



NATIONAL SUGAR INSTITUTE
Government of India
KANPUR
Proforma A : Sugar Engineering

Name of the factory:

Type of Survey:

Dates of visit

I. CANE HANDLING:

1. Cane Supply (in % of total supply)

- (i) Trucks
- (ii) Trolleys
- (iii) Carts
- (iv) Any other mode

2. Mechanical Unloader:

- (i) Number
- (ii) Type (sling/grab)
- (iii) Capacity
- (iv) Maximum lift of the hoist (m)
- (v) Gantry span (m)
- (vi) Gantry length (m)
- (vii) H.P. of hoisting motor
- (viii) Hoisting speed (m/minute)
- (ix) H.P. of drum holding motor
- (x) H.P. of bridge drive motor
- (xi) Cross travel speed (m/minute)
- (xii) H.P. of trolley drive motor
- (xiii) Trolley speed (m/minute)
- (xiv) Open or shed provided
- (xv) Cane handled (Tonnes/hour)

3. (A) Feeder Table:

- (i) Number
- (ii) Location
- (iii) Size
 - (a) Width along the carrier (mm)
 - (b) Length across the carrier (mm)
- (iv) Drive
 - (a) Type (variable speed/fixed speed)
 - (b) Horse power
 - (c) Speed (rpm)
- (v) Number of chains
- (vi) Chains driving shaft (rpm)

(vii) Surface speed of chains (m/minute)	
(viii) Feeder table inclination	
(ix) Chute plate inclination	
3. (B) Hydraulic truck unloader:	
(i) Load handling capacity	
(ii) Angle of tilt	
(iii) Size of platform	
(iv) Tilting gear mechanism (Hydraulic or Pneumatic)	
(v) H.P. of oil pump motor	
3. (C) Auxillary cane carrier:	
(i) Provided for truck/ Two motion Mechanical grab unloader.	
(ii) Capacity of two motion mechanical grab unloader	
(iii) Location of installation (across) main cane carrier/In line main cane carrier)	
(iv) Size (Width x length) m	
(v) Slope With horizontal	
(vi) H.P. of drive (Variable/uniform)	
(vii) Linear speed range (m/minute)	
(viii) Chute plate inclination	
(ix) Breaking strength of chain	
(x) Cane Kicker for auxilliary cane carrier	
(a) Drive H.P.	
(b) Speed	
(c) R.P.M.	
(d) No. of arms	
(e) Dia. over the tip of arms	
(f) Location of Kicker	
(g) Number of trucks handled/hour	

II. CANE CARRIER

	Ist carrier	IInd carrier	Rake elevator
1. Width (mm)			
2. Length between the sprocket centres (m)			
3. Horizontal loading length(metres)			
4. Angle of inclination (with horizontal)			
5. Trough cross section			
(a) Height of the vertical section over the slats (mm)			
(b) Total height over the slats (mm)			
(c) Width of the top (mm)			
6. Drive			

<p>(i) Electric motor</p> <ul style="list-style-type: none"> (a) Horse power (b) Speed (rpm) (c) Make (d) Type (e) Other details 	
<p>7. Reduction gearing</p> <ul style="list-style-type: none"> (i) High speed reduction gear box <ul style="list-style-type: none"> (a) Rating / HP (b) Reduction Ratio (ii) Open gearing reduction ratio 	
<p>8. Driving sprocket</p> <ul style="list-style-type: none"> (a) Diameter (mm) (b) Number of teeth (c) No. of strands (d) Pitch (mm) (e) Maximum Linear speed (m/minute) (f) Minimum Linear speed (m/minute) 	
<p>9. Driving and Driven shaft dia (mm)</p> <ul style="list-style-type: none"> (a) No. of sprockets mounted on the tail end shaft with key ways and free (b) Dia. Of the shaft (mm) 	

III. Cane preparatory devices:

	Kicker	Leveller	Cutter
<ol style="list-style-type: none"> 1. Location at cane carrier 2. No. of hubs 3. No. of Knives 4. Sweep dia. at the tip of Knives 5. Shaft dia at the hubs 6. Shaft dia. at the bearings. 7. Total shaft length 8. Distance between bearing centres 9. Fly wheel dimensions <ul style="list-style-type: none"> (i) Diameter (mm) (ii) Width (mm) 10. Clearance under the tip of knives (mm) 11. Type of knives 12. Dimension of knife: <ul style="list-style-type: none"> (i) Length (mm) (ii) Width (mm) (iii) Thickness (mm) 13. Overall length of hub 			

- | | | | |
|--|--|--|--|
| 14. Thickness of hub | | | |
| 15. Drive | | | |
| (a) Horse power | | | |
| (b) Type | | | |
| (c) Speed (rpm) | | | |
| 16. Type of coupling | | | |
| 17. Centre distance between leveller and cutter (mm) | | | |
| 18. Bearings | | | |
| (a) Type | | | |
| (b) Bearing number | | | |
| 19. Arrangement for adjusting the clearance. | | | |

20. Fibrizer (fixed hammer/swing hammer)	Shredder	Mincer	Swing Hammer Shredder
<p>I. Specifications</p> <ul style="list-style-type: none"> (a) No. of Hammers/knives (b) No. of Hammers/arm length (c) Weight of each hammer (d) RPM of the drive (e) RPM at output shaft (f) Dia. of rotor shaft <ul style="list-style-type: none"> (i) at hub location (ii) at bearing journal (g) Thicknees of caststeel./forged steel hub (h) Method of fastening bolts (i) Thicknees of anvil plate (j) Type of anvil plate <ul style="list-style-type: none"> (i) Pocketed (a) No. of Pocket (b) Pitch of Pocket (ii) Serrated (k) Angle of lap of anvil plate (l) Dia. over tips of hammers (m) Clearance at the top and bottom of anvil (n) Method of adjusting the clearance (o) Type of drive 			
<p>II. Drive Details for fibrizer</p> <ul style="list-style-type: none"> a) Steam turbine make <ul style="list-style-type: none"> i) H.P ii) R.P.M iii) Steam inlet pressure and temperature iv) Exhaust pressure v) Steam consumption vi) Chest pressure b) Enclosed <ul style="list-style-type: none"> i) Speed reduction ratio ii) Rated H.P c) Electric motor <ul style="list-style-type: none"> (i) H.P. (ii) Rated R.P.M. (iii) External slip resistance (iv) Actual running load (Amps) 		$\frac{\text{Primary reduction ratio}}{\text{Secondary reduction gear ratio}}$	
<p>III. Pusher for fibrizer</p> <ul style="list-style-type: none"> i) Drum dia ii) R.P.M. of pusher iii) Drive of pusher 			

- iv) H.P.
- v) Reduction gear details

IV. MILLS

1. Specification of mills:

- Number and size of mills
- Make of plant
- Distance between two mills
- Type of mills (complete details)

2. Head Stock

- a) Type – Inclined/Straight
- b) Material-C.I/C.S Fabricated

3. Trashplate:

- a) Type - Rigid/Rocking
- b) Material C.I/C.S

4. Mill troughs:

- a) Slope of troughs for continuous 'V' troughs

<ul style="list-style-type: none"> b) Slope towards outlet for individual troughs (c) Material of troughs 	
<p>5. Mill Drive:</p> <ul style="list-style-type: none"> i) Details of hydraulic drive for each mills <ul style="list-style-type: none"> a) Horse power b) H.P. of Electric motor c) Hydraulic pack details d) Variation in the R.P.M. of hydraulic drive/ Mill R.P.M. with respect to the bagasse height in the donnelly chute. e) Any other relevant working details ii) Steam turbine <ul style="list-style-type: none"> a) Make. b) Type . c) Rated speed (RPM). d) Rated H.P e) Reduction ratio of integral high speed reduction gearing f) Intermediate enclosed reduction gear <ul style="list-style-type: none"> Make Reduction ratio (g) Type of coupling (iii) Variable speed electric motor <ul style="list-style-type: none"> (a) Make and H.P (b) Rated speed of motor (c) Running speed of motor (d) Running electric load (e) Interlocking arrangement between motor and TRPF electric drive, Inter rake carrier drive 	(Yes/No)
<p>6. Open reduction gearings</p> <ul style="list-style-type: none"> (i) First Motion <ul style="list-style-type: none"> (a) Type of teeth (b) Face width (mm) (c) D.P/C.P. (mm) (d) Reduction ratio (e) Journal dimensions (mm) (ii) Second motion <ul style="list-style-type: none"> (a) Type of teeth (b) Face width (mm) (c) D.P./C.P. (mm) (d) Reduction ratio (e) Journal dimensions (mm) (iii) Overall reduction ratio 	
<p>7. Roller diameters (mm) for the season</p> <ul style="list-style-type: none"> (a) Feed (b) Top (c) Discharge 	
<p>8. Mill roller speed</p> <ul style="list-style-type: none"> (a) Rotational speed (rpm) 	

(b) Mean dia. of roller (mm) (c) Surface speed (m/minute)	
9. Roller journal dimensions (a) Length (mm) (b) Dia (mm)	
10. Hydraulic Accumulators (a) Type: (b) Pressure	
11. Mills Hydraulic Caps (a) Arrangement for fixing the Cap (b) Ram dia. (mm) (c) Type of hydraulic packing	Long bolts/short bolts/ Keys/feathers.
12. Inter Carriers (a) No. of strands (b) Pitch of chain (mm) (c) Chain number (d) Type of slats (e) Inter carrier sprocket speed (rpm) (f) Inter carrier linear speed (m/minute) (g) H.P. of electric motor (h) Cross section of flight bars (circular/ box) (i) Angle of inclination with horizontal	
13. Under force feed roller (a) Dia (mm) (b) Gearing ratio for roller (c) Speed (rpm) (d) Surface speed (m/minute)	TRF type or C.I Grooved Roller
14. Driving Chains: (i) Inter Carrier (a) Make (b) Chain number (c) Pitch (mm) (ii) Feeder roller (a) Make (b) Chain number (c) Pitch (mm)	
15. Donnelly chute type (a) Length x width (mm x mm) (b) Inclination with horizontal (c) Cane feeding sensing device (Provided/not provided)	
16. T.R.P.F (a) Drum dia (b) Pitch of drum sprocket (c) Thickness of drum sprocket (d) O.D. of drum sprocket. (e) R.P.M of T.R.P.F.	

- (f) Shaft dia. of T.R.P.F at sprocket location
- (g) Shaft dia. at bearing location
- (h) Driving arrangement (independent/mill prime movers)
- (i) Driving H.P in case of independent drive
- (j) Angle of inclination of T.R.P.F headstock
- (k) T.R.P.F coupling details
- (l) T.R.P.F gearing details
- (m) T.R.P.F setting drum to drum
- (n) Pressure chute setting at inlet
- (o) Pressure chute setting at outlet
- (p) Pressure chute divergent angle
- (q) Length of pressure chute

17. G.R.P.F

- (a) Dia of G.R.P.F roller
- (b) G.R.P.F under feed roller dia (mm)
- (c) R.P.M of G.R.P.F
- (d) G.R.P.F setting (PCD to PCD)
- (e) G.R.P.F grooving details
 - Pitch
 - Angle
 - Depth
- (f) Messchaert groove if provided
 - Pitch
 - Depth
 - Width
- (g) Whether G.R.P.F rollers are lotus roll, if so give details.
- (h) Driving arrangement (compound/independent)
- (i) Driving H.P
- (j) Pressure chute setting at inlet
- (k) Pressure chute setting at outlet
- (l) Length of pressure chute
- (m) Pressure chute divergent angle

18. Inter rake carriers

- (a) Angle of inclination with the horizontal
- (b) Linear speed (m/minutes)
- (c) Driving horse power (variable/fixed)
- (d) Width between chains
- (e) Type of chains (block/roller type)
- (f) Pitch of the chain
- (g) Breaking strength of chain
- (h) Sprocket details in case of block type chain.

- (i) Cross section of the flight bars
- (j) Pitch of the flights
- (k) Shape of the flights
- (l) Angle of inclination of flights with bottom of carrier trough
- (m) Distance between flight bars
- (n) PCD of sprocket on the driving shaft
- (o) Number of teeth of driving sprocket
- (p) Number of teeth of tail shaft.

19. Roller groovings

- (i) Top roller
 - (a) Pitch (mm)
 - (b) Depth (mm)
 - (c) Angle
- (ii) Feed Rollers
 - (a) Pitch (mm)
 - (b) Depth (mm)
 - (c) Angle
- (iii) Discharge roller
 - (a) Pitch (mm)
 - (b) Depth (mm)
 - (c) Angle
- (iv) Messchaert grooves
 - (a) Pitch (mm)
 - (b) Width (mm)
 - (c) Depth beyond groove base (mm)
- (v) Chevrons
 - (a) Pitch (mm)
 - (b) Depth (mm)
 - (c) Angle with horizontal

20. Mill settings (PCD to PCD) (mm)

- (a) Feed
- (b) Discharge
- (c) Trashplate
- (d) Trashplate slope
- (e) Trashplate heel clearance/ detail of Back grooving in each mill

21. Mill Roller Bearings

- (i) Type of bearing Housing with linear liner/solid bearings
- (ii) Material

brass/gun metal white metals

22. Mill roller bearing lubrication:

- (i) Oil/grease Oil
- (ii) Specification of lubricant
- (iii) Consumption per shift
- (iv) Consumption per year

V. IMBIBITION

1. Water imbibition

- (i) Hot/cold imbibition and temperature of water
- (ii) Place of application (whether after one mill or two mills)
- (iii) Point of application
- (iv) Method of application (holes in pipe or nozzles)
- (v) Pitch of holes/nozzles
- (vi) Diameter of holes/details of nozzles (sketch)

2. Measurement of imbibition water.

- (i) By automatic weighing scale:
 - (a) Make
 - (b) Type
 - (c) Capacity per tip
 - (d) System of tip recording
- (ii) By flow meters:
 - (a) Make of Meter
 - (b) Type of meter
 - (c) Capacity in m³/hour
 - (d) Designed for handling hot or cold water
 - (e) Whether recording system provided

3. Imbibition water receiving tank (After measurement weighment.)

- (a) Size of tank
- (b) Capacity (m³)

4. Imbibition water pumping set/sets

Number of pumps

- (1) Motor details:
 - (a) Horse power
 - (b) Speed (rpm)
- (2) Pump details
 - (a) Make
 - (b) Type
 - (c) Capacity (1lt./second)
 - (d) Head (m)
 - (e) Speed (rpm)

5. Juice Imbibition

Inhibition Details Pump Details

Mill No.	Motor Details		Pump Details				Remarks
	H.P.	Speed (r.p.m.)	Make and type	Capacity / l/sec.	Head Metre	Speed r.p.m.	
							Running/ Standby

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6. Juice screening arrangement

(i) *Wedge type stationery screen for mixed juice.*

- (a) Angle of screen
- (b) Size of screen
- (c) location of screen
- (d) Whirling tanks
 - Diameter
 - Height
- (e) Juice by pass arrangement
- (f) Discharge of cusp cusp Directly over the inter carriers
 - Through cusp cusp conveyor In case of cusp cusp conveyor
 - H.P of drive motor
 - Speed of drive motor
 - Gear box reduction ratio

(ii) *Details of cusp cusp screw conveyor*

- Drive
- Horse power
- Speed
- Reduction gear ratio
- Speed of screw conveyor shaft (rpm)
- Diameter of screw
- Length of screw

(iii) *Rotating screen*

- (a) Size of screen
 - Length
 - Diameter
- (b) Mesh of screen
- (c) Diameter of holes
- (d) Angle of inclination

(e) Speed of rotation (rpm)

(f) Drive

Horse power

Speed

Reduction ratio

VI. STEAM GENERATING PLANT

A. Boiler Details	Boiler 1	Boiler 2	Boiler 3	Boiler 4
<ol style="list-style-type: none"> 1. Boilers <ol style="list-style-type: none"> a) Make b) Year of manufacture c) Registration number under I.B.R. 2. Type of Boiler 3. Steam generating Capacity (Kg/hr.) 4. Designed steam pressure Kg/cm² <ol style="list-style-type: none"> a) Drum outlet b) Superheater outlet 5. Designed steam Temp. °C 6. Working steam pressure(Kg/cm²) <ol style="list-style-type: none"> a) Drum outlet b) Super heater outlet 7. Heating surface (m²) <ol style="list-style-type: none"> a) Boiler b) Super heater c) Air heater d) Economiser 8. Type of furnace (Dumping /Travelling/ Grate//Horseshoe) 9. Number of cells 10. Grate/Hearth / Furnace area (m²) 11. Coal grate area(m²) 12. Oil Burner details <ol style="list-style-type: none"> a) Number b) Capacity of each (ltr./hr.) c) Nozzles size 13. Chimney details <ol style="list-style-type: none"> a) Dia. at top (mm) b) Dia at bottom (base) (mm) c) Height (mm) 				
B. Boiler Accessories:				
<ol style="list-style-type: none"> 1. I.D.fan details: <ol style="list-style-type: none"> a) Make b) Fan drive <ol style="list-style-type: none"> (i) Horse power (ii) Speed (rpm) c) Speed of fan rotor (rpm) d) Fan rotor details: 				

- (i) Dia (mm)
- (ii) Width (mm)
- (iii) Nos. of vanes

e) Capacity of fan (m³/hr.)

2. F.D. fan details:

(a) Make.

(b) Fan drive

(i) Horse power

(ii) Speed (rpm)

(c) Speed of fan rotor (rpm)

(d) Fan rotor details

(i) Dia (mm)

(ii) Width (mm)

(iii) Nos. of vanes

(e) Capacity of fan (m³/hr)

3. S A Fan Details

(a) Make

(b) Fan drive

(i) Horse power

(II) Speed (rpm)

(c) Speed of fan rotor (rpm)

(d) Fan rotor details

(i) Dia (mm)

(ii) Width (mm)

(iii) Nos. of vanes

(e) Capacity of fan (m³/hr)

(f) Arrangement for cold / hot air

4. Feed Water tank details:

(a) Number

(b) Rectangular/Cylindrical

(c) Dimensions (m)

(d) Capacity (m³)

(e) Details of lagging

(i) Type of lagging

(ii) Thickness of lagging (mm)

(f) Height of tank from suction of feed water pump(m)

5. De – aerator tank details

(a) Number

(b) Rectangular/Cylindrical

(c) Dimensions (m)

(d) Capacity (m³)

(e) Details of lagging

(i) Type of lagging

(ii) Thickness of lagging (mm)

<p>(f) Effective height from bottom of tank to suction pump (mm)</p>	
<p>6. Surplus hot tank water storage tank details</p> <p>(a) Location (b) Dimensions (c) Capacity (m³)</p>	
<p>7. Feed water pump details</p> <p>7.1 Turbo Pumps</p> <p>No.of turbo pumps</p> <p>(i) Turbine details</p> <p>(a) Make Coffin (b) Type (c) Horse power (d) Steam pressure at inlet (kg/m²) (e) Steam temperature at inlet (°C) (f) Speed (rpm)</p> <p>(ii) Pump details:</p> <p>(a) Make (b) Type (c) Capacity (m³/hr.) (d) Head (m) (e) Number of stages (single stage or multistage) (f) Pump size (mm) (g) Effective height from bottom of tank to suction of pump (mm)</p>	
<p>7.2 Electric driven pumps</p> <p>(a) Number of pumps (b) Make (c) Type (d) Rating of motor (KW/HP) (e) Speed of motor (rpm) (f) Pump capacity (m³/hr) (g) Pump head (m) (h) No. of stages in pump (i) Pump size (mm x mm) (j) Effective height from the bottom of tank to the suction of the pump (mm)</p>	
<p>8. Boiler instrument panels:</p> <p>(a) Number of panels (b) Make type and capacity of steam flow meter (c) Make, type and capacity of water flow meter (d) Make and range of multipoint temperature indicator (e) Make and range of draft gauges</p>	

- (f) Make and type of Co₂ recorder/ indicator
- (g) Make and type of pressure recorder/ indicator
- (h) Make and type of feed water level recorder level indicator/ integrator
- (i) Make and type of feed water regulator
- (j) Make and type of steam flow recorder/ indicator/ integrator for steam.

9. Feed water treatment details:

- (i) In case of chemical treatment in feed water tank.
 - (a) Dosing apparatus
 - (b) Name of chemical being used
 - (c) Quantity per shift (Kg)
- (ii) In case of Demineralisation Plant.
 - (a) Make of the plant.
 - (b) Process adopted
 - (c) Capacity of plant (tonnes/hr.)
 - (d) Details of plant

C. Bagasse Carriers/ Feeding devices

1. Bagasse elevator details:

- (a) Location
- (b) Drive
 - (i) Horse power
 - (ii) Speed (rpm)
- (c) Width of flight bars (mm)
- (d) Pitch of flight bars (mm)
- (e) Angle
- (f) Pitch of chain links (mm)
- (g) Chain link Number (mm)
- (h) Reduction gearing ratio
- (i) Speed of bagasse elevator. (m/min.)

2. Bagasse carrier details:

- (a) Location
- (b) Drive
 - (i) Horse power
 - (ii) Speed (rpm)
- (c) Width of flight bars (mm)
- (d) Pitch of flight bars (mm)
- (e) Pitch of chain links (mm)
- (f) Chain links Number
- (g) Reduction gearing ratio
- (h) Speed of bagasse carrier (m/min)

3. Return carrier details:

- (a) Location
- (b) Drive
 - (i) Horse power

- (ii) Speed (rpm)
- (c) Width of flight bars (mm)
- (d) Angle
- (e) Pitch of flight bars (mm)
- (f) Pitch of chain links (mm)
- (g) Chain links Number
- (h) Reduction gearing ratio
- (i) Speed of bagasse elevator (m/min.)

D. Bagasse feeding devices

(Spredder stroker / Pneumatic spraying)

- (a) Details of drive
 - (i) Horse power
 - (II) Speed (rpm)
 - (iii) Reduction gearing ratio
- (b) Speed of feeder (rpm)
- (c) Dia. of feeder (mm)
- (d) Width of feeder (mm)
- (e) No. of spredder stokers

E. Bagasse Baling press:

- (a) Number of baling process
- (b) Make
- (c) Capacity in terms of wet bagasse bales per hour
- (d) Weight of each bagasse bale
- (e) Size of of each bagasse bale

F. Extra Fuel details

1. Furnace oil equipment
 - (a) Make
 - (b) Type
 - (c) Capacity (l/hr.)
2. Furnace oil storage tank
 - (a) Diameter (mm)
 - (b) Height (mm)
 - (c) Capacity (m³)
3. Furnace oil service tank
 - (a) Dia (mm)
 - (b) Height (mm)
 - (c) Capacity (m³)
4. Oil heating arrangement details

G. Boiler Furnace

1. Horse Shoe Furnace details

- (a) No. of cells
- (b) Radius of circular parts of hearth (mm)
- (c) Total length of hearth (mm)
- (d) Width of hearth at throat (mm)
(Sketch showing dimension of hearth)
- (e) Hearth area of each cell (m²)

- (f) Height of hearth bridge wall (mm)
- (g) Boiler heating surface (m^2)
- (h) Ratio of Boiler heating surface to hearth area

2. Tuyer's details

- (a) No. of rows

VII. POWER GENERATING PLANT

(A) Turbo Generator-number

a) Turbine:

- i. Type/make/year
- ii. Power - KW
- iii. Speed-RPM
- iv. Steam pressure(Kg/Cm²)
- v. Exhaust pressure(Kg/Cm²)
- vi. Steam temperature (°c)
- vii. Steam consumption
(Kg/Hour/KW)
- viii. at 100% load
- ix. at 80% load
- x. at 70% load
- xi. at 60% load

b) Alternator

- i. Type/Make/ Year
- ii. Power KW.
- iii. Voltage/Amps.
- iv. Power factor/cycles per sec
- v. Phase/RPM.
- vi. Maximum demand in KW
- vii. During season
- viii. During off-season
- ix. Running or stand by

(B) Steam engine generator

a) Steam engine

- i. Cylinder dia/stroke (mm)
- ii. Type/Make/Year
- iii. Power-KW.
- iv. Speed - RPM
- v. Steam pressure (Kg/Cm²)
- vi. Exhaust pressure (Kg/Cm²)
- vii. Steam temperature (°C)
- viii. Steam consumption at full load
(Kg/hour/KW)
- ix. at 100% load.
- x. at 80% load.
- xi. at 70% load.
- xii. at 60% load.

b) Generator

- i. Type/Make/Year
- ii. Power - KW
- iii. Voltage/Amps
- iv. Power factor/cycles per Sec

- v. Phase/RPM.
- vi. Maximum demand in KW
- vii. During season
- viii. During off-season
- ix. Running or stand by

(C) Diesel engine generators-number

a) Diesel engine:

- i. Type/Make/Year
- ii. Power KW
- iii. Speed rpm
- iv. No. of cylinders
- v. Fuel consumption (lt./hour/KW)

b) Generator

- i. Type/make/year
- ii. Power KW
- iii. Voltage /Amps
- iv. Power factor/cycles per Sec.
- v. Phase/RPM
- vi. Maximum demand in KW
- vii. During season
- viii. During off season
- ix. Running or standby

(D) Outside sanction load in KW

Maximum demand in season - KW

(E) Capacitors

Number placement capacity in KVAR

VIII Other details to be submitted

1. Layout of mill house giving details of complete mill drives, Closed & open reduction gear location, height of mill house Crane from the top roller of mills.
2. Layout of the Cane carriers and Truck trippers.
3. Layout of Cane Preparatory devices.
4. Layout of Boilers giving details of bagasse feeders feed roller pumps, de-aeration plant, return bagasse carriers
5. Layout of ID/FD Fans including secondary fans
6. Layout of feed water tanks.
7. Layout of flue passage and chimney.
8. Layout of powerhouse with installation details of D.G. sets.
9. List of motors with placement/Actual load in amps., pumps, Capacitors, and feeder wise details of power distribution.
10. Layout and dimensions of live steam and exhaust pipe lines including boiler headers distribution system