.S 304 grade, outer body made of M.S powder coated temp range 5 degC to 60 deg C , accuarcy +/-1 deg C throught out the chamber , double wall glass woll chamber , with 8mm inner acrylic door. Make: Reputed	2
11	Sodium Potasssium Analyser themo fisher scientific	1
12	Ph Meter, Bench top PH meter, Range 1-14 with temp probe, Make Reputed	1
13	Refractormeter, Digital ,Make: Reputed	1

14	Remi Centrifuge , Swing bowl head 50ml rotor tube capacity	1
15	Analytical weighing balance 220g, Max cap: 220g, Readability 0.0001g , Make: Reputed,	1
16	Laminar Air Flow size working size 2ft*2ft*3ft with all SS,1 no hepa filter with digitally controll UV lamp and illumination , Make: Reputed	1
17	TDS meter table top , Make: Labtronics	1
18	Remi Stirrer with hotplate,	1
19	Induction	1
20	Automatic Measure (Tilt) 10ml, Reputed	6
21	Autimatic Measure (Tilt) 1 ml , Reputed	6
22	Bottle Brush, Nylon	6
23	Burner, AI	2
24	Butter Butyrometer 0-100% Fat, Reputed	3
25	Butyrometer Brush, Nylon	6
26	Butyrometer Stand PVC	3
27	Conical Flask 50ml, , Reputed	2
28	Conical Flask 100ml, , Reputed	2
29	Conical Flask 250ml, , Reputed	2
30	Conical Flask 500ml, , Reputed	2
31	Conical Flask 1000ml, , Reputed	1
32	Digital Thermometer	1
33	Filter Paper	1
34	Glass Beaker 50ml, , Reputed	2
35	Glass Beaker 100ml , Reputed	2
36	Glass Beaker 250ml , Reputed	2
37	Glass Beaker 500ml , Reputed	2
38	Glass rod	1
39	Lactometer ISI star 25-35,	
40	Lactometer jar PVC /AI	1
41	Lactometer Tary PVC	1

42	Lock Stopper Brass Cap, Reputed	6
43	Lock Stopper Brass Key Aluminium	2
44	MBR tube cork, Rubber	24
45	Measuring Cylinder 10ml , Reputed	2
46	Measuring Cylinder 25ml , Reputed	2
47	Measuring Cylinder 50ml Reputed	2
48	Measuring Cylinder 100ml Reputed	2
49	Measuring Cylinder 250ml Reputed	2
50	Measuring Cylinder 500ml, Reputed	2
51	Measuring Cylinder 1000ml , Reputed	1
52	Measuring Jug/Jar PVC 1000ml Reputed	2
53	Mico Pipette 0.1ml ,Reputed	1
54	Milk Butyrometer 0-10% Fat, Reputed	10
55	Milk Pipette 10.75ml Reputed	10
56	Petri Dish - Glass , Reputed	10
57	Petri Dish PVC 100mm Reputed	10
58	Pipette 1ml , Reputed	5
59	Pipette 1.1ml , Reputed	5
60	Pipette 2.0ml, Reputed	5
61	Pipette 2.2ml , Reputed	5
62	Pipette 5.0ml , Reputed	5
63	Pipette 10.0ml , Reputed	5
64	Pipette Brush	5
65	Pipette Stand Horizontal, Reputed	2
66	Pipette Stand Vertical Reputed	2
67	PVC Beaker 100ml Reputed	2
68	PVC Beaker 250ml Reputed	2
69	PVC Beaker 500ml Reputed	2
70	Reagent Bottle 500ml Reputed	4



71	Reagent Bottle 1000ml , Reputed	4
72	Reagent Bottle 125ml , Reputed	4
73	Reagent Bottle Amber Colour 1000ml , Reputed	2
74	Raegent Bottle Amber Colur 500ml Reputed	2
75	Sample Bottle Brush	10
76	Sample Bottle PVC	12
77	Spatulla round mouth	4
78	Spirit Lamp	1
79	Test Tube 15*125mm, , Reputed	10
80	Test Tube 15*150mm, , Reputed	10
81	Test Tube Brush, Nylon	10
82	Test Tube Stand Vertical 15*18, Reputed	2
83	Ts Box Aluminium	6
84	Ts Dish- Aluminium, poreclain , Silica, SS, Nickle	10
85	Wash Bottle LDPE 500ml, Reputed	1
86	Whatman Filter Paper No. 42, 12.5ml	1
87	Wide mouth Bottle 500ml, , Reputed	2
88	Wide mouth Bottle 1000ml, , Reputed	2
89	WMP Butyrometer 20-40% Fat , Reputed	2
90	Funnel 25mm , Reputed	2
91	Funnel 50mm Reputed	2
92	Funnel 75mm , Reputed	2
93	Funnel 100mm , Reputed	2
94	Absorbent Cotton	2
95	Adhesive Gum	1
96	Aluminium foil wrap	1
97	Duster Cloth	6
98	Glass Marker Pencil	3
99	Hand Gloves	6

100	Measuring Scale	1
101	Non absorbent Cotton	6
102	Rubber Gloves	6
103	Tissue Paper	2
104	Tongs	1
105	Glacial Acetic Acid 100%, Cap: 500ml, Reputed	1
106	Sodium Hydroxide Pallet, Cap: 500g, Reputed	1
107	Absolute Ethanol (99.9%), Cap: 500ml, Reputed	4
108	Ammonium Hydroxide solution (28%), Cap: 500ml, Reputed	1
109	Ammonium Hepatamolybdate, Cap: 100ml, Reputed	1
110	Anhydrous Sodium Sulphate, Cap: 500g, Reputed	1
111	Cane Sugar , Dextrose Anhydrous, Cap: 500g, Reputed	1
112	Conc. Hcl, Cap: 500ml, Reputed	1
113	Conc.Nitric Acid, Cap: 500ml, Reputed	1
114	Concentrated sulphuric Acid, cap: 5ltr, Reputed	1
115	Concentrated Ammonia Soluton (sp gr .88), cap: 500ml , Reputed	1
116	Ferric Chloride , cap: 500g , Reputed	1
117	Formaldehyde 500ml , Reputed	1
118	Glycerol (98% w/w) AR, 500ml	2
119	Hydrogen Peroxide solution 50% , cap: 500ml, Reputed	1
120	Silver Nitrate 25g, Reputed	1
121	N/10 Sodium Hydroxide Solution 500ml, Reputed	6
122	Oxalic Acid Crystals (Dihydrate) 500g, Reputed	1
123	Paraphenylene diamine 250g , Reputed	1
124	Phenolphthalein Indicator 125ml , Reputed	3
125	Pottassium diChromate GR 500gm, Reputed	3
126	Pottassium Iodide Crystals 500gm , Reputed	1
127	Pottassium Oxalate 500gm, Reputed	3
128	Pottassium Permanganate 500gm, Reputed	1

129	Resorcinol Powder, Reputed	1
130	Rosalic Acid Powder 25g,Reputed	1
131	Silica (dry) gel self indi coarse 500gm	1
132	Sodium Bicarbonate 500gm, Reputed	1
133	Sodium Carbonate Anhydrous 500gm, Reputed	1
134	Sodium Chloride (AR) 500gm, Reputed	1
135	Sodium Dichromate dihydrate 500gm, Reputed	1
136	Sucrose (pure and Anhydrous), 500gm,Reputed	1
137	Mecuric Chloride 50g, Reputed	1
138	Starch 500gm, Reputed	1
139	Potassium Chromate 500gm, Reputed	1
140	Sodium Citarte 500gm, Reputed	1
141	Dipotassium hydrogen phosphate 500gm, Reputed	1
142	Saturated Boarx 500gm, Reputed	1
143	Methylene blue tablets for milk testing 50gm, Make: Reputed	1
144	EDTA (N/50) solution 500ml , Reputed	1
145	Silicon Antifoaming agent 100ml, Reputed	1
146	Iso Amyl Alcohol 500ml, Reputed	4
147	Eithyal Alcohol 500ml, Reputed	4
148	Automatic Measure (Tilt) 10ml, Reputed	4
149	Autimatic Measure (Tilt) 1 ml , Reputed	4
150	Bottle Brush, Nylon	4
151	Burner, AI	2
152	Butter Butyrometer 0-100% Fat, Reputed	2
153	Butyrometer Brush, Nylon	2
154	Butyrometer Stand PVC	3
155	Desktop, UPS & Printer with Scanner	1