# **Tender Notice**

National Small Industries Corporation Limited
NSIC Bhawan Okhla
Industrial Estate New
Delhi-110020

Tel: +91-11-26826941/26826847 Email: tech@nsic.co.in

Tender no.: SIC/HO/TID/AU/12-171 Date: 2<sup>nd</sup> May, 2017

Subject: Supply, Installation & Commissioning of One set of Processing plant for Tomato & Fruit, Capacity: 200 kg. per hour crushing of Tomato / Fruit, at Manica, Mozambique on Turnkey Basis.

NSIC is setting up India-Africa Incubation Centre for Small Enterprise Establishment at Manica (Mozambique).

We are pleased to invite your offer in two parts viz. (a) Technical and (b) Financial, strictly as per enclosed terms and conditions and instructions to bidders, in sealed covers for the under mentioned plant and machinery / equipment required for supply and installation at Manica (Mozambique). One set of equipment as given in "Technical Bid Schedule" of this tender document.

The detailed tender document can be obtained free of cost from Chief General Manager (TID) at the above address. The tender document can also be downloaded from NSIC website <a href="www.nsic.co.in">www.nsic.co.in</a>. Any clarification on technical specifications can be obtained in writing from NSIC before tender opening. Manufacturers are welcome to have prebid meeting with NSIC for better understanding our requirements.

Please submit your lowest quotation / offer for the above requirement subject to our terms and conditions. Your offer should be submitted to Chief General Manager (TID), National Small Industries Corporation Limited, NSIC Bhawan, Okhla Industrial Estate, New Delhi-110020 latest by 18<sup>th</sup> May, 2017 till 5:30 P.M. Offers received after the last date and scheduled time shall not be considered.

The format for technical bid and financial bid shall be as per Annexure-I and Annexure-II respectively. The offer should be submitted with a covering letter as per format at Annexure-III in a sealed envelope clearly mentioning the above tender number on top of the envelope.

The technical bid shall be opened on 19<sup>th</sup> May, 2017 at 4:30 P.M. in the presence of authorized representatives of the bidders who may like to be present. The authorized representative should bring authority letter from their principals for attending the bid opening.

**Note:** The vendor should submit their best price while submitting their bids itself and they will not be allowed to revise the price any time thereafter.

NSIC reserves the right to reject one or all of the bids without assigning any reasons.

KINDLY READ ALL TERMS AND CONDITIONS OF "TENDER DOCUMENT" THOROUGHLY. QUOTATION NOT IN ACCORDANCE WITH THE TERMS AND CONDITIONS IS LIABLE TO BE DISQUALIFIED AND IGNORED.

Chief General Manager (TID)

# Important Instructions to bidders for submission of tender

# 1) Preparation of Bids:

The bids should be prepared in the following manner: -

- a. The Bid shall be neatly arranged, plain and intelligible.
- b. Each page of the bid should be signed by the authorised person. Letter regarding the authorisation of such person should be obtained from the Principal / Manufacturer and enclosed with the bid.
- c. Insertions, postscripts, additions and alterations shall not be recognized, unless confirmed by bidder's signature.
- d. Bids should not contain any terms and conditions, printed or otherwise, which are not applicable to the Bid.
- e. Any conditional bid not adhering to the terms & conditions of the tender shall be rejected.
- f. The bidder should be the Principal / Original manufacturers of plant & machinery/ equipment, failing which the quotation shall not be considered.
- g. The bidders should have executed at least three purchase orders / contracts of equivalent value in the last five years. The bidder is required to submit catalogue of the plant & machinery/ equipment, complete reference of the past supply of equipment for the same or similar specification giving details of customer with name of the contact person, Fax no, phone no, E-mail.
- h. The bidders (originals manufacturers) will have to submit ink-signed offer / bid in original to NSIC. **Bids not complying with this condition shall not be considered**.
- i. In the Financial Bid, prices are to be indicated in both figures and words. In case of any discrepancy of value the prices quoted in words shall be considered for evaluation and establishing L1 status.
- j. No price variation clause will be entertained.

- k. Specifications are the basic essence of the "Product". Mere copying of the tender specifications by the Bidder into their bids shall not make them eligible for consideration. Appropriate and sufficient evidence of conformity by way of data (catalogues etc.) shall be furnished. There should be an item-by-item commentary on the Specifications demonstrating responsiveness of the offered equipment to the specifications.
- I. Bid with any pre-conditions (like conditional discounts) for price are liable to be "Not considered" / "Rejected".

# 2) Submission of Bids:

- a. Bids must be received by NSIC on or before the due date and time at the address specified in the tender document. In the event of the specified date for the submission of bids being declared a holiday for NSIC, the bid-closing deadline will stand extended to the next working day up to the same time.
- b. Any bid received by NSIC after the deadline for submission of bids, will not be accepted and returned unopened to the bidder.
- c. NSIC at its discretion may extend the deadline for the submission of bids if the bid document undergoes changes during the bidding period, in order to give prospective bidders time to take into consideration the amendments while preparing their bids.
- d. In case of receipt of inadequate numbers of bids, NSIC may extend the deadline for submission of bids giving opportunity to other bidders to participate in the bidding process to make it competitive.
- e. If the Supplier submits only one envelop / cover containing all the bids or combined bids e.g. techno-commercial bid & price bid together, the bid is liable for rejection.
- NOTE: The manufacturers should submit their best price at this stage itself and they will not be allowed to revise the price. Any revision / discount given by manufacturers subsequently will be ignored.

# 3) Amendment of Bidding Documents:

- a. At any time prior to the deadline for submission of bids, NSIC may, for any reason, whether on its own initiative or in response to the clarification request by a prospective bidder, modify the bid document.
- b. All prospective bidders who have requested for the bidding document will be notified of the amendment in writing, and such amendments/ modifications will be binding on them.

# 4) Bid opening and evaluation of Bids:

- a. The technical bids shall be opened on 19<sup>th</sup> May, 2017 at 4:30 P.M.
- b. Bidder whose technical bid is qualified based on the eligibility criteria as specified in this tender document will be considered for financial bid evaluation. The date and time of opening of the financial bid will be informed to such bidders.
- c. NSIC will open financial bids of only the technically qualified, in the presence of the bidders or their authorised representative who choose to attend the bid opening.
- d. The bidder's authorised representative who attends the bid opening shall sign an attendance register as a proof of having attended the bid opening.
- e. The bidder's name, bid prices, discounts and such other details will be announced at the time of opening of the financial bids.

#### 5) Award of Contract

- a. The financial bids of the technically qualified bidders shall be opened by the constituted committee. Thereafter the committee shall prepare the comparative statement (CST) based on the FOR, ICD, Tuglakabad, New Delhi price quoted by the bidders. This will facilitate to shortlist the L-1 bidder quoting the lowest price.
- b. L-1 will be decided on the basis of total value of the bid.

- c. NSIC shall award the contract to the eligible bidder whose financial bid has been accepted and determined as the lowest evaluated financial bid.
- d. If more than one bidder happens to quote the same lowest price, NSIC reserves the right to award the contract to any one bidder.
- e. Separate supply order shall be placed for supply and installation of machinery and equipment required for location at Manica. The bidder shall deposit 'Security Deposit' for ₹1,00,000/- (Rupees One Lakh only) for each supply orders placed for different locations.
- f. The successful bidder, on award of contract/order, must send the contract/order acceptance in writing, within 7 days of award of contract/order, failing which the EMD will be forfeited.

# 6) Interpretation of the clauses in the Tender Document / Contract Document

In case of any ambiguity / dispute in the interpretation of any of the clauses in this Tender Document, NSIC's interpretation of the clauses shall be final and binding on all parties.

# 7) Earnest Money Deposit:

a. The units registered with Central Purchase Organization (DGS&D), National Small Industries Corporation (NSIC) or the concerned Ministry or Department shall be exempted from the payment of Earnest Money as defined under Rule 157 of General Financial Rules (GFR), 2005.

In such case, copy of the certificate showing registration with the above mentioned institutions to be enclosed alongwith the Technical Bid.

- b. In case, the unit is not covered under a. above, it should submit the offer along with Earnest Money Deposit (EMD) for ₹1,00,000/- (Rupees One Lakh only) by way of Demand Draft (DD) drawn in favour of "National Small Industries Corporation Limited" payable at New Delhi for one set of goods only (even in case the bidder is quoting for more than one set). No cash / cheque towards EMD shall be accepted. The DD for EMD should be placed inside the envelope containing technical bid. The offers without EMD shall be rejected.
- c. The EMD will be refunded to the unsuccessful bidder within 30 days from the award of contract.
- d. No interest will be allowed for earnest money deposited with the Company.
- e. The EMD shall be forfeited:
  - (i) If the bidder withdraws the bid during the period of bid validity specified in the tender.
  - (ii) If the successful bidder fails to furnish the acceptance in writing, within 7 days of award of contract/order.

# 8) Security Deposit

- a. The EMD of successful bidder shall be kept as 'Security Deposit' for supply of goods against each supply order and shall be released at the time of final payment after successful completion of work.
- b. In case of bidder exempted from payment of EMD (as mentioned in Para 7 a. above), 'Security Deposit' for ₹1,00,000/- by way of demand draft in favour of "National Small Industries Corporation Limited" payable at New Delhi should be submitted along with order acceptance against each supply order. However, the successful bidder can furnish a Bank Guarantee of Nationalized Bank of equivalent amount in lieu of 'Security Deposit' valid for one year from the date of supply order.

# 9) Prices:

All items are to be quoted in INR only in the format as per Annexure-II. The price quoted should be inclusive of sea worthy packing, insurance and freight on FOR, ICD, Tulglakabad (New Delhi) basis. The prices should also be inclusive of all taxes and duties as applicable. The price quoted shall be considered firm and no price escalation shall be permitted.

# 10) Validity of the Quote:

The validity of quote should be at least six months (180 days) from the closing date of tender. A bid valid for a shorter period shall stand rejected.

NSIC may ask for the bidder's consent to extend the period of validity. Such request and the response shall be made in writing only. A bidder agreeing to the request for extension will not be permitted to modify his bid.

# 11) Delivery period:

The goods shall be delivered to NSIC's C&F agent at New Delhi (or any other place as specified by NSIC) within 60 days from the date of award of contract. Part delivery shall not be permitted. Separate dispatch instruction shall be issued after inspection of goods and acceptance thereof by NSIC. No other delivery terms shall be acceptable.

#### 12) Taxes / Duties:

- a. The bidders should be registered with sales tax / income tax department of Govt. of India and should hold a valid VAT registration certificate, as applicable.
- b. Sales tax, excise duty, VAT, octroi or any other tax shall be paid on actual as per rule applicable and on production of documentary proof. No tax concession form or proof of shipment of goods shall be issued.

#### 13) Payment terms:

- a. 80% of order value to be released on submission of following documents:
  - i. Signed commercial Invoice-two copies certifying that the goods are exactly as per the purchase order and the specification quoted.
- ii. One copy of NSIC supply order.
- iii. Proof of delivery of the consignment to our C&F agent.
- iv. Clean report of findings issued by NSIC.
- v. Packing list two copies duly signed.
- b. Balance 20% order value shall be released after successful installation and commissioning of equipment at site and upon furnishing performance guarantee as stated at para 15 of this tender document.

# 14) Packing & Marking:

Consignment must be packed in Sea Worthy in strong packing cases, taking all precaution against damage during handling and sea weather corrosion.

Proper marking on the packing cases should be made for smooth handling of consignment. The supplier will be held responsible for the plant and machinery / equipment not being sufficiently and properly packed and in such eventuality the supplier shall have to transport them by rail, road at their destination, at his expense free from loss or damage.

Every package delivered under our order shall at the expense of the supplier be distinctly marked with description and quantity or contents with the consignee name and address (which shall be notified subsequently) with gross weight and net weight, with the distinctive number and mark which is also to be shown for the purpose of identification on the suppliers packing account.

Each packet shall contain a packing note quoting a number and date of our order and showing its contents in detail.

#### 15) Performance Guarantee:

Performance Guarantee in the form of Bank Guarantee (BG) on the prescribed format @10% of order value in favour of NSIC Ltd. towards performance of the contract (Purchase Order) shall be required to be submitted by the party after successful installation of the project at site. This bank guarantee shall be valid for 18 months from date of shipment or 12 months from the date of successful completion of installation and commissioning at site whichever is later.

# 16) Pre-Shipment Inspection:

The plant and machinery / equipment to be supplied and packing thereof shall be subject to inspection by NSIC or third party (name shall be conveyed to the successful bidder) at manufacturer's premises prior to dispatch thereof. Approval and clean report of findings shall be submitted at the time of claiming 80% payment. Machinery & equipment including packing boxes shall be offered by the awarded unit for inspection at least 10 days before the stipulated date of delivery. Deviations, if any pointed out by the visiting inspection team, as mentioned above, shall be corrected and the machinery and equipment as per specification shall be dispatched on or before the contract delivery date.

# 17) Liquidated damages:

In the event of delay in supply of the goods within the stipulated period, Liquidated Damages (LD) shall be charged by NSIC @ 1½% (one-half of one percent) of the total order value per week of delay or part thereof subject to a maximum of 5% (five percent) of the order value. Supplier shall deduct the applicable LD from the first payment while raising the claim for the same.

# 18) Insurance:

All goods are to be insured for 110% of the FOR value of the goods by successful bidder from the works to warehouse of our C&F agent at New Delhi.

# 19) <u>Installation & Commissioning:</u>

a. The awarded bidders shall have to depute expert(s) for installation & commissioning at site as and when instructed by NSIC.

- b. No additional charges shall be payable for installation & commissioning of equipment at site except for the following:
- i. Return economy class Air Ticket shall be provided by NSIC.
- ii. Lodging shall be taken care of by NSIC.
- iii. Local conveyance shall be taken care of by NSIC.
- iv. Out of pocket allowance as per MEA rate shall be paid by NSIC.
- v. Skilled and unskilled workers shall be provided by Host country at site.
- vi. The supplier has to inform in advance about the material handling facilities to be arranged by host country for successful installation, commissioning, training and pilot production from the machines and equipment supplied.
- c. Time and manpower required (skilled/unskilled) for erection & commissioning should be clearly given in terms of working days and number respectively.
- d. The supplier will be required to train for at least 7 days the operators as decided by NSIC / host country.

# 20) After Sales Service / Warranties by Suppliers:

The equipment shall be warranted for any manufacturing defect for a period of 18 months from the date of shipment or 12 months from the date of successful completion of installation and commissioning at site, whichever is later.

Should any part or parts fail or proved defective within the period specified above, owing to defect in design, material or workmanship, the supplier will have to replace them at the place of installation free of all charges.

During the warranty period, expert(s) shall be deputed at site by the awarded unit whenever found essential and which cannot be undertaken locally or by the NSIC's experts including rectifying any defect / malfunctioning of plant & machinery. The cost of deputation of expert(s) and any other associated expenditure shall be borne by the awarded unit.

#### 21) Technical Documents:

The awarded unit shall provide technical documents like operation and maintenance manual etc. in English language in three copies for each items of equipment. Two copies to go with the consignment, one copy to be forwarded to NSIC office.

# 22) Risk Purchase:

In case of delays in supplies / defective supplies or non-fulfillment of any other terms and conditions given in the Supply Order, NSIC may cancel the supply order in full or part thereof, and may also make the purchase of such material from elsewhere / alternative source at the risk and cost of the supplier.

In case vendor does not agree to above risk purchase clause, their offer is liable to be rejected. In case any vendor accepts risk purchase clause initially and subsequently declines to honour the term in the eventuality of RISK PURCHASE, they may be banned for business with NSIC.

# 23) Cancellation of Bids

- a. NSIC reserves the rights to cancel any bid without assigning any reasons.
- b. NSIC reserves the rights to cancel bids and re-float a fresh tender, at any time after opening of the bids, in case it finds the response to its bid are not meeting its requirement. This shall be at the sole discretion of NSIC.

# 24) Blacklisting / Debarring of Firm

- a. Units blacklisted by any Government Departments / PSUs are not eligible to participate in the tender.
- b. If the unit(s) commits breach of contract, it shall be black listed / debarred for further business with NSIC for a declared period.

# 25) Post Tender Negotiations

- a. NSIC reserves the right to conduct negotiations on the `Price' and 'other commercial terms' with the lowest ranked offerer, and
- b. If so required by NSIC, supplier may have to share their cost data / costing sheet with NSIC.

# 26) Force Majeure

If at any time during the currency of this contract, the performance in whole or in part, by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events), then provided notice of happening of any such events is given by either party to other within ten days from the date of occurrence thereof, neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non-performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by the purchaser subject to prompt notification by the seller to the purchaser of the particulars of the events and supply to the purchaser if required of any supporting evidence. Any waiver of time in respect of partial instalment shall not be deemed to be a waiver of time in respect of remaining deliveries.

# Annexure-I

# Format for technical bid

SI.	Tender requirements	Quantity	Compliance				
No.							
One							
per h							
	ambique).						
NOTE							
	e plant and machinery should come with complete fit						
	accessories for supply of water / supply of steam and product line, i.e. union, elbow, T, sockets, nipples, ball valve, gate valve,						
	rection valve, safety valve, additives, threads, etc.	are varve,					
2. Va	cuum /Water Pipeline and fittings should be in ø ½".	Steam					
Pip	peline and fittings should be of ø 1½". Food Pipeline a	and fittings					
	ould be of ø 1¼".						
	et of equipment consisting of the following:						
1.	Inclined Conveyor:	One No.					
	Supporting Structure – Stainless steel angle						
	and channel combined structure.						
	Conveyor Belt is of thick PVC having arresting						
	Cleats at required distance,						
	Motor: 2 HP 380 volts 3 phase AC reputed						
	make.						
	Gear Box: Premium quality, reputed make –						
	Greaves, etc						
	Including Idler, Roller etc., to complete the						
	unit.						
	Side guard: Fabricated from Stainless steel						
	thick sheet.						
2	Dimension: 10'ft L x 1.5'ft W	One Ne					
2.	Tomato/ Fruit Washer	One No.					
	Determine the control of the control						
	Rotary type with drum suitable for washing						
	fruits/ tomatoes through jet water spray with						
	contact parts of SS304 placed on outside MS structure.						
	structure.						
	The machine fitted with Electrical Motor 2 HP						
	(reputed make), Water Pump of 2HP, Electrical						
	starter, Switch, overload protector and						
	complete panel board with safety switch etc.						
	Drum made of SS perforated sheet having 3						
	mm perforation holes, drum dia 400 mm x						
	1525 mm x $5'$ long.						
	•						
	Equipped with water jet spraying arrangement						

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	through motorized pump Size of water pipe is 1" dia.		
	Any other necessary provisions required for satisfactory operation Capacity: Drum size of 200 Kg fruit per charge.		
	This machine will be adequate to remove dirt, soil, small insects, formed fungus and residues of fertilizers.		
3.	Inspection Conveyor and Table: Supporting Structure – Mild Steel angle structure.		
	Conveyor Belt is of thick PVC.  Motor: 2 HP 380 volts 3 phase AC reputed make.		
	Gear Box: Premium quality, reputed make – Greaves, etc. Including Idler, Roller etc., to complete the		
	unit. Side guard: Fabricated from Stainless steel thick sheet.		
	Dimension: 12'ft L x 1.5'ft W.		
	Stainless Steel fabricated table- 2 Nos.(one at each side.) Top of the table made of SS304 sheet minimum 1.6mm thick. Table size: 12'ft long x 1'ft W x 2.5'ft H.		
4.	Storage tanks	One No.	
	With Lid, made from SS 304 with thickness of sheet 16 SWG. Rectangular in shape mounted on pipe legs, with sloping bottom and sliding door on the side. Support structure also made from Stainless Steel Capacity: 200 Kg		
5.	Tomato/ Fruit slicer Machine + Fruit Mill/ Crusher (both to be placed on the same structure)	One Set	
	Main Body of 1.5 mm thick combined with 4mm and 8mm thick 304 type 18/8 quality stainless steel sheet, Argon welded.		
	With blade set to slice the tomatoes with contact parts of SS304 placed on outside MS structure. The machine fitted with Electrical		

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	Motor 1 HP (reputed make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc.		
	Should have product collection tank of capacity – 200 Litres fitted with Stainless Steel Peristaltic type Transfer Pump, operated by 2HP 380V, 3ø AC motor suitable to transfer crushed tomato/fruit to Vacuum Pan (tilting type)		
	Any other necessary provisions required for satisfactory operation		
6.	Crushing Capacity: 200Kg / hour  Vacuum Pan (tilting type) with stirrer and scraping assembly for pre-cooking crushed tomatoes/fruit. This kettle is also to be used for making Sugar syrup for adding to juices. Should come with digital temperature indicator, pressure gauge, electrical motor 2HP – reputed make etc.	One No.	
	Complete piping fitted with screw pump (2HP) to feed to Tomato Pulper (for tomato processing line) and twin pulper (for fruit juice line),		
	Any other necessary provisions required for satisfactory operation		
	Capacity of pan: 100 liters		
	Contact parts: SS-304 with outside MS fabricated structure Tilting: Manual		
	The pan shall have product discharge arrangement to take out paste after the process and handle arrangement for tilting type position.		
7.	Coarse pulping machine	One No.	
	Fitted with Electrical Motor 2HP (reputed make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc. All contact parts of SS304 placed on outside MS structure. The crushed tomatoes		

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	and fruits fed through hopper to machine and the machine is provided with different pulping screens (0.8 mm, 1 mm, 1.6 mm, 3 mm), beater blades and nylon brush assembly for pulping Tomatoes and fruits with discharge outlet.  Any other necessary provisions required for satisfactory operation	
	Capacity: 200 Kg per hour	
8.	Colloid Mill	One No.
	Driven by vertical type high speed motor with stainless steel housing and circular ring shaped starter assembly having two different tooth stages and conical rotor. Grinding gap accuracy – 0.10 mm, grinding gap calibrated on scale.  Fitted with Electrical Motor (reputed make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc. All contact parts of SS304 placed on outside SS structure.  Any other necessary provisions required for satisfactory operation  Capacity: 200 Kg per hour	
9.	Storage tanks with Lid	One No.
	Made from SS 304 with thickness of sheet 16 SWG. Fabricated from 304 type stainless steel sheet, all joints argon welded and polished. Provided with Inlet and outlet nozzle fitted with stainless steel ball valve, equipped with 4 nos stainless steel pipe made stand Attached with gear pump / screw pump and pipings for feeding the output to Vacuum Homogenizer. Capacity: 200 Kg	
10.	Twin Pulper	One No.
	All Contact Parts fabricated from 304 type18/8 quality stainless steel materials. Double stage -one unit for Coarse and other for fine sieving.	

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	Supporting Structure is made from stainless steel Angles and plates.		
	Two nos. of nylon brush in each section are included. Sieve is of 1/8 mesh in coarse section and 1/32 in fine section, made from stainless steel. Operated by 380 volts three phase AC Main.		
	Capacity: Approx. 200 Kgs Fruit /Mango input per hour – Motor 3 + 2 H.P, Electrical starter, Switch, overload protector and complete panel board with safety switch etc. Any other necessary provisions required for satisfactory operation		
11.	Storage tanks with Lid	One No.	
	Made from SS 304 with thickness of sheet 16 SWG. Fabricated from 304 type stainless steel sheet, all joints argon welded and polished. Provided with Inlet and outlet nozzle fitted with stainless steel ball valve, equipped with 4 nos stainless steel pipe made stand Attached with gear pump / screw pump and pipings for feeding the output to Colloid Mill. Capacity: 200 Kg		
12.	Vacuum Homogenizer: fitted with Electrical Motor (reputed make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc.	One No.	
	Any other necessary provisions required for satisfactory operation		
	Capacity of pan: 200 liters Contact parts: SS-304 with outside MS fabricated structure Product circulation / Outlet pump – 2 KVA Conical Vessel for product inlet, vertical cylindrical vessel with agitator drive 2 HP geared motor, vacuum pump of 2 HP with piping, shear homogenizer pump at product outlet – 3KVA, PLC controlled panel, vessel with steam jacket and steam piping. It shall have product discharge arrangement to take out paste after the process.		
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	Any other necessary provisions required for		
10	satisfactory operation		
13.	Vacuum Pan (Fixed type) - Evaporator	One No.	
	With stirrer and serening assembly (materized)		
	With stirrer and scraping assembly (motorized)		
	for concentrating juice to puree/ paste with		
	shell and tube type main condenser made of		
	SS304. The pan is steam jacketed with vacuum		
	for evaporation of excess water.		
	Shall have Vapour Outlet, Charging hole, BSP		
	Boss-head for pressure/vacuum gauge, Hand		
	hole for cleaning, Necessary fittings for steam		
	inlet, Product outlet bottom ball valve,		
	Vapour ducting from reaction kettle to		
	the overhead condenser, Light and Sight hole,		
	provided with glass, Suitable support for main		
	condenser, Shell and tube type main condenser, fabricated from stainless steel 304		
	,		
	type materials, Stainless steel Feed Tank,		
	Stainless steel Feed Pump with adequate		
	capacity motor, Stainless steel pipe line from		
	feed tank to pump and to the evaporator,		
	Watering Vacuum Pump of adequate capacity,		
	water circulating pump to circulate water from tank to condenser. Inter connecting pipeline of		
	G.I. from water tank to the condenser.		
	G.I. Holli water talk to the condenser.		
	Capacity of pan: 200 liters		
	Contact parts: SS-304 with outside fabricated		
	structure also of SS. Vacuum gauge,		
	thermometer, pressure gauge, vacuum control		
	valve and all important instrumentation fitted.		
	varvo and an important moti amortation into		
	The pan shall include recirculation system,		
	pumps and SS piping (1.5"dia, 50 meters),		
	steam fittings, safety devices, condenser		
	should be provided with readymade cooling		
	tower.		
	The pan shall have product discharge		
	arrangement to take out paste after the		
	process.		
	Any other necessary provisions required for		
	satisfactory operation		
14.	Vacuum Pasteurizer, RTS type, with digital	One No.	
	temperature indicator, pressure gauge, piping,		
	fitted with Electrical Motor 2HP (reputed		
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make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc. with gear / screw pump to send the output to storage tank. Should contain the following:

#### Section A -

a) Plate Heat Exchangers (PHE) for Heating and Cooling –Cap- 200 LPH

Temperature Programme setting – 40-90-70-35 degree C.

- b) Float Balance Tank SS 316 Cap- 50 LPH SS Pump 1.5 HP -Model CM 217
- c) Inline Strainer 38mm size
- d) Flow Regulating Valve 25mm size
- e) Holding tube for 60 seconds duration 38mm size
- f) SS control panel for automatic operation with temperature indicator cum controller, PID controller, I2P, Buzzer, On/Off push button with starter, Indicating lamps, forward and diversion switch for manual operation etc. It is mounted on the skid.
- g) SS inter connecting pipe 25mm size and fittings -1 lot
- h) Pneumatically operated flow diversion valve 25 mm size
- i) SS skid made out of rectangular hollow tube

#### Section B -

Hot water generating system consists of: PHE with 33 Nos. of plates with EPDM gaskets a) SS Insulated heating battery with sparging facility of 20 Litres. cap.

- b) 1 HP Hot water pump
- c) Hot water pipes and fittings
- d) Steam control valve ½" size(diaphragm type)
- e) Globe type steam valves and pipes and fittings
- f) Steam trap 1/2" with strainer and sight glass

Note – 1) All these equipment mentioned above to be made for ready for assembly with necessary piping..

1. The equipment to be suitably mounted.

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operated by 1.0 HP 380 volts three phase AC Motor, with AC Drive to control feeding – all electricals should be reputed make  3. Shell and Tube type Heat exchanger, made from 304 type Stainless Steel tubes in tube, all joints are properly argon welded and polished for cold process. – Two Nos.  4. Stainless steel tank of 800 liters capacity, having refrigeration system By Hermetically sealed adequate capacity Compressor, with its components and copper cooling coil widely distributed inside the tank, is provided to circulate cold water to cool down the temperature of syrup – One No.  5. Water circulating pump, operated by 1 H.P. motor. – Two Nos.  17. Filter Press or Sugar syrup filtration: All contact parts to be of 304 type stainless steel materials. Supporting structure to be made from mild steel pipe, covered with stainless steel sheet. 6 bed of 8" dia each, Filter press should be ideal for sugar syrup filtration,	'1
from 304 type Stainless Steel tubes in tube, all joints are properly argon welded and polished for cold process. – Two Nos.  4. Stainless steel tank of 800 liters capacity, having refrigeration system By Hermetically sealed adequate capacity Compressor, with its components and copper cooling coil widely distributed inside the tank, is provided to circulate cold water to cool down the temperature of syrup – One No.  5. Water circulating pump, operated by 1 H.P. motor. – Two Nos.  17. Filter Press or Sugar syrup filtration: All contact parts to be of 304 type stainless steel materials. Supporting structure to be made from mild steel pipe, covered with stainless steel sheet. 6 bed of 8" dia each, Filter	
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All contact parts to be of 304 type stainless steel materials. Supporting structure to be made from mild steel pipe, covered with stainless steel sheet. 6 bed of 8" dia each, Filter	
operated by 1 H.P. motor and stainless steel gear pump	
18. Boiler Capacity: 400 Kg/hr. from feed water at 30 degree Celsius. Working Pressure, Kg/sq. cm. g: 7 – 15, Thermal efficiency (NCV) %: 89 + 2, Electrical Load, Kw: 1.5 Main steam stop valve, mm: 40, Flue gas exhaust port, mm: 300 Completely connected with: Chimney – 6 meter, Fuel Tank – 150 liter, Water treatment/ softener plant for above boiler, Soft Water day tank – 1500 liter cap., Water pipe line from Soft water tank to boiler, Blow Down Valve, Fuel pipe line from fuel tank to burner.  Should have Monobloc, fully automatic Diesel fired burner and include interconnection for recirculation of steam system, pumps, valves and piping (around 50 meters), steam fittings,	

		SIC/HO/TID/A	U/12-1/1
	safety devices, etc. from boiler to the connected pans and other equipment to be supplied by supplier, with all standard accessories like feed water pump with motor, feed check valve, non-return valve, blow down valve, safety valve, pressure gauge, water softener, feed water tank, oil tank etc.  Any other necessary provisions required for satisfactory operation		
19.	Trolley with rubber wheels, SS top, 2 feet x 2 feet Capacity: 100 Kg material handling	Two Nos.	
20.	<ul> <li>Working equipment consisting of the following:</li> <li>(i) Punches from SS material</li> <li>Pineapple punches, punches for tits-bits, corner, cutting blades- 2 sets each</li> <li>(ii) Knife from SS material</li> <li>Pitting, coring, peeling and fruit cutting (size 7", 5.5", 3.5") – 2 sets each</li> <li>(iii) Slicer (SS materials) for Mango &amp; for general purpose – 2 sets each</li> </ul>	One lot	
21.	Weigh Scale (Digital display) Capacity: 200 kg, readability 20 gm. Platform size: 505 x 650 mm	One No.	
22.	Weigh Scale (Digital display) Capacity: 1 kg, readability 0.1 gm. Platform size: 161 mm dia	One No.	
23.	Working table (SS top) wit bin 2 mtr. x 1 mtr. 1 mtr. (ht.) SS top sheet of 1.6 mm thick, supported by MS angel with removable legs of MS pipes.	One No.	
24.	Complete set of tools, jigs & fixtures required for installations  (please specify each item with detailed specifications / quantity - use separate sheet)  (Anti-vibration mountings/ foundation bolts etc), tools for smooth operations & maintenance of machines (hand tools, special tools including electrical circuit diagrams and electrical spares etc) including the following:  (i) Hand Refractometer - ERMA, Range 0 to 32%	One set	Diddon

		SIC/HO/TID/A	U/12-171
	<ul> <li>(ii) Spanner – 20 Nos.</li> <li>(iii) Screw Driver – 20 Nos.</li> <li>(iv) Tester-5 Nos.</li> <li>(v) Hand drilling machine – 1 No.</li> <li>(vi) Drill tap – 8,10,12 – set</li> <li>(vii) Drill tapping set – 1 no.</li> <li>(viii) Hammer – 1 no.</li> <li>(ix) Hand grinder machine – 1no.</li> <li>(x) Grinding wheel – 1 set</li> <li>(xi) Cutting wheel – 1 set</li> <li>(xii) Tool box – 1 set</li> <li>Any other necessary provisions required for satisfactory operation</li> </ul>		
25.	Spares to maintain normal operations of machine for two years.  (please specify each item with detailed specifications / quantity - use separate sheet)  Ensure the spares list include all the items/ parts those are required to be replaced during the course of normal running of machine, due to their wear & tear including the following:  (i) For Fruit washer:  a) Nylon wheels of drum - 1 set b) Spray nozzles - 1 set c) Water Spray Jet - 2 sets	One set	
	<ul> <li>(ii) For storage tank: <ul> <li>a) SS valve- 1 set</li> </ul> </li> <li>(iii) Fruit slicer machine: <ul> <li>a) SS blades – 1 set</li> </ul> </li> <li>(iv) For Fruit mill: <ul> <li>a) O ring 8 mm- 1 set</li> </ul> </li> <li>(v) For Pulper: <ul> <li>a) Pulping screen- 1 set</li> <li>b) Nylon Brush- 3 sets</li> <li>c) V belt – 1 set</li> </ul> </li> <li>(vi) For Colloid Mill: <ul> <li>a) Rotor- 1 set</li> <li>b) Ring- 1 set</li> </ul> </li> <li>(vii) For Vacuum Pan – fixed type:</li> </ul>		
	a) Teflon Scrapper- 1 set		

		b) c) d)	O ring- 1 set Teflon bush – 1 set Valves – 1 set		
		u)	valves – 1 Set		
	(viii)	)For Va a)	cuum pan- tilting type: Teflon scrappers – 1 set		
	(ix)	For Sto	orage tank with stirrer Teflon scrappers – 1 set		
	(x)	For Va a) b) c) d)	cuum pasteurizer: Mechanical seal– 1 set Pressure Gauge– 1 set Temperature indicator– 1 set Thermometer– 1 set		
	(xi)	For Va a) b)	cuum Homogeniser: Teflon scrapper– 1 set Mechanical seal– 1 set		
	(xii)	For sto a)	orage tank with stirrer: Teflon scrapper- 1 set		
	(xiii	)For ste a) b) c) d)	eam boiler: Product valves 38 mm- 1 set Seals of product valves- 1 set Electrical – overload relays- 1 set 'Y' Trap – 2 sets.		
	(xiv	) For Tr a)	rolley with rubber wheels Rubber wheels- 1 set		
	Any oth	a) b) c) d) ner nec	Prince or price or pr		
26.	preserve pilot commis (pleas	vatives product ssioning e spec ication	(Chemicals, Taste maker, Salt, etc) required for taking out the ion after the installation & g of machines at site cify each item with detailed s / quantity - use separate	One lot	

SIC/HO/TID/AU/12-171 including the following: (i) Sodium Benzoate - 1 kg (ii) Salt - 1 kg (iii) Spices & condiments - 1 kg (iv) Cumin powder - 1 kg (v) Turmeric powder - 1 kg (vi) Onion powder - 1 kg (vii) Sugar - 1 kg (viii) Garlic powder - 1 kg (ix) Yeast extract - 1 kg (x) Acidity regulators E330 - 1 kg (xi) Added flavor- natural & nature identical - 1 kg Any other necessary provisions required for satisfactory operation

# Note:

The aspects mentioned below must be noted while submitting bids for the above mentioned plant and machinery / equipment:

- a) Finished products should have quality similar to norms of Bureau of Indian Standards / FPO AGMARK, wherever applicable.
- b) All machines / equipment should be compatible with 220 V Single Phase, 380-400 V Three Phase 50 cycle per second supply. Electrical wiring for interconnection of the machines upto main supply wherever necessary should be supplied along with machines.
- c) In case foundation of the machine is required for installation, necessary foundation bolts, pads, washers etc. should be supplied along with foundation drawing.
- d) All machines should be supplied with electricals, raw material handling and finished material packing arrangement along with working tools.
- e) List out the technical specification, additional equipment required, if any, for smooth running of the project.
- f) All machines should be complete and ready for production of stated capacity and should be supplied with operation and maintenance manual.

#### **Enclosures:**

- 1. Company profile with catalogues.
- 2. Detailed specification of all items mentioned above.

- 3. Copy of client list / purchase orders/ contracts of similar nature and size in the last five years.
- 4. Copy of Pan Card / Sales tax / VAT registration certificate.
- 5. Copy of Udyog Aadhaar SSI/MSME Memorandum part-II/ NSIC registration certificate, if applicable.
- 6. Demand draft for ₹1,00,000/- as EMD.

# Financial price schedule

# Annexure-II

SI. No.	Description and Technical specification	Quantity	Price (INR)	Tax & Duties (As applicable ) (INR)	Total price (FOR, Delhi) (INR)
	set of Processing plant for Tomato		apacity: 20		ur crushing
	omato / Fruit consisting of the follo				
1.	Inclined Conveyor: Supporting Structure – Stainless steel angle and channel combined structure. Conveyor Belt is of thick PVC having arresting Cleats at required distance, Motor: 2 HP 380 volts 3 phase AC reputed make. Gear Box: Premium quality, reputed make – Greaves, etc Including Idler, Roller etc., to complete the unit. Side guard: Fabricated from Stainless steel thick sheet. Dimension: 10'ft L x 1.5'ft W	One No.			
2.	Rotary type with drum suitable for washing fruits/ tomatoes through jet water spray with contact parts of SS304 placed on outside MS structure.  The machine fitted with Electrical Motor 2 HP (reputed make), Water Pump of 2HP, Electrical starter, Switch, overload protector and complete panel board with safety switch etc. Drum made of SS perforated sheet having 3 mm perforation holes, drum dia 400 mm x 1525 mm x 5' long.	One No.			

		T	,	SIC/HO/TID/AU/12	-171
	Equipped with water jet spraying arrangement through motorized pump Size of water pipe is 1" dia.				
	Any other necessary provisions required for satisfactory operation Capacity: Drum size of 200 Kg fruit per charge.				
	This machine will be adequate to remove dirt, soil, small insects, formed fungus and residues of fertilizers.				
3.	Inspection Conveyor and Table: Supporting Structure – Mild Steel angle structure. Conveyor Belt is of thick PVC. Motor: 2 HP 380 volts 3 phase AC reputed make. Gear Box: Premium quality, reputed make – Greaves, etc. Including Idler, Roller etc., to complete the unit. Side guard: Fabricated from Stainless steel thick sheet. Dimension: 12'ft L x 1.5'ft W.  Stainless Steel fabricated table- 2 Nos. (one at each side.) Top of the table made of SS304 sheet minimum 1.6mm thick. Table size: 12'ft long x 1'ft W x 2.5'ft H.				
4.	Storage tanks  With Lid, made from SS 304 with thickness of sheet 16 SWG. Rectangular in shape mounted on pipe legs, with sloping bottom and sliding door on the side. Support structure also made from Stainless Steel Capacity: 200 Kg	One No.			

5.	Tomato/ Fruit slicer Machine + Fruit Mill/ Crusher (both to be	One Set	SIC/HO/TID/AU/12	-171
	placed on the same structure)  Main Rody of 1.5 mm thick			
	Main Body of 1.5 mm thick combined with 4mm and 8mm thick 304 type 18/8 quality stainless steel sheet, Argon welded.			
	With blade set to slice the tomatoes with contact parts of SS304 placed on outside MS structure. The machine fitted with Electrical Motor 1 HP (reputed make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc.			
	Should have product collection tank of capacity – 200 Litres fitted with Stainless Steel Peristaltic type Transfer Pump, operated by 2HP 380V, 3ø AC motor suitable to transfer crushed tomato/fruit to Vacuum Pan (tilting type)			
	Any other necessary provisions required for satisfactory operation			
	Crushing Capacity: 200Kg / hour			
6.	Vacuum Pan (tilting type) with stirrer and scraping assembly for pre-cooking crushed tomatoes/fruit. This kettle is also to be used for making Sugar syrup for adding to juices. Should come with digital temperature indicator, pressure gauge, electrical motor 2HP – reputed make etc.	One No.		
	Complete piping fitted with screw pump (2HP) to feed to Tomato Pulper (for tomato			

			SIC/HO/TID/AU/12	-171
	processing line) and twin pulper (for fruit juice line),			
	Any other necessary provisions required for satisfactory operation			
	Capacity of pan: 100 liters			
	Contact parts: SS-304 with outside MS fabricated structure Tilting: Manual			
	The pan shall have product discharge arrangement to take out paste after the process and handle arrangement for tilting type position.			
7.	Coarse pulping machine	One No.		
	Fitted with Electrical Motor 2HP (reputed make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc. All contact parts of SS304 placed on outside MS structure. The crushed tomatoes and fruits fed through hopper to machine and the machine is provided with different pulping screens (0.8 mm, 1 mm, 1.6 mm, 3 mm), beater blades and nylon brush assembly for pulping Tomatoes and fruits with discharge outlet.  Any other necessary provisions required for satisfactory operation			
	Capacity: 200 Kg per hour			
8.	Colloid Mill	One No.		
	Driven by vertical type high speed motor with stainless steel housing and circular ring shaped starter assembly having two			

			,	SIC/HO/TID/AU/12	-171
	different tooth stages and conical rotor. Grinding gap accuracy – 0.10 mm, grinding gap calibrated on scale.				
	Fitted with Electrical Motor (reputed make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc. All contact parts of SS304 placed on outside SS structure.				
	Any other necessary provisions required for satisfactory operation				
	Capacity: 200 Kg per hour				
9.	Storage tanks with Lid	One No.			
	Made from SS 304 with thickness of sheet 16 SWG. Fabricated from 304 type stainless steel sheet, all joints argon welded and polished. Provided with Inlet and outlet nozzle fitted with stainless steel ball valve, equipped with 4 nos stainless steel pipe made stand Attached with gear pump / screw pump and pipings for feeding the output to Vacuum Homogenizer. Capacity: 200 Kg				
10.	Twin Pulper	One No.			
	All Contact Parts fabricated from 304 type18/8 quality stainless steel materials. Double stage - one unit for Coarse and other for fine sieving. Supporting Structure is made from stainless steel Angles and plates.				
	Two nos. of nylon brush in each section are included. Sieve is of 1/8 mesh in coarse section and 1/32 in fine section, made from				

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			SIC/HO/TID/AU/12	-171
	stainless steel. Operated by 380 volts three phase AC Main.			
	Capacity: Approx. 200 Kgs Fruit /Mango input per hour – Motor 3 + 2 H.P, Electrical starter, Switch, overload protector and complete panel board with safety switch etc. Any other necessary provisions required for satisfactory operation			
11.	Storage tanks with Lid	One No.		
	Made from SS 304 with thickness of sheet 16 SWG. Fabricated from 304 type stainless steel sheet, all joints argon welded and polished. Provided with Inlet and outlet nozzle fitted with stainless steel ball valve, equipped with 4 nos stainless steel pipe made stand Attached with gear pump / screw pump and pipings for feeding the output to Colloid Mill. Capacity: 200 Kg			
12.	Vacuum Homogenizer: fitted with Electrical Motor (reputed make), Electrical starter, Switch, overload protector and complete panel board with safety switch etc.  Any other necessary provisions required for satisfactory	One No.		
	operation  Capacity of pan: 200 liters Contact parts: SS-304 with outside MS fabricated structure Product circulation / Outlet pump – 2 KVA			
	Conical Vessel for product inlet, vertical cylindrical vessel with agitator drive 2 HP geared motor, vacuum pump of 2 HP			

SIC/HO/TID/AU/12-171 with piping, shear homogenizer pump at product outlet - 3KVA, PLC controlled panel, vessel with steam jacket and steam piping. It shall have product discharge arrangement to take out paste after the process. Any other necessary provisions required for satisfactory operation 13. Vacuum Pan (Fixed type) -One No. Evaporator With stirrer and scraping assembly (motorized) for concentrating juice to puree/ paste with shell and tube type main condenser made of SS304. The pan is steam jacketed with vacuum for evaporation excess water. Shall have Vapour Outlet, Charging hole, BSP Boss-head pressure/vacuum gauge, for Hand hole for cleaning, Necessary fittings for steam inlet, Product outlet bottom ball Vapour ducting from reaction kettle to the overhead condenser, Light and Sight hole, provided with glass, Suitable support for main condenser, Shell and tube main type fabricated condenser, from stainless steel 304 type materials, Stainless steel Feed Tank. Stainless steel Feed Pump with adequate capacity motor, Stainless steel pipe line from feed tank to pump and to the evaporator, Watering Vacuum Pump of adequate capacity, water circulating pump

to circulate water from tank to condenser. Inter connecting pipeline of G.I. from water tank

to the condenser.

SIC/HO/TID/AU/12-171 Capacity of pan: 200 liters Contact parts: SS-304 with outside fabricated structure also of SS. Vacuum gauge, thermometer, pressure gauge, vacuum control valve and all important instrumentation fitted. The shall include pan recirculation system, pumps and SS piping (1.5"dia, 50 meters), steam fittings, safety devices, condenser should be provided with readymade cooling tower. The pan shall have product discharge arrangement to take out paste after the process. Any other necessary provisions required for satisfactory operation Vacuum Pasteurizer, RTS type, 14. One No. temperature with digital indicator, pressure gauge, piping, fitted with Electrical Motor 2HP (reputed make), Electrical starter. Switch. overload protector and complete panel board with safety switch etc. with gear / screw pump to send the output to storage tank. Should contain the following: Section A a) Plate Heat Exchangers (PHE)

a) Plate Heat Exchangers (PHE)for Heating and Cooling –Cap-200 LPH

Temperature Programme setting – 40-90-70-35 degree C. b) Float Balance Tank SS 316 - Cap- 50 LPH

SS Pump 1.5 HP -Model CM 217

- c) Inline Strainer 38mm size
- d) Flow Regulating Valve 25mm size

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	SIC/HO/TID/AU/12-171
e) Holding tube for 60 seconds duration 38mm size f) SS control panel for automatic operation with temperature indicator cum controller, PID controller, I2P, Buzzer, On/Off push button with starter, Indicating lamps, forward and diversion switch for manual operation etc. It is mounted on the skid. g) SS inter connecting pipe 25mm size and fittings -1 lot h) Pneumatically operated flow diversion valve 25 mm size i) SS skid made out of rectangular hollow tube	
Section B - Hot water generating system consists of: PHE with 33 Nos. of plates with EPDM gaskets a) SS Insulated heating battery with sparging facility of 20 Litres. cap. b) 1 HP Hot water pump c) Hot water pipes and fittings d) Steam control valve ½" size(diaphragm type) e) Globe type steam valves and pipes and fittings f) Steam trap ½" with strainer and sight glass	
Note – 1) All these equipment mentioned above to be made for ready for assembly with necessary piping	
5. The equipment to be suitably mounted.	
6. PHE for juice to be in three sections i.e. heating, regeneration and cooling.	

The plate material will be SS 316 and gaskets material will be NITRILE in regeneration and

			SIC/HO/TID/AU/12	171
	chilling section and EPDM in heating section.		310/110/110/A0/12	-171
	7. All the SS pipes and fittings to be of SS 316 quality for juice processing and SS 304 for hot water generating system.			
	b. The control panel to be made for automatic operation consisting of PID-controller, Temp. Indicator, Solenoid valve, Air filter regulator, Pneumatic pipes and fittings, Buzzer, On/Off push button starters for pumps (with spares - 2 Nos.), Indicating lamp, actuating switch, Control panel should be pre-wired.			
	8. Chilled water tank: Doubled walled tank with inner chamber made of SS304 sheet and outer with mild steel sheet, provided with 2" thick layer of PUF. Refrigeration unit with its components to be placed on one side of the tank. Digital temperature controller with sensor to be provided.			
	It shall have product discharge arrangement to take out paste after the process.  Any other necessary provisions required for satisfactory operation			
15.	Capacity: 200 liters  Storage tanks (insulated) with Lid & stirrer, made from SS 304 with thickness of sheet 16 SWG for storing material / puree. Vertical cylindrical in shape, cone bottom and mounted on pipe legs, agitator driven by geared motor. Outlet 2" SMS union with 2" SMS valve, with provision for interconnecting tanks			

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tanks

SIC/HO/TID/AU/12-171 Capacity: 300 Kg each 16. Sugar Syrup Cooling System: One Set Should consist of: 1. Stainless steel Tank for Syrup of capacity 200 liter - One. 2. Stainless steel Pump, to feed sugar syrup, operated by 1.0 HP 380 volts three phase AC Motor, with AC Drive to control feeding – all electricals should be reputed make 3. Shell and Tube type Heat exchanger, made from 304 type Stainless Steel tubes in tube, all joints are properly argon welded polished for cold process. – Two Nos. 4. Stainless steel tank of 800 liters capacity, having refrigeration system By Hermetically sealed adequate capacity Compressor, with its components and copper cooling coil widely distributed inside the tank, is provided to circulate cold water to cool down temperature of syrup – One No. 5. Water circulating pump, operated by 1 H.P. motor. - Two Nos. 17. Filter Press One No. or Sugar syrup filtration: All contact parts to be of 304 type stainless steel materials. Supporting structure to be made

from mild steel pipe, covered with stainless steel sheet. 6 bed of 8" dia each, Filter press should be ideal for sugar syrup

filtration, operated by 1 H.P. motor and stainless steel gear pump  Boiler Capacity: 400 Kg/hr. from feed water at 30 degree Celsius. Working Pressure, Kg/sq. cm. g : 7 – 15, Thermal efficiency (NCV) %: 89 + 2, Electrical Load, Kw: 1.5 Main steam stop valve, mm: 40, Flue gas exhaust port, mm: 300 Completely connected with: Chimney – 6 meter, Fuel Tank – 150 liter, Water treatment/ softener plant for above boiler, Soft Water day tank – 1500 liter cap., Water pipe line from Soft water tank to boiler, Blow Down Valve, Fuel pipe line from fuel tank to burner.  Should have Monobloc, fully automatic Diesel fired burner and include interconnection for recirculation of steam system, pumps, valves and piping (around 50 meters), steam fittings, safety devices, etc. from boiler to the connected pans and other equipment to be supplied by supplier, with all standard accessories like feed water pump with motor, feed check valve, non-return valve, blow down valve, safety valve, pressure gauge, water softener, feed water tank, oil tank etc.  Any other necessary provisions required for satisfactory operation  19. Trolley with rubber wheels, SS top, 2 feet x 2 feet Capacity: 100 Kg material				SIC/HO/TID/AU/12	-171
18. Boiler Capacity: 400 Kg/hr. from feed water at 30 degree Celsius. Working Pressure, Kg/sq. cm. g: 7 - 15, Thermal efficiency (NCV) %: 89 + 2, Electrical Load, Kw: 1.5 Main steam stop valve, mm: 40, Flue gas exhaust port, mm: 300 Completely connected with: Chimney – 6 meter, Fuel Tank – 150 liter, Water treatment/ softener plant for above boiler, Soft Water day tank – 1500 liter cap., Water pipe line from Soft water tank to boiler, Blow Down Valve, Fuel pipe line from fuel tank to burner.  Should have Monobloc, fully automatic Diesel fired burner and include interconnection for recirculation of steam system, pumps, valves and piping (around 50 meters), steam fittings, safety devices, etc. from boiler to the connected pans and other equipment to be supplied by supplier, with all standard accessories like feed water pump with motor, feed check valve, non-return valve, blow down valve, safety valve, pressure gauge, water softener, feed water tank, oil tank etc.  Any other necessary provisions required for satisfactory operation  19. Trolley with rubber wheels, SS Two Nos.		motor and stainless steel gear			
top, 2 feet x 2 feet Nos.	18.	Boiler Capacity: 400 Kg/hr. from feed water at 30 degree Celsius. Working Pressure, Kg/sq. cm. g: 7 – 15, Thermal efficiency (NCV) %: 89 + 2, Electrical Load, Kw: 1.5 Main steam stop valve, mm: 40, Flue gas exhaust port, mm: 300 Completely connected with: Chimney – 6 meter, Fuel Tank – 150 liter, Water treatment/ softener plant for above boiler, Soft Water day tank – 1500 liter cap., Water pipe line from Soft water tank to boiler, Blow Down Valve, Fuel pipe line from fuel tank to burner.  Should have Monobloc, fully automatic Diesel fired burner and include interconnection for recirculation of steam system, pumps, valves and piping (around 50 meters), steam fittings, safety devices, etc. from boiler to the connected pans and other equipment to be supplied by supplier, with all standard accessories like feed water pump with motor, feed check valve, non-return valve, blow down valve, safety valve, pressure gauge, water softener, feed water tank, oil tank etc.  Any other necessary provisions required for satisfactory	One No.		
handling	19.	top, 2 feet x 2 feet Capacity: 100 Kg material			

		1	·	SIC/HO/TID/AU/12	-171
20.	Working equipment consisting of the following:	One lot			
	<ul> <li>(i) Punches from SS material</li> <li>Pineapple punches, punches for tits-bits, corner, cutting blades- 2 sets each</li> <li>(ii) Knife from SS material</li> <li>Pitting, coring, peeling and fruit cutting (size 7", 5.5", 3.5") – 2 sets each</li> <li>(iii) Slicer (SS materials) for Mango &amp; for general purpose – 2 sets each</li> </ul>				
21.	Weigh Scale (Digital display) Capacity: 200 kg, readability 20 gm. Platform size: 505 x 650 mm	One No.			
22.	Weigh Scale (Digital display) Capacity: 1 kg, readability 0.1 gm. Platform size: 161 mm dia	One No.			
23.	Working table (SS top) wit bin 2 mtr. x 1 mtr. 1 mtr. (ht.) SS top sheet of 1.6 mm thick, supported by MS angel with removable legs of MS pipes.	One No.			
24.	Complete set of tools, jigs & fixtures required for installations (please specify each item with detailed specifications / quantity - use separate sheet)  (Anti-vibration mountings/ foundation bolts etc), tools for smooth operations & maintenance of machines (hand tools, special tools including electrical circuit diagrams and electrical spares etc) including the following:  (xiii) Hand Refractometer - ERMA, Range 0 to 32% (xiv) Spanner - 20 Nos.  (xv) Screw Driver - 20 Nos.	One set			
	(11) 55.50 51100 20 1005.	l	L	I	l

SIC/HO/TID/AU/12-171 (xvi)Tester-5 Nos. (xvii) Hand drilling machine – 1 No. Drill tap - 8,10,12 -(xviii) set (xix)Drill tapping set – 1 no. (xx) Hammer – 1 no. (xxi) Hand grinder machine -1no. Grinding wheel - 1 (iixx) set Cutting wheel – 1 (xxiii) set (xxiv) Tool box – 1 set Any other necessary provisions required for satisfactory operation Total price FOR, ICD, Tuglakabad, New Delhi (Sl. No. 1 to 24)

Lump sum price for one set of machinery & equipment (FOR, ICD,	
Tuglakabad, New Delhi: ₹	
(in words Rupees_	)

# **Spares & Raw Materials**

SI. No	Description and Technical specification	Qty.	Price (INR)	Tax & Duties (INR)	Total price (FOR,
1.	·	One set			
	Ensure the spares list include all the items/ parts those are required to be replaced during the course of normal running of machine, due to their wear & tear including the following:				
	<ul> <li>(i) For Fruit washer:</li> <li>a) Nylon wheels of drum – 1 set</li> <li>b) Spray nozzles – 1 set</li> <li>c) Water Spray Jet – 2 sets</li> </ul>				
	(ii) For storage tank: a) SS valve- 1 set				
	(iii) Fruit slicer machine: a) SS blades – 1 set				
	(iv) For Fruit mill: a) O ring 8 mm- 1 set				
	<ul><li>(v)For Pulper:</li><li>a) Pulping screen- 1 set</li><li>b) Nylon Brush- 3 sets</li><li>c) V belt – 1 set</li></ul>				
	<ul><li>(vi) For Colloid Mill:</li><li>a) Rotor- 1 set</li><li>b) Ring- 1 set</li></ul>				
	<ul> <li>(vii) For Vacuum Pan – fixed type:</li> <li>a) Teflon Scrapper- 1 set</li> <li>b) O ring- 1 set</li> <li>c) Teflon bush – 1 set</li> <li>d) Valves – 1 set</li> </ul>				
	(viii) For Vacuum pan- tilting type: a) Teflon scrappers – 1 set				
	(ix) For Storage tank with stirrer	Cierr		of Ridde	

Signature of Bidder
Seal of Bidder

Any other necessary provisions required for

satisfactory operation

		,	316/110/1	ID/AU/12-17	
2.	Raw material (Chemicals, Taste maker, Salt, preservatives, etc.) required for taking out the pilot production after the installation & commissioning of machines at site	1 Lot			
	Including the following:  (i) Sodium Benzoate - 1 kg  (ii) Salt - 1 kg  (iii) Spices & condiments - 1 kg  (iv) Cumin powder - 1 kg  (v) Turmeric powder - 1 kg  (vi) Onion powder - 1 kg  (vii) Sugar - 1 kg  (viii) Garlic powder - 1 kg  (ix) Yeast extract - 1 kg  (x) Acidity regulators E330 - 1 kg  (xi) Added flavour- natural & nature identical - 1 kg  Any other necessary provisions required for satisfactory operation				
1					

**Note:** The above price should be inclusive of sea-worthy packing, transportation and insurance and Taxes & Duties etc.

# Annexure-III

# Format of covering letter

# **Annexure-IV**

# **Proforma for Bank Guarantee**

In consideration of the National Small Industries Corporation Ltd. (NSIC), Okhla Industrial Estate, New Delhi (hereinafter called the Company') having agreed to exempt
Contractor' which term includes Suppliers for the purpose of this Bond) from the demand under the terms and conditions of an Agreement date.
for (hereinafter called the said 'Agreement') of Security Deposit for the due fulfillment by the said Contractor of the terms and conditions contained in the said Agreement, on production of a Bank Guarantee for ₹only).
a. We,(Indicate the name of the Bank) (hereinafter referred to as the 'Bank') at the
request(Contractor(s) do hereby undertake to pay to the Company an amount not exceeding ₹ against any loss or damage
caused to or suffered or would be caused to or suffered by the Company by reason of any breach by the said Contractor (s) of any of the terms and conditions contained in the said Agreement.
b. We,(indicate the name of the Bank) do hereby undertake to pay
the amounts due and payable under this guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss or damage caused to or would be caused to or suffered by the Company by reason of breach by the said Contractor(s), of any of the terms of conditions contained in the said Agreement or by reason of the contractor(s), failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding the same of the contractor of the contractor of the contractor of the contractor of the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding the contractor.
. We undertake to hav to the Company any money so

c. We undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

_	or payment there un gainst us for making			ctor(s)	shall					
	(indicate				the the					
the period that Agreement and dues of the Combeen fully paid  (NSIC) certifies thave been fully and accordingly claim under this	n contained shall rem would be taken fo that it shall continu- pany under or by vir and its claims satisf National Sma that the terms and co- and property carried discharged this gu guarantee is made or	r the perfile to be ended the file of the file out by the file of	ormance nforceable said Agree charged o ies Corpo the said o le said col Jnless a	of the till all ement I ement	said I the have Ltd. nent r(s) d or the					
	(indicate				the the					
Company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said contractor(s) form time to time or to postpone for any time or from time to time any of the power exercisable by the company against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by any reason of any such variation or extension being granted to the said contractor(s) or for any forbearance, act or omission on the part of the company or any indulgence by the company to the said contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.										
_	intee will not be disch le Bank or the contra	_	to the ch	ange ir	ı the					
g. We, bank)	(indicate	the lastly unde	name ertake not	of to rev	the					
of the Company	uring its currency ex in writing. da (indicate the nam	•	•							

The payment so made by us under this bond shall be a valid discharge