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## **Tender Document**

**for  
Design, Engineering, Manufacturing, Supply,  
Installation, Testing, Commissioning & Acceptance  
of  
Dual Multi-fruit Processing Lines for fruit processing  
at a minimum capacity of 20000 kg/hr Each  
for  
MDFVPL Project, Kuppam, Andhra Pradesh, India**

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**1. Invitation for Bid**

**Enquiry Reference no.:** IDMC/ Sourcing & VD/ 2026-27/ Enquiry/ 15 dated 16.04.2026

IDMC Limited invites sealed bids from original equipment manufacturers (OEMs) for Design, Engineering, Manufacturing, Supply, Installation, Testing, Commissioning, acceptance of Dual Multi-fruit Processing Lines designed to handle fruits at a minimum capacity of 20,000 kg/hr Each for MDFVPL Project, Kuppam, Andhra Pradesh, India as per details given below:

Description of Tender	Design, Engineering, Manufacturing, Supply, Installation, Testing, Commissioning & Acceptance of Dual Multi-fruit Processing Lines designed to handle fruits at a minimum capacity of 20,000 kg/hr Each. (mention imported & indigenous item separately)
Qty	1 Pack
Estimated Cost	INR 30.0 CRORE
Completion period (For the complete plant (design, manufacturing, supply, installation, testing, and commissioning))	10 months from the date of the Letter of Intent (LOI)/Purchase Order (PO) whichever is earlier
Earnest Money Deposit (EMD)	Not applicable
Mode of Tender	eProcurement at NCDFI eMarket portal, considering restricted tender of IDMC with single stage two bid envelope system (Part I- Techno-commercial Bid and Part II- Price Bid) through <a href="http://www.idmc.com">www.idmc.com</a> (click procurement) OR <a href="https://www.ncdfimarket.com/index.php/idmc/">https://www.ncdfimarket.com/index.php/idmc/</a> and can be downloaded and used as tender document for uploading the offer. The invited bidders are required to submit their offer electronically through NCDFI eMarket portal. No physical tender/email is acceptable.
Eligible bidders	This invitation for bids is restricted to original equipment manufacturers to the invited bidders only and written communication sent through email by purchaser/NCDFI e-Market.
Query/support related to online portal during submission of bid	Mr Sachin Chaudhary +91 99786 28169 Mr Parth Parikh +91 70435 31188
Warranty Period	12 months from the date of successful commissioning, product trial & acceptance of the plant



Date of uploading of enquiry on NCDFI eMarket portal	17.04.2026
Last date, time and place for receipt of bids/ offers	08.05.2026 (Up to 1700 hrs IST)
Bid submission currency	INR/ USD /EURO
Conversion Rate (USD / EURO to INR)	1 USD = 93.8 INR, 1 EURO = 109.05 INR (Reference date 16.04.2026)
EPCG (for information of bidders)	Imported items under EPCG

**1.1. The bid document can be downloaded by registration from the link:**

[www.idmc.com](http://www.idmc.com) (click procurement) OR  
<https://www.ncdfimarket.com/index.php/idmc>

**1.2. Enquiry document:**

Instructions to bidders, General conditions of contract, Special conditions of contract, Form of agreement, Acceptable forms of bank guarantees, Schedule of Requirement and technical specifications for all the items of works are indicated in this enquiry document.

**1.3. Clarification on the bids:**

The bidders may submit their queries / clarification if any through email by 24.04.2026 on email id – [tenders\\_mech@idmc.com](mailto:tenders_mech@idmc.com) for consideration of the purchaser.

**1.4. Opening of offers:**

Bids will be opened by the tender opening committee of IDMC based on the offer received on the NCDFI Portal, bidders' presence is not required.

**1.5. Offer validity:**

The bid shall remain valid for a period of 120 (One hundred twenty) days from the date of bid closing.

**1.6. Drawings:**

Bidders to submit preliminary GA /dimensional drawing along with the offer.

**1.7. Rights reserved by IDMC Limited:**



**IDMC**<sup>®</sup>  
L I M I T E D

**Dual Multi-fruit Processing Lines**

Tender Ref. No.  
IDMC/ Sourcing &  
VD/ 2026-27/  
Enquiry/ 15

IDMC may evaluate & consider bids both technical as well as financially beneficial to the project. It reserves the right to accept and or reject any or all the bids.

**2. Instructions to bidders**

(a)	Tender/Event Ref. No.:	IDMC/ Sourcing & VD/ 2026-27/ Enquiry/ 15 dated 16.04.2026
(b)	Transaction Fee Payment of transaction fee by NEFT/ RTGS in favor of IDMC Limited (refer clause No.-4 of Annexure-A)	Not Applicable
(c)	Incidental charges (in land) in case documents are to be sent by courier/post	Not Applicable
(d)	Event Start Date	17.04.2026
(e)	Event Close Date & time	08.05.2026, 17.00 Hours
(f)	Last Date and time for bid submission	08.05.2026, 17.00 Hours
(g)	Time and date of opening of bids	
	Part I – Techno-commercial bid	Bids will be opened by the tender opening committee of IDMC based on the offer received on the NCDFI Portal, bidders' presence is not required.
	Part II – Price bid	May be communicated later to responsive /technically qualified bidders who have accepted all techno commercial terms and conditions
(h)	Opening of bid	ONLINE at web portal (in presence of tender opening committee of IDMC)
(i)	Address for communication	IDMC Tender committee 124-128 GIDC Estate Vithal Udyognagar- 388121 Dist.- Anand (Gujarat) Tel: +91 2692 -220521 Email: tenders_mech@idmc.com
(j)	Time of completion	10 (Ten) Months for overall completion (from the date of notification of award of Contract (LOI)/ Purchase Order) whichever earlier
(k)	Amount of EMD	Not Applicable
(l)	Date and time for receipt of EMD. The EMD in original to be submitted to communication address as stated above in clause (i)	Not Applicable
(m)	Price Basis (Incoterm)	For Imported items - CFR- Indian Port (Mundra / Nhava-sheva)



		For Indigenous - FOR MDFVPL Project, Kuppam, Andhra Pradesh, India
(n)	Packing & forwarding	In Bidder scope
(o)	Freight	For Imported items - CFR- Indian Port (Mundra / Nhava-sheva) For Indigenous items - FOR MDFVPL Project, Kuppam, Andhra Pradesh, India
(p)	Transit Insurance (Warehouse to warehouse)	For Imported items - Purchaser Scope For Indigenous items - FOR MDFVPL Project, Kuppam, Andhra Pradesh, India (Unloading at project site in IDMC Scope)
(q)	All applicable custom clearance, duties & Taxes in India	In IDMC scope

**2.1. Eligible bidders:**

This invitation for bids is restricted to original equipment manufacturers to the invited bidders only and written communication sent through email by purchaser/NCDFI e-Market.

**2.2. Cost of bidding:**

The Bidder shall bear all costs associated with the preparation and submission of its bid, and IDMC Limited, also hereinafter based on the context referred to as "the Purchaser", will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

**2.3. Bidders to check the contents of enquiry documents:**

The Bidder is requested to carefully examine all instructions, conditions, forms, terms, specifications, and drawings in the bidding documents. Failure to comply with the requirements of bid submission will be at the bidder's own risk. Bids which are not substantially responsive to the requirements of the bidding document will be rejected.

**2.4. Documents to be submitted along with the offer/ bid:**

The offer to be submitted by the bidder/ vendor shall comprise the following:

- a. The Form of bid duly filled and signed.
- b. Bidders: self-attested copies of documents defining the constitution, place of Registration and principal place of business.



- c. Details of experience and past performance of the bidder on the executed contracts of similar nature within the last 5 years. The bidder shall also provide details of similar machines provided in last five consecutive years to the following geographies:
- i. Globally (excluding Asia)
  - ii. Asia (excluding India)
  - iii. India
- d. List of customers and their contact details for reference.
- e. All details as specified in the section technical details as per the format provided.
- f. The complete enquiry document with filled in offer, has to be submitted duly signed & stamped by the bidder/ vendor.
- g. The bidder should furnish a brief write-up, backed with adequate data, explaining his available capability (both technical and commercial) for manufacturing and design, engineering, manufacturing, supply, installation, testing and commissioning of the required equipment within the specified time of completion, after meeting all their current commitments.
- h. Service setup of the bidder in India (if any).
- i. The bidder shall submit a detailed technical offer including the layout, GA drawings, Process Flow Diagram (showing flow, temperature, pressure, and other relevant parameters), P&ID, equipment/instrument/electrical datasheets, automation architecture, detailed electrical panel and cable specifications, and a tentative schedule/Gantt chart (L1 schedule).
- j. Additionally, the bidder shall provide a detailed list of all equipment with quantities proposed under import, the list of indigenous equipment with quantities, and a complete list of spare parts and special tools required for two years of continuous operation.

All pages of the offer documents shall be signed by person(s) duly authorized. Proof of authorization shall be in the form of a written Power of Attorney/ Authority letter which shall accompany the bid. All pages of the offer documents, where entries and amendments have been made, shall additionally be initiated by the person(s) signing the offer/ bid.

The complete offer/ bid shall be without alterations, interlineations, or erasures except those in accordance with instructions issued by IDMC Limited,



or as necessary to correct errors made by the bidder in which case such corrections shall be initialed by the person(s) signing the offer. No overwriting shall be permitted.

**2.5. Clarification of bidding documents:**

As specified above at clause no. 1.3

**2.6. Mode and manner of submission:**

2.6.1. Submission of bid shall be through NCDFI eMarket portal only. No physical/email bids shall be accepted

**2.7. Currency of offer & payment:**

The prices shall be quoted by the bidder as under:

2.7.1. Bidders shall quote in USD / Euro / INR (as applicable). All payments will be made in the currency in which the PO/contract will be awarded.

The payment will be only through an authorized bank, subject to forex and other regulations, including withholding taxes, if any, in force. The bank charges within India shall be borne by the purchaser.

**2.8. The price schedule:**

**Dual Multi-fruit Processing Lines**

<b>Technical Details Serial No.</b>	<b>Description</b>	<b>Quantity</b>	<b>UOM</b>
1	Scraped Surface Preheater	1	EA
2	Turbo Refiner	2	EA
3	Hot Break System	1	EA
4	Scraped Surface Evaporator	1	EA
5	Aseptic Sterilizer	2	EA
6	Forced circulation Evaporator	1	EA
7	Aseptic Filler Machine	2	EA
8	Web Aseptic Filler with Aseptic Tank	1	EA
9	Tomato Chopper pump	1	EA
10	Spare for 2-year operation	1	EA
11	Installation, Testing, Commissioning, acceptance & Training	1	Job



12	Non-Comprehensive AMC (minimum 4 Visits per annum & unlimited breakdown after warranty period) for 2 year	8	Job
13	Comprehensive AMC (minimum 4 Visits per annum & unlimited breakdown after warranty period) for 2 year	8	Job

- 2.8.1. The bidder shall quote the price in figures and words clearly specifying the currency. The said price shall be a comprehensive all-inclusive price for the design, engineering, manufacturing, supply, installation, testing, and commissioning including the obligations of any services and supplies as specified in the technical details or elsewhere in the bidding document.
- 2.8.2. The price will include the cost/ fee of any Technician/ Supervisor/ Expert to be deputed by the vendor at the site for Supervision of installation, testing, commissioning and handing over, or any other related activity.
- 2.8.3. Please mention imported & indigenous item separately.

**Note:** IDMC Limited shall provide local transportation from Hotel to the project site at Kuppam (Andhra Pradesh) only to facilitate officials of the successful bidder (applicable for Foreign bidders representative only) during the period of Supervision of installation, testing and commissioning.

**2.9. Offer validity & extension of validity if required:**

Bids submitted shall remain valid for acceptance for a period of 120 days from the date of bid closing.

**2.10. Submitted offer to be complete in all respect:**

The bidder shall submit an offer which complies fully with the requirements of the bidding documents, including the basic technical design as indicated in the specifications.

**2.11. Date of submission of offer/ bid:**

The offer must be received by IDMC Limited on or before the date and time of submission as stated in the Invitation for Enquiry/ Tender. IDMC Limited may, at its discretion, extend the deadline for the submission of offer/ bid by issuing necessary instructions on email to all registered bidders, in which case, all rights and obligations of IDMC Limited and the bidders previously subject to the original deadline shall thereafter be subject to the new deadline as extended.

**2.12. Late bids:**



Any offer/ bid received by IDMC Limited later than the deadline for the submission of offers/ bids as prescribed by IDMC Limited will be subject to rejection.

**2.13. Opening of bids:**

The bids will be opened, scrutinized, and evaluated as per the qualification, scope and specification mentioned in tender and award the contract accordingly.

After the opening of offers IDMC Limited shall evaluate and process the same for finalizing the issuance of the Purchase order. The process shall be kept confidential - not disclosed to bidders/ any vendor or other persons not officially concerned with such process.

**2.14. Undue influence by the bidder:**

Any action to influence the procurement process or contract execution for undue advantage will be improper and may result in the rejection of the bidder's bid/ offer.

**2.15. Clarification on offers/ bids:**

To assist in the evaluation of offers/ bids, IDMC Limited may request the bidders/ vendors for clarification of their bids, including breakdown of unit rates. The request for clarification and the response shall generally be in writing but no change in the price or substance of the bid shall be sought, offered or permitted. The Purchaser may, depending on the nature of the query, contact the concerned bidder on the telephone number provided in the bid document only for the purpose of understanding and/ or resolving the query. For this purpose, the bidder is requested to provide the name and contact details of its designated officer.

**2.16. Correction of errors:**

- 2.16.1. The offers will be checked by IDMC Limited for any arithmetic errors in computation and summation. Errors will be corrected as follows:
- 2.16.2. "Where there is a difference between rates in figures and in words, the rates that correspond to the amounts worked out by the bidders, shall be taken as correct. However, when the amount of an item is not worked out or it does not correspond with the rates written either in figures or words, then the rates quoted by the bidder in words shall be taken as correct. When the rates quoted by the bidder in figures and words tallies but the



amount is not worked out correctly, the price quoted by the bidder shall be taken as correct and not the amount.”

2.16.3. The amount stated in the form of bid will be adjusted by IDMC Limited in accordance with the above procedures for the correction of errors, and with the concurrence of the bidder, shall be considered as binding upon the bidder. If the bidder does not accept the quoted rates (Price) of bid then his bid shall be rejected.

2.16.4. IDMC Limited reserves the right to accept or reject any variation, deviation, or alternative offers.

**2.17. IDMC Limited’s right to accept any offer/ bid and to reject any or all offers/ bids:**

As mentioned above in clause no. 1.7

**2.18. Notification of award and issuance of Purchase order:**

Prior to the expiry of the period of offer/ bid validity prescribed in the enquiry/ bid documents, IDMC Limited will notify the finalized bidder/ vendor here in after referred to as the “/ Successful bidder/ Bidder”, in writing on acceptance of their offer/ bid and issue a Letter of Intent/ Award, followed by a detailed Purchase order mentioning all the required terms and conditions and (hereinafter and in the Conditions of the Contract referred to as the "Contract price").

**2.19. License and permit for goods/ services:**

No license or permit shall be provided by Purchaser/ Owner/ IDMC Limited for the exports of goods and services being provided by the Successful bidder against this enquiry or work order.

**2.20. Amendment to the bidding document:**

At any time prior to the deadline for submission of bids, the Purchaser may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the Bidding Documents by amendment. The amendment will be notified in writing by mail to all registered Bidders.

**2.21. Modification in the bid:**

2.21.1. The Bidder may modify or withdraw its bid after the bid submission, provided that written notice of the modification or withdrawal is received by the Purchaser prior to the deadline prescribed for submission of bids.



2.21.2. No bid may be modified after the deadline for submission of bids.

**2.22. Language of bid:**

The Bid prepared by the Bidder and all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser, shall be written in the English language, provided that any printed literature furnished by the Bidder may be written in another language so long as accompanied by an English translation of its pertinent passages in which case, for purposes of interpretation of the bid, the English translation shall govern.

**2.23. Personal discussion:**

If required, IDMC Limited may desire to hold personal discussions with shortlisted vendors. The discussions, if required, are likely to be held at IDMC Limited's office in Anand or through the Online Teams meeting. Date shall be intimated through e mail by designated person of IDMC.

### **3. General conditions of contract**

#### **3.1. Definitions and Interpretation:**

- 3.1.1. In the Contract, as hereinafter defined, the following words and expressions shall have the meanings hereby assigned to them, except where the context otherwise requires.
- 3.1.2. OWNER/ PURCHASER/ IDMC shall mean IDMC Limited and shall include its successors and assignees, as well as its authorized representatives.
- 3.1.3. IDMC Limited shall mean IDMC Limited.
- 3.1.4. The bidder/ Vendor shall be the firm/party/individual who submits the offer/ bid against this enquiry.
- 3.1.5. Contractor/ Successful bidder/ Bidder shall mean the successful vendor/ bidder whose Offer/ Bid has been accepted by the Owner/ IDMC Limited and on whom a work order/ PO has been placed and shall include his heirs, legal representatives, and assignees.
- 3.1.6. Contract price/rate shall mean the prices/ rates of the accepted Offer/Bid
- 3.1.7. Contract shall mean the work order or Purchase order along-with articles of agreement, the conditions, the Annexure, the schedule of quantities, and/ or specifications attached herewith.
- 3.1.8. "Notice in writing" shall mean a notice in written, typed or printed characters sent (unless delivered personally or otherwise proved to have been received) by courier/ registered to the last known address or the registered office of the addressee and shall be deemed to have been received when in the ordinary course of post, it would have been delivered.
- 3.1.9. Site shall mean the actual place where the machine being purchased will be installed and commissioned as specified in technical specifications.
- 3.1.10. Month shall mean from the beginning of a given date of a calendar month to the end of the preceding date of the next calendar month.
- 3.1.11. Week shall mean seven consecutive days.
- 3.1.12. Day shall mean a day from midnight to midnight.
- 3.1.13. Award shall mean the written acceptance of the Offer/ Bid by IDMC Limited/owner given to the successful bidder/ Vendor/ Bidder.

- 3.1.14. Constructional Plant shall mean all appliances or things of whatsoever nature required in or about the execution and maintenance of the Works but does not include the materials or other things required/intended to form or forming part of the Works.
- 3.1.15. Specifications shall mean the specification referred to in the Enquiry Document/ Bid Document and any modification thereof or addition thereto as may from time to time be furnished or approved in writing by IDMC Limited.
- 3.1.16. Drawings shall mean drawings referred to in the specifications and any modification of such drawings approved in writing by IDMC Limited and such other drawings as may from time to time be furnished or approved in writing by IDMC Limited.
- 3.1.17. Approved/ Approval shall mean approval in writing, including subsequent written confirmation of previous verbal or written approval.
- 3.1.18. I.S.S. shall mean Indian Standard Specifications as published by Bureau of Indian Standards, India.
- 3.1.19. Government shall mean the Government of India or the Government in state of Gujarat.
- 3.1.20. Enquiry document shall mean the Bid document.
- 3.1.21. Headings and marginal note: All headings of and notes to the clauses of these Conditions of Contract or of and to the Specifications or any other bid document are solely for the purpose of giving concise indication and not a summary of the contents thereof, and they shall never be deemed to be the part of or be used in the interpretation or construction thereof or of the Contract.
- 3.1.22. Singular and plural: In this Contract document unless otherwise stated specifically the singular shall include the plural and vice-versa wherever the context so requires.
- 3.1.23. Cost: The cost shall be deemed to include all the overhead costs whether on or off the site.
- 3.1.24. Purchaser: IDMC Limited.
- 3.1.25. Installation: Something (such as a piece of equipment) that is put together and made ready for use.



3.1.26. Testing, commissioning and handover : It is the process of assuring that all systems and components of an industrial plant are designed, installed, tested, operated, and maintained according to the operational requirements and the Purchase Order specifications of the owner or final client.

**3.2. Application:**

These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

**3.3. Documents mutually explanatory:**

Except if and to the extent otherwise provided by the Contract, the provisions of the General Conditions and Special Conditions of the Contract shall prevail over those of any other documents forming part of the Contract. Several documents forming the Contract are to be taken as mutually explanatory.

**3.4. Program to be furnished:**

3.4.1. The successful bidder shall, after the receipt of the PO, submit to the Purchaser a program showing the schedule of various activities weekly as well as monthly in which he proposes to carry out the supply, installation, testing and commissioning within the timelines agreed for inclusion in the contract.

3.4.2. If at any time it should appear to IDMC that the actual progress of the Works does not conform to the approved program, as referred above, the successful bidder shall produce, at the request of IDMC, a revised program showing the modifications to the approved program necessary to ensure completion of the Works within the time for completion as defined in the contract.

**3.5. Standards:**

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned institution.



**3.6. Use of contract documents and information:**

- 3.6.1. The Bidder shall not, without the Purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Bidder in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 3.6.2. The Bidder shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in clause 3.6.1 except for purposes of performing the Contract.

**3.7. Patent rights and royalties:**

The Bidder shall indemnify IDMC Limited from and against all claims and proceedings for or on account of infringement of any patent rights, design trademark or name or other protected rights in respect of any constructional plant, machine work, or material and for in connection with the supply of the machine or any of them and from and against all claims, proceedings, damages, costs, charges and expenses whatsoever in respect thereof or in relation thereto.

**3.8. Inspection and tests:**

- 3.8.1. The Purchaser or its representative shall have the right to inspect and/ or test the Goods to confirm their conformity to the Contract. The technical specifications shall specify what inspections and tests the Purchaser requires.
- 3.8.2. The inspections and tests may be conducted on the premises of the Bidder, at point of delivery and/or at the Good's final destination. Where conducted on the premises of the Bidder, all reasonable facilities and assistance including access to drawings and production data-shall be furnished to the inspectors at no charge to the Purchaser. In case of any defects or deficiency notified by the Purchaser's inspection authority, the Bidder will rectify and make good the same without delay and not proceed with further processing of such item(s) of Goods without obtaining approval from the inspection authority.
- 3.8.3. Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject them and the Bidder shall either replace the rejected Goods or make all alterations necessary to meet specification requirements free of cost to the Purchaser.



3.8.4. The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at the destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Purchaser or its representative prior to the Goods shipment from the country of origin.

**3.9. Packing and marking:**

3.9.1. The Bidder shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to temperature, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit. The Bidder will be responsible for internal damage if any, even if outwardly there is no damage to the package.

3.9.2. The packing, marking and documents within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract and, subject to Clause 3.18 and any subsequent instructions given by the Purchaser.

3.9.3. Each package shall be marked to indicate:

Name of the Bidder

Purchase Order number

Details of items in the package

Gross, net, and tare weights on the item

Name of the consignee Destination

Country of origin

3.9.4. The cost of the individual cases aggregating to the total machine cost shall have to be submitted to IDMC prior to dispatch. The Bidder will have to replace the respective item of the individual cases at the cost declared, in case of damage/loss etc. IDMC Limited shall not permit deviation from this clause. The Bidder finally executing the contract would be deemed to have accepted this clause.



### **3.10. Delivery and documents:**

Upon shipment/ dispatch, the Bidder shall notify to the purchaser the full details of dispatch including purchaser order no., description of the goods, quantity, mode of transport, place of loading, date of dispatch, packing details with the individual costs etc. The Bidder will mail the following documents to the purchaser with a copy to the Insurance Company:

Original and five copies of:

The Bidder's invoice showing purchase order no. description of goods, quantity, unit price, total amount;

- a. Delivery note/case-wise detailed packing list identifying contents of each package/ lorry Receipt/Bill of landing, individual case values (for replacement purposes, in case of damage) etc.
- b. Manufacturer's/Bidder's warranty certificate;
- c. Inspection Certificate issued by the nominated inspection agency, and the Bidder's Factory inspection report;
- d. Certificate of origin;
- e. Any other document evidencing payment of statutory levies;
- f. The Bidder's certificate certifying that the defects pointed out during inspection have been rectified;
- g. Certificate of no war/ war like materials is loaded in the consignment;
- h. Age of vessel (Not more than 25 years)

**Note:** The nomenclature used for the item description in the invoice/s, packing list/s and delivery note/s etc. should be identical to that used in the purchase order. The dispatch particulars including name of transporter, LR/BL no. and date should also be mentioned in the invoices.

### **3.11. Insurance**

Global bidders (Price basis shall be applicable as per Incoterm mentioned in clause no. 2 (m) - Instructions to bidders )



**3.12. Transportation:**

- 3.12.1. For Imported Goods : As per incoterms mentioned above.
- 3.12.2. For local goods (Indigenous items) : Transportation and insurance upto the site shall be in the scope of bidder.

**3.13. Incidental services:**

As specified in the Special Conditions of Contract, the Bidder will be required to provide any or all of the following services:

- a. The bidder shall provide all the details/load for safe unloading of materials at project site.
- b. Furnishing list of tools and tackles required for assembly and/or maintenance of the supplied goods; Any special tools required for assembly and installation shall be provided by the bidder
- c. Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods; and manuals covering the operation and maintenance of automation software and control systems. The soft copy of manuals shall also be provided.
- d. Performance or supervision or maintenance and/or repair of the supplied Goods, for a period agreed by the parties, provided that this service shall not relieve the Bidder of any warranty obligations under this Contract; and
- e. Conduct 15 working days onsite /offsite training during installation and commissioning as per the requirement of the purchaser.

**3.14. Spare parts: - Applicable as per technical specifications**

Bidder shall also provide costing & breakup quantity of spares.

**3.15. Warranty:**

- 3.15.1. The Bidder warrants that the Goods and equipment, supplied, installed, and commissioned under the Contract are new, unused, of the most recent or current models and incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Bidder further warrants that the Goods supplied under this Contract shall have no defect arising from design, materials or workmanship (except insofar as the design or material is required by the Purchaser's Specifications) or from any act or omission of the Bidder, that may develop



under normal use of the supplied Goods in the conditions obtaining in the country of final destination. The Bidder also guarantees that the Goods supplied shall perform satisfactorily as per the signed/rated/-installed capacity as provided for in the Contract.

- 3.15.2. The warranty period is 12 months after the date of successful commissioning, product trial & acceptance, and completion certificate duly signed by both parties or handover of the plant.
- 3.15.3. The Purchaser shall promptly notify the Bidder in writing of any claims arising under this warranty.
- 3.15.4. Upon receipt of such notice, the Bidder shall promptly respond and resolve the issue maximum within 7 days from the date of notice by way of repair or replace the defective Goods or parts thereof, without costs to the Purchaser.
- 3.15.5. If the Bidder, having been notified, fails to remedy the defect(s) within a reasonable period mentioned in clause no 3.15.4, the Purchaser may proceed to take such remedial action as may be necessary, at the Bidder's risk and expense and without prejudice to any other rights which the Purchaser may have against the Bidder under the Contract.

### **3.16. Payment:**

#### **Payment for supply component:**

- 3.16.1. 20% advance against submission of equivalent security in the form of Bank guarantee from a reputed bank with banker confirmation and shall valid till receipt of last consignment at purchaser site in acceptable condition.
- 3.16.2. 70% shall be payable through letter of credit (on B/L date- 90 days Interest Free Credit- usance period) on presentation of clean set of board shipping documents along with insurance details. LC to be opened 1 month prior to scheduled ex-work delivery date.
- 3.16.3. The balance 10% shall be payable through letter of credit in 30 days after final acceptance of satisfactory performance of the complete plant for uninterrupted running of 15 days continuously, on completion of other contracted services including training and acceptance by the purchaser in writing, within the scope of this contract and on submission of an equivalent amount of performance bank guarantee (PBG) valid for a period of 12 months from the date of successful commissioning, product trial & acceptance by the purchaser.



**Payment for Installation, Start-up assistance, Testing, Commissioning, acceptance & Training:**

3.16.4. 90% of the contract price against successful installation and commissioning shall be paid in 30 days on actual completion of installation/erection and approval by the purchaser (against detailed break up cost to be furnished by the Bidder in advance and accepted by the Purchaser)

3.16.5. On final acceptance:

The balance 10% shall be paid on continuous satisfactory running of the complete plant/equipment for one month, on completion of other contracted services and accepted by the purchaser's representative, within the scope of this contract.

**Payment for Non-Comprehensive AMC & Comprehensive AMC:**

3.16.6. 100 % shall be paid in 15 days against submission of visit report accepted by the purchaser's representative, within the scope of this contract.

**Note:**

1) All bank charges within India to the Buyer account and outside India to the beneficiary/ Vendor account. L/ C confirmation charges (if any) to beneficiary/ Vendor account. L/ C shall be processed only after receipt of order acknowledgement and/ or Pro-forma invoice from Beneficiary/ Vendor with required details.

2) All bank guarantees should be issued by a Nationalized/ class- I Indian/ Foreign Bank in the format provided in the bid.

3.16.7. The Bidder's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by shipping documents, submitted pursuant to Clause 3.10, and fulfillment of other obligations stipulated in the Contract.

3.16.8. All payments under this contract shall be made in the currency in which the bid price was quoted.

**3.17. Change orders:**



3.17.1. The Purchaser may, at any time, by a written order given to the Bidder make changes within the general scope of the Contract in any one or more of the following:

- a. Drawings, designs, or specifications, where Goods to be furnished under the Contract is to be specifically manufactured for the Purchaser:
- b. The method of shipment or packing;
- c. The Services to be provided by the Bidder.

3.17.2. If any such change causes a substantial increase or decrease in the cost of, or the time required for, the Bidder's performance of any part of the work under the Contract, whether changed or not changed by the order, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Bidder for adjustment under this clause must be asserted within sixty (60) days from the date of the Bidder's receipt of the Purchaser's change order.

**3.18. Contract amendment:**

Subject to Clause 3.17, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

**3.19. Assignment:**

The Bidder shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent.

**3.20. Liquidated damages:**

If the Bidder fails to deliver any or all the goods or perform the services within the times period (s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the contract prices, as liquidated damages, a sum equivalent to:

- (1) 0.5% of the full contract value for every completed week (week comprising of 7 days including holidays and any incomplete week shall be ignored for the calculations of liquidated damages) of delay in the supplies/commissioning.



- (2) The total amount so deducted shall not exceed 5% of the Contract value. Once the maximum is reached, the Purchaser may consider termination of the contract pursuant to Force Majeure.

Any incremental taxes and levies on account of delay in performance of the Contract by the Bidder shall be to the Bidder's account.

**3.21. Termination for default:**

The contract can be terminated on the following grounds:

3.21.1. Bidders default:

3.21.1.1. If the Bidder shall assign the Contract, without the consent in writing of the Purchaser first obtained, or if in the opinion of the Purchaser, the Bidder:

- a. Has abandoned the Contract, or
- b. Without reasonable excuse has failed to commence the Works or has suspended the progress of the works for twenty-eight days after receiving from the purchaser written notice to proceed, or Despite previous warnings by the Purchaser, in writing, is not executing the works in accordance with the Contract or neglecting to carry out his obligations under the contract.

3.21.1.2. Consequent to such termination of Contract, the Purchaser shall also be entitled to recover the advance paid, if any, to the Bidder along with interest @ 18% per annum compounded quarterly on the last day of March, June, September and December on the advance paid for the entire period for which the advance was retained by the Bidder.

3.21.2. Default of the Purchaser

3.21.2.1. In the event of the Purchaser:

- a. Becoming bankrupt or (being a company) going into liquidation other than for the purpose of a scheme of reconstruction or amalgamation, or
- b. Being unable to continue to meet his contractual obligations for unforeseen reasons due to economic dislocation.



3.21.2.2. Nothing in this clause contained shall prejudice the right of the Bidder to exercise, either in lieu of or in addition to the rights and remedies in this Clause specified any other rights or remedies to which the Bidder may be entitled.

**3.22. Force majeure:**

3.22.1. Notwithstanding the provisions of Clauses 3.20, 3.21 the Bidder shall not be liable for forfeiture of its performance security, liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force majeure.

3.22.2. For purposes of this clause, "Force majeure" means an event beyond the control of the Bidder and not involving the Bidder's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.

3.22.3. If a Force Majeure situation arises, the Bidder shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Bidder shall continue to perform its obligations under the Contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force majeure event.

**3.23. Inspection of goods during manufacturing at Bidder works/ operations:**

The Purchaser and any person authorized by him shall have the right to inspect the physical progress at the site of the successful bidder, after providing reasonable and not less than three days' notice.

**3.24. Time for completion shall mean the completion of performance of contract:**

As given in clause 4.3 in the special conditions of contract.

**3.25. Certification of completion of works:**

The successful bidder shall obtain a certificate of completion from IDMC Limited at the time of complete plant hand over for the commercial production after successful commissioning and performance trial of the supplied plant and machinery and fulfilment of other obligations stipulated in the contract.

**3.26. Resolution of disputes:**

3.26.1. The Purchaser and the Bidder shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Bidder have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms as specified in the special conditions of contract. These mechanisms may include but are not restricted to, conciliation mediated by a third party, adjudication in an agreed national or international forum, and/or international arbitration. The mechanism shall be specified in the Special conditions of the contract.

**Applicable law:**

The Contract shall be interpreted in accordance with the laws of the Union of India.

**3.27. Notices:**

3.27.1. Any notice given by one party to the other pursuant to the Contract shall be sent in writing to the address specified for that purpose in the Special Conditions of Contract.

3.27.2. A notice shall be effective when delivered or on the notice's effective date, whichever is later.

**3.28. Right to use defective goods:**

If after delivery, acceptance and installation and within the warranty period, the operation or use of the Goods proves to be unsatisfactory, the Purchaser shall have the right to continue to operate or use such Goods until rectifications of defects, errors, or omissions by repair or by partial or complete replacement are made without interfering with the Purchasers' operation.

**3.29. Jurisdiction:**

This invitation for bids is issued by IDMC Limited and on behalf of its head office situated at Anand (Gujarat). For the settlement of any dispute arising out of the contract against this bid, only the Courts at Anand, Gujarat, India shall have jurisdiction.



#### **4. Special conditions of contract**

##### **4.1. General:**

The following Special conditions of Contract shall supplement the General conditions of Contract, given in chapter 3. Wherever there is a conflict, the provisions herein shall prevail over those in the General conditions of Contract.

##### **4.2. Taxes:**

###### **For Global bidders**

The offer rates being as per price basis (Incoterm) mentioned in Instruction to Bidder. All the taxes and duties applicable from the port including customs duty etc. will be paid by the Purchaser. Foreign exchange rates as public customs the Reserve Bank of India on the bid closure date will be considered. All payments will be made in the currency in which the Purchase order will be placed and will be only through authorized bank, subject to forex and other regulations, including withholding taxes if any, in force and payment terms agreed.

##### **4.3. Time of completion:**

The expected total time of completion of the Design, Engineering, Manufacturing, Supply, Installation, Testing, Commissioning of Dual Multi-fruit Processing Lines designed to handle fruits at a minimum capacity of 20,000 kg/hr Each is a period of 10 (Ten) months from the issue of the purchase order to successful commissioning and handover to purchaser.

##### **4.4. Drawings/ specification:**

The bidder shall furnish a standard Plant layout drawing along with the bid.

##### **4.5. Safety regulations & compliance:**

The successful bidder has to follow all the safety requirements during the supervision of erection, testing and commissioning as per the standard safety laws, compliances and as per the guideline of IDMC.

##### **4.6. Office space at site:**

IDMC Limited shall provide office space at the site location to the personnel of the Bidder during erection and commissioning period.



**4.7. Installation, start up, commissioning and trial runs:**

As per attached technical specifications.

**4.8. Rating:**

As per attached technical specifications

**4.9. Instruction Manual:**

As per attached technical specifications

**4.10. Resolution of Disputes (Clause 3.26 of General Conditions of Contract):**

In the event of any dispute in the interpretation of the terms of the order/contract or difference of opinion between the parties on any point in the order/contract arising out of or in connection with the agreement accepted order/contract or with regard to the performance of any obligation hereunder by either party, the parties hereto shall use their best efforts to settle such disputes or difference of opinion amicably by mutual negotiations. In case no agreement is reached, either party may forthwith give to the other, a notice in writing of the existence of such question, dispute, or difference of opinion, and the same shall be referred to the adjudication of a sole arbitrator to be appointed by IDMC whose decision in the matter shall be final and binding on the parties.

The arbitration proceedings shall be governed under the provisions of the Indian Arbitration and Conciliation act, 1996, and the rules there under or any statutory modifications thereof for the time being in force. In the order/contract, the venue of such Arbitration shall be Anand, Gujarat and the Courts of Anand alone shall have jurisdiction regarding any matter arising out of the order/contract.

**4.11. Rights reserved by IDMC Limited:**

IDMC Limited at its sole discretion and without assigning any reason thereof reserves the right to accept and/ or reject any or all the bids. Further it shall be the prerogative of IDMC Limited to revise/ modify the qualifying criteria specified in the invitation to bid without assigning any reasons whatsoever.

**4.12. Limitation of Liability:**

Notwithstanding anything to the contrary herein, Bidders' s entire liability for claim, whether based on contract, warranty (except warranty of title), tort



(including negligence), strict liability, or otherwise for any loss arising out of its performance or failure to perform this contract shall:

- (A) not exceed the contract price of the equivalent supplied plant and machinery hereunder which was the cause of such claim:
- (B) in no case extend to direct, indirect special incidental, or consequential damages, of any nature or kind, including, without limitation, lost profits, lost production, lost revenues, or lost business opportunities; and
- (C) termination upon expiration of the warranty period.



**5. Form of Bid**

Enquiry Reference No : IDMC/ Sourcing & VD/ 2026-27/ Enquiry/ 15  
dated 16.04.2026  
Name and address of Purchaser : IDMC Limited, 124-128, GIDC Estate, Vithal  
Udyognagar- 388121, Anand District, Gujarat,  
India, Tel: +91-2692-220521

Gentlemen:

Having examined the Conditions of Contract, Technical Specifications and the Drawings included in or referred to in the Bidding Documents including Addenda Nos. (Insert Numbers), the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply and deliver Goods and Services including installation and commissioning as detailed in the price bid, in conformity with technical specifications and drawings (except to the extent of deviation statement furnished in our bid) and the Conditions of Contract as mentioned in or referred to in the said Bidding Document for the sum as may be ascertained in accordance with the Bid Prices and made part of this bid and the said conditions.

Our acceptance to all the conditions of the Bidding Document in this bid form shall persist over any other terms and conditions, if any, given in our bid.

We undertake, if our bid is accepted, to commence and complete delivery of all the goods and Services including installation and commissioning as specified in the Schedule of Quantities of the Bid Document, from the date of receipt of your Purchase Order.

If our bid is accepted, we will obtain the bank guarantees as per the conditions of the Contract for the due performance of the Contract.

We agree to abide by this bid for the period of 120 days from the date fixed for bid opening as per the Instruction to Bidders and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid, together with your written acceptance thereof and your Purchase Order/notification of award, shall constitute a binding Contract between us.

We understand that you are not bound to accept the lowest or any bid you may receive.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 2026.

\_\_\_\_\_  
Signature



**IDMC**<sup>®</sup>  
L I M I T E D

**Dual Multi-fruit Processing Lines**

Tender Ref. No.  
IDMC/ Sourcing &  
VD/ 2026-27/  
Enquiry/ 15

\_\_\_\_\_  
(In the Capacity of)

Duly authorized to sign bid for and on behalf of

(Name & Address of Bidder): \_\_\_\_\_  
\_\_\_\_\_

Name of Witness: \_\_\_\_\_

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



**BIDDING TERMS DEVIATION STATEMENT FORM**

The following are the particulars of deviations from the requirements of the bidding conditions/ terms:

CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)
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The terms and conditions prescribed in the bidding document shall prevail over those of any other document forming a part of our bid, except only to the extent of deviations furnished in this statement.

Dated:  
Place:

Signature and Seal of Bidder

Note :-

Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "NO DEVIATIONS".



**TECHNICAL DEVIATION STATEMENT FORM**

The following are the particulars of deviations from the requirements of the bidding conditions/ terms:

CLAUSE	DEVIATION	REMARKS (INCLUDING JUSTIFICATION)
--------	-----------	-----------------------------------

All the bidders to submit their bids as per the scope of supply mentioned in the technical specifications in totality and no any deviation shall be considered in the scope of supply.

The terms and conditions prescribed in the bidding document shall prevail over those of any other document forming a part of our bid, except only to the extent of deviations furnished in this statement.

Dated:  
Place:

Signature and Seal of Bidder

Note :-

Where there is no deviation, the statement should be returned duly signed with an endorsement indicating "NO DEVIATIONS".



6. Acceptable forms of Bank Guarantees

Bank Guarantee to secure performance

Table with 4 columns and 6 rows containing fields for Currency, Amount in figures, Amount in words, Date of execution, Date up to when in force, Date of expiry, Date of Claim/ Demand, Name and address of beneficiary, and Name and address of the vendor and/or service provider.

THIS deed of guarantee made on this \_\_\_ day of \_\_\_, between \_\_\_ (name of the bank issuing this guarantee), herein after called 'the bank', on the first part and \_\_\_ (hereinafter referred to as 'vendor and/ or service provider in relation to IDMC Limited' and 'purchaser in relation to the bank' respectively) on the second part.

WHEREAS, the purchaser of the bank guarantee has been engaged by IDMC Limited as a vendor and/ or service provider for \_\_\_ (e.g. design, manufacture, and supply of equipment or installation/ testing/ commissioning/ job work/ preventive maintenance/ break-down maintenance/ consulting or advising services as envisaged in the purchase order(s)/ contract(s) \_\_\_ dated \_\_\_) which is required to be performed in pursuance of the said purchase order(s)/ contract(s);

WHEREAS, the vendor and/ or service provider is required to submit this bank guarantee for a sum of Rs. \_\_\_ (Rupees \_\_\_ only) as security for fulfilling its obligation to secure performance of the \_\_\_ (description of goods and/ or services) under the said purchase order(s)/ contract(s).

AND WHEREAS, at the request of the vendor and/ or service provider, the bank has agreed to guarantee the refund of the said amount in case the aforesaid goods and/ or services do not perform to the satisfaction of IDMC Limited as per the terms and conditions of the said purchase order(s)/ contract(s).



NOW THIS DEED OF GUARANTEE DOES WITNESSETH AS UNDER:

1. That in consideration of IDMC Limited having awarded the said purchase order(s)/ contract(s), the bank does hereby irrevocably guarantee and indemnify that if the vendor and/ or service provider has supplied and/ or provided \_\_\_\_\_ (description of goods and/ or services), which is not to the satisfaction of IDMC Limited, as per the details, terms and conditions contained in the said purchase order(s)/ contract(s), *supra*, the Bank shall, without demur, repay and indemnify IDMC Limited within seven (7) working days as the bank may be called upon to pay subject to a ceiling of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_);
2. We, \_\_\_\_\_ (name of the bank), further agree that this performance guarantee will remain in full force and effect up to \_\_\_\_\_ by which duration IDMC Limited believes it may be reasonable to certify that the defect liability period has been successfully completed as per the details contained in the purchase order(s)/ contract(s), *supra*.
3. That the bank shall not question any of the details, terms and conditions contained in the said purchase order(s)/ contract(s), *supra*, including but not limited to the amount of consideration agreed upon between IDMC Limited and the vendor and/ or service provider for the purposes of determining its acceptance of liabilities under this bank guarantee and forthwith accept the demand of IDMC Limited to determine this bank guarantee.
4. That at the written request of either IDMC Limited or the vendor and/ or service provider, the bank shall renew this bank guarantee before it's date of expiry.
5. The Bank agrees that the amount hereby guaranteed shall be immediately due and payable to IDMC upon serving the bank with a notice before the date of expiry or date of claim/ demand, whichever is earlier. The claim can be lodged by IDMC Limited up to 45 days beyond the date of expiry or extended date of expiry.
6. This Bank Guarantee shall be subject to the law as applicable in India.
7. "In the event of invocation, the details to be sent to the branch address with branch email id \_\_\_\_\_ Marking a copy to our back-office email id \_\_\_\_\_."
8. Notwithstanding anything stated herein before:
  - (i) The Bank's liability under this guarantee is restricted to Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ only);



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**Dual Multi-fruit Processing Lines**

Tender Ref. No.  
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- (ii) This guarantee shall remain in force till \_\_\_\_\_ and;
- (iii) The Bank is liable to pay the guaranteed amount or any part thereof under this bank guarantee only if IDMC Limited serves upon the Bank a written claim/ demand on or before \_\_\_\_\_ (Date of Claim/ Demand) including 45 days of grace period from the date of expiry.

IN WITNESS WHEREOF, the bank has signed on this \_\_\_\_\_ day of \_\_\_\_\_, 2026.

Signature of Bank Manager



**Bank Guarantee for advance payment**

Currency: INR / EURO / USD / ETC..		Amount in figures	
Amount in words			
Date of execution		Date up to when in force/ Date of expiry	
Date of Claim/ Demand (up to 45 days beyond the date of expiry)			
Name and address of beneficiary		IDMC Limited, Plot no. 124-128, GIDC Estate, Vithal Udyognagar, District Anand, Gujarat -388121	
Name and address of the vendor and/ or service provider (i.e. purchaser of the bank guarantee from the bank)			

THIS deed of guarantee made on this \_\_\_\_\_ day of \_\_\_\_\_, between \_\_\_\_\_ (name of the bank issuing this guarantee), herein after called 'the bank', on the first part and \_\_\_\_\_ (hereinafter referred to as 'vendor and/ or service provider in relation to IDMC Limited' and 'purchaser in relation to the bank' respectively) on the second part.

WHEREAS, the purchaser of the bank guarantee has been engaged by IDMC Limited as a vendor and/ or service provider for \_\_\_\_\_ (e.g. design, manufacture and supply of equipment or installation/ testing/ commissioning/ job work/ preventive maintenance/ break-down maintenance/ consulting or advising services as envisaged in purchase order(s)/ contract(s) \_\_\_\_\_ dated \_\_\_\_\_) which is required to be supplied/ provided latest by \_\_\_\_\_ (dd/mm/yyyy) in pursuance of the said purchase order(s)/ contract(s)

WHEREAS, IDMC Limited is required to pay the vendor and/ or service provider a sum of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_ only) against submission of this bank guarantee towards part value of \_\_\_\_\_ (description of goods and/ or services) ordered to be manufactured/ supplied/ provided under the said purchase order(s)/ contract(s);

AND WHEREAS, at the request of the vendor and/ or service provider, the bank has agreed to guarantee the refund of the said amount, in case the aforesaid goods and/ or services do not deliver to the satisfaction of IDMC Limited as per the terms and



conditions of the said purchase order(s)/ contract(s).

NOW THIS DEED OF GUARANTEE DOES WITNESSETH AS UNDER:

1. That in consideration of IDMC Limited having agreed to pay an advance of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_) to the vendor, the bank does hereby irrevocably guarantee and indemnify that if the vendor and/ or service provider fails to supply/provide to IDMC Limited the goods and/ or services as per the details, terms, and conditions contained in the said purchase order(s)/ contract(s), *supra*, the Bank shall, without demur, repay and indemnify IDMC Limited within seven (7) working days all such advances paid by IDMC Limited to the vendor and/ or service provider as the bank may be called upon to pay subject to a ceiling of Rs. \_\_\_\_\_ (Rupees \_\_\_\_\_);
2. That the guarantee furnished herein shall be realized and discharged the moment the vendor and/ or service provider supplies/ provides the equipment to the satisfaction of IDMC Limited, as per the details, terms and conditions contained in the said purchase order(s)/ contract(s);
3. That the bank shall not question any of the details, terms and conditions contained in the said purchase order(s)/ contract(s), *supra*, including but not limited to the amount of consideration agreed upon between IDMC Limited and the vendor and/ or service provider for the purposes of determining its acceptance of liabilities under this bank guarantee and forthwith accept the demand of IDMC Limited to determine this bank guarantee.
4. That at the written request of either IDMC Limited or the vendor and/ or service provider, the bank shall renew this bank guarantee before it's date of expiry.
5. That the Bank agrees that the amount hereby guaranteed shall be immediately due and payable to IDMC on serving the bank with a notice before the date of expiry or date of claim/ demand, whichever is earlier. The claim can be lodged by IDMC limited up to 45 days beyond the date of expiry or extended date of expiry.
6. This Bank Guarantee shall be subject to the law as applicable in India.
7. "In the event of invocation, the details to be sent to the branch address with branch email id \_\_\_\_\_ Marking a copy to our back-office email id \_\_\_\_\_."
8. Notwithstanding anything stated herein before:
  - a. The Bank's liability under this guarantee is restricted to Rs. \_\_\_\_\_/- (Rupees \_\_\_\_\_ only);



- b. This guarantee shall remain in force till \_\_\_\_\_ and;
- c. The Bank is liable to pay the guaranteed amount or any part thereof under this bank guarantee only if IDMC Limited serves upon the Bank a written claim/ demand on or before \_\_\_\_\_ (Date of Claim/ Demand) including 45 days of grace period from date of expiry.

IN WITNESS WHEREOF, the bank has signed on this \_\_\_\_\_ day of \_\_\_\_\_, 2026.

Signature of Bank Manager

## **7. Schedule Of Requirement**

**Design, Engineering, Manufacturing, Supply,  
Installation, Testing, Commissioning & Acceptance of**

**Dual Multi-fruit Processing Lines for fruit processing  
at a minimum capacity of 20000 kg/hr Each**



**Schedule of Requirement:**

<b>Pack No.</b>	<b>Description</b>	<b>Quantity</b>	<b>Completion Period</b>
<b>1</b>	Design, Engineering, Manufacturing, Supply, Installation, Testing, Commissioning & Acceptance of Dual Multi-fruit Processing Lines for processing the fruits such as Banana, Mango, Papaya, Tomato, and Guava, including all allied equipment, electrical systems, automation, structural works, and comprehensive services such as Project Engineering & Management, Training and AMC <b>specifically designed to handle fruits at a minimum capacity of 20,000 kg/hr Each as per the technical specifications as per the technical specifications</b> on single source responsibility basis at MDFVPL Project, Kuppam, Andhra Pradesh, India	1 Pack	<b>9 Months</b>

Note: Bidders must quote their prices for each item as mentioned in the broad schedule of quantity.

**Schedule of Quantity:**

The Dual Multi-fruit Processing Lines shall be supplied completely with all standard mountings, accessories, and tools necessary for safe and efficient operation, fully complying with the latest applicable codes and statutory regulations. The Dual Multi-fruit Processing Lines shall include all components specified herein.

It shall be the sole responsibility of the successful bidder to supply any components or items not explicitly mentioned in this specification or in their offer, if such components are required for compliance with statutory or regulatory provisions and process smooth operation. These additional components/items shall be deemed included within the bidder's scope of work, and no additional cost shall be entertained for the same.

The bidder shall, however, clearly identify in their offer any components or items not listed in this specification but considered necessary for safe, reliable, and efficient operation in accordance with the latest regulations. Prices for such additional components/items, if applicable, shall be furnished separately on an item-wise basis

The general technical specifications of the major components and the ancillary items described in the technical section and the equipment, its capacities and quantity proposed by the Purchaser is furnished in the design requirement and schedule of quantities are for the guidance of the supplier only. However, the Bidder has to get themselves familiarized/acquainted about the nature and the quantum of work involved and submit their offer without deviation in the basic configuration of the plant.

Bidder must agree to undertake the complete work and there is no exclusion whatsoever of any PART. It shall be understood that any minor work, which may not have been explicitly detailed but is necessary for the proper functioning of individual equipment or the plant as a whole, is included in the scope of work without any additional cost.

**Dual Multi-fruit Processing Lines**

<b>Technical Details Serial No.</b>	<b>Description</b>	<b>Quantity</b>	<b>UOM</b>
1	Scraped Surface Preheater	1	EA
2	Turbo Refiner	2	EA
3	Hot Break System	1	EA
4	Scraped Surface Evaporator	1	EA
5	Aseptic Sterilizer	2	EA
6	Forced circulation Evaporator	1	EA
7	Aseptic Filler Machine	2	EA
8	Web Aseptic Filler with Aseptic Tank	1	EA
9	Tomato Chopping pump	1	EA
10	Spare for 2-year operation	1	EA
11	Installation, Testing, Commissioning, acceptance & Training	1	Job
12	Non-Comprehensive AMC (minimum 4 Visits per annum & unlimited breakdown after warranty period) for 2 year	8	Job
13	Comprehensive AMC (minimum 4 Visits per annum & unlimited breakdown after warranty period) for 2 year	8	Job

Note: The above-mentioned Quantities are tentative and subject to confirmation during the detailed process review and may vary from the final scope.



## **8. Technical Specifications**

**Design, Engineering, Manufacturing, Supply,  
Installation, Testing, Commissioning & Acceptance of**

**Dual Multi-fruit Processing Lines for fruit processing  
at a minimum capacity of 20000 kg/hr Each**



**CONTENTS**

- A. INTRODUCTION**
- B. PROJECT SITE DETAILS**
- C. SCOPE OF WORK**
- D. DESIGN REQUIREMENT**
- E. DETAILS NEED TO BE FURNISH BY BIDDER**
- F. BATTERY LIMIT**
- G. PACKING**
- H. PERFORMANCE TESTS AND GUARANTEES**
- I. DELIVERY & TIMELINE**

**A. INTRODUCTION**

IDMC Limited is setting up a “Multi-fruit processing plant capable of converting fruits such as Banana, Mango, Papaya, Tomato, and Guava into their respective shelf-stable products including pulps, purees, pastes, and concentrates” on behalf of the MDFVPL (Mother Dairy Fruit & Vegetable Private Limited) for their Kuppam, Andhra Pradesh.

In order of above, it is proposed to set up a Dual Multi-fruit Processing Lines.

**B. PROJECT SITE DETAILS**

Site Location : MDFVPL Project, Kuppam  
District : Chittoor  
State : Andhra Pradesh, India  
Nearest Airport : Bengaluru  
Operation : 24 Hrs

	<b>Summer</b>	<b>Monsoon</b>	<b>Winter</b>
Ambient Dry Bulb Temperature in Deg.C	45	31.4	10.8
Ambient Wet Bulb Temperature in Deg.C	35	25.1	9.2

**Tropicalization** - All equipment / system / sub-system / instruments/ control system should be fully tropicalized in view of the hot and humid weather conditions prevailing at this site.

**C. SCOPE OF WORK**

It shall be understood that this is a complete job on single source responsibility basis. The scope of this contract shall include, but not limited to designing, manufacturing, supply, installation, testing and commissioning the complete System and allied equipment.

Schedule of major items and components of the proposed plant are broadly described under technical specification.

Any items not explicitly mentioned in the specifications/scope of the work but required for completion of supply, proper functioning and satisfactory performance of the system is included in the scope of work and shall be provided by the bidder without any extra claim.

The scope of work specifically includes the following:

- The scope of work shall be on a turnkey basis, covering design, supply, installation, testing, and commissioning of all related equipment, piping, electrical systems, instrumentation, automation, and structural works.
- The bidder must undertake the job in its entirety without exclusions. Any minor works not explicitly detailed but necessary for the proper functioning of the Dual Multi-fruit Processing Lines, or for achieving high-quality and efficient output, shall be deemed included at no additional cost.
- The bidder shall plan and execute the design, layout, selection of technology, and methodology of plant execution with full knowledge of efficient operations.
- Process flow diagrams, time schedules, mass flow diagrams, P&IDs, operating parameters, equipment details, and layouts shall be submitted by the bidder based on the offered system.
- The bidder shall furnish the complete requirement of utilities such as raw water, RO water, chilled water, hot water, steam, refrigerant, compressed air, oil and electrical power.
- The raw product shall be provided by the purchaser.
- General specifications of major components and ancillary items are described in the technical section. Capacities and quantities provided by the purchaser are indicative for comparison.
- It shall be assumed that the bidder is fully familiar with the nature of the product and the scope of work, and therefore shall not deviate from the basic design, functional requirements, or configuration of the plant
- The bidder shall be responsible for the proper positioning of the system and associated equipment on foundations, as well as all connections for piping, electrical systems, and earthing.
- Fruits, water, and power will be made available at the battery limit by the purchaser.



- The final packed product shall meet all applicable Indian food safety and quality standards.
- **All equipment shall be designed, engineered, supplied, and installed in accordance with prevailing international standards, including EHEDG or 3A sanitary Standards/USDA /FDA for smooth exporting of products and in compliance with ISO, HACCP, GMP, FSMS, and statutory Indian food and industrial safety regulations.**
- All Process equipment which have direct Food Contact shall be fabricated in stainless steel AISI 304/316 as per process & design requirement unless otherwise specified.
- The bidder shall ensure satisfactory performance and provide after-sales service and support for all bought-out items.
- The bidder shall impart comprehensive training to plant personnel on the operation and maintenance of the equipment.
- After commissioning, the bidder shall submit Access to PLC program, Detailed BOQ and consumable list, dead load, Normal Load and catastrophic load, as-built P&IDs, equipment layout drawings, SOPs for operation and maintenance, safety instructions, and Do's & Don'ts.
- The bidder shall submit a detailed preventive maintenance schedule and complete operating manuals at least two weeks before the start of commissioning.
- The bidder shall submit the “layout, GA Drawings, Process Flow Diagram (with flow, temperature and other parameters), product drawing, P & ID, Equipment/ instrument/electrical Data sheet, Automation architecture, details of electrical panel and cable, and a tentative schedule/Gantt chart/ L1 Schedule and a comprehensive list of all spare parts and special tools required for two years of continuous functioning” at the time of submitting offer.
- The manuals shall include:
  - Procedures for system start-up, commissioning, normal operation, and emergency operation.
  - Troubleshooting charts indicating operational issues, possible causes, and corrective actions.
  - As-built equipment drawings, electrical schematics, control wiring diagrams, and executed P&IDs.
- Manuals and drawings are to be supplied as follows:
  - 1 Sets of drawings and manuals in hard copy
  - 1 Sets of drawings and manuals in Pen Drive (softcopy – PDF Format)
  - 1 Sets of drawings in Pen Drive (softcopy - AutoCAD Format)

**D. DESIGN REQUIREMENT**

The fully automatic Dual Multi-fruit Processing Lines.

**Product Summary & Capacity**

Production Capacity (FG)								
Product		Rated Per Hour Capacity in MT	No of lines	To be used per Hour Capacity in MT	Effective Operational Hours/Day (minus CIP)	Season /Open days	Annual Targeted Capacity (MT)	FG Brix
Alphonso Mango		10.0	2	20.0	20	30	12,000	16-18
Totapuri Mango		10.0	2	20.0	20	50	20,000	14-16
Tomato Paste	Hot Break	3.0	1	3.0	20	100	6,000	28-30
Guava Puree		10.0	1	10.0	20	40	8,000	8 - 10
Banana conc.		3.0	1	3.0	20	30	1,800	30
Banana pulp		9.0	1	9.0	20	10	1,800	20
Papaya Conc.		4.0	1	4.0	20	30	2,400	25
<b>Total:</b>							<b>52,000</b>	

Fruit Handling Capacity							
Product	Yield	Rated Per Hour Capacity in MT	No of lines	To be used per Hour Capacity in MT	Effective Operational Hours/Day (minus CIP)	Season /Open days	Annual Targeted Capacity (MT)
Alphonso Mango	50%	20.0	2	40.0	20	28	22,400
Totapuri Mango	50%	20.0	2	40.0	20	48	38,400
Tomato	14.30%	21.0	1	21.0	20	100	41,958
Guava	60%	16.7	1	16.7	20	40	13,333
Banana - Conc.	33%	9.1	1	9.1	20	30	5,455
Banana - Pulp	45%	20.0	1	20.0	20	10	4,000



**Dual Multi-fruit Processing Lines**

Tender Ref. No.  
IDMC/ Sourcing &  
VD/ 2026-27/  
Enquiry/ 15

Papaya Conc.	20%	20.0	1	20.0	20	20	8,000
<b>Total:</b>							<b>13,356</b>

**Line wise Capacity**

<b>Line #1 : Banana Specific Line</b>			
<b>a</b>	<b>Product Requirements:</b>		<b>Description(s)</b>
	Specific Product	Line #1	<b>Main Product Banana Puree/Conc.</b>
	Line capable to run other fruits	Line #1	Mango/Guava/Papaya Pulp/Conc. along with Banana Puree/Conc.
<b>b</b>	<b>Raw Material Handling Capabilities</b>		
	Mango	Line #1	20 MTPH
	Guava	Line #1	17 MTPH
	Banana	Line #1	20 MTPH
	Papaya	Line #1	20 MTPH
<b>c</b>	<b>Target Yield%</b>		
	Mango	Line #1	50% single strength
	Guava	Line #1	60% without Grit
	Banana	Line #1	45% basis Pulp; 33% basis Concentrate
	Papaya	Line #1	50% basis Pulp; 20% basis Concentrate
<b>d</b>	<b>FG Output</b>		
	Bag in Box	20 L	Bag filling stand shall be provided by supplier
	Bag in Drum	220 L	Need not to be turning table type of filling conveyor
	BIN / Jumbo Pack	BIN	Filling head movement as per need of pulp filling to avoid stretch on bags

<b>Line #2 : Tomato Specific Line</b>			
<b>a</b>	<b>Product Requirements:</b>		<b>Description(s)</b>
	Specific Product	Line #2	<b>Main Product Tomato Paste</b>
	Line capable to run other fruits	Line #2	Mango/Guava/Papaya Pulp & Conc. along with Tomato Paste
<b>b</b>	<b>Raw Material Handling Capabilities</b>		
	Tomato	Line #2	21 MTPH



	Mango	Line #2	20 MTPH
	Guava	Line #2	17 MTPH
	Banana	Line #2	20 MTPH
	Papaya	Line #2	20 MTPH
<b>c</b>	<b>Target Yield%</b>		
	Tomato	Line #2	14.3% single strength
	Mango	Line #2	50% single strength
	Guava	Line #2	60% without Grit
	Banana	Line #2	45% basis Pulp; 33% basis Concentrate
	Papaya	Line #2	50% basis Pulp; 20% basis Concentrate
<b>d</b>	<b>FG Output</b>		
	Bag in Box	20 L	Bag filling stand shall be provided by supplier
	Bag in Drum	220 L	Need not to be turning table type of filling conveyor
	BIN / Jumbo Pack	1000 L	Filling head movement as per need of pulp filling to avoid stretch on bags



**Details of Equipments:**

**1. Scraped Surface Preheater:**

• **General Information**

Application Banana/Mango/Papaya/Guava  
Capacity: Minimum 10 MTPH  
Operation: Continuous (20 hrs./day)  
Ambient Temperature: 24–28°C  
Utility Power: 415 V ±10%, 3 Phase, 50 Hz  
Heating Media: Hot Water  
Heating Method: Indirect  
System Type: Scraped Surface Heat Exchanger (SSHE)

• **Functional Requirement**

The Scraped Surface Preheater is designed for continuous heating of banana / Mango/Papaya/Guava pulp to:

- Achieve rapid and uniform heating
- Prevent fouling and product burn-on
- Maintain product texture and quality
- Ensure controlled shear for viscous products
- Improve downstream processing efficiency

• **Design Requirement**

Capacity = min. 10 MTPH Pulp (2 x 5MTPH can be used both in series for Banana & and single in other Pulp)  
Heat Exchanger: Indirect heating by hot water as Scrap Surface Heat Exchanger (SSHE) suitable for meshed Banana Crush  
MOC: Product Contact SS -316/Utility Contact SS-304  
Heating: from 35 degree to 92+ degree (Banana crush)  
Isolation valve shall be provided between the stages.

**Process Design Data:**

<b>Parameter</b>	<b>Value</b>
Product	Banana/ Mango/Papaya/Guava
Capacity	Minimum 10 MTPH
Feed Temperature	35°C
Outlet Temperature	92°C +
Product Viscosity	High
Operation Mode	Continuous



• **General Design Requirements**

- Suitable for high viscosity products
- Hygienic food-grade design
- Continuous operation for 20 hrs/day
- CIP compatible
- No dead zones
- Insulated surfaces for safety

• **Equipment Details**

The system shall consist of:

- Scraped Surface Heat Exchanger
- Heating Medium System (Hot Water/steam)
- Product Recirculation Tank
- Drive System with Variable Speed
- Electrical Control Panel
- Instrumentation System
- Interconnecting Piping
- Skid Mounted Structure

• **Scraped Surface Heat Exchanger**

Quantity: 1 No

Type: supplier to confirm

Construction Features

<b>Component</b>	<b>Specification</b>
Product Contact Parts	SS 316L
Cylinder	Hygienic design
Scraper Blades	Food-grade
Shaft	SS 316
Seal	Mechanical Seal (Food Grade)
Insulation	Supplier to confirm
Mounting	Supplier to confirm

Functional Features

- Adjustable shaft speed (VFD controlled)
- Continuous scraping action
- High heat transfer efficiency
- Minimal fouling

• **Heating Medium System (Steam / Hot Water)**



• **Product Recirculation Tank**

Parameter	Specification
Material	SS 316
Design	Hygienic, drainable
Function	Buffering & flow stabilization
Outlet	Sanitary connection

• **Drive System**

- Motor: supplier to confirm
- Speed Control: VFD
- Function: Control scraping intensity and shear

• **Electrical Control Panel**

Parameter	Specification
Panel Material	SS 304
Protection	IP 54
Mounting	Floor Mounted

**Includes**

- VFD for scraper shaft
- Pump controls
- PID temperature controller
- HMI (12" Touch Panel)
- Alarm system
- Emergency stop
- SCADA compatibility

• **Instrumentation**

Instrument	Type
Temperature	Supplier to confirm
Pressure	Gauge
Flow	Supplier to confirm
Level	For tank

• **Piping & Fittings**

- SS 316 sanitary piping
- Tri-clamp fittings
- Hygienic valves
- Designed for CIP and low pressure drop



- **Skid Mounted System**

- SS 304 structure
- Compact footprint
- Pre-assembled & factory tested

Quantity: 1 EA

Note: The inclusion of this item is subject to confirmation during the detailed process review and may be excluded from the final scope.

## **2. Turbo Refiner:**

- **General Information**

Ambient Temperature: 24 to 28 Deg C

Utility: 415 V ±10 %, 3 Phase, 50 Hz ±5 %

Operation: 3 Shift × 20 Hour / Day

Application: Fruit Pulp Refining (Banana/Guava/Mango/Papaya/Tomato)

Capacity: Banana Line: Minimum 12 MTPH,

Capacity: Tomato Line: Minimum 20 MTPH

Total Line: 2 No

Quantity: 2 No.

- **Functional Requirement**

Turbo Refiner for Fruit Pulp Handling – 2 No.

Continuous refining, screening, and separation of fruit pulp to remove seeds, peel, and coarse fibres from (Banana/Guava/Mango/Papaya/Tomato) pulp at rated capacity of minimum 12 MTPH for banana line and minimum 20 MTPH for tomato line.

The turbo refiner shall ensure:

- Efficient separation of coarse and fine pulp
- Uniform pulp consistency
- High yield with minimum pulp loss
- Easy maintenance and quick screen replacement.

- **Design Requirement**

**For Banana line:**

Capacity = Minimum 12 MTPH on single strength tropical fruit pulp (Mango.

Banana, Guava, Papaya)

Provision of online Paddle Gap Setting arrangements is must.



MOC: SS304

Sieve sizes: 0.7 mm; (0,6 mm as spare)

Note: Preferably single stage but can be accepted two stages as per OEM wrt capacity match.

**For Tomato line:**

Capacity = Minimum 20 MTPH on Tomato Juice and Minimum 12 MTPH on single strength tropical fruit pulp (Mango, Banana, Guava, and Papaya)

Provision of online Paddle Gap Setting arrangements is must.

MOC: SS304

Sieve sizes: 0.7 mm; (0.5 mm & 1.0 mm as spare)

Note: Preferably Single stage but can be accepted two stages as per OEM wrt capacity match.

• **Machine Construction**

- Main Body: Horizontal cylindrical type; easily openable for inspection and cleaning.
- Material of Construction (MOC):
  - Refiner body and frame: AISI 304 stainless steel
  - Rotor paddles and perforated sieve: AISI 316 stainless steel or high-resistance alloy
- Support Structure: Heavy-duty framework, vibration-resistant, with optional stainless steel structure and handrails for operator safety.
- Access: Front-opening door with safety interlocks for inspection..

• **Rotor & Sieve**

- Rotor: High-speed rotor with interchangeable radial/movable paddles, designed for uniform spreading of pulp on sieve.
- Rotor Speed: supplier to confirm (adjustable depending on product and desired extraction efficiency)
- Sieve:
  - Conical perforated design for self-cleaning and optimal juice extraction
  - Standard perforations:
    - For banana line: : Sieve sizes 0.7 mm & (0,6 mm as spare)
    - For tomato line: Sieve sizes: 0.7 mm; (0.5 mm & 1.0 mm as spare)
  - Easily removable and interchangeable; typically, 1 working + 2 spares
- Adjustable Rotor-Sieve Distance: Allows real-time modification of squeezing intensity without stopping the machine

• **Drive & Power**



- Motor: supplier confirm
- Installed Power: Supplier To Confirm
- Shaft & Bearings: Chrome steel drive shaft with double ball-bearing supports for durability
  
- **Pulp & Juice Handling**
  - Discharge Hopper: Guides refined pulp into collection tank
  - Juice/Drainage Valves: For controlled discharge and sampling
  - Optional Nitrogen Saturation: Prevents oxidation during juice extraction
  - Pumps: To transfer pulp to downstream processes (evaporator or sterilizer)
  - Capacity: Banana Line- Minimum 12MTPH and cold break
  - Line- 20MTPH
  - Power: Supplier to confirm
  
- **Cleaning & Maintenance**
  - CIP (Clean-in-Place) System: Automatic spraying and washing cycles for hygiene
  - Inspection: Rotor and sieve easily extractable; front access for cleaning and maintenance
  
- **Control & Instrumentation**
  - Control Panel: Stainless steel (AISI 304), IP54 protection
    - Pilot lamps, fuses, and control elements for rotor, refiner, and juice collection system
    - Adjustable operation settings (speed, rotor-sieve distance, alarms)
  - Monitoring: Real-time process adjustment without stopping production
  
- **Auxiliary Components**
  - Juice Collecting Tank: Stainless steel (AISI 304), capacity – (supplier to confirm), complete with valves and piping
  - Additional Screens: Optional for different particle sizes or higher juice yield
  - Safety: Non-slip flooring, handrails, emergency stop, and interlocked access
  
- **Scope of Supply**
  - Turbo Refiner Machine Complete Assembly
  - Refiner Body & Frame (SS 304 Construction)
  - Rotor Assembly with Adjustable Paddles (SS 316)
  - Interchangeable Perforated Sieves (Multiple sizes as specified)



- Main Drive Motor with Coupling & Guard
- Gearbox / Drive Arrangement
- Online Paddle Gap Adjustment Mechanism
- Feed Inlet Hopper & Discharge Hopper
- Juice / Pulp Collection Arrangement
- Product Transfer Pumps
- CIP System Provision (Spray nozzles)
- Local Control Panel (SS 304)
- VFD for speed control
- Instrumentation (Temperature, Pressure, basic monitoring)
- Structural Support Frame with Anti-Vibration Mounts
- Safety Guards, Interlocks & Emergency Stop
- Set of Standard Sieves

Quantity: 2 EA

### 3. Hot Break System:

- **General Information**

- Ambient Temperature- 24 to 28 degree C
- Application: Tomato Pulp / Paste Processing
- Operation: Continuous
- Plant Operation: 3 Shifts × 20 Hours / Day
- Utility Power Supply: 415 V ±10 %, 3 Phase, 50 Hz ±5 %
- Installation/Type: Shall be vertical type fitted on FCE platform itself
- Quantity- 1 No

- **Functional Requirement**

Hot break system for pulp plant - 1 No

#### **Capacity & Process Parameters**

- Product Handled: Tomato Crush
- Feed Capacity: Minimum 21 MTPH
- Initial Feed Temperature: 30 °C
- Output Temperature:95 °C (Settable)
- Specific Gravity of Feed: (supplier to confirm)
- Hot Break Holding Temperature: (supplier confirm)
- Recirculation Flow Rate: Supplier to confirm
- The system shall preserve organoleptic characteristics of tomato pulp.
- Heating shall be achieved by continuous recirculation of tomato crush through a heat exchange.
- Hot tomato juice shall be continuously discharged to the Turbo Refiner.
- Provision of fully automatic CIP system.
- Operation Mode: Continuous



- Design shall minimize product residence time while ensuring effective enzyme deactivation.
- **Design Requirement**  
Minimum 21 MTPH Tomato Crush handling  
Temperature: 95 deg C output  
MOC: SS304 (preferably vertical type fitted on FCE platform itself)
- **Major Equipment Components:**
  - Hot Break Tank – (Supplier to confirm)**
    - Function: Holding and recirculation of tomato mass at high temperature
    - MOC: SS 304
    - Insulated and suitable for high-temperature operation
  - Recirculation Pump – (Supplier to confirm)**
    - Function: Continuous circulation of tomato crushes through heat exchanger
    - MOC (Product Contact): SS 316
    - Suitable for high flow rate and fibrous product
  - Product Transfer Pump – (Supplier to confirm)**
    - Function: Transfer of hot tomato juice to Turbo Refiner
    - MOC (Product Contact): SS 316
  - Heat exchanger / –(Supplier to confirm)**
    - Design: supplier to confirm
    - Function: Heating of tomato crush without blockage due to peel or particles
    - Detachable ends on both sides for cleaning and inspection
    - Sight glass provided for condensate observation
  - Steam & Condensate System – (Supplier to confirm)**
    - Steam control valves
    - Condensate outlet valves
    - Required piping, fittings, and accessories
  - Instrumentation & Control Panel –**
    - PLC-based instrument cum electrical control panel
    - VFD provided for all product pumps
    - Instruments include:
      - Pressure gauges
      - Temperature transmitters
      - VFDs for speed and flow control
      - Designed for energy-efficient operation



**Structure –**

- Extended structure from evaporator / FCE platform
- Suitable for mounting Hot Break system, pumps, and heater

• **Scope of Supply**

- Complete Assembly of Hot break system
- Hot Break Tank (SS 304, insulated)
- Heat exchanger
- Recirculation Pump (SS 316 – suitable for fibrous product)
- Product Transfer Pump (SS 316)
- Steam Control Valve & Steam Trap
- Condensate System with required valves & fittings
- PLC Based Control Panel with HMI (SS Enclosure)
- VFDs for all product pumps
- Temperature & Pressure Instruments
- CIP Provision (Spray balls, valves & connections)

Quantity: 1 EA

**4. Scraped Surface Evaporator:**

• **General Information**

Ambient Temperature: 24 to 28 Deg C  
Utility: 415 V ±10 %, 3 Phase, 50 Hz ±5 %  
Operation: 3 Shift × 20 Hour / Day  
Application: Fruit Pulp Processing (Banana)  
Quantity: 1 No.

• **Functional Requirement**

Application: Evaporation and concentration of high viscosity Banana.

Design Capacity:

- Output Capacity: 3 MTPH (Banana Concentrate output)
- Evaporation Capacity: 1500 LPH ( 1500 kg/hr. water removal)

Operation: Continuous – 20 Hours per day  
Shift Pattern: 3 Shift Operation

Process Duty:

The Scraped Surface Evaporator (SSE) is designed to concentrate fruit pulp by controlled evaporation under vacuum conditions. The rotating scraper



mechanism continuously removes product film from heated surface to prevent burning, fouling and product degradation. CIP compatible hygienic design

**Operating Conditions:**

- Feed Type: Pre-heated fruit pulp
- Feed Temperature: (supplier to confirm)
- Feed Brix: 20°Brix
- Final Brix: 30°Brix
- Vacuum Level: (supplier to confirm)
- Steam Pressure: supplier to confirm
- Feed Variation: ±20%
- Continuous Duty: Suitable for 20 hrs/day

• **Design Requirements:**

1500 LPH water evaporation Capacity (i.e. 3 MT/Hr. Banana Concentrate Output)

Inlet: 20 Brix

Outlet: 30 Brix

**Mechanical Construction**

Type: Scraped Surface Evaporator (Supplier to confirm)

Construction: Fully enclosed hygienic design suitable for food applications

Major Components:

Evaporation Body with Steam Jacket

- Rotating Shaft with Scraper Blades
- Vapour Separator
- Steam Inlet & Condensate Outlet
- Vacuum Connection Nozzle
- Feed Inlet Assembly
- Concentrated Product Outlet

• **Materials of Construction (MOC):**

Product Contact Parts – SS 316 (Preferred for Banana)

Evaporator Shell – supplier to confirm

Steam Jacket – supplier to confirm

Shaft – supplier to confirm

Scraper Blades – supplier to confirm

Vapour Separator – supplier to confirm

External Frame – supplier to confirm

Fasteners (Product Contact) – supplier to confirm

Gaskets & Seals – supplier to confirm



- **Surface Finish:**

Product Contact Surface Finish: supplier to confirm  
All welds ground and polished  
External industrial finish  
Rotor & Shaft Assembly: supplier to confirm  
Dynamically balanced shaft  
Replaceable scraper blades  
Heavy-duty bearings (SKF/FAG or equivalent)  
Food grade mechanical seal  
Grease lubricated bearing housing

- **Heating System**

- Heating Medium: Saturated Steam
- Steam Pressure: supplier to confirm
- Steam Control Valve with Pressure Gauge
- Steam Trap Assembly
- Provision for Condensate Recovery

- **Drive & Electrical System**

- Motor Type: supplier to confirm
- Motor Rating: supplier to confirm
- Voltage: 415V ±10%
- Frequency: 50 Hz
- Protection: IP55 or Higher
- Insulation Class: supplier to confirm
- Starter: VFD Recommended
- Emergency Stop & Overload Protection

- **Performance Parameters**

- Evaporation Capacity: 1500 LPH
- Output Capacity- 3MTPH
- Uniform product consistency
- Minimal product loss
- Noise Level <85 dB at 1 meter
- Stable vibration within limits

- **Scope of Supply**

- Main Drive Motor
- Complete Scraped Surface Evaporator Assembly



- Vapour Separator
- Steam Control Valve & Steam Trap
- Base Frame with Anti-Vibration Pads
- Local Control Panel (SS Enclosure)
- Temperature, Pressure & Vacuum Gauges
- Foundation Bolts

Quantity: 1 EA

Note: The inclusion of this item is subject to confirmation during the detailed process review and may be excluded from the final scope.

### **5. Aseptic Sterilizer:**

- **General Information**

Ambient Temperature: 24 to 28 °C

Utility: 415 V ±10%, 3 Phase, 50 Hz ±5%

Operation: 3 Shift × 20 Hours / Day

Application: Fruit Pulp Processing (Mango / Banana / Guava / Tomato / Papaya)

Quantity: 2 Nos.

- **Functional Requirement**

Application:

Continuous sterilization of fruit pulp (Mango, Banana, Guava, Tomato, Papaya) for aseptic bulk packaging.

Design Capacity:

- For Tomato Line Capacity: 10 MTPH
- For Banana Line Capacity: 10 MTPH
- Suitable for medium to high viscosity products with fiber content

Operation:

Continuous operation for 20 hours/day under fully automatic PLC control.

Typical Operating Conditions:

- Feed Temperature: supplier to confirm
- Sterilization Temperature: supplier to confirm
- Holding Time: supplier to confirm
- Product Outlet Temperature: supplier to confirm
- Design Pressure: Supplier to confirm

- **Design Requirement:**

- **For Banana line:**

Capacity: 10 MTPH wrt single strength Mango pulp



IMPORTANT: Sterilizer shall be suitable to run 10 MTPH Acidified Banana Puree/3 MTPH Banana Concentrate. (For more information please refer the production capacity finish good table)

**For tomato line:**

Capacity: 10 MTPH wrt single strength Mango pulp (& 3 MTPH on 28 Brix Hot Break Tomato Paste)

IMPORTANT: Sterilizer shall be suitable to run at reduced capacity for high viscous material of 3 MTPH Tomato Paste. (For more information please refer the production capacity finish good table)

**Recommended System:**

Tubular Type Aseptic Sterilizer (Multi-tube)

**Design Basis:**

- Suitable for high viscosity and fibrous products
- Capable of handling semi-abrasive fruit pulps
- Continuous and hygienic operation
- Integrated deaeration and homogenization
- Uniform heat treatment with minimal product degradation

**• Process Parameters**

Parameter	Specification
Product	Mango, Banana, Guava, Tomato, Papaya
Plant Capacity	10 MTPH (for banana line), 10 MTPH (for Tomato line)
Product Type	Natural pulp / puree / concentrate
Viscosity Range	Medium to high viscosity
pH Range	Supplier to confirm
Final Packaging	Aseptic bags (20L / 200L / 1000L)
Operation Mode	Continuous
Automation Level	Fully automatic

**• Mechanical Construction**

Type: Tubular Aseptic Sterilizer (Concentric / Multi-tube Heat Exchanger)

Quantity: 2 Nos.

**Major Components:**

- Product feeding tank with deaeration system
- Positive displacement
- High-pressure homogenizer : 1 No ( only for banana line)
- Tubular heat exchanger (heating, holding, cooling sections)
- Hot water generation system



- Cooling water system
- Product diversion and back-pressure system
- Aseptic valve network
- PLC-based control panel
- Integrated CIP system

• **Materials of Construction**

- Product Contact Parts: SS 316 / 316L
- Non-contact Parts: SS 304
- Holding Tube: SS 316L
- Gaskets: Food-grade
- Structural Frame: SS 304
- Insulation: supplier to confirm

• **Product Feeding Tank / Deaerator**

Parameter	Specification
Material	SS 304 / SS 316L (product contact)
Design	Supplier to confirm
Operation	Supplier to confirm

Features:

- Vacuum vessel for air removal
- Product distribution system
- Agitator for uniform mixing
- Level transmitter with high/low alarms
- CIP spray ball provision
- Vacuum generation and control system

• **Product Feed Pump**

Type: Supplier to confirm

Material: SS 316

Control: Variable frequency drive (VFD)

Seal: Supplier to confirm

Requirement:

Pump shall be suitable for handling high-viscosity and fibrous pulp without shear damage.

• **Piston pump: supplier to confirm : 1 No ( only for tomato line)**

• **Homogenizer / High Pressure Pump: 1 No (only for banana line)**

Parameter	Specification
Type	Supplier to confirm
Operating Pressure	Supplier to confirm



Flow	Variable
Application	Product homogenization and pressure boosting

Features:

- Self-aligning pistons
- Overpressure protection
- Suitable for semi-abrasive products

• **Heating & Cooling System**

**Heating System:**

- Medium: Pressurized hot water
- Heating source: Steam

**Cooling System:** supplier to confirm

**System Components:**

- Heat exchanger for hot water generation
- Expansion tank with safety valve
- Water circulation pump
- Steam control and condensate system

• **Tubular Heat Exchanger**

Parameter	Specification
Type	Supplier to confirm
Material	SS 316L (product side)
Design Pressure	Supplier to confirm
Design Temperature	Supplier to confirm
Heating Medium	Hot water / Steam
Heat Recovery	Provided

• **Holding Tube**

Parameter	Specification
Material	SS 316L
Insulation	Supplier to confirm
Holding Time	Supplier to confirm
Design	Hygienic
Material	SS 316L



- **Cooling Section**

**Cooling Methods:**

- Cooling water
- Chilled water

**Features:**

- Two-stage cooling system
- Hygienic tubular design
- Controlled cooling to final outlet temperature
- Outlet Temperature: supplier to confirm

- **Product Diversion System**

Application: Automatic diversion of product during abnormal process conditions.

Components:

- Back pressure valve
- Aseptic valves
- Cooling provision for diverted product

- **Valves and Instrumentation**

Product Valves:

- Aseptic valves
- Single seat valves
- Butterfly valves
- Non-return valves

Media Valves:

- Steam control valves
- Cooling water valves
- On-off control valves
- Steam traps

Instrumentation:

- Temperature indicators and transmitters
- Pressure indicators and transmitters
- Electromagnetic flow meter

Note: All instruments in contact with product shall be calibrated and suitable for hygienic applications.

- **Automation & Control System**

- PLC-based control system
- Touch screen HMI (minimum 15")



- Fully automatic operation
- Data logging capability
- Industrial communication interface
- Remote monitoring capability

**Control Panel:**

- Stainless steel enclosure
- Protection: IP55 or higher
- Integrated power and control components
- Proper cable management and ventilation

● **CIP & SIP System**

**CIP System:**

- Suitable for caustic and acid cleaning
- Hot water rinsing
- Recirculation cleaning system

**SIP System:**

- Steam sterilization capability
- Fully automatic sterilization cycle

● **Performance Parameters**

- Continuous operation capability
- Rated capacity: 10 MTPH (for Banana line), 10 MTPH (Tomato line)
- Product outlet temperature: supplier to confirm
- Suitable for viscous and fibrous products
- Uniform heat treatment with minimal product degradation

● **Utility Requirements**

<b>Utility</b>	<b>Requirement</b>
Steam	Supplier to confirm
Cooling Water	Supplier to confirm
Chilled Water	Supplier to confirm
CIP Water	Supplier to confirm
Compressed Air	Supplier to confirm
Installed Power	Supplier to confirm

● **Scope of Supply**

Design, manufacture, supply, installation, and commissioning of complete aseptic sterilization system including:

- Product feeding and deaeration system
- Feed pumps and homogenizer



- Tubular sterilizer (heating, holding, cooling)
- Product diversion system
- Cooling system
- Complete piping and valve network
- CIP system
- Automation and control panel
- All field instruments and accessories

Quantity: 2 EA

## **6. Forced circulation Evaporator:**

- **General Information**

Ambient Temperature: 24 to 28 Deg C

Utility: 415 V ±10%, 3 Phase, 50 Hz ±5%

Operation: 3 Shift x 20 Hour / Day

Application: Pulp Concentration (Tomato/Guava/Mango/Papaya/Banana)

Quantity: 1 No.

- **Process Description**

Application: Evaporation and concentration of  
Tomato/Mango/Banana/Guava/Papaya

Design Capacity: 18000 LPH water evaporation

Operation: Continuous – 20 Hours per Day

Shift Pattern: 3 Shift Operation

- **Process Duty:**

The Forced Circulation Evaporator (FCE) is designed to concentrate fruit pulp by controlled evaporation under vacuum conditions. The rotating scraper mechanism continuously removes product film from heated surface to prevent burning, fouling and product degradation.

- **Functional Requirement**

Continuous concentration of Pulp using a multi-effect viscos film evaporator suitable for viscous food products. The evaporator shall ensure hygienic processing, stable vacuum evaporation, minimum thermal degradation and continuous operation at rated capacity.

- **Design Requirement:**

18000 LPH water evaporation Capacity,

3 Effect Forced Circulation Evaporator (FCE): Can be used as 1-Effect or 2-Effect or 3-Effect.

Vapour Condensate shall be Shell & Tube/PHE /or any which should not mix condensate with cooling tower water.



**Evaporator Design**

- Type: Multi Effect Evaporator
- Configuration: 3 Effects (Forced Circulation + Mix Flow)
- Operation: Continuous Vacuum Evaporation
- Turn Down Possibility: supplier to confirm

**Process Parameters**

- Feed Temperature (Inlet): supplier to confirm
- Feed Pressure (Inlet): supplier to confirm
- Pasteurization Temperature: supplier to confirm
- Holding Time: supplier to confirm
- Outlet Temperature: supplier to confirm
- Outlet Pressure: supplier to confirm

**Capacity & Performance**

Concentrate Flow Rate: Minimum 3,000 LPH

Evaporation Rate: 18,000 LPH

Operation: Continuous

Product- Tomato/Guava/mango/Papaya/Banana

**Material of Construction (MOC)**

Food Contact Parts: SS316

Non-Contact Parts: Carbon Steel / OEM Standard

Surface Finish (Product Contact):  $\leq 0.8 \mu\text{m Ra}$

Construction: Hygienic, suitable for fruit processing

**Major Equipment Components**

- A) Product Feed Tank – OEM to confirm.
- B) Product Feed Pump – OEM to confirm.
- C) Heat Exchangers (Mix Flow) – OEM to confirm.
- D) Plate Condenser – OEM to confirm.
- E) Cyclonic Separator Vessels – OEM to confirm.
- F) Ducting – OEM to confirm.
- G) Process Piping – OEM to confirm.
- H) Recirculation Pumps – OEM to confirm.
- I) Condensate Transfer Pumps – OEM to confirm.
- J) Positive Displacement Pumps – OEM to confirm.
- K) Concentrate Discharge Pump – OEM to confirm.
- L) Vacuum Pump System – OEM to confirm.

**Scope of Supply**

1. Product Feed Tank with instrumentation
2. Product Feed Pump



3. Heat Exchangers
4. Plate Condenser
5. Cyclonic Separator Vessels
6. Vacuum ducting system
7. Hygienic process piping
8. Recirculation pumps
9. Condensate transfer pumps
10. Positive displacement pumps
11. Concentrate discharge pumps
12. Vacuum pump system

**Details:**

<b>Model</b>	<b>Supplier to confirm</b>
Capacity	18000 LPH water evaporation
Type	3 Effect Forced Circulation Evaporator
Product	Tomato/Guava/mango/Papaya/Banana
Operation	Continuous
Food Contact Parts	SS 316
Quantity	1
Power Supply	415 V, 3 Phase, 50 Hz
Protection	IP55 / IP65

Quantity: 1 EA

**7. Aseptic Filler Machine:**

• **General Information**

Temperature: 24 to 28 Deg C

Utility: 415 V ±10%, 3 Phase, 50 Hz ±5%

Operation: 3 Shift x 20 Hour / Day

Application: Compatible to run 20L & Jumbo BIN 1000 L pack along with 200L Aseptic Bag packing with required motorized Barrels Pallets/Bin Conveying system with/without turning tables as per OEM layout Drawing)

Quantity: 2 Nos.

• **Product Characteristics**

Product: Banana/ Tomato /Mango/Guava/Papaya

Filling Temperature: As per aseptic process requirement

Product Viscosity: Suitable for medium to high viscosity fruit pulp

Filling System: Volumetric filling through electromagnetic flow meter with aseptic valve



- **Functional Requirement**

The system shall provide continuous volumetric aseptic filling of fruit pulp through electromagnetic flow meter-controlled dosing system with aseptic filling valve.

Machine shall perform the following automatic filling cycle:

1. Sterilization of filling valve
2. Sterilization of cap
3. Automatic cap opening
4. Product filling
5. Fully Automatic CIP.

The filling operation shall occur inside a steam sterilized aseptic chamber to maintain sterility. Machine shall be capable of filling:

The system shall automatically stop filling if aseptic conditions are not satisfied.

- **Design Requirement:**

Compatible to run 20L & Jumbo BIN 1000 L pack along with 200L Aseptic Bag packing with required motorised Barrels Pallets/Bin Conveying system with/without turning tables as per OEM layout Drawing)

- **General Design**

Design: Double-head aseptic filling machine (Supplier to confirm)

The filler shall include two independent aseptic filling heads mounted on a heavy-duty supporting frame.

Each filling head shall include:

- Aseptic filling valve
- Spout sterilization chamber
- Steam barrier
- Cap sterilization system
- Spout gripping mechanism

- **Head Movement:**

Motorized vertical movement of filling head to accommodate different container heights.

Movement shall allow:

- Drum filling
- Palletized drum filling
- Bin / octabin filling

The lifting system shall include adjustable speed control to maintain uniform bag filling.



Horizontal movement system shall be provided to allow filling of four drums on pallet.

- **Structure:**

Heavy-duty stainless steel supporting frame with integrated operator platform. The machine frame shall include:

- Operator platform
- Access ladder
- Safety handrails

- **Material of Construction**

Component Material

Product Contact Parts: Stainless Steel AISI 316L

Non-Product Contact Parts: Stainless Steel AISI 304

Product Piping: Stainless Steel AISI 316L sanitary piping

Frame and structure: Supplier to confirm

- **Surface Finish:**

Product contact surfaces shall have sanitary finish suitable for aseptic food processing.

Surface roughness:

Product contact surfaces: Supplier to confirm

Weld finishing: Supplier to confirm

All materials shall be food grade and suitable for aseptic processing.

- **Aseptic & Sterilization System**

Steam Sterilization: Integrated SIP system for aseptic valve and filling path

Sterility Control: Automatic sterilization cycle before production

Flexible Aseptic Hose: For multiple packaging formats (drum, bag, octabin)

Sterility Monitoring: Temperature and time-controlled sterilization assurance

- **Scope of Supply**

- Aseptic filling machine (Supplier to confirm)
- Flexible aseptic filling pipe arrangement
- Flow meter-controlled volumetric filling system
- Motorized vertical head positioning system
- PLC control panel with HMI
- Steam sterilization (SIP) assembly
- CIP assembly
- Electrical and pneumatic components



- Necessary safety guards and interlocks

Quantity: 2 EA

### **8. Web Aseptic Filler with Aseptic Tank:**

- **General Information**

Utility: 415 V ±10 %, 3 Phase, 50 Hz ±5 %

Operation: Continuous (20 hrs./day)

Application:

Product Type: Tomato/Mango/Banana/Guava/Papaya

Compatible to run 3/5/20L Aseptic Bag

Capacity: 500 Bags/Hr.@ 5 L

Total Quantity: 1 No

System Type: Aseptic Web Filling System with optional aseptic buffer tank

- **Functional Requirement**

#### **Aseptic Filling System**

The aseptic filler is a pre-assembled, factory-tested unit designed for sterile filling operations.

#### **Functions:**

- Filling of pre-sterilized bags in aseptic conditions
- Maintaining sterility using hot/cold aseptic barriers
- Compatibility with different cap types
- Ensuring accurate and hygienic filling

#### **Features:**

- Plug-and-play system
- Automatic bag filling
- Aerosol disinfectant system (for low-acid products)
- Suitable for continuous operation

#### **Aseptic Buffer Tank**

Installed between sterilizer and filler.

#### **Functions:**

- Prevents recirculation through sterilizer
- Maintains product quality
- Acts as buffer during flow fluctuations
- Ensures continuous filling operation

- **Design Requirement**

Compatible to run 3/5/20L Aseptic Bag



Capacity: 500 Bags/Hr@ 5 L  
to be connected with any sterilizer as slave filler with suitable capacity Aseptic Tank

• **Aseptic Web Filler**

Parameter	Specification
Filling Valve Size	supplier to confirm
Filling Capacity	500 Bags/Hr.@ 5 L
Inlet Pressure	Supplier to confirm
Feed Flow Rate	Supplier to confirm

• **Filling Speed (Automatic Mode)**

Bag Size	Filling Speed
3 Liters	Supplier to confirm
5 Liters	Supplier to confirm
20 Liters	Supplier to confirm

• **Aseptic Tank**

Parameter	Specification
Capacity	Supplier to confirm
Internal Finish	Mirror polished (Ra < 0.6 µm)
External Finish	Scotch-brite
Bottom Design	Conical
Design Pressure	Supplier to confirm
Design Vacuum	Supplier to confirm
Inlet Temperature	Supplier to confirm
Certification	PED

• **General Design**

- Hygienic design suitable for food processing
- CIP compatible system
- No dead zones
- All product contact parts SS 316
- Controlled overpressure using sterile air/nitrogen
- Fully enclosed sterile system

• **3.5 Scope of Supply**

1. Aseptic filler complete assembly
2. Aseptic buffer tank



3. Filling valve system
4. Sterile air/nitrogen system
5. Product inlet/outlet connections
6. Control system with instrumentation
7. Temperature and pressure sensors
8. Safety guards and covers
9. Supporting skid/frame

- **3.6 Material of Construction (MOC)**

<b>Component</b>	<b>Material</b>
Product Contact Parts	SS 316
Non-contact Parts	SS 304 / Carbon Steel
Surface Finish	Supplier to confirm

Quantity: 1 EA

Note: The inclusion of this item is subject to confirmation during the detailed process review and may be excluded from the final scope.

**9. Tomato Chopping pump:**

- **Design Requirement**

Capacity = 21 MTPH Tomato crushing before Hot Break  
MOC: SS304

Quantity: 1 EA

Note: The inclusion of this item is subject to confirmation during the detailed process review and may be excluded from the final scope.

**10. Spare for 2-year operation**

The Bidder shall supply all necessary spare parts required to ensure two years of continuous and reliable operation of the Dual Multi-fruit Processing Lines.

Quantity: 1 EA

Note: The inclusion of this item is subject to confirmation during the detailed process review and may be excluded from the final scope.



**11. Non-Comprehensive AMC (minimum 4 Visits per annum & unlimited breakdown after warranty period) for 2 year:**

The Bidder representatives (technical and skilled engineer) shall attend the project for continuous five working days in each quarter throughout two year after warranty period. These visits shall cover meetings, training, equipment adjustment, & servicing. These visits shall not cover guarantee work, which shall be undertaken separately.

The objectives of these visits are intended to ensure that the efficiency of the plant is maintained at the optimum level and

- To help improve operating and maintenance procedures.
- To keep the plant adjusted for optimum energy efficiency, product quality and minimum product losses.
- To arrange for service visits by specialists to inspect, service and carry out reports.
- To carry-out and audit of plant operating efficiency at regular intervals.
- In case of any breakdown except above mentioned 4 visits, bidder to plan visit on emergency basis upon intimation from purchaser during the whole AMC period

Note:

- The no. of skilled technical engineer deployed shall be decided by the bidder, and all expenses during visit shall be borne by bidder.
- The inclusion of this item is subject to confirmation during the detailed process review and may be excluded from the final scope.

**12. Comprehensive AMC (minimum 4 Visits per annum & unlimited breakdown after warranty period) for 2 year:**

The Bidder representatives (technical and skilled engineer) shall attend the project for continuous five working days in each quarter throughout two year after warranty period. These visits shall cover meetings, training, equipment adjustment, & servicing. These visits shall not cover guarantee work, which shall be undertaken separately.

The objectives of these visits are intended to ensure that the efficiency of the plant is maintained at the optimum level and

- To help improve operating and maintenance procedures.
- To keep the plant adjusted for optimum energy efficiency, product quality and minimum product losses.



- To arrange for service visits by specialists to inspect, service and carry out reports.
- To carry-out and audit of plant operating efficiency at regular intervals.
- In case of any breakdown except above mentioned 4 visits, bidder to plan visit on emergency basis upon intimation from purchaser during the whole AMC period
- Any Parts required for preventive maintenance and in breakdown is in scope of bidder, and no additional charges to be payable for visit charges in case of part replacement.

Note :

- The no. of skilled technical engineer deployed shall be decided by the bidder, and all expenses including parts during visit shall be borne by bidder.
- The inclusion of this item is subject to confirmation during the detailed process review and may be excluded from the final scope.

**13. Installation, Testing, Commissioning, acceptance & Training****Design Qualification (DQ)**

Design qualification (DQ) for the complete system with all its components, is to be prepared by bidder and submitted to purchaser for approval. DQ document should comprise of Detailed Design Calculations, Equipment GA drawing, instrumentation details and detailed P&ID etc. Design code for all fabricated items needs to be mentioned in the documents as per applicable standards.

Quality Assurance Plan (QAP) which includes material inspection, testing, Fabrication shall be submitted to purchaser for approval

**Installation Qualification (IQ)**

Installation Qualification shall include the following activities:

- Preparation of IQ protocol (which includes correct component selection, installation as per OEM, connection of all connected utilities, use of approved skilled manpower, approved quality consumables, compliance to BEP and statutory requirements) shall be done by Bidder and submitted for approval.
- After completion of installation, the successful Bidder shall check /verify whether installation of each and every component of the plant is as per approved layout, P& ID drawings and as per order specifications.
- The scope also includes the successful Bidder shall tag mark / neatly type lettering Name of equipment, capacity, direction flow, etc on major component, piping.

**Operational Qualification (OQ)**

The successful Bidder shall submit OQ & PQ documents, after approval of DQ & IQ documents, as per approved protocol.

OQ document should log/ record data during initial operations for the following:

- Duty/ capacity range (with Max & min)
- Operating conditions (ambient / room condition)
- Inlet & outlet product flow conditions.
- Safety checks

**Performance Qualification (PQ)**

After the system has been stabilized, the successful bidder shall measure / record actual performance parameters for all equipment, as indicated in the OQ. PQ should conform to the intended system performance as per order/



design (with necessary calculations if any). The test readings in general shall be taken by the supplier in the presence of client & purchaser representative.

All report formats (protocol) and acceptance criteria should be approved by purchaser & client adequately in advance of starting test. All instruments should be calibrated and certificate copy should be attached with reports.

## **PROJECT MANAGEMENT**

### **Time Schedule**

The project execution shall be time-bound as per the mutually agreed time schedule which would not exceed date mentioned in 'DELIVERY & TIMELINE'

The Project Manager will provide the Purchaser's Project in charge with monthly progress reports which clearly indicate the actual Vs. planned progress and the new likely completion dates of supply, erection, commissioning and performance trials.

The project staffing pattern shall be submitted with the offer and should include sufficient personnel to meet the execution time schedule.

### **Management Team**

A competent execution team shall be deputed at site and shall be headed by a Project Manager who shall be adequately experienced in Project Management of such magnitude and type. The Project Manager shall avail of assistance from reputed experts in various fields who shall be directly responsible for satisfactory execution.

The Project Manager shall be responsible for overall implementation of the entire project, from commencement to the final takeover of the plant. Services of a Project Engineer shall be ensured for the day to day operations and co-ordination to ensure successful and satisfactory design, procurement, manufacture, inspection, erection, testing & commissioning of all the equipment/ facilities/ systems within the time-bound schedule.

The Project Manager and Project Engineer shall attend all technical and review meetings between various parties involved in the project and ensure implementation of all decisions taken in the meetings.

The Project Manager shall be responsible for detailed material accounting at site and management of the store maintained at site.



The Purchaser shall nominate a Project In-charge with whom the bidder shall generally communicate/co-ordinate.

The bidder has to fully authorize the Project Manager to take on-the-spot decision with regard to:

- Modification in layout and execution plan to suit local conditions.
- To purchase essential materials from local market to avoid delays.

For smooth execution of the project, a team of Project Manager and Key Personnel shall remain consistent throughout the execution period.

After satisfactory erection and testing, competent commissioning team shall be deputed to establish the performance parameters for a specific period.

### **Approvals**

Bidder shall submit the technical documents and drawings within agreed time schedule. Approval on technical documentation (with or without specified amendments) shall be taken by Purchaser after submission. The amendments which are not in the original scope of work or due to changes in concept, shall be taken up by the bidder as per mutually agreed rates to be decided before execution, and shall be binding on the bidder.

Bidder shall obtain approval for purchase of specific makes of equipment whose makes are not mentioned in his offer. All the detailed design calculations regarding the selection of equipment sizes, System types, etc. shall be submitted to Purchaser for their specific observation and record.

### **Inspection**

The Bidder shall submit the Inspection and Test Plan for complete system for Purchaser's approval. The purpose of this document is to provide guidelines and agreement on the Quality Control activities and inspection clearances of fabricated equipment, materials and bought out equipment being supplied by bidder.

The bidder shall invite Purchaser for inspection and preliminary testing as per approved Inspection and Test Plan. The inspection may be required at various stages of manufacture/assembly for some items. However, for imported items where the inspection has to be done abroad, the bidder shall do the inspection at his cost and submit the necessary test certificate.



**Installation:**

It includes supervision for installation, interconnecting pipework of Equipments on foundation covering both mechanical and electrical, according to the agreed layout by the bidders qualified representative.

**Start-up assistance, Testing, Commissioning, acceptance & Training:**

The scope of this service includes the testing, commissioning, acceptance and running product trials to confirm performance parameters, with the project goal set to commence product trials and service load trials.

**Training**

Training shall be undertaken by the bidder. The bidder would train all levels of staff of the client in operating the plant including managers, engineers, supervisors, operators and maintenance personnel.

Training would be given both at site and the manufacturer's works and a schedule should be proposed by the bidder, together with the content of training programmer, their duration and venue.

Training should commence during the erection and commissioning period as follows:

- During erection  
Exposure to the working and construction of the various equipment comprising the various systems of the plant, including instrumentation and controls.
- During commissioning  
Exposure to and training on the operations and maintenance of the various equipment in the plant including the testing, calibration setting of instruments both local and panel mounted.

Familiarization with startup procedures, management operations, basic principles of controls, control during operation and adjustments, fault finding and including operation and maintenance on control system and maintenance of the plant

Training on safety aspects, service and machine guidelines, operator trouble shooting guidelines for operation and maintenance staff

**APPROVED MAKES**

The table below specifies the preferred approved makes of major equipment/ accessories. Where more than one makes are considered for an item OR no make is mentioned in the bid/order, bidder shall obtain prior written approval of Purchaser before commencing the manufacturing/placing an order on bidder as the case may be. However, as regards to the ultimate makes to be supplied to these projects, makes shall be finalized in consultation with the purchaser. **For equipment for which we had mentioned 'European' should be strictly 'European origin' only.**

<b>Technical Details Serial No.</b>	<b>Material Description</b>	<b>Preferred Make</b>
1	Scraped Surface Preheater	European : Alfa Laval / Omnia / Navatta / JBT
2	Turbo Refiner	European : Alfa Laval / Omnia / Navatta / JBT
3	Hot Break System	European : Alfa Laval / Omnia / Navatta / JBT
4	Scraped Surface Evaporator	European : Alfa Laval / Omnia / Navatta / JBT
5	Aseptic Sterilizer	European : Alfa Laval / Omnia / Navatta / JBT
6	Forced circulation Evaporator	European : Alfa Laval / Omnia / Navatta / JBT
7	Aseptic Filler Machine	European : Alfa Laval / Omnia / Navatta / JBT
8	Web Aseptic Filler with Aseptic Tank	European : Alfa Laval / Omnia / Navatta / JBT
9	Tomato Chopping pump	European : Alfa Laval / Omnia / Navatta / JBT

Note: While execution, choice of make would be made from the preferred list. Makes and model shall be approved by the purchaser expeditiously.

**E. DETAILS NEED TO BE FURNISH BY BIDDER**

Blank Details mentioned below shall be filled by Bidder while bidding:

Sr. No	Description	Mango / Papaya	Tomato / Guava	Banana	UOM
	<b>Product Details</b>				
1	Raw Material - Variety				
2	Raw Material - Size Range				
3	Raw Material - Input Rate				
4	Raw Material - Solid Content				
5	Raw Material - Impurities				
6	Loss - Sorting Rejects				
7	Loss - Destoning				
8	Loss - Milling/Refining Waste				
9	Loss - Pulp in Reject				
10	Product Output - Type				
11	Product Output - Capacity				
12	Product Output - Particle Size				
	<b>Utility Characteristic &amp; Consumption Details (Process/Equipment Wise)</b>				
13	Power				
14	Steam				
15	Compressed Air				
16	Raw Water				
17	Soft Water				
18	RO Water				
19	Chilled Water				
20	Recycled Water				
21	Humidification				
22	Air Exhaust				
23	Condensate Return Quantity				
24	Condensate Return Temperature				
25	ETP Load / Inlet Water Details				
26	Heat Load				
27	Room Temperature to be maintain				
	<b>Consumable Materials Details</b>				
28	CIP Chemical				
29	Additives Details				



	<b>Process Parameters Details (Equipment Wise)</b>				
30	Equipment Type / Model				
31	Equipment Size / Capacity / Rating				
32	Equipment OEM / Make				
33	Equipment Design Code				
34	Equipment Input Parameters				
35	Equipment Output Parameters				
36	Equipment MOC / Thickness				
37	Equipment Connections Size				
38	Equipment Compliance				
39	Equipment Certificate				
40	Equipment Dimension (L x W x H)				
41	Equipment Weight				
42	Equipment Foundation Details				

**F. BATTERY LIMIT**

<b>Description</b>	<b>Purchaser's Scope</b>	<b>Bidder's Scope</b>
Civil works	Necessary foundations/floor for equipment based on the details provided by the bidder	Supply of necessary foundation bolts, nuts along with the template, sub base, and all other associated erection materials
Installation	Unloading, shifting, positioning, installation, interconnecting pipework of Equipments on foundation covering both mechanical and electrical	Supervision by qualified representative during installation.
Utilities & Piping	Compressed Air, Steam, Raw/Soft/RO water	Interconnecting piping/ducting/platforms etc of the supplied Machinery. <i>Valves/instruments for Interconnection at side of Machine.</i>  For Interconnection by Purchaser, all the required Drawing/Details shall be furnished by bidder
Drain lines	From Process Machines to Drain Points.	For Interconnection by Purchaser, all the required Drawing/Details shall be furnished by bidder
Permanent Power Supply	Purchaser Scope	-
Fruits	Purchaser Scope	-
Consumables	-	Necessary consumables such as oils, lubricants, chemical required for trial runs and commissioning.

**G. PACKING**

Bidder shall pack all the consignment in road worthy packaging strong enough to withstand rough handling during transit. Machine surface shall be suitably protected against scratches, corrosion, shocks, impact etc. Packages shall be suitably and distinctly identified for type of handling and kind of storage. The bidder shall take into consideration the 6-months' storage time, possibly in outdoor conditions, prior to final installation of the equipment. All Machines shall be fitted with engraved name plate containing pertinent details such as make, model, capacity, PO Ref, Tag No

**H. PERFORMANCE TESTS AND GUARANTEES****Performance test:**

The bidder is required to detail the documentation proposed for performance test of all major equipment. This shall detail the guaranteed v/s actual throughput or output or performance (as relevant) and the tolerance of accuracy. Also, the test methods proposed to demonstrates that these guarantees have been met:

**Formats of Guarantees:**

- Guarantees for throughput of various sections of plant
- Consumption and losses
- Service consumption

**Formats for performance tests:**

- Procedure for carrying out the tests
- Method of measurement
- Test durations
- Evaluation methodology

**PERFORMANCE PARAMETERS AND TEST PROCEDURE****General test procedure**

On completion of the commissioning trials shall be operated for establishing the guaranteed performance. The performance trials shall be for 15 days of continuous operation along with main Plant process plant. The successful bidder shall during the performance trials depute their competent engineers for continuously 15 days' time to monitor the performance and take corrective actions as per requirement for improving the operation and performance of the system so that they run at guaranteed efficiencies.



Performance trials shall be conducted for the following:

- Capacity
- Efficiency
- Heat losses
- Individual equipment performance

If shutdown occurs due to external Force Majeure reasons after 16 hrs of operation in any day, this shall be considered as a full day testing. If at less than 16 hrs of operation, the trials shall be continued for an additional full day.

**Guarantee / Warranty**

12 months from the date of successful commissioning, product trial & acceptance of the plant

**I. DELIVERY & TIMELINE**

For the complete plant (design, manufacturing, supply, installation, testing, and commissioning, acceptance), the project goal is to commence product trials and service load trials within 9 months from the date of the Letter of Intent (LOI)/Purchase Order (PO) whichever is earlier.