

Amendment No. 1

Name of Project: Hon. Balasaheb Thackeray Agribusiness and rural Transformation (SMART) Project.

Name of CBO: Apegaon Agro Processor Farmers Producer Company Ltd., Wadwali, Tq. Paithan, Dist. Aurangabad.

Name of Tender: Inviting Quotations for Freeze Dryer Machine 200 Kg/Day for Apegaon CBO.

RFB: SMART/AAPFPCL/Goods/02/2023

RFB: Published on 12/09/2023 in Dainik Punyanagari.

Amendment No. 1

- 1) Original Clause: Instruction to Bidders - Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids (Point No. 20) (Page No. 11 of Tender Document)
Amendment: Revised Point Attached below

The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to bidders. In case of annulment, all bids submitted and specifically, bid securities, shall be promptly returned to the bidders.

Purchaser is free to allot contract award by splitting to the contract part according to machinery.

- 2) Original Clause: Invitation for Quotations For Supply, Installation & Commissioning of Pulping Unit 2 TPH - Section 2, Supply Requirements, Point No. 1 List of Goods and Delivery Schedule (Table) (Page No. 14 of Tender Document)
Amendment: Revised Table Attached below

Item No.	Name of Goods or Related Service	Unit	Quantity	Place of Delivery and Installation	Delivery & Installation Period
1	Fruit Washer Make – KES Capacity – 2 TPH	No	01	At Gat No. 151/1 Wadwali, Tq. Paithan, Dist. Aurangabad	6 Months
2	Inspection Cum Cutting Conveyor Make – KES Capacity – 2 TPH	No	01		
3	Feeding Screw Elevator Make – B.K. Engineering Capacity – 2 TPH	No	01		
4	Pulper & Finisher Make – GOMA Capacity – 2 TPH	No	01		
5	Wastage Screw Conveyor Make – GOMA Capacity – 2 TPH	No	01		
6	Collection Tank Make – GMP Capacity – 1KL	No	01		
7	Product Transfer Pump Make – Netzsch	No	01		

	Capacity - 2 TPH				
8	Batch Tank Make - GMP Capacity - 1 KL	No	02		
9	Product Transfer Pump Make - Netzsch Capacity - 2 TPH	No	01		
10	Pasteurizer Make - KES Capacity - 1 TPH	No	01		
11	Final Product Holding Tank Make - KES Capacity - 2 KL	No	01		
12	Pouch Filling Machine Make - Samarpan Capacity - 2 TPH	No	01		
13	Product Transfer Pump Make - Netzsch Capacity - 2 TPH	No	01		
14	Custard Apple Pulper Make - PKV Capacity - 500 KG/HR	No	01		
15	Boiler Make - Rakhoh Capacity - 500 KG/HR	No	01		
16	Cooling Tower Make - Snow Cool Capacity - 50 TR	No	01		
17	Chiller Make - Snow Cool Capacity - 40 TR	No	01		
18	Cold Storage Make - Blue Star Capacity - 100 MT	No	01		
19	Blast Room Make - Blue Star Capacity - 20 MT	No	01		
20	Air Compressor Make - Airpower Engi. Capacity - 50 KV	No	01		

3) Original Clause: Invitation for Quotations For Supply, Installation & Commissioning of Pulping Unit 2 TPH - Section 2, Supply Requirements, Point No. 2 Technical Specifications of each item (Table) (Page No. 15 to 20 of Tender Document)

Amendment: Revised Table Attached below

Item No.	Name of Goods or Related Service	*Technical Specifications and Standards
1	Fruit Washer	<ul style="list-style-type: none"> • MOC: S.S.304. • Size: 1200 mm (W) x 3000 mm (L) x 1150 mm ht. • Washer with air blower creating the turbulence for effective washing • Circulation Pump for pushing the material towards the discharge Elevator. • Filtration System removes the foreign particles effectively. • Nozzles are given on elevator for fresh water spray. • 1 HP: for Elevator, • 2 HP: for water circulation pump and • 2 HP: for blower.
2	Inspection Cum Cutting Conveyor	<ul style="list-style-type: none"> • MOC: S.S.304. • Size: 900 mm (w) x 3000 mm (L) x 1250 mm (Drop Height). • Support structure construct in square tube. • Side main structure fabricated in sheet 2.5 mm thk. • Belt: PVC food grade. • Both side working platform with checker plate. • Electrical load: • 1 HP: Gear Motor.
3	Feeding Screw Elevator	<ul style="list-style-type: none"> • MOC: SS304 • Size: 250 mm (W) x 4500 mm (L) • Feeding Height 850 mm with hopper. • Discharge height is suitable to feed product to pulper. • Supporting structure construct in square tube. • Electrical load: 1 HP: Gear motor for screw
4	Pulper and Finisher	<ul style="list-style-type: none"> ▪ MOC: SS304

		<ul style="list-style-type: none"> • Mesh Size: 400 mm Dia. x 900 mm (Long). • Pulper with 3 mm sieve and Finisher with 0.8 mm whole sieve. • Screens are easily removable for cleaning. • SS paddle and nylon brushes are provided in Pulper. • Nylon brushes in finisher for effective pulp extraction. • Height Adjustment is given for brushes to suit for different fruits. • Electrical load: • 7.5 HP : Motor for Pulper & • 7.5 HP: Motor for finisher.
5	Wastage Screw Conveyor	<ul style="list-style-type: none"> • MOC:SS 304 • Length and size will be decided at actual required
6	Collection Tank	<ul style="list-style-type: none"> • MOC: SS304 • Size: 750 mm (Width) x 1250 mm (Length) x 590 mm (Height). • Side glass is provided to view the level in the tank. • Tank is provided with Lid.
7	Product Transfer Pump	<ul style="list-style-type: none"> • Capacity: 2000 LPH. • Head: 10-20 MWC. • Screw type progressive cavity pump. • SS 304 rotor & EPDM rubber stator. • Electrical load : • 1 HP : Gear motor.
8	Batch Tank	<ul style="list-style-type: none"> ▪ MOC : S.S.304. ▪ Size: 1100 mm x 1000 mm shell height. ▪ Shape: Conical top & bottom.
9	Product Transfer Pump	<ul style="list-style-type: none"> • Capacity: 2000 LPH. • Head: 10-20 MWC. • Screw type progressive cavity pump. • SS 304 rotor & EPDM rubber stator. • Electrical load : • 1 HP : Gear motor.
10	Tube In Tube Pasteurizer Cum Cooler	<ul style="list-style-type: none"> • MOC: All contact parts in S.S.316 & no contact parts in S.S.304. • Tube in tube: 6 Module. • Tube in Tube module Dia. 76 mm. • 2 mm thickness for Outer pipe & 1.6 mm thk. For Inner pipes. • Inner & outer tubes are corrugated for creating turbulence in liquid • Flow inside as well as outside of inner tubes as well as this corrugation will help to increase the surface area of tubes and give better performance. ▪ Pipes are Heat treated suitable for Heat exchanger. Temperature programmed: <ul style="list-style-type: none"> ▪ Heating: 30 degree to 90 degree. (Pasteurization) 90 degree to 45 degree. (Cooling by Cooling tower water) 45 Degree to 15 degree. (Chilling by Child water) ▪ Heat exchanger for mixing steam & water. Heating media- Hot water circulates through the heating section of the machine to heating the product at set ▪ Temperature within very fine limits in continuous process. ▪ System having flow diversion valve this routes the product after heating section. ▪ Automatic precision controls to ensure proper preheat up to certain desired set temp. ▪ If the product is properly preheated at desired set temperature, it flows forward through the unit. ▪ In case the product is not heated to the set heating temperature, it is automatically diverted by the FDV back to the balance tank
11	Final Product Holding Tank	<ul style="list-style-type: none"> • MOC: S.S.304. • Size: 1100 mmx 900 mm shell height. Shape: Conical top & bottom
12	Pouch Filling Machine	<ul style="list-style-type: none"> • Automatic system

		<ul style="list-style-type: none"> • Two head provide • With CIP system line • Capacity- mini.750 pouch per hrs 																																								
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14	FRUIT MILL	<ul style="list-style-type: none"> * Capacity: 500kg/Hr. * All material used SS304 except bearing housing and motor. * Crushing area 1000mm * Four hammer in pillar. * Bearing housing * Sieve provided * Mat polishing. 																																								
15	SS TABLES	<ul style="list-style-type: none"> * Size will be 900 mm (W) x 2000 mm (L) x 900 mm (H) *Thickness of SS sheet will be 1.2mm *Frame to be provided in 30 mm x 30 mm square tube *Mat Polishing provided *All material in SS304 																																								
16	SS Pots	Standard																																								
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18	SS Pipeline	Standard																																								
19	Boiler steam line	Standard with insulation																																								
20	Boiler	<table border="1"> <thead> <tr> <th>Sr. No</th> <th>OPERATING PARAMETERS</th> <th>UNIT</th> <th></th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Steam Generation Capacity(F & A100°C)</td> <td>Kg /Hr</td> <td>500</td> </tr> <tr> <td>2.</td> <td>Safety valve lift off pressure (SVLOP)</td> <td>Kg /cm²</td> <td>7</td> </tr> <tr> <td>3.</td> <td>Hydraulic Test Pressure</td> <td>Kg /cm²</td> <td>10.5</td> </tr> <tr> <td>4.</td> <td>Efficiency of Boiler on GCV basis- GCV of Wood : 3200 kcal/kg GCV of Briquettes : 3760 kcal/kg</td> <td>%</td> <td>72±2% Based on GCV of Wood 74±2 % Based on GCV of Briquettes</td> </tr> <tr> <td>5.</td> <td>Fuel Consumption (Approx.)(At Full Load)</td> <td>Kg/hr</td> <td>70 kg/hr of Wood 59 kg/hr of Briquettes</td> </tr> <tr> <td>6.</td> <td>Steam Quality (Dryness)</td> <td>%</td> <td>98% Dry Saturated</td> </tr> <tr> <td>7.</td> <td>Fuel Feeding System</td> <td></td> <td>Manual</td> </tr> <tr> <td>8.</td> <td>Flue Gas Temperature Boiler WPH Stack/Chimney</td> <td>Deg C</td> <td>200 180 160</td> </tr> <tr> <td>9.</td> <td>Grate Type</td> <td></td> <td>Stationary Grate with Supports</td> </tr> </tbody> </table>	Sr. No	OPERATING PARAMETERS	UNIT		1.	Steam Generation Capacity(F & A100°C)	Kg /Hr	500	2.	Safety valve lift off pressure (SVLOP)	Kg /cm ²	7	3.	Hydraulic Test Pressure	Kg /cm ²	10.5	4.	Efficiency of Boiler on GCV basis- GCV of Wood : 3200 kcal/kg GCV of Briquettes : 3760 kcal/kg	%	72±2% Based on GCV of Wood 74±2 % Based on GCV of Briquettes	5.	Fuel Consumption (Approx.)(At Full Load)	Kg/hr	70 kg/hr of Wood 59 kg/hr of Briquettes	6.	Steam Quality (Dryness)	%	98% Dry Saturated	7.	Fuel Feeding System		Manual	8.	Flue Gas Temperature Boiler WPH Stack/Chimney	Deg C	200 180 160	9.	Grate Type		Stationary Grate with Supports
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		10.	Required PRS system with all necessary assembly	-	1 Nos
		11.	Boiler Design/Construction		IBR1950 with latest amendments
		12.	Type of Boiler		Smoke Tube Package Type
		13.	Number of Passes		Two+ One in WPH
		14.	Steam/Water Separator		Inbuilt -Modern Make
		15.	Boiler Dimensions		2000L *1400W*1600H
		16	Steam pipeline with insulation	-	-
21	Cooling Tower	<ul style="list-style-type: none"> Capacity - 80 TR Size-9ft*9ft*12ft Luffers - FRP 			
22	Chiller	<ul style="list-style-type: none"> Capacity - 50 TR Temp. in- 10 deg Celsius Temp. out- 5 deg Celsius Flow- 215LPM Type- Self Contained Air cooled 			
23	Cold Storage	Ambient Temperature	+43 Deg C		
		Room temperature maintained	-18 to - 22 deg c and + 0 to 6 deg c		
		Product to be stored	Fruit pulp and fresh fruit		
		Product Incoming Temperature	-20 deg for minus temp. and 37 deg c for plus temp.		
		Product storage capacity per batch	60 MT for plus room and 40 MT for minus room		
		Pull down time	Storage only		
		PUF Density	40 kg per cum		
		U factor	0.05 Btu/hr/sqft/deg F		
		Material of insulation for wall & Ceiling Insulation and thickness	R PUF, 100 mm Panels for freezerand80 mm for chiller		
		Wall and ceiling finish	PCGI/PCGI		
		Door thickness, type and size	150 and 60 mm thick insulated swing door of size 34x78 inches with door heater for both		
		Type of refrigeration unit	Split type, DX type		
		Evaporator unit make	Blue star / guntner		
		Condensing unit/Compressor make	Blue star / emerson		
		Type of refrigerant	R 404a		
		Type of Compressor	hermetic compressor		
		Type of condenser	Air Cooled		
		Type of evaporator units	Forced air cooled		
		Temperature indicator	Microprocessor based digital controller cum indicator.		
		Type of lighting	Cold Room Lights - included		
		Human safety release knob	Part of the Door -		

		Power supply:	415 V, 3-Phase																																		
24	Blast Room	<table border="1"> <tr> <td>Ambient Temperature (in Deg C)</td> <td>+43 Deg C</td> </tr> <tr> <td>Room temperature maintained</td> <td>-45 deg c</td> </tr> <tr> <td>Desired temperature range</td> <td>NA</td> </tr> <tr> <td>Product to be stored</td> <td>Fruit pulp</td> </tr> <tr> <td>Product Incoming Temperature</td> <td>+ 15 deg</td> </tr> <tr> <td>Product storage capacity per batch</td> <td>3 MT</td> </tr> <tr> <td>Pull down time</td> <td>Hardening only</td> </tr> <tr> <td>Door thickness, type and size</td> <td>150 and 60 mm thick insulated swing door of size 32x75 inches with door heater.</td> </tr> <tr> <td>Evaporator unit make</td> <td>Blue star</td> </tr> <tr> <td>Condensing unit/Compressor make</td> <td>Emerson</td> </tr> <tr> <td>Type of refrigerant</td> <td>R 404a</td> </tr> <tr> <td>Type of Compressor</td> <td>hermetic compressor</td> </tr> <tr> <td>Type of condenser</td> <td>Air Cooled</td> </tr> <tr> <td>Type of evaporator units</td> <td>Forced air cooled</td> </tr> <tr> <td>Temperature indicator</td> <td>Microprocessor based digital controller cum indicator.</td> </tr> <tr> <td>Type of lighting</td> <td>Blast Room Lights - included</td> </tr> <tr> <td>Power supply:</td> <td>415 V, 3-Phase</td> </tr> </table>		Ambient Temperature (in Deg C)	+43 Deg C	Room temperature maintained	-45 deg c	Desired temperature range	NA	Product to be stored	Fruit pulp	Product Incoming Temperature	+ 15 deg	Product storage capacity per batch	3 MT	Pull down time	Hardening only	Door thickness, type and size	150 and 60 mm thick insulated swing door of size 32x75 inches with door heater.	Evaporator unit make	Blue star	Condensing unit/Compressor make	Emerson	Type of refrigerant	R 404a	Type of Compressor	hermetic compressor	Type of condenser	Air Cooled	Type of evaporator units	Forced air cooled	Temperature indicator	Microprocessor based digital controller cum indicator.	Type of lighting	Blast Room Lights - included	Power supply:	415 V, 3-Phase
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25	SS BLAST TROLLEY	<ul style="list-style-type: none"> * SS 304 trolley * One trolley will have with 6 feet height & 24 trays per trolley * Size 1000 mm x 800 mm X 1600 mm * 24 numbers tray in each trolley * Frame made by square tube size will be 30 mm x 30 mm x 2 mm thickness * Tray support angle 25 mm x 25 mm x 3 mm provided * Nylon cluster wheels 6 inch 4 numbers provided * All material SS304 provided * Mat polishing provided 																																			
26	Air Compressor	<table border="1"> <tr> <td>Horse Power</td> <td>10 HP</td> </tr> <tr> <td>Technology</td> <td>Screw compressor</td> </tr> <tr> <td>Maximum flow rate</td> <td>15-40cfm</td> </tr> <tr> <td>Auto cut off system</td> <td>Available</td> </tr> </table>		Horse Power	10 HP	Technology	Screw compressor	Maximum flow rate	15-40cfm	Auto cut off system	Available																										
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* Where ISI certification marked goods are available in market, procurement should generally be limited to goods with those or equivalent marking only.

Note: if any specific brand/model number is mentioned in the specification in such case other equivalent brand/ model no is acceptable to the purchaser

- 1) Essential spares of machinery like screens and other spares for the smooth functioning of the plant for one year of operation should be supplied.
- 2) Tools required for the maintenance of machinery should be supplied
- 3) Appropriate guard for all open drives should be provided for safety
- 4) The individual machinery should be supplied with an electrical motor and matching starter
- 5) Provision for starting/ stopping the individual machine of the line should be made available
- 6) The electrical motor supplied should be from reputed manufacturers having an efficiency of 80% and above
- 7) Control panel for the entire plant should be provided along with indicator lamps and Voltage
- 8) The charges for wiring the individual machinery with necessary and regulatory safety features should be included in the scope of the supply.
- 9) The AMC for the entire plant (after the warranty period) may be indicated
- 10) Please mention the area required for each line and arrange to provide layout drawing accordingly.
- 11) Machine is fitted with a Suitable Feed Hopper with a Feed Control device.
- 12) For silent & smooth operation of the machine reduction Gear box drive is fitted.
- 13) All the shafts are made of high - Grade Steel.
- 14) All the electric motors, electric control panel, all platforms, machine accessories, power transmission mechanism, etc. of standard material and size should be provided.
- 15) Before submitting the bid, bidder should visit the site.
- 16) Plant and machinery should have tested by the authorized testing center of the appropriate authority / agency, preferably government of India.

4) Original Clause: Form No 9 Price Schedule (Page No. 32 of Tender Document)

Amendment: Revised Form No 9 Attached below

Sr. No.	Items	Model No & Brand name	Unit	Qty	Unit Rate without GST in Rs.	Total Amount without GST in Rs.
1	Fruit Washer Make - Fabricated		No	01		
2	Inspection Cum Cutting Conveyor Make - Fabricated		No	01		
3	Feeding Screw Elevator Make - Fabricated		No	01		
4	Pulper & Finisher Make -KES/ GOMA or equivalent		No	01		
5	Wastage Screw Conveyor Make - Fabricated		No	01		
6	Collection Tank Make - Fabricated		No	01		
7	Product Transfer Pump Make - Netzsch Capacity - 2 TPH		No	01		
8	Batch Tank Make - Fabricated		No	02		
9	Product Transfer Pump Make - Netzsch Capacity - 2 TPH		No	01		
10	Pasteurizer Make - KES / GOMA / HRS or equivalent Capacity - 1 TPH		No	01		
11	Final Product Holding Tank Make - Fabricated		No	01		
12	Pouch Filling Machine Make - Samarpan / RMC / Qualitronic or equivalent Capacity - 750 Pouch per hrs		No	01		
13	Product Transfer Pump Make - Netzsch Capacity - 2 TPH		No	01		
14	Custard Apple Pulper Make - PKV, Capacity - 500 KG/HR		No	02		
15	Boiler Make - Rakhoh/Ross or equivalent		No	01		
16	Boiler chimney		NO	01		
17	Fruit Mill Make- Fabricated Capacity-500KG/HRS		NO	01		
18	Cooling Tower Make - Fabricated, Capacity - 80 TR		No	01		
19	Chiller (including pipeline) Make - Snow Cool, Capacity - 50 TR		No	01		
20	Hand sealing Machine Capacity-100 pouch/hrs		NO	05		
21	SS Pots -25 Nos and SS Table -05 Nos		NO	25/05		
22	Cold Storage Make - Blue Star /MK FREEZING TECHNOLOGIES or equivalent Capacity - 40MT minus temp. (18 to -22) and 60 MT plus temp. (0 to 6)		No	01		
23	Blast Room (Including Trollies) Make - Blue Star/MK FREEZING TECHNOLOGIES or equivalent Capacity - 3 MT		No	01		

24	Air Compressor (including air pipeline) Make - Ingersoll rand/Comp Air or equivalent		No	01		
25	SS Pipeline (All Necessary pipeline)		-	-		
26	Electrical panel (as per machines requirement)		-	-		
	Total Amount without GST in Rs.					
	Add GST in Rs.					
	Total Amount with GST in Rs.					