

I (1) Form
Schedule of Machinery

SEASON : 2022-23	Capacity : 2500 TCD
NAME OF FACTORY	Jaishriram Sugar & Agro Products Ltd. Halgaon, Tal : Jamkhed, Dist : Ahmednagar. Pin – 413205.
REGISTRATION NO	C/N U/542/PN2006PLC/02/985 Dt. 10-02-2006.
SHORT NAME	JAISHRIRAM
CODE NO.	67301
TELEPHONE NO.	Head Office: (020) 24218124 Factory Site : (02421) 233370
FAX NO.	Head Office: (020) 24218124 Factory Site : (02421) 233371
EMAIL	jsapltd@gmail.com jsapl.eng@gmail.com
TYPE OF PLANT	Electric Driven.
PROCESS FOLLOWED	Double Sulphitation.
MAKE OF PLANT	Gadekar Bestall Industrial Projects; (GBIP), Pune-5. Modified by S S Engineers Pune.

- 1) CANE WEIGH BRIDGES**
- i) 2 – Nos. of cane weigh bridges
 - ii) Type – electronic type
 - iii) Make – Shivam Weighing Scale, Himmatanagar, Gujarat.
 - iv) Platform Size –
 - 40 MT = 3.175 X 7.450mts
 - 50MT = 3.4 X 16mtr for Truck Tractor

a) Cane Unloaders

Two Nos.

- 1).
 - i) Make – ‘Trimurti’ make (Kolapur)
 - ii) Type Two motion electrically operated.
 - iii) Capacity – 7.5 MT/Lift.
 - iv) Lift PerHr. = 20 Lifts/Hr.
 - v) Span length = 28 mtr
 - vi) Height of lifting – 13 mtr
 - vii) H.P of cross travel = 7.5 HP and 940 RPM
 - viii) H.P of hoist Motion = 30 HP and 935 RPM
- 2).
 - i) Make – S S Engineers
 - ii) Type Two motion electrically operated.
 - iii) Capacity – 7.5 MT/Lift.
 - iv) Lift PerHr. = 20 Lifts/Hr.
 - v) Span length = 28 mtr
 - vi) Height of lifting – 13 mtr
 - vii) H.P of cross travel = 7.5 HP and RPM
 - viii) H.P of hoist Motion = 25 HP and 960 RPM

b) Feeder Table

- i) Two nos. = pusher chain type for Bullock cart,
- ii) Size = L-7 mtrs x W-8 mtrs
- iii) Drive = 15 HP/1440rpm. With Dynospeed Drive
- iv) Speed = 1 to 3 mtrs/min.
- v) Chain = 9 stands & 150 mm pitch.
- vi) Angle of Inclination = Horizontal

2) CANE CARRIER

Two Nos Having auto cane feeding system (ACFC) Make – Instrucon System, Satara

a) First Cane Carrier Size, Carriers drive HP etc.

- i) Length = 33000mm & width = 1700 mm Width, Length, between
- ii) Horizontal length- 16500mm
- iii) Inclined length – 14800mm
- iv) No. of strand & pitch = 3 Nos & 150mm.
- v) Drive = 60 HP 1440rpm variable speed.
- vi) Dyno Speed rpm – 120 to 1200 RPM.

b) Second Cane Carrier Size, Carriers drive HP etc.

- i) Length = 24250 mm & width = 1700 mm Width, Length, between
- ii) Inclination 27 Degree.
- iii) No. of strand & pitch = 2 Nos & 229 mm.
- iv) Drive = 50 HP 1440 rpm VFD AC

3) CANE PREPARATION

a) Cane Chopper

- i) One number.
- ii) Make = MERU INDUSTRIES
- iii) Drive BHP = 120 rpm-1440.
- iv) Swing Dia. – 1600 mm X 1700 mm length
- v) No of knives – 32 Nos.

b) Cane Leveller

- i) One Number Swing type knives
- ii) Make – MERU INDUSTRIES.
- iii) No. of Knives – 42.
- iv) Dia overtip and Knives = 1600 mm X 1700 mm
- v) Clearance between tip of knife and cane carrier is 250mm
- vi) Drive = Electric Motor 250HP/600 Rpm.
- vii) Pitch = 100mm.
- viii) Year of Installation – 2022.

c) Fibrizer Swinging Hammer

- i) One Set.Swing Hammer
- ii) Make – MERU INDUSTRIES
- iii) No. of Hammers = 105.
- iv) Type – Swing hammer type.
- v) Wt. of each Hammer = 20kg.
- vi) Shaft dia. = 240 mm.
- vii) Swing dia. = 2100 mm.
- viii) setting 160-100-20 mm
- ix) Drive – 800HP/750Rpm M-2 Nos .
- x) Coupled – Directly coupled
Gear coupling 108
- xi) Year of Installation – 2022.

d) Mill House Eot

:- Capacity -10 Tph & 20 Tph

4) MILLS

State No. of Mills & for each

i) Tow Nos.(1 & 4 Mills.) Buckau-wolf mills

having three rollers and mill the Dia & length of the roller 830 X 1524 mm ,GRPF each mill & Donnelly Chute .Roller Dia 1031mm x1524mm length

State No. of Mills & for each

ii) Tow Nos.(2 & 3 Mills.) Meru Industries mills

having three rollers and mill the Dia & length of the roller 830 X 1524 mm ,TRPF each mill & Donnelly Chute .Roller Dia 830mm x1524mm length

Individual Hydraulic system is provide
 Make – Kamakshi Engineering, Belgaon.
 Type – 8 cylinder nitrogen based.
 Max. pressure – 5000 PSI.

DETAIL OF MILLING TANDUM

No.	Description	I	II	III	IV
1)	Mill Setting in mm PCD to PCD				
	Feed (mm)	49	38	32	28
	Discharge (mm)	17	16	13	10
	Trash Plate	93	74	62	55
	GRPF				
2)	Grooving Details				
	i) Pitch (mm)	50	50	30	30
	ii) Grooving Angle	-	-	-	-
	Feed	35	40	40	35
	Top	50	50	50	50
	Discharge	45	45	45	50
	GRPF pitch	50	-	-	30
	Top to bottom	36			36
	iii) Depth	-			
	Feed	62			
	Top	42	55	30	35
	Discharge	47	42	24	24
	GRPF	41	47	27	24
	Top to bottom	40	-	-	41
	Top to bottom		-	-	40
3)	Diameter of Rollers (mm)				
	Feed	830	830	830	830
	Top	830	830	830	830
	Discharge	830	830	830	830
4)	Roller RPM	4-6	4-6	4-6	4-6

- 1) Total Hydrolic load on top roller in Kg 200 Kg/cm²
- 2) length & Dia of roller journal(mm) 380 x 500 mm

5) DRIVES FOR CRUSHER & MILLS

- A) If steam engine used state no. & type of engine, no. of crushers engine, he diameter of cylinder, stroke RPM & normal indicated horse power. Not Provided.
- B) If steam turbines are used their HP & the units driven by each Not Provided.
- b) Gear Arrangement
- 1) Planetary gear reducer with rope coupling.
 - 2) Make –Top Gear.
 - 3) Gear box oil cooling arrangement
 - 4) Type-MD 1350 Ratio-165.95:1for mill no-1
 - 5) Type MD 1250 Ratio 163.20:1 for Mill no. 2 to 3
 - 6) Type-MD 1250 Ratio-122.18:1for mill no-4
- c) If electric Motors are used state
- number type of motors particular of current, no. of crusher and mill driven by each motor & house power development at full load by each motor.
- 1) four nos. of electric motor provided for mill drive with AC VFD drive
 - 1) Make – Siemens – 300 kw – 2 nos 2017
 - 2) Make – Kirloskar -300 Kw- 02 nos RPM-992 ,
 - 3) GRPF 200 HP two Nos Mill No.1 & 4 Year of Installation –2022

7) INTERMEDIATE CARRIER RAKE TYPE

- a) Rake Carrier
- Three Nos.
- 1) Length of each -6500 mm
 - 2) Width of each - 1524 mm
 - 3) Inclined angle – 52,52,53
 - 4) Feeding height – 1230 mm
 - 5) Drive HP-25 HP 2 Nos.& 1 No.20 HP
 - 6) Planetary gear box – Kavistu make
 - 7) No of rakes for each rake carrier – 33 Nos.
 - 8) Make – Meru Interprises
 - 9) Year of Installation – 2022.
- b) Belt Conveyor for Bagasse Handling after 4th mill.
- Not applicable.

8) BAGASSE ELEVATOR , BAGASSE CARRIER & RETURN BAGASSE CARRIER

a) State type, Length drive

- 1) Bagasse elevator – One nos.
- 2) Type – One steel chain slat type. No of slat 52
- 3) Pitch – 150 mm.
- 4) Width – 1240mm.
- 5) length – 15600mm
- 6) Drive HP – 30 HP/RPM.
- 7) Gear Box – Planetary gear box
Make – Kavistu Sr. No. – 11104424.
- 8) Speed – 25 meters/min.
- 9) Make – GBIP, Pune.
- 10) Year of Installation – 2010.

b) Bagasse Carrier

-NA

c) Return Bagasse Carrier

One Number.150mm pitch

- 1) Length – 76 mtr C to C-32 m Ht-10 mtr
- 2) Width – 1220 mm Depth
- 3) Gear Box make – Kavistu Satara
- 4) Type – planetary
- 5) Drive -40 HP/1460 rpm

9) IMBIBITION

a) State whether used is hot or cold water arrangement of measuring or weighing & capacity.

- 1) Hot water imbibition is provided.
- 2) Hot water flow meter.
- 3) Capacity – 50m³/Hr.
- 4) Make – PSP Kolapur. Year – 2022
- 5) Pipe Size – 100 mm.

b) State Imbibition scheme is followed

1) Compound Imbibition scheme is adopted.

c) Juice Screening

- 1) Rotary juice screen having Dia 1800x3600 mm with auto screen washing arrangement per spacing 500 micron, Drive :-5.5 KW, Planetary Gear Box
:- Make:-PSP,Capacity:-160 M³/Hr.
Head :-75 mtr, Suction & Delivery:- 150/125, RPM:-1440.&Hp-100 two Nos.

* Raw Juice Pump

10) JUICE HEATERS

09 Nos

No.	Make	Type	No. of tubes	No. of passes	Tubes Pass	Tubes / Size ODx IDxLmm	Heating Surface m ²
1)	GBIP , Pune	Vertical High Velocity	216	24	9	42x45x4000	118 m ²
2)	GBIP , Pune	Vertical High Velocity	216	24	9	42x45x4000	118 m ²
3)	GBIP , Pune	Vertical High Velocity	216	24	9	42x45x4000	118 m ²
4)	GBIP , Pune	Vertical High Velocity	216	24	9	42x45x4000	118 m ²
5)	GBIP , Pune	Vertical High Velocity	216	24	9	42x45x4000	118 m ²
6)	SS Engineers	Vertical High Velocity	306	18	17	42x45x4000	170 m ²
7)	Trimurti make	Dynamic Vertical High Velocity	448	28	16	42x45x4000	240 m ²
8	Trimurti make	Sulpher Juice DCH	1 No.Direct Contact Heater for Sulpher juice heating diameter of 750 mm. 1 st body Vapour upto 100 °C to 110 °C				
9	Trimurti make	Clear Juice DCH	1 No.Direct Contact Heater for Clear juice heating diameter of 750 mm. 1 st body Vapour upto 100 °C to 110 °C				

a) Plate type heat exchanger

Not provided.

12] JUICE SULPHITATION TANK

a) State no types gross working tank capacity in m³ for each Together with clarification Arrangement.

- 1) One no. of continuous juice sulphitation
- 2) Working Height – 2500 MM
- 3) Make – GBIP Pune.
- 4) Diameter- 2700mm.
- 5) Retention time - 7 min.
- 6) Stirrer motor. - provided.
- 7) Gear box. - Planetary Top Gear.

b) correction tank

- 1) Not provide

c) Sulpher Juice Pump

Two Nos. (Stand By)
 Make:-PSP, Model:- A125450 Size :-150 X 125
 Capacity :-150 M³/Hrs , RPM :-1440 ,Total Head:-65 Mtr.

13) CLARIFIER

State number and working capacity
In m³ of each in respect in continuous
settlers mentioned, make no of
compartments of juice holding capacity.

- 1) One nos. of Clarifier.
- 2) Make – Universal make
- 3) Type – 555
- 4) Diameter – 6706 mm.
- 5) Height – 7620 mm.
- 6) No. of compartment – Five
- 7) Total Juice holding capacity – 2750HL
- 8) Retention time – 2.5 Hr.
- 9) Stirrer motor – HP/RPM – 3 HP/1440 &
Speed – 3 RPH with VFD drive
- 10) Gear Box – Top Gear

14) Clear Juice Pump

- A) Make:-Geeta ,Capacity:-90 M³/Hr Two Nos.
Head:-40 mtr, Suction & Delivery:-125/80
RPM:-1440, HP-25 .
- B) Make:-PSP, Capacity:-120 M³/Hr One No.
Head:-60 mtr, Suction & Delivery:-125/400
RPM:-1440, KW-46

15) SULPHUR GAS PLANT

a) Sulpher furnace state type & no.
of furnace and tray areas of each.

- 1) Three nos. of continuous sulphur burners.
- 2) Make – Vishwa, Nasik/S.S. Engg. Pune
- 3) Capacity - 70kg/Hr each.

b) Air compressors, state number,
Type capacity of each and delivery
pressure.

- 1) Three nos. of air Blowers are provided.

No.	Station	Make	Type	Pressure	Motor HP/RPM	Compressor RPM	CFM
1	Juice sulphitation	KPT	Rotary Twin lobe type	1.00 kg/cm ²	50HP / 1440RPM	_____	600m ³ /Hr.
2	Syrup sulphitation	KPT	Rotary Twin lobe type	1.00 kg/cm ²	50HP / 1440RPM	_____	600m ³ /Hr
3	Common	KPT	Rotary Twin lobe type	1.00 kg/cm ²	50HP / 1440RPM	-----	600m ³ /Hr

16) FILTERS

a) Filter press station type
and no. of filtering area in
m² of each tightening device
(juice & Steam to be given separately)

Not Provided.

b) Rotary vacuum filter state
make number and length of each
engg.pune Filtering area as together with
Details of screens.

- 1) Two numbers of rotary vacuum filter .
- 2) Make - Hitech Engg. Meerut./SS
- 3) Size – 8’ (dia) x 16’ L
(2440 mm x 4880 mm)
- 4) Filtering area = 36 m²
- 5) Drum speed – Varied by mechanical speed
Variator & VFD

c) Vacuum pump	1) 02 Nos. A) Make :- kakati ,model:- KVM 100 Pump rpm 1350,discharge :- 12 M ³ /min Vacuum:-500 mm/Hg Drive motor 30 /1475 HP/rpm
16) MILK OF LIME PLANT	
a) Give datels of lime slaker Type size rpm etc	1) 01 no.MOL slaker 2) Type – Rotory type 3) size –L- 3920mm Dia- 760mm 4) make – SiMO HP/RPM – 5.5/1450 5) Gear Box – make/type/-Shanti/ FU4
b) Lime Classifier	Not provided
c) Milk of lime storage tank	1) Storage tank – 02 Nos. 2) Volume - 6.23 M2 3) Dia – 1900 mm 4) Height – 2200 mm 5) Stirrer Drive Motor – make/ HP/ RPM/ Cropton/7.5/1450
d) Milk of lime Counter	6) G.B. –Shanti/FV-6 Not Provided
17) DOSING PUMPS	
a) Boiler Chemical Dosing	1) One number. 2) Sr. No. 10105698 3) Model no. – PL-2017. 4) Capacity – 0.15 LPH 5) Pressure – 65 kg/cm ² 6) Work order No. – 5782/2. 7) Type – Plunger type.
i) H.P. Dosing	8) Make – Positive metering pumps (I) Pvt ltd.
ii) L.P. Dosing	1) One number. 2) Sr. No. – 10105697. 3) Model – PL – 1011. 4) Capacity – 15 LPH 5) Pressure – 5 kg/cm ² 6) Work order No. – 5782/1. 7) Type – Plunger type.
	8) Make – Positive metering pumps (I) Pvt. ltd
b) Hydrogen Peroxide dosing	Not Provided.
C) Flocculant Pump	Not Provided
d) Biocide Pump (Triplex)	Not provided
18) CAUSTIC SODA TANK	NA

19) EVAPORATION BOILING PLANT

make – GBIP, Pune, Modify by :-Trimurti Engg.

A) Evaporators :

the vessel from which vapours are bleed should specified stating used to which the bleed vapours are used.

- 1) Evaporator body S.K. – vapour bleed to juice heater (sul. Juice second heating) & SJ & CLJ Final heating
- 2) 2000 M² Evaporator body Vapour bleed to All Pans & SJ1 Heating
- 3) 810 Evaporator body no.3 Vapour bleed to SJ1/RJ3 heating
- 4) 680 Evaporator body no. 4th B – vapour bleed to RJ2(DY.J.H)
- 5) 350 Evaporator body no. 5th A – vapour bleed to RJ1 (V.L.J.H)
- 6) 290 Evaporator body no. 4th A- vapour bleed to RJ1(DY.J.H)

B) General Arrangement of evaporator

No.	Description	Evaporator or Semi Kestner no.1	Evaporator no.2 nd	Evaporator or no.2 nd /3 rd	Evaporator no.2 nd /3 rd	Evaporator no.4A	Evaporator no.5A	Evaporator no.4B	Evaporator no.5B
1	Heating Surface (m ²)	1700	2000	810	680	290	150	600	350
2	Dia. Of shell (mm)	3500	5000	2800	2800	2210	2000	3474	2605
3	Vapour outlet (mm)	900	1000	650	650	500	670	700	750
4	Height of callendria (mm)	4490	1990	3330	2900	2100	1430	2000	2202
5	Exhaust / Vapour inlet (mm)	800	900	650	650	650	500	600	600
6	No. of tubes (S.S)	2810	7550	1807	1801	1043	775	2264	1311
7	Tube size OD X ID X length	42x45x450	42x45x2000	42x45x3340	42x45x2910	42x45x2110	45x45x1440	42x45x2008	42x45x2210
8	Make	SS Engg	Trimurti Kolhapur	GBIP, Pune	GBIP, Pune	GBIP, Pune	GBIP, Pune	Trimurti Kolhapur	Crystal , pune
9	Year	2013	2022	2011	2011	2011	2011	2016	2015

C) Give particulars of apparatus if provided for recording and controlling

1) Temperature gauges are provide to each body and calendria.

2) Vacuum gauges are provided for Q 3 & Q4

3) Pressure gauges are provided for Q 1 & Q2

4) Temp gauges are provided for JH No 1 to 4

d) State heating surface of Evaporator if any provided.

Not provided.

e) Details of save all & catcher

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f) Arrangement for drawing condensate from vessels

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20) SYRUP TREATMENT PLANT

a) State number & working capacity in m³

- 1) One no. of continuous syrup sulphitation unit .
- 2) Make – GBIP, Pune.
- 3) Working capacity – 3.18 m³ = 30 HL
- 4) Working height – 2100 mm
- 5) Retention Time –10 Minutes.
- 6) Diameter-1.5 mtr

21) SYRUP & MOLASSES STORAGE TANK

a) state no. of tank an 1)Total storage tanks are 13 nos.each of 13.58 MT. capacity in M³ of each

Distribution – 1) Syrup – 05

2) Melt – 01

3) AL - 02

4) AH - 02

5) BH - 02

6) CL - 01

Dimension – **L X W X H** = Volume M³

$$3.4 \times 1.7 \times 2.35 = 13.58 \text{ M}^3$$

b) Molasses Conditioners -

03 Nos.

22) VACUUME PAN –

a) state type & no. of each

No.	Particulars	New pan no.1	Pan No.2	Pan No.3	Pan No.4	Pan no .5
1	Make	SS Engg. Pune.	Trimurti Proj.Kolhapur	Modify By Trimurti Proj.Kolhapur	Modify By Trimurti Proj.Kolhapur	Modify By Trimurti Proj.Kolhapur
2	Capacity	60	60	45	45	45
3	Type	L.H.	L.H.	L.H.	L.H.	L,H
4	Tube size	102x100x750mm	102x99x800mm	102x99x800mm	102x99x800mm	102x99x800mm
5	No. of tubes	1300	1172	832	832	832
6	H.S.	300 sq.mtrs	275 sq.mtrs	204 sq.mtrs	204 sq.mtrs	204 sq.mtr
7	Type of condenser	Single entry	Single entry	Single entry	Single entry	Single entry
8	Vapour pipe I/L dia in mm	400 X 1 500 X 1	500 X 1 250 X 1	400	400	400
9	Vapour pipe O/L dia in mm	1000	1100	900	900	900
10	Purpose	A	A	A / B	B	C
11	Mechanical circulator	Yes	Yes	Yes	No	No

23) CONDENSATE PLANT

- a) Condenser state numbers type dia & height also give particulars of pan and evaporator connected each condenser.

- 1) Make – Spray Engg /S.S.Engg.
2) Nos. – 7 Nos. 2 for Q, & other – 5 for Pan No 1 to 5

Particular	Q1	Q2	P1	P ₂	P ₃	P ₄	P ₅
Vapour pipe dia mm	600	700	1000	1100	900	900	900
No. of nozzles	32	36	52	38	38	38	32
Type	S.S single entry type	S.S single entry type	S.S S.E Type	S.S S.E Type	S.S S.E Type	S.S S.E Type	S.S S.E Type

- b) Injection water pump state & capacity for each

- 1) for quad. & All Pna – total Four pump nos. of Injection pump provided with common header having size – 900
Make – Gita/Mather & plant
Type – 300 MF / 250 MF
Capacity – 1000 m³/Hr
3Nos ,900 M³ / Hr- 1 No.
Head – 22 meters
Motor Make – HP/RPM = 120 Hp/1440 RPM

- c) Priming Pump

Make - Kirloskar DV40

- d) Water cooling system -

- 1) Spray Pump state type

- 1) Three Nos.

- 2) Make –Geeta make – 2 nos.

Numbers ,capacity .

Type – 250 MF , Suc & Del – 250x250

Capacity – 900 m³/Hrs

- 3)Mather Make – Capacity - 700 m³/Hrs- 01 no.
Type – 10 MFU3 , Suc & Del – 250x250

- ii) Spray pond, state nos.
& type nozzles.

- 1) one spray ponds provided.

- 2) Dimension- LxWxd

47 x 45 x 1.500 = 3172.5 m³

- 3) Total no. of Nozzle – 280

- 4) Nozzle size ID- 25 mm thread dia- 50mm
Make - Geeta

- iii) Priming pump no. 2

- iv) Cooling Curing & Drying plant :

Fan less Cooling Tower 4 Nos. 25 mt/hr

for Condensate Cooling

24) CRYSTALISERS

a) State No. of crystallizers & each type (open & closed socketed etc.) for each crystallizers capacity (M.T) Type of M/C cooling & cooling surface in (Sq.mtr) of coil if any type of cooling coil.

No.	Type	Cooling system	Capacity	Used for	Planetary Gear Box
1	U shaped open Horizontal type	Air Cooled	60 MT	A	Cyclo sr. no. 03102774 Motor Make – cg/3hp/1430
2	U shaped open	Air Cooled	45 MT	A	Cyclo sr. no. 03102775 Motor Make –
3	U shaped open	Air Cooled	45 MT	A	Cyclo sr. no. 03102776 Motor Make –
4	U shaped open	Water Cooled	45 MT	B	Cyclo sr. no. 03102777 Motor Make –
5	U shaped open	Water Cooled	45 MT	B	Cyclo sr. no. 03102773 Motor Make –
6	U shaped open	Air Cooled	45 MT	C	Motor – 5HP/1440RPM Make -Top Gear Final RPH - 60
7	U shaped open	Air Cooled	-----	C	Motor – CG/1.5HP/1440. Cyclo P/GB. Sr.no.
8	Round cylindrical type	Vaccum	30 MT	A	Motor – 3HP/1440RPM Make -Top Gear Final RPH - 1
9	Round cylindrical type	Vaccum	25 MT	Vaccum C	Motor – CG/2HP/1440. cyclo . ratio – 1364.1, sr. no. – 03102833
10	Round cylindrical vacuum type	Vacuum	30 MT	B	Motor- 5 HP-1440, GB- Top gear

b) Continuous Vertical Crystallizer

- 1) One no.
 - 2) Make – GBIP, Pune.
 - 3) Holding capacity – 150 MT
 - 4) Height of the shell – 10000mm
 - 5) Overflow Height – 9000mm
 - 6) Diameter – 4000mm
 - 7) Drive Motor HP/RPM –
5HP/1440rpm
- Gear Box – Make – Cyclo.
Type – CRY-470 Ratio – 4277 : 1,
Stirrer Revolution – 20/hr

c) Seed Crystallizer mention no. of cry & capacity

20 MT Capacity -1 No.

25) DRIVE & STIRRER DETAILS

Crustno.	Drive motor Make /HP/ RPM	Gear Box details Remake Make/model/ratio/Sr,no.
1	CG/3HP/1430	Cyclo/ - / - 03102774
2	CG/3HP/1430	Cyclo/ - / - 03102775
3	CG/3HP/1430	Cyclo/ - / - 03102776
4	CG/3HP/1430	Cyclo/ - / - 03102777
5	CG/3HP/1430	Cyclo/ - / - 03102773
6	CG/3HP/1440	Cyclo/ - / - 03102834
7	CG/3HP/1440	Cyclo/ 70 /1364 1/03102835

26) CENTRIFUGAL MACHINE

A) State no of machine used as foreworkes separately for each type of massecuite & mention separately their basket diameter , height , RPM wheather manually operated or semi-automatic or completely Automatic.

No.	Make	Capacity	Type	Motor make HP/RPM	Basket size used for	Qty.
1	Creative Engg, Pune	1250Kg Per Charge 20 cycles per Hr	Completely automatic recycling type C/F flat bottom DC drive	IEC Make/180 HP/135 Kw/600 Rpm to 1200 Variable speed	A-m/c curing 1300 mm X 1100 mm dia	1 No.
2	NHEC, Pune	1000 kg per charge, 20 cycles per Hr.	Completely automatic recycling type C/F flat bottom DC drive	Simo make/180HP/135Kw/600rpm to 1400 variable speed.	A-m/c curing 1250 mm X 1040 mm	2 No.
3	NHEC, Pune	12 T/hr	NK 1100 30° continuous machine	Bharat Bijalee/75 HP/55 Kw/1480rpm	Basket Dia 1100 mm 1800 RPM B-mass Basket pully dia 235mm Motor pully dia 290mm	1 No.
4	NHEC, Pune	12 T/hr	NK 1100 30° continuous machine	Bharat Bijalee/75HP/55 Kw/1475rpm	Basket Dia 1100 mm 1650RPM C.A.W. Motor pully dia 260mm	01 No.
5	NHEC, Pune	6T/hr	NK-1100 30° Continues machine	Bharat bijali/75HP/55Kw/1 475RPM	Basket Dia 1100mm 2000RPM C-mass Motor pully dia 125mm	02 No.
6	S.S. Engg	6T/hr	NK-1100 30° Continues machine	Bharat bijali/75HP/55Kw/1 475RPM	Basket Dia 1100 mm 1800 RPM C-mass Motor pully dia 235mm	01 No.
7	Creative engg pune	6T/hr	Ck-1100 Continues .M/C	Kirloskar /75 HP/ 55Kw//1480 Rpm	Basket dia 1100mm 1800 Rpm C- mass. Motor pullydia235mm	01 No.

b) Air Compressor

- 1) One numbers
- 2) Make – Anest Ewata make air cooled and reciprocating type
- 3) Size/model – LT 150.
- 4) Sr. No. KMO.172
- 5) Pressure and Discharge
- 6) Motor HP/RPM – 15 HP/1460
Air receiver tank – one nos. which is air compressor
Is mounted on this tank.
Make – Anest Ewata Make.

c) Vapour Exhaust Blower

Not Provided.

27) SUGAR MELTER

- 1) One number, vertical type with Sugar melter
Magma mixer
- 2) Diameter – 2000 mm(2 Nos Tank)
- 3) Working Height – 2000 mm
- 4) Capacity –12.57 m³
- 5) Make –Trimurti Proj.Kolhapur
- 6) Gear Box – Type – FV6 Ratio – 70 : 1.
- 7) Motor HP/RPM –7.5 /1440 starar Rpm-20
- 8) pump- Two number (stand by)
Make – Getta
Type – 50-BC-320 Size- 65X50
Total Head – 30 meters
Rate of flow – 15 M3/Hr
Motor Make – Make/HP/RPM . ..
SIM0/20HP/470

28)SUGAR GRASS HOPPER

Make- Meb Industries, sangli
Inst. Year -2010

Sr.No.	TYPE	Length mm	Width mm	Drive make HP/RPM	Belt No.
1	Single Tray	10000mm	1500 mm	Hindustan/10/960	C-120/4No.
2	Multy Tray	10000mm	1500 mm	Hindustan/10/960	C-120/4No.
3	Multy Tray	10000mm	1500 mm	Hindustan/10/960	C-120/4No.

SUGAR ELEVETOR

- 1) One Nos.
- 2) Type – Belt Type PVC Bucket
- 3) No. Of Bucket – 96
- 4) Capacity- 30 T/Hrs
- 5) Drive Motor-5HP/1440/25:01

SUGAR GRADER

- 1) One Nos.
- 5) Make –Mogensen sizer typr
Type :-SL 2066
- 6) Deck - 06
- 7) Capacity- 20 T/Hrs
- 8) Drive Motor make/HP/RPM-
Make:-IC,KW-1.7,RPM-1500
Make:-IC,KW-1.7,RPM-1500

30) HOT AIR BLOWER

- 1) 1 MAKE – Meb Industries Sangli.
- 2) No. of Blades – Six Plastic Material
- 3) Drive Motor – Make Hindustan
- 4) HP/RPM- 1HP/2845RPM

31) COLD AIR BLOWER

- 1) MAKE – Meb Industris Sangli.
- 2) No. of Blades – Six Plastic Material
- 3) Drive Motor – Crompton
- 4) HP/RPM- 1HP/2845RPM

32) DUST CATCHER

Not Provided.

33) SUGAR WEGHING MACHINES

- 1) Platform type.2 nos. Make
Seco. Electronics, Pune
Capacity - 150kg.
- 2) Platform type – 1 nos. make – Arrow .
Digital Scale Capacity – 200kg.

34) Sugar silo

- 3 Bin having capacity 170 MT with
Automatic stitching m/c and
conveyer to belt conveyer

35) BAG STITCHING MACHINE

1 Nos. Make - Novel
Model – D/DA

36) MOLASSES WEIGHING SCALE

- Molasses magnetic Flow Meter is provided.

A) Weighing Scale

Make = Adept, Pune.

Type = magnetic.

Capacity = 50m³/hr.

Pipe Size =100mm.

B) Molasses check weight

Not Provided.

37) BOILERS

a) State number, Type & make of boiler for each boilers is working pressure Kg/cm² Heating surface

- 1) One number of water tube boiler
- 2) Steam pressure – 45 Kg/cm²
- 3) Make – GBIP, Pune
- 4) Steam generation capacity – 44 MT/hr.
- 5) Heating surface – 2369.1 sq. Meters
- 6) S.H. heating surface – 478 sq. meters.
- 7) Super heater outlet temp - 510°C ± 10°C
- 8) Feed water temp - °C = 95°C.

b) Boiler feed water treatment given particular of Arrangement of any for softening of otherwise Treating the feed water entering boilers.

- 1) Exhaust condensate of a) Evaporated body 1
- b) pan no. 1 to 4 Exhaust condensate water
- 2) RO plant having capacity of 10 m³/hr.

c) Economizers & feed water heaters. Give particulars staging type of heating surface.

- 1) One nos. Integral type
- 2) Type – Plane Coil type.
- 3) Design Pressure - 65kg/cm²g
- 4) Hydraulic Test Pressure – 68kg/cm²
- 5) Design Temperature - 185°C
- 6) Heating Surface – 467 sq.mtrs.
- 7) Tube size – 38.1Ø X 3.658 X 175268mm
- 8) No. to coils – 26 nos.
- 9) Feed water flow MCR – 45T

d) State Accumulators nos. type & capacity.

Nil

e) Auxiliary fuel Give particulars of arrangement for burning auxiliary fuel if any crude oil, molasses, coal etc.

Nil

39) POWER PLANT Not applicable.

a) State No. of prime movers its
make cylinder diameter stokers
RPM & normal IHP or BHP.

b) If any Turbine is also used state

A) One Numbers of Power

Turbine its type no of stages and condition

1) Type – Back Pressure Turbine on inlet & outlet.

2) Make - Triveni

3) Inlet Pressure – 45 kg/cm²(g)

4) Exhaust Steam Pressure – 2.5 Ata

5) Speed – 8226 rpm

6) Inlet Temp. - 500°c±

10°c 7) KW – 8000

c) Electric Alternator

1) One Number

2) Make – TDPS

4) RPM – 1500

5) KW - 8000

Diesel Engine Set

A) 1) 2 nos. Diesel Engine Set

2) Make – Crompton Greaves make
250KVA/313HP

3) Model – TBD3V8 Sr.No. – 13060860486

4) Alternator –

250KVA/440volts/3phase/50cycle

Sr.No. GAA – 0056 Model – GIR 315

SE

5) Installation Year – 2007.

B) Make – Comins

500KVA/400KW

Model – PTS/KF14-

01 Alternator –

500KVA/440Volts/3phas

e Sr. No. - N12G311094

Installation Year - 2012

40) DETAILS OF WORKSHOP MACHINERY

- a) State no. of lath machines & their size
- i) 3 nos. of lathe machine
- 1) Make – Ravi machine Tools, Rajkot
Centre height – 235mm
Bed length – 1245mm
Electric Motor – Elmark
make/3HP/1420RPM
- 2) Lathe Machine make – Sani Ind.
Rajkot Type –RJT Size – 6’ X
10’’
Centre – 310mm height. Bed length – 1245mm
- 3) Roller Grooving Lath Machine
Make – Kamla Foundry & Workshop
Size – 26’ X 32’’ Centre height – 800mm
Bed length – 7924.80 mm
Electric Motor – 20 HP/1440 RPM
- b) **Shaping Machine**
- 1) One nos. of shaping machine
make – Batliboi.
Stroke length – 630mm X 630mm
Motor make/HP/RPM – Batliboi
À3À1430 stroke - 7’’ X 7’’ 3178mm X 178
mm
- c) **Hack Saw – Machine**
- One number of power Hacksaw machine
size 1¼’’ X 14’’. Make – Shree Ambica.
motor make ÀHPÀRPM =
JETIX/1.5hp/1370rpm
- d) **Drilling Machine**
- 1) Tow number - Radial Drilling
Machine
Radial drilling machine – 32mm cap.
A’ Make - Prakash Type - Radial
type
Drill size - 3mm to 30mm
Elect motor
make ÀHPÀRPM-
Siemens À0.5hp À0.37KW RPM-1440
Size – 1’’
- B’ Drill Machine No2
Make - Panchal, Ahmadabad
Capacity - 3mm to 19mm
Electric motor make ÀHPÀRPM
= Siemens À01À1400Rpm
- e) **Bench Grinder**
- 1) Two numbers.
2) Wheel dia – 200mm
3) Electric motor – 075hp/2800rpm.
- f) **Slotting Machine**
- 1) Make – Moral / Size – 12’’.

41) CONTROL INSTRUMENT :

A) Auto Cane Feed Control Unit

B) P. R. D. Unit

a) Air Compressor

b) Auto Imbibition Temperature

Control instruction system satara

c) Boiler Instrumentation &

Instrucon system satara

1) Make – BEP engineers Pune. 20 TPH

1) Make – Anest Ewata Capacity – 9 – 1
CFW Working Pressure – 100 Psig
(7Kg/cm²g)

30 MT /hr capacity

1) Make – DN 50 CL600 DEMBLE

42 SAMPLING EQUIPMENT

Give particulars of equipment Provided
for sampling various Juices, bagasse &
other material For analysis.

Manual ampling.

43) LABORATORY INSTRUMENT

1) Lab cane crusher – one number.
make – karjger, kolhapur.

Motor make/HP/RPM –

Lakshmi/7.5/1440

2) Rapi – Pole extractor – One number.

Make– ACROW India Ltd.

Motor - 1.5hp/3000rpm.

3) Crystal measuring Microscope –
not provided.

4) Oven – One number

Make – MIC (India) model – MIC – 160

Range – 5°c to 250°c.

5) Muffle furnace – One number.

Make – MIC (India)

Range – 28°c to 1200°c.

6) Polari meter – One number.

Make – Sucropol, Pune

7) Scientific Balance – One number

Make – Contech , Mumbai.

45) FINAL MOLASSES STORAGE TANK :

- 1) One no. of M.S. tank for molasses storage having
Capacity - 3000m³
Diameter – 20.0 mtr.
Height - 9.75 mtr.

46) R.O. PLANT

RO Plant

Make :- Mercules Water System Pune

Capacity – 13 M3/Hrs

Permit Water :- 10 M3/Hr

Reject Water :- 03 M3/Hr

D. M. Water storage tank

One Number

Size – Dia. X Height = Volume

5.14 mtrs x 6.30 mtrs =150m³

**47) OVERHEAD WATER TANK
(HOT & COLD)**

3 Nos. Total

2 nos. – cold water. – 15m³ / each

1 no – hot water – 15m³

**48) EFFLUENT TREATMENT
PLANT**

Supplied by Avis India Ltd. Pune

200 M3/day.

49) JACKWELL PUMP -

A) 1) Make – Decon Industrials

2) Type - Vertical submersible

3) Speed – 2880

4) size - 100 mm

5) Capacity – 880 m³/Hr.

6) Total Head – 64 m

7) Drive Motor – 30 HP

8) make/HP/RPM- 30/2880

B) 1) Make – Deccen

2) Type - Vertical submersible

3) Speed – 2880

4) size - 75 mm

5) Capacity – 880 m³/Hr.

6) Total Head – 64 m

7) Drive Motor – 17.5 HP

8) make/HP/RPM- 17.5/2880

50) STORAGE AND HANDLING

a) Sugar Godowns-

Sr.No.	Particulars	Height (mtrs)	Width (mtrs)	Length (mtrs)	Capacity (Bags)
1	Godown No. 1	12 Mtrs	30 Mtrs	90 Mtrs	1 Lac Qty
	Godown No. 2	10 Mtrs	30 Mtrs	90 Mtrs	1 Lac Qty

b) Sulphur Godown

Size - L x W x H = Volume
8.25 x 1.1 x 6.0 = 54.45 m³

c) Lime Godown

Size - L x W x H = Volume
3.25 x 1.1 x 6.0 = 21.45 m³

d) Gunny Bales Godown

Not Provided

e) Sugar Bag Printing Machine

Not Provided

f) Sugar Bag Stacker

1) Two Number
1) Make – Group Engg. Sangli
a) Length – 33 feet
2) Spaco corporation make
b) Length – 50 feet

g) Sugar belt conveyer

1) Total - 7 nos.
2) make - Group Engg. Sangli
3) size – 1) 20 feet – 1 nos.
2) 30 feet – 2 nos.
3) 50 feet – 4 nos.

Chief Chemist

Works Manager

General Manager