

B K Engineers

B-109, Tasawade MIDC,

Karad-415109

Ph. No. 02164258096

Ref: BKE/SAFPCL/02/21-22

Date: 25/01/2022

To:

Sonhira Agro farmer;s Producer Co. Ltd.

Mohityanche Vadgaon

Dist. Sangli Maharashtra

Kind Attn. Mr. Datta Mohite

With reference to your requirement of Mango, Tomato, Ketchup, Sauce and Jam and Banana processing line, we are sending herewith our techno commercial offer for your kind consideration. We hope that we are in line with your requirement and looking for your valuable order.

Thanking you,

Your's truly,

For

B K Engineers

SHRIKANT KULKARNI

Techno-Commercial Offer:-

1 Inspection Belt Conveyor Consist Of:-

Qty.: 01 No.s

- Completely made in SS304
- Capacity: 4MT/Hr raw fruit
- Size: Width 1000mm and length **3000mm** and discharge height suitable to feed in fruit washer
- Side frames made in 3mm thick sheet
- Drive and non drive end plates made in 5mm thick sheet
- Food grade PVC belt 3mm thick
- Belt supported on rollers made in 2" NB pipe
- Both drive and non drive rollers are rubber lined
- Both side platform for inspection of fruits
- Structure made in 80x40 and 40x40 sq. pipe
- Feed side stopper and discharge chute
- Geared motor SEW/Nord make 1.5HP, 14RPM



2 Fruit Washer

Consist Of:-

Qty.: 01 No.s

- Completely made in SS304
- Capacity: 4MT/Hr raw fruit
- Rectangular shaped tank of size 1000mm X 2500mm X 1000mm height approx.
- Tank made in 2mm thick sheet
- Elevator made in angle 50x5 and 40x5mm L angle
- Belt in SS 304 link belt of width 750mm with product support height 75mm, at the pitch of 200mm
- An electric blower for air agitation 3HP, 280CUM/Hr
- Circulation pump kirloskar make SP1HM model 2HP
- Pushing nozzles also provided
- Static filter for water filtration
- Cleaning hatch dia. 225mm 02 no.s
- **Chlorine dozing unit with dozing pump and tank**
- **Spray line on inclined portion of elevator for fresh water wash**
- **Provision of Spurger line for Hot water**
- Discharge height suitable to feed in fruit washer-2
- Geared motor for elevator SEW make 1.5HP,22RPM
- Installed power 6HP



3 Working Table
Consist Of:-

Qty.: 03 No's

- Completely made SS 304.
- Size - 2200 X 1000 X 850 mm
- Sq. tube leg structure.
- Top side guard made in 100 X 25 mm rect. tube
- Levelers for legs

4 Fruit Crusher (Pulvarizer)
Consist Of:-

Qty.: 01 No.s

- Capacity: 1 MTH. Ginger /garlic and 4 TPH tomato
- Suitable for Tomato, Green chili, Ginger and Garlic.
- Collapsible set of hammers
- Special heavy duty fruit crusher
- Completely made in SS 304
- Set of sieves 3mm 4mm 6mm 8mm
- 2 pole 3000 RPM Motor 15 Hp.
- Feed hopper with screw and discharge chute
- Mounted on extruded SS structure

5 Auger Pump with Hopper
Consist Of:-

Qty.: 01 No.s

- Capacity: 4MT/Hr
- Stator rotor type pump
- Make: Unique pumps/ equivalent
- All contact parts in SS304 and food grade rubber
- Auger pump
- Provide 500 Ltr. Inlet hopper
- Base frame in SS304
- Geared motor SEW or Nord make

6 2 - Stage Pulper
Consist Of:-

Qty.: 01 No.s

- Completely made in SS304
- Capacity: 4MT/Hr
- Comprises of Pulper and finisher mounted on same structure
- Both the Sieves for pulper and finisher size dia. 500 X 1000 mm in length and 3mm hole size and 0.8mm hole size
- Shaft supported on heavy duty bearings
- Feed hopper provided with feed screw for uniform feeding for pulper
- Connecting pipe for pulp from pulper to finisher 101 mm OD pipe
- 4 no.s of brushes for scrapping for both pulper and finisher
- Brush in PP with base 65x65 and 1mm bristle dia. 1mm and 50mm height

- Set of pulleys and v belts for drive
- Mounted on heavy duty structure made in 150x150x3mm thick square pipe
- Outlet connection 101 mm sms union with bend and pipe connecting to collection tank
- Operating speed is 450 RPM for both pulper and finisher
- Installed power – 5 KW, 6P for pulper and 3.75 KW, 6P for finisher

7 Collection Tank-500Ltr
Consist Of:-

Qty.: 01 No.s

- Completely made in SS304
- Rectangular shaped tank
- Tank made in 2mm thick sheet
- Level glass indicator for tank
- Single slope bottom
- Top lids
- Discharge height 400mm from ground
- Legs in round pipe with ball feet
- Outlet connection 63mm SMS

8 Transfer pump
Consist Of:-

Qty.: 01 No.s

- Capacity: 2MT/Hr
- Stator rotor type pump
- Make: Unique pumps/equivalent
- All contact parts in SS304 and food grade rubber
- Base frame in SS304
- Geared motor SEW make



9 Jacketed Kettle-500 Ltr.

Qty.:- 03 No's

Consist Of:-

- Spherical shaped bowls made in SS316 and SS304 of 5mm thick sheet
- Straight face 200mm
- Scraper type agitator for scraping
- Steam inlet connection provided
- Pressure gauge, safety valve and steam trap also provided
- Geared motor 2.2KW, 15 RPM
- Outlet connection 51mm SMS



10 Tilting Kettle -250 Ltr.

Qty.: 01 No.

Consist Of:-

- **Capacity: 250 Kg.**
- Completely made in SS304
- Spherical shaped bowls Dia. 950 and Straight face 200mm
- Top lids in two parts
- Open jacket 20mm for steam
- Inlet and drain connection for jacket
- Safety valve , pressure gauge, relief valve on jacket
- Outlet connection for tank 51mm SMS
- 80 X 80 Sq. tube structure
- **Provide motorized starrier for product mixing 1.5 HP 1440 RPM Motor**
- Provide tilting mechanism for kettle tilting (Manual)
- Both side NTN make bearing for kettle holding
- Stopper for stop tilting.

11 Transfer pump
Consist Of:-

Qty.: 01 No.s

- Capacity: **4MT/Hr @12 bar pressure.**
- Stator rotor type pump
- Make: Unique pumps/equivalent
- All contact parts in SS304 and food grade rubber
- Base frame in SS304
- Geared motor SEW make



12 Overhead Insulated tank with filling Manifold
Consist Of:-

Qty.: 01 No.

- Completely made in SS304
- Capacity: 500 Ltrs.
- Size: Dia. 800 X 1000mm
- Bottom cone and top lids
- Inner Cone and shell made in 2mm thick sheet
- Outer cone and shell made in 1.6mm sheet
- Rockwool Insulation of 50mm thick
- Legs in 2" NB pipe
- Outlet connection 63mm SMS
- Level glass indicator on shell and bottom cone
- Spray ball for cleaning
- Ladder also provided
- Filling station with 2 nos. of ball valve
- Table of width 500X 1000mm also provided



13 Mobile Tank with Pump
Consist Of:-

Qty.: 01 No.

- Completely made in SS304
- Tank capacity – 300 ltr.
- Rectangular shaped tank
- Size: 900x900x400mm
- Tank made in 2mm thick sheet
- Level glass indicator for tank
- Single slope bottom
- Top lids
- Discharge height 300mm from ground
- Legs in round pipe with ball feet
- Stator rotor type pump capacity – 2 MTH
- **Collection tank and pump fitting in movable skid**

14 Homogenizer
Consist Of:-

Qty.: 01 No.s

- HIGH PRESSURE HOMOGINIZER For Ketchup /Juice / Pulp
- Capacity: 1000 LPH
- Model : SHE 10K / 15.0 hp
- Series :Fully Hi-tech Series
- TYPE: - PNUMATIC / AUTOMATIC
- Mounting ON S.S. ADJUSTABLE ANTI VIBRATIONDAMPERS.
- **Operating Data**
Flow rate, LPH 1000 lph.
Pressure – bar 150 bar (Designed – 200 bar)
Viscosity, cps 10,000 cps [Considered]
Temperature, 0 C 110 deg. (Designed)

- Homo. Eff. 98 %
- No. Of Stage Two
- No. of Piston Three
- Piston Dia 30 mm
- End connections - Suction - 38 mm and discharge - 38 mm.
- Homogenizing Head High Grade Bume Material
- Homogenization block S.S. 316
- Piston S.S. 316 With - High Grade Crome / Stalited Coated
- Pneumatic Heads S.S. 304
- All Elastomers Food Grade – Viton
- Homogenizing Valve & Sheets Imported – TC
- Face Combination TC
- Motor Kw / HP 11.0 Kw / 15.0 hp Speed – rpm 210 rpm
- Motor Make ABB / CGL / BB Make



15 Cooling Unit
Consist Of:-

Qty.: 01 No.

- Completely made in SS304
- Multi tube type heat exchanger made with corrugated tubes in which shell in 3”NB pipe and inner tubes 19mm OD.
- Total 4 modules 3 mtr. Length.
- Product feed pump use kettle discharge pump for product feeding
- CIP pump mounted parallel with product feed pump with NRV and valve , 10 CUM /hr with 30 mtr head
- Media flowing in counter flow direction provided inlet and outlet connections with manual operated valve for media.
- Piping for product circulation & CIP within skid
- Total unit is skid mounted
- Skid made in SS 304 sq. tubes
- VFD for product feed pump

- Temperature sensors for product inlet, product outlet
- Control panel cabinet in SS304 with all standard accessories
- Wiring for unit within skid

Cooling Tower

Qty.: 01 No's

- For Pulp Cooling – 20,000 Kcal/hr.
- counter flow type,
- inlet water temp 32Deg C
- Outlet water temp. 27 deg C
- Circulation pump 10 cum/ hr.

16 Set of Product piping and supports

Qty.: 01 Set.

- One set of Pipes, Hose pipes, valves, unions, bends, Tees, clamps and supports with fabrication and fittings to connect all equipment's as per lay out All items are in SS 304

**17 Control Panel
Consist Of:-**

Qty.: 02 Set.

- SS 304 cabinet
- Starters for product circulation pumps
- Temperature and pressure indicators
- All necessary interlocking for temperature provided

Price Sheet:

Sr. No.	Description	Qty.	Total Cost
1	Inspection Belt Conveyor	01 No.s	3,46,500
2	Fruit Washer	01 No.s	7,00,000
3	Working Tables	03 No.s	1,89,000
4	Fruit Crusher (Pulveriser)	01 No.s	3,50,000
5	Auger Pump with Hopper	01 No.s	3,22,000
6	2 Stage Pulper	01 No.s	6,30,000
7	Collection Tank 500 Ltr	01 No.s	1,05,000
8	Transfer Pump 2 MTH	01 No.s	2,66,000
9	Jacketed Kettle – 500 Ltr.	03 No.s	14,70,000
10	Tilting Kettle – 250 Ltr	01 No.s	3,92,000
11	Transfer Pump – 4 MTH @ 12 Bar	01 No.s	3,22,000
12	Overhead insulated Tank with table –500 Ltr.	01 No.s	3,92,000
13	Mobile Tank with pump	01 No.s	2,80,000
14	Homogenizer	01 No.s	13,30,000
15	Cooling Unit with cooling tower	01 No.s	4,20,000
16	Set Of Product Piping and Supports	01 Set	2,80,000
17	Control Panel	02 Set	4,20,000
		TOTAL=	82,14,500
		GST- @18%	14,78,610
		Transport	56,000
		GRAND TOTAL=	97,49,110

Utility requirement:-

To be organized by customer

- 1) Steam boiler –
 - 1000 kg/hr@ 10.3 kg/cm²
 - All accessories like chimney, feed water tank, PRS , piping and valves , insulation etc.
- 2) Air compressor –50 CFM @ 7kg/cm² with 1000 ltr tank, dryer, filter unit, piping
- 3) Water treatment plant suitable for potable water and soft water of 0 to 5 ppm hardness , water storage facility and piping for soft water and normal raw water
- 4) Power supply,100 kva , cabling, trays, distribution panel, DG set etc
- 5) ETP suitable for 50 cum /day
- 6) All civil work including foundations
- 7) All utility piping (For water, air, steam effluent etc)

Terms & Conditions

1. The price quoted are ex – works Karad.
2. GST @ 18%
3. Packing extra at actual.
4. Equipments will be shipped on freight to pay basis, Insurance charges on buyers account.
5. Payment Terms: 40% advance to be paid along with Purchase Order, 50% after inspection of equipments at our works but before despatch against Performa Invoice and balance 10% after installation and commissioning.
6. Delivery period 4 **Months** after receipt of clear commercial order along with advance.
7. Inspection at our site.
8. Validity of offer is 15 Days.

For

B K ENGINEERS

Shrikant Kulkarni