

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

It is running condition and with all related equipment ideal for any company planning to setup a Power Plant for captive power consumption. Only Genuine End Users are Welcome

A BOILER & TURBINE TECHNICAL DATA		
A1	<i>BOILER make & model</i>	ISGEC JOHN THOMPSON WATER TUBE BOILER IWT 6080 TRAVELLING GRATE STEAM BOILER Model : 2003
	Fuel Used	BIOMASS
	Type	SPREADER STOKER FIRED BI-DRUM WATER TUBE BOILER
	Evaporation (MCR)	33 TPH Steam generating Capacity
	Working Pressure	66 Kg/Cm² (g) (72 Kg/cm²)
	Final Steam Temperature	485 ± 5°C"
A2	<i>TURBINE Make</i>	TRIVENI make 2008
	Type	Type Bleed Cum Condensing
	Power	7500 KW
	Inlet Steam Temperature	485°
	Inlet Steam Pressure	63 Kg
	Turbine Rotor Speed	7500 RPM
	Gear Box Out-Put Speed	1500 RPM
A3	<i>ALTERNATOR</i>	BHEL, Make 2003
	Speed	1500RPM

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

1 BOILER FEED PUMP		
1	Pump Manufacturer	Sulzer Pumps LTD
2	Model/size	HDA 80/12
3	Number of Stages	12 nos
4	Quantity	Two (1W + 1SB) Nos
5	Fluid	Boiler feed Water
6	MCR flow	35.70 m ³ /h
7	Design Flow	39.30 m ³ /h
8	Fluid Temp (MCR & Design)	120 °C
9	Deferential Head	915 mwc (at Design condition)
10	pump Speed	2950 RPM
2 PRIMARY SUPER HEATER		
1	Whether drainable or not?	NO
2	Method of support	Over roof
3	Pitch along gas flow	96 MM
4	pitch across gas flow	125 MM
5	Flow	Counter
6	No of tubes across gas flow	25
7	No of tubes along gas flow	14
8	Design Pressure	75.5 Kg/Cm ² g
9	Design Temp.(Part -1 & Part -2)	374/394 °C
10	Tube Size	44.5 O/D × 4.00 Thk. MM
11	Tube Material (Part -1 & Part -2)	SA 210 Gr.A1 / SA 213 T11
3 SECONDARY SUPER HEATER		
1	Whether dainable or not?	NO
2	Pitch along gas flow	96 MM
3	pitch across gas flow	150 MM
4	Flow	Parallel
5	No of tubes across gas flow	18
6	No of tubes along gas flow	13
7	Design Pressure	75.5 Kg/Cm ² g
8	Design Temp.(Part -1 & Part -2)	529 / 473 °C
9	Tube Size	44.5 O/D × 4.00 Thk. MM
10	Tube Material (Part -1 & Part -2)	SA 213 T11/ SA 213 T22

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

4		FURNACE	
1	Width x Depth x Height (mean)	3300 x 4700 MM; 13250 MM (h)	
2	Tube Size	φ 63.5 × 4.0 Thk. MM	
3	Material	BS 3059 PT 2; ST-360 S2	
4	No of Front Wall Tubes	32 Nos	
5	No of Left Wall Tubes	48 Nos	
6	No of Right Wall Tubes	48 Nos	
7	No of Rear Wall Tubes	32 Nos	
8	Design pressure of water wall	75.5 Kg/Cm ² g	
9	Design temperature of water wall	291 °C (in side gas patch)	
10	Water wall fins material	IS - 2062 Gr.A	
5		FURNACE FRONT & REAR WALL HEADERS	
1	Size	200 NB Sch. 100 MM	
2	Material	SA - 106 Gr.B	
3	Wall Header length	3500mm Front & 3500mm Rear wall	
4	Design pressure	Kg/Cm ² g	
5	Design temperature	291 °C	
6		FURNACE SIDE WALL HEADERS	
1	Size	200 NB Sch. 100 MM	
2	Material	SA - 106 Gr.B	
3	Length of side wall	5075 MM (bottom headers)	
4	Length of side wall	5780 MM (top headers)	
5	Design pressure	75.5 Kg/Cm ² g	
6	Design temperature	291 °C	
7		BOILER STREAM DRUM	
1	Inside Diameter	1220 MM	
2	Shell Thickness	75 MM	
3	Shell Length(Straight portion)	3850 MM	
4	Material	SA 516 Gr. 70	
5	Design pressure	75.5 Kg/Cm ² g	
6	Design temperature	291 °C	
7	Working Metal	319 °C	
8	Dished head thickness	56 MM	
9	Dished head Material	SA - 516 Gr.70	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

8	BOILER MUD DRUM	
1	Inside Diameter	914 MM
2	Shell Thickness	56 MM
3	Shell Length (Straight portion)	3850 MM
4	Material	SA 516 Gr. 70
5	Dished End thickness	56 MM
6	Dished End Material	SA - 516 Gr.70
9	BOILER BANK TUBES	
1	Drum center to center distance	3800 MM
2	Tube Size	φ 51 × 3.6 Thk. MM
3	Tube Material	BS- 3059; ST- 360; S2
4	No. of tubes wide	30 Nos
5	No. of tubes deep	20 Nos
6	Pitch along flow	104 MM
7	Pitch across flow	114 MM
10	FORCED FLOW ELEMENTS (FORCED FLOW BANK)	
1	Type	Horizontal Drainable
2	Tube size	38.00 O/D × 3.60 Thk. MM
3	Material	BS 3059 ST 360 ERW
4	No of tubes across gas flow	23
5	No of tubes along gas flow	50
6	No. of blocks	2
7	Pitch along gas flow	96 MM
8	Pitch across gas flow	76 MM
9	Design pressure	79 Kg/Cm ² g
10	Design temperature	213 °C
11	FORCED FLOW HEADERS (I/L & O/L)I	
1	Size	150 NB Sch. 80 MM
2	Material	SA - 106 Gr.B
3	Lenth Outlet Header	2530 MM
4	Lenth Intlet Header	2530 MM
5	Design pressure	79.0 Kg/Cm ² g
6	Design temp* (Inlet header)	120.0 °C
7	Design temp*(outlet header)	213.0 °C

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

12	PRIMARY AIR HEATER FD Zone-1	
1	No. of Blocks	3 Nos
2	Effective tube height	2600 MM
3	<i>Tube Size</i>	
	Plain Tubes	φ 63.5 × 2.03 Thk. MM
	Corton Tubes	φ 63.5 × 2.03 Thk. MM
4	<i>MTC spec. of tubes</i>	
	Plain & Stay tubes	BS 6323, 1982 PT- V- ERW
5	<i>No. of tubes</i>	
	Plain tubes	Block -1 : 828, Block -2 : 828 Nos
	Stay tubes	10% (min)
6	Tube sheet material	1S2062
7	Tube sheet thickness	Top-16, Bottom-20 MM
8	Tube Arrangement	Staggered
9	Pitch along air flow	70 MM
10	Pitch across air flow	90 MM
13	SECONDARY AIR HEATER FD Zone-2	
1	No. of Blocks	1 Nos
2	Effective tube height	2600 MM
3	<i>Tube Size</i>	
	Plain Tubes	φ 63.5 × 2.03 Thk. MM
	Stay Tubes	φ 63.5 × 2.03 Thk. MM
4	<i>MTC spec. of tubes</i>	
	Plain & Stay tubes	BS 6323, 1982 PT- V- ERW
	Corton steel	SA -423. GR .1
5	<i>No. of tubes</i>	15 x 45 Nos
	Plain Tubes	Block -1 : 675 Nos
	Stay Tubes	10% (min.) Nos
6	Tube sheet material	1S2062 Gr. A
7	Tube sheet thickness Top	16 MM
8	Tube sheet thickness Bottom	20 MM
9	Tube Arrangement	Staggered
10	Pitch along air flow	70 MM
11	Pitch across air flow	90 MM

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

14	SECONDARY AIR HEATER SA Zone	
1	No. of Blocks	1 Nos
2	Effective tube height	2600 MM
3	<i>Tube Size</i>	
	Plain Tubes	φ 63.5 × 2.03 Thk. MM
	Stay Tube	φ 63.5 × 2.03 Thk. MM
	Corton Steel	φ 63.5 × 2.03 Thk. MM
4	<i>MTC spec. of tubes</i>	
	Plain & Stay tubes	BS 6323, 1982 PT- V- ERW
	Corton steel	SA -423. GR .1
5	No. of tubes	15 × 45 Nos
	Plain Tubes	Block -1 : 675 Nos
	Stay Tube	10% (min.) Nos
6	Tube sheet material	1S2062 Gr. A
7	Tube sheet thickness Top	16 MM
8	Tube sheet thickness Bottom	20 MM
9	Tube Arrangement	Staggered
10	Pitch along air flow	70 MM
11	Pitch across air flow	90 MM
15	DEAERATOR DESIGN DATA	
1	Type	Spray cum tray
2	Capacity	14 Cu.M/ hr
3	Outlet flow	40 Mt/hr
4	Inlet water temperature	35.0°C make up water, 50.0°C Cond.
5	Inlet water pressure	6 Kg/Cm ² g
6	Outlet water temperature	130 °C
7	Operating pressure	1.8 Kg/Cm ² g
8	Oxygen content in deaerated water	0.007 PPM
9	Design pressure	2.0 & full vacuum Kg/Cm ² g
10	Type	Spray cum tray
11	Capacity	14 Cu.M/ hr
16	LP DOSING SYSTEM	N/A
	HP DOSING SYSTEM	N/A

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

17		INDUCED DRAFT FAN						
1	Fan model	HRVS 63 - 1250 K						
2	Fan type	Horizontal, Radial, Backward curved						
3	Fan Make	M/s.Batliboy Environmental Eng. Ltd						
4	Medium to be handled	Flue gas						
5	Flow volume	19.8 Cu. M/Sec						
6	Static Pressure	180 mmwc						
7	Ambient temperature	27°C						
8	Relative humidity	60%						
9	Impeller type and mounting	Centrifugal, back curved, directly coupled						
10	Fan speed	987 RPM						
11	Type of drive	Variable frequency drive electric motor						
12	Motor recommended rating	75 kw/ 6 Pole						
13	Motor recommended frame size	315 m						
Sl	Description	Test Block (Design)	MCR-1	MCR-2	MCR-3	MCR-4	MCR-5	
1	Volume Flow in m ³ /s	5.8	5.15	4.89	5.10	5.0	4.98	
2	Operating Temp in °C	40	35	35	35	35	35	
3	Fluid density in kg/m ³	1.1123	1.1304	1.1307	1.1304	1.1306	1.1306	
4	Pressure at inlet of IGV/ Damper mmwc	-23	-20	-17	-19	-18	-18	
5	Pressure at outlet of Fan mmwc	627	540	471	512	492	492	
6	Static head to be developed by fan mmwc	650	560	488	531	510	510	
7	Total head developed by fan mmwc	651	562	490	533	512	512	
8	Static efficiency in %	Vendor has to specify						
9	Total efficiency in %	79.50	69	63	65	64	64	
10	Shaft Power (VFD) in KW	46	42	38	41	39.30	39.30	
11	Fan Speed (RPM)	990	860	655	633	673	519	
Note : MCR-1 is 100% Bagasse firing, MCR-2 is 100% Rice Husk firing, MCR-3 is 100% Julia flora firing, MCR -4 is 100% of Casuvarina firing, MCR -5 is 90% Coal firing								

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

18		FORCED DRAFT FAN						
1	Fan model	HR VS 63 - 710 K						
2	Fan type	Horizontal, Radial, Backward curved						
3	Fan Make	M/s.Batliboy Environmental Engg. Ltd						
4	Medium to be handled	Atmospheric Air						
5	Dust in medium	"Dusty and corrosive atmosphere as prevailing in industrial Area"						
6	Site elivation	15 m above mean sea level						
7	Ambient temperature	40 °C						
8	Relative humidity	60%						
9	Impeller type and mounting	Centrifugal, back curved, directly coupled						
10	Fan speed	1430 RPM						
11	Type of drive	Variable frequency drive electric motor						
12	Recommended motor rating	37 kw/ 4 Pole						
SI	Description	Test Block (Design)	MCR-1	MCR-2	MCR-3	MCR-4	MCR-5	
1	Volume Flow in m ³ /s	9.0	7.73	7.34	7.66	7.50	7.46	
2	Operating Temp in °C	40	35	35	35	35	35	
3	Fluid density in kg/m ³	1.1123	1.1304	1.1307	1.1304	1.1306	1.0306	
4	Pressure at inlet of IGV/ Damper mmwc	-25	-20	-17	-19	-18	-18	
5	Pressure at outlet of Fan mmwc	105	85	75	81	78	78	
6	Static head to be developed by fan mmwc	130	105	92	100	96	96	
7	Total head developed by fan mmwc	130	105	92	100	96	96	
8	Static efficiency in %	Vendor has to specify						
9	Total efficiency in %	74.40	62	58	60	58	58	
10	Shaft Power (VFD) in KW	16	13	11.5	12.6	12.2	12.2	
11	Fan Speed in RPM	1485	1225	1185	1224	1083	1064	
Note :		MCR-1 is 100% Bagasse firing, MCR-2 is 100% Rice Husk firing, MCR-3 is 100% Julia flora firing, MCR -4 is 100% of casuvarina firing, MCR -5 is 90% Coal firing						

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

19		SECONDARY FAN					
1	Fan model	HR VS 63 - 1250 K					
2	Fan type	Horizontal, Radial, Backward curved					
3	Fan Make	M/s.Batliboy Environmaental Engg. Ltd					
4	Medium to be handled	Flue gas					
5	Dust in medium	600mg/Nm3					
6	Site elivation	50 m above mean sea level					
7	Ambient temperature	40°C					
8	Relative humidity	60%					
9	Impeller type and mounting	Centrifugal, back curved, directly coupled					
10	Fan speed	1430 RPM					
11	Type of drive	Variable frequency drive electric motor					
12	Recommended motor rating	45 kw/ 4 Pole					
SI	Description	Test Block (Design)	MCR-1	MCR-2	MCR-3	MCR-4	MCR-5
1	Volume Flow in m ³ /s	5.80	5.15	4.89	5.1	5.00	4.98
2	Operating Temperature in °C	37	27	27	27	27	27
3	Fluid density in kg/m ³	1.1123	1.1304	1.1307	1.1304	1.1306	1.1306
4	Pressure at inlet of IGV/ Damper mmwc	-23	-20	-17	-19	-18	-18
5	Pressure at outlet of Fan mmwc	627	540	471	512	492	492
6	Static head to be developed by fan mmwc	650	560	488	531	510	510
7	Total head developed by fan mmwc	651	562	490	533	512	512
8	Static efficiency in %	Vendor to Specify					
9	Total efficiency in %	79.50	69	63	65	64	64
10	Shaft Power in KW	46	42	38	41	39.50	39.50
11	Fan Speed in RPM	1480	1480	1480	1480	1480	1480
	Note : MCR-1 is 100% Bagasse firing, MCR-2 is 100% Rice Husk firing, MCR-3 is 100% Julia flora firing, MCR -4 is 100% of Casuvarina firing, MCR -5 is 90% Coal firing						

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

20	SOOT BLOWERS				
Sl	Description	SB-1	SB-2	SB-3	SB-4
1	Quantity	1 No	1 No	1 No	1 No
2	Location	Between Sec & Pri S.H	Boi. Bank	Eco.	Eco.
3	Type	LRSB	RB	RB	RB
4	Quantity	1 No	1 No	1 No	1 No
5	Gas Temperature	750 °C	550 °C	400 °C	400 °C
6	Blowing angle (Degrees)	360	360°	360°	360°
7	Pressure in KG/CM ² (g)	23	23	23	23
8	Type of Operation	Electric	Manual	Manual	Manual
9	Furnace / Duct length	3.3 M	33.0 M	1.8 M	1.8 M
10	Effective clearance radius	2.5 M	18.0 M	1.6 M	1.6 M

21	SAFETY VALVES			
Sl	Description	D01	D02	H10
1	Location	Steam Drum	Steam Drum	S.H outlet Link
2	No. of valves	One	One	One
3	Fluid & state	Saturated Steam	Saturated Steam	Superheated steam
4	Valve Type	Semi Nozzle Full Lift	Semi Nozzle Full Lift	Semi Nozzle Full Lift
5	Type of bonnet	Open bonet	Open bonet	Open bonet
6	Required relieving capacity	11550 Kg/h	14850 Kg/h	9900 Kg/h
7	Relieving temperature	290 °C	291 °C	490 °C
8	Design temperature	290 °C	291 °C	490 °C
9	Set Pressure (S.V opening pr.)	75 Kg/cm ² g	75.5 Kg/cm ² g	70.2 Kg/cm ² g
10	Operating Pressure	69.7 Kg/cm ² g	69.7 Kg/cm ² g	66 Kg/cm ² g
11	Design pressure	75.5 Kg/cm ² g	75.5 Kg/cm ² g	75.5 Kg/cm ² g

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

22	SCREW FEEDER DRIVE	
1	Motor Capacity	2.2 (VFD) KW
2	Motor Speed	1500 (1440 Rated) RPM
3	Motor Speed Range	100%
4	Motor Operation Speed	20
5	Out put speed	1
6	Type of mounting	Foot mounting
7	Quantity Required	3 Set
8	RPM	30 based on Fuel
23	SCREW FEEDER GEAR BOX	
1	Model No	U
2	Shaft Handling	R
3	Reduction Ratio	60 : 1
4	Input Speed	288 – 1440 RPM
5	Connected Power	2.2 KW
6	Output Torque	Vendor to specify
7	Reduction Step	Single Reduction
8	Quantity	3 Nos
24	BAGASSE FEEDER DRIVE	
25	DRUM FEEDER GEAR BOX	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

26	TURBINE	
1	Make	TRIVENI
2	Model Number	TST-2080
3	Triveni W.O. NO.	C-2689
4	Power Rated	7500 KW
5	Inlet Steam Pressure	64 Kg/Cm ² g
6	Inlet Steam Temperature	480 °C
7	Inlet Steam Flow	30500 Kg/hr
8	Bleed Steam Pressure	4.54 Kg/Cm ² g
9	Bleed Steam Flow	3330 Kg/hr
10	Exhaust Pressure (Vacuum)	0.1 ATA
11	Exhaust Flow	27170 Kg/hr
12	Turbine Speed	7545 RPM
13	Alternator Speed	1500 RPM
14	Turbine Trip Speed Range	8306 - 8675 RPM
15	First Critical Speed Range	2800 - 3200 RPM
16	Steam Inlet Size	8" NB 900# RF
27	GEAR BOX	
1	Make	TEIL Mysore
2	Model	N2219C
3	Type	Double Helical
4	Driving Equipment	Steam Turbine
5	Driven Equipment	Alternator
6	Speed/Input	7545-1500
28	OIL SYSTEMS	
1	Lubricating Oil Grade	ISO - VG - 46/ Equivalent
2	Oil Tank Capacity	3500 Litre
3	1st Fill Oil Requirement	4000 Litre
4	Flushing Oil Requirement	4000 Litre
5	Lube Oil Pressure Range	1.8 - 2 Kg/Cm ² g
6	Control Oil Pressure	5.55 Kg/Cm ² g

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

29.1		MAIN LUBRICATING OIL PUMP
1	Manufacturer	David Brown, U.K
2	Type	Greared
3	Model	M30H-1FL-AM,4,5" FW
4	Capacity	120 IGPM
5	Driver	Gear Box
6	Discharge Pressure	6.5 Kg/Cm ² g
29.2		A.C AUXILIARY OIL PUMP
1	Manufacturer	Rotodel
2	Type	Greared
3	Model	RDN X-300L RHS
4	Capacity	120 GPM
5	Speed	1440 RPM
6	Discharge Pressure	6.5 Kg/Cm ² g
7	Motor	15, 415v AC Supply HP
29.3		D.C AUXILIARY OIL PUMP
1	Manufacturer	Rotodel
2	Type	Greared
3	Model	RDN X-125L
4	Capacity	15 IGPM
5	Discharge Pressure	3 Kg/Cm ² g
6	Motor	2 (110 V DC Supply) HP
29.4		OIL COOLER
1	Manufacturer	Eskay Industries
2	Type	Horizontal Duplex
3	Model	TB2CBM 4195 r5-item-3
4	Capacity	120 IGPM
5	Oil Temperature Inlet	60 °C
6	Oil Temperature Outlet	45 °C
7	No. of Tubes	320-5/8" 0/0 × 20 BWG Ad Brass
8	Surface Area	40 M ²
9	Cooling water Temp. Inlet	35 °C
10	Cooling water Temp. Outlet	38 °C
11	Cooling water Flow	245 GPM

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

29.5		OIL FILTER LUBRICANTS OIL	
1	Manufacturer	Industrial Enterprises	
2	Type	Duplex (IEH-1405)	
3	Filtering Capacity	10-15 Microns	
4	Capacity	120 IGPM	
5	Elements No.	BT0160041	
29.6		CONTROL OIL FILTER	
1	Manufacturer	Industrial Enterprises	
2	Type	Simplex (IEH - 1435)	
3	Filtering Capacity	15 Microns	
4	Capacity	8 IGPM	
5	Elements No.	BT0160042	
29.7		PRESSURE RELIEF VALVE (MOP) IMO19995	
1	Make	Hopkinsons, U.K	
2	Duty	Control Oil	
3	Size Inlet / Outlet	1" NB-ANSI 150# FF	
4	Set Pressure	6.05 Kg/Cm ² g	
5	Discharge Capacity	25 GPM	
29.8		PRESSURE RELIEF VALVE (AOP) VL0100032	
1	Make	Hopkinsons Ltd	
2	Duty	Control Oil	
3	Size inlet/ outlet	40x50 NB-ANSI 150# RF	
4	Set Pressure	5.9 Kg/Cm ² g	
5	Discharge Capacity	120 GPM	
29.9		PRESSURE RELIEF VALVE (LUBE OIL) IMO190007	
1	Make	Hopkinsons, U.K	
2	Duty	Lube Oil	
3	Size	1" NB-ANSI 150# FF	
4	Set Pressure	1.8 Kg/Cm ² g	
5	Discharge Capacity	25 GPM	
29.10		ACCUMULATOR	
1	Manufacturer	Fawcet - India	
2	Model	2000A-00-201	
3	Pre Changed Pr.	3.9 Kg/Cm ² g	
4	Capacity	20 Litre	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

29.11		SOLENOID VALVE	
1	Make	ASCO	
2	Model	WPB210B38	
3	Voltd	110 DC	
4	Connection	3/4" NPT (F)	
5	Action	De Energise to trip	
29.12		OIL LEVEL SWITCH	
1	Make	Levcon	
2	Model	LS 31461-61	
3	Electric Supply	230.0 Volts	
29.13		OIL CENTRIFUGE	
1	Make	Alfa Laval (India) Ltd.	
2	Model	MAB 103B	
3	Capacity	1000 LPH	
30		HIGH SPEED COUPLING	
1	Manufacturer	Euroflex Transmission (I) Pvt. Ltd.	
2	Model	8GBH-260-S (WOSP)	
3	Drawing no	02126-00	
31		LOW SPEED COUPLING	
1	Manufacturer	Euroflex Transmission (I) Pvt. Ltd.	
2	Model	10GBH-300-S (W.S.P)	
3	Drawing no	100 806-00	
32		TURBINE JOURNAL BEARINGS	
1	Manufacturer	Mitchell Bearings	
2	Type	Tilting Pad	
3	Model for Steam end Pedestal	JPU-125-050/BB	
4	Model for Ex end Pedestal	JPU-140-056/BB	
5	No. of Pads	5	
6	Size for Steam end Pedestal	125 MM	
7	Size for Exhaust end Pedestal	140 MM	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

33		TURBINE THRUST BEARINGS	
1	Manufacturer	Mitchell Bearings	
2	Type	Tilting Pad	
3	Model	08048 EDC/HBI	
4	No. of Pads (Total)	8	
34		GOVERNOR	
1	Manufacturer	Woodward (505 Model) Digital Type	
35		ACTUATOR	
1	Manufacturer	Woodward (505 Model) Digital Type	
2	Operating Speed	1004 RPM	
3	Output	Rotary	
4	Actuator Model	TG13E	
36		CONDENSER	
1	Make	ALSTOM	
2	Type	Surface, Fixed Tube Type	
3	Number of Pass	Two	
4	Water Box type	Divided	
5	Steam Flow	27.20 TPH	
6	Steam Pressure	1.000 ATA	
7	Steam Temperature	46 °C	
8	Cleanliness Factor	0.85	
9	Cooling Water Temp. Inlet	32 °C	
10	Cooling Water Temp. Outlet	40 °C	
11	Cooling Water Pressure in/out	1.6/0.8 Kg/Cm ² g	
12	Cooling water Quantity	1850 M ³ /Hr	
13	Cooling Water	18" NB × 2 Inlet/ Outlet Sizes	
14	Weight (Working)	48000 Kg	
15	Tubes Material	SA249 TP304	
16	No. of Tubes	2000	
17	Tube Size	18*0.7*5100 MM	
18	Surface Area	571 M ²	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

37		EJECTOR (STARTUP)	
1	Manufacturer	New field india Ltd.	
2	Capacity	49 Kg/Hr	
3	Steam Pressure	10 ± 1.5 Kg/Cm ² g	
4	Steam Temperature	400 ± 15 °C	
5	Steam Consumption	157 TPH	
6	Evacuation Time	20 Minutes	
38		EJECTOR SYSTEM	
1	Manufacturer	New field india Ltd.	
2	Steam Pressure	10 ± 1.5 Kg/Cm ² g	
3	Steam Temperature	400 ± 15 °C	
4	Steam Consumption	145 TPH	
39		GLAND VENT CONDENSER	
1	Manufacturer	Eskay Industries (EI/GC/1283)	
2	Steam Flow Type	Horizontal Shell & Tube	
3	Steam Flow	350 Kg/Hr	
4	Cooling Water flow	30500 Kg/Hr	
5	Cooling Water Temp. Inlet	52 °C	
6	Cooling Water Temp. Outlet	60.65 °C	
7	Cooling Water Pressure	8.0 Kg/Cm ² g	
8	Surface Area	10.14 M ²	
40		GVC BLOWER	
1	Manufacturer	Nadi Airtechnics	
2	Capacity	650 Air at 2" WC CFM	
3	Model	Saw*21-ACW-11 ARRT-4	
4	Motor	0.37-415 V AC Supply HP	
41		CONDENSATE EXTRACTION PUMP	
1	Manufacturer	Sulzer Pumps india Ltd	
2	Type	0250-250	
3	Motor	22 KW AC Motor	
4	Speed	2925 RPM	
42		THROTTLE VALVE LIFT SETTING	
1	Throttle Valve No. 1	33.00 MM	
2	Throttle Valve No. 2	19.00 MM	
3	Throttle Valve No. 3	5.00 MM	
4	Relay Piston	57.00 MM	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

43	TURBINE MOTOR DETAILS				
43.1	Main Oil Pump Motor		N/A		
43.2	Other Motors Details:-				
Motor Name	Auxiliary Oil Pump Motor (AOP)	Emergency Oil Pump (EOP)	Barring Gear motor	Cooling Water Pump- 3 Nos	Condensate Extraction Pump 2Nos (CEP)
Make	ABB	AEP	ABB	ALSTOM	ABB
Type	HX 225 MB4	ADC180M	HX180MLB4	D280M	HX180MLB2
Sr. No	-	D 0312001	58412	2256022/25	86244
Phase	3 PH	DC	3PH	3PH	3PH
Voltage	415 AC	110 DC	415 AC	415AC	415AC
KW	45	3.7	22	93	22
H.P	60	5	30	125	30
rpm	1470	1500	1460	1485	2925
Amps	79	41	42	159	37.5
Bearing Drive	6313/C3	6309	610/C3 ZZ	N317	610/C3 ZZ
Bearing Non-Drive	6312/C3	6309	6309/C3 ZZ	6314	6309/C3 ZZ
Motor Name	Auxiliary Cooling water pump - 2 Nos	Cooling Tower Fan - 3Nos	Oil Vapour Extractor	Centrifuge pump Motor - 2 Nos	Air Compressor motor - 2 Nos
Make	ALSTOM	C G	SIEMENS	B B J	ABB
Type	D225S	ND -200L	1LA 7080	N 2316929	HX 200 MLC 4
Sr. No	2.36E+08	NDM 16163	2AA900	MA080435	92565
Phase	3PH	3PH	3PH	3PH	3PH
Voltage	415AC	415AC	415AC	415AC	415 AC
KW	37	30	0.75	0.75	30
H.P	50	40	1	1	40
rpm	1470	1475	2855	1405	1470
Amps	65	51	1.65	1.88	54.5
Bearing Drive	6313	6312 ZZ		6004 ZZ	6312ZZ C3
Bearing Non-Drive	6312	6312 ZZ		6004 ZZ	6311 ZZC3

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

44		BOILER MOTOR DETAILS			
Motor Name	I.D.Fan	F.D. Fan	S.A.Fan	Boiler Feed Pump -2Nos	Drum Feeders 3Nos
Make	CG	CG	CG	CG	BBJ
Frame/Type	NO 3158	NO180M	ND250M	NO315L	MA11 M 435 112 M
Sr. No	NADW 93046	NADK14914	NADT96469	NADZ92526	K 5325178
Phase	3Ph	3Ph	3ph	3ph	3Ph
Voltage	415ac	415ac	415ac	415ac	415ac
KW	75	18.5	55	180	3.7
H.P	100	25	75	240	5
rpm	987	1475	1475	2975	1430
Amps	129	33	92	280	7.6
Bearing Drive	6319	6310 2rs	6314 se3	6315 c3	6209zzc3
Bearing Non-Drive	6303	6310 2rs	6314 se3	6315 c3	6206zze3
Motor Name	Dyno Drive 3No	Screw Feeders 3No	Dyno Drive 3No	DM Transfer Pump 2No	Traveling Grade (Storker)
Make	Greaves	BBJ	Greaves	ALSTOM	BBJ
Frame/Type	ID 170 L 0 V	MA10 L435 100 L	ID 170 0 V	100L	MA11 M435 112 M
Sr. No	G 03LA 57	K532 4363	G 03LA 161	2256738/35	K5322181
Phase	DC	3ph	DC	3Ph	3 Ph
Voltage	85dc	415ac	85dc	415ac	415ac
KW	3.7	2.2	2.2	3.7	3.7
H.P	5	3	3	5	5
rpm	120-1200	1430	120-1200	2850	1430
Amps	2.5 -5	5	3	7.6	7.6
Bearing Drive	6307zz	6209zzc3	6305zz	6206zz	6206zz
Bearing Non-Drive	6306zz	6206zzc3	6306zz	6205zz	6205 zz
Motor Name	Dyno Drive	LP Dosing motor -2No	HP Dosing motor - 2Nos	Lp Dosing agitator	HP Dosing agitator
Make	Greaves	Positive	Positive	Positive	Positive
Frame/Type	ID 170 L 0 V				
Sr. No		104917	1049200	104918	1049201
Phase	DC	3 ph	3 ph	3 ph	3 ph
Voltage	85 Dc	415 ac	415 ac	415 ac	415 ac
KW	3.7	0.37	0.37	0.37	0.37
H.P	5	0.5	0.5	0.5	0.5
rpm	120-1200	1440	1440	1440	1440
Amps		1.2	1.2	1.2	1.2
Bearing Drive	6308 zz				
Bearing Non-Drive	6309 zz				

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

45		MATERIAL HANDLING				
Motor Name	BC- 1	BC-2	BC-3	SMBC	Small slat chain motor	Big slat chain motor
Make	ABB	ABB	ABB	ABB	ABB	ABB
Frame/Type		HX133SMC4	HX112MA			HX160MLD4
Sr. No	34686	76084	61133	A112909	76862	A134612
Phase	3 PH	3 PH	3 PH	3 PH	3 PH	3 PH
Voltage	415 AC	415 AC	415 AC	415 AC	415 AC	415 AC
KW	5.5	7.5	3.7	1.5	3.7	15
H.P	7.5	10	5	2	5	20
rpm	1440	1440	1440	1415	1425	1455
Amps	11.2	14.8	7.5	3.4	7.6	29.6
Bearing Drive	6308ZZ C3	6308ZZ C3	6307ZZ C3	6205 ZZ C3	6307 ZZ C3	6309 ZZ C3
Bearing Non-Drive	6307ZZ C3	6307ZZ C3	6206ZZ C3	6205 ZZ C3	6206 ZZC3	6308 ZZ C3
Motor Name	Suspention Magnet	Vibrating screen	Crusher (impactor)	Dust extraction fan	Dust extraction RAV	Suspension Magnet
Make	MCI	ABB	ABB	ABB	RIME	MCI
Frame/Type	SM 96-96-50-2.5TR					SM 96-96-50-2.5TR
Sr. No			77095	91189	TRL- 780	
Phase	1 PH	3 PH	3 PH	3PH	3 PH	1 PH
Voltage	70-80 DC	415 AC	415 AC	415 AC	415 AC	70-80 DC
KW	1.1	5.5	22	22	0.37	1.1
H.P		7.5	30	30	0.5	
rpm		1440	1460	1440	1440	
Amps		11.2	42	42	0.9	
Bearing Drive		6308 ZZ C3	6310 ZZ C3	6310 ZZ C3		
Bearing Non-Drive		6307 ZZ C3	6309 ZZ C3	6309 ZZ C3		

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

46	ASH HANDLING			
Motor Name	Screw conveyor- 2Nos	Inclined srew conveyor	APH RAV motors- 2Nos	ESP RAV motors- 2Nos
Make	BBJ	BBJ	BBJ	BBJ
Frame/Type				
Sr. No	K 5302656	N23 06891		
Phase	3 PH	3 PH	3 PH	3 PH
Voltage	415 AC	415 AC	415 AC	415 AC
KW	3.7	2.2	0.75	1.5
H.P	5	3	1	2
rpm	1430	1430	1405	1415
Amps	7.5	4.72	1.88	3.43
Bearing Drive	6206 ZZ C3	6206ZZ C3	6004 ZZ C3	6205 ZZ C3
Bearing Non-Drive	6206 ZZ C3	6206ZZ C3	6004 ZZ C3	6205 ZZ C3
Motor Name	Bucket elevator	ESP rapping (GDRM)	Collecting rapping 2Nos	Emitting rapping 2Nos
Make	ABB	IC BAUER	IC BAUER	IC BAUER
Frame/Type				
Sr. No	K 522 3152	30995	30497	30498
Phase	3 PH	3 PH	3 PH	3 PH
Voltage	415 AC	415 AC	415 AC	415 AC
KW	3.7	0.37	0.37	0.37
H.P	5	0.5	0.5	0.5
rpm	1430	1330	1330	1330
Amps	7.7	1.1	1.1	1.1
Bearing Drive	6206 ZZ C3			
Bearing Non-Drive	6206 ZZ C3			

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

47 YARD				
Sl	Motor Name	2 Nos Roto grinder	2 Nos Roto grinder Hydraulic oil	Drum chipper
1	Make	NGEF	CG	CG
2	Frame/Type	AMW 280 SAH 2	NADK 14914	NADT 4A
3	Sr. No	10412314		
4	Phase	3PH	3PH	3PH
5	Voltage	415 AC	415 AC	415 AC
6	KW	75	18.5	55
7	H.P	100	25	75
8	rpm	1475	1475	1450
9	Amps	130	33	92
10	Bearing Drive	6316-C3 SHAFT 22215EK	6310 - 2 RS	6314 C3
11	Bearing Non-Drive	6314-C3 SHAFT 22215EK	6310 - 2 RS	6314 C3
48 FIRE FIGHTING SYSTEM				
S1	Description	Fire fighting pump	Jokey pump 01	
1	Make	CG	CG	
2	KW	55	9.3	
3	H.P	-	12.5	
4	Frame	HX250SMC4	HX132SMB2	
5	Insul/Pro.Deg	F/IP55	F/IP55	
6	Amps	96	16.6	
7	Rpm	1475	2860	
8	Bearing/De/Nde	--	6308 ZZ C3/6307 ZZ C3	
49 D.G.SET PANEL				
1	Make	KIRLOSKAR		
2	Rating	275 KVA		
3	Power	KW, 415 V, 252 AMPS, 3 PHASE		
4	Frequency	50 Hz		

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

50.1	1.6 MVA TRANSFORMER	
1	Make	Alstom Pvt Ltd
2	Serial No	4674
3	Type of Cooling & Rating	ONAN 1600 KVA
4	No Load Voltage	11000 / 415 HV / LV
5	Current	84 / 2133.40 Amps HV /LV
6	Phases	3 / 3 HV / LV
7	Impedance Voltage	6.4 %
8	Frequency	50 Hz
9	Rector Group	Dyn 11
10	Basic Insulation Level (Impuls Volt)	75 Kv Peak / - HV / LV
11	Basic Insulation Level (P.F Volt)	28 Kvrms / 3 Kvrms HV / LV
12	Core And Windings Weight	2500 Kg
13	Weight of Oil	760 Kg
14	Oil Quantity	875 Lts.
15	Total Weight	4560 Kg
16	Type of on load tap changer	Manual Wheel
50.2	9.0 MVA TRANSFORMER	
1	Make	Alstom Pvt Ltd
2	Type of Cooling	ONAN
3	Rating	9000 KVA
4	No Load Voltage	33000 / 11000 HV / LV
5	Current	157.5/ 472.4 Amps HV /LV
6	Phases	3 / 3 HV / LV
7	Impedance Voltage	-- %
8	Frequency	50 Hz
9	Rector Group	YNd1
10	Basic Insulation Level (Impuls Volt)	170 Kv Peak / 75 Kv Peak HV / LV
11	Basic Insulation Level (P.F Volt)	75 Kvrms / 28 Kvrms HV / LV
12	Core And Windings Weight	8750 Kg
13	Weight of Oil	4450 Kg
14	Oil Quantity	5150 Lts.
15	Total Weight	19700 Kg
16	Type of on load tap changer	--

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

51	SYNCHRONOUS GENERATOR	
1	Make	VA TECH HYDRO
2	Serial No	C95/041
3	Type	HTM - 090 D 04
4	Capacity	9375 KVA
5	Load	7500 KW
6	Speed	1500 RPM
7	Power Factor	0.8 LAG
8	Stator Volts	11000 +/- 10% V
9	Stator Amps	393.63 AMPS
10	Insulation Class	F
11	Supply	3 PHASE
12	Frequency	50 Hz
13	Connection	STAR TYPE
14	Ambient Temp	50 °C
15	Inlet Temp	50 °C
16	EXCT. VOLT	150 DC
17	EXCT. Amps	248 AMPS
18	Specification	IS 4722
19	Duty	CONTINUOUS
20	Degree of Protection	IP 54
21	Weight	

52	COMPRESSORS - 2 Nos		
Sl	Description	Compressor-1	Compressor-2
1	Make	KIRLOSKAR	CP
2	Product Type	TC-200M M-S	1903248922
3	Serial No	AB0629	14 D05
4	Maximum final Pressure	7.7 Bar	10.5 Bar
5	Free Air Delivery	30.4 l/s	-
6	Motor Power	30 KW	
7	Capacity	200 CFM	100 CFM

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

53	ON LOAD TAP CHANGERS		
Sl	Description	9.5 MVA	1.6 MVA
1	Make	CTR	
2	Type	EN-16	
3	Rated Current OLTC	200	
4	TR	112.23 AMPS	
5	Rated Step Voltage	412.5 AMPS	
6	Transition Resistance	3.09 V	
7	Rated Insulation Level	170 Ω	
8	Motor Voltage / Frequency	415 / 50 V/Hz	
9	Control Voltage / Frequency	110 / 50 V/Hz	
10	Service Taping position Nos	17 Nos	5 Nos
11	Direction of Power flow	BI	
12	Transformer Rating	11/33 MVA/KV	11/440 MVA/KV
54	NEUTRAL GROUNDING RESISTOR		
1	Make / Model	RIS Switch gear, 2003 Model	
2	Sr.No	445134/7	
3	Resistance	63.58 + 10% ohm	
4	Current & Temperature	100 Amps and 275 deg C	
5	Voltage & AMB Temp	11 / v-3 KV and 50 deg C	
55	ESP TRANSFORMER & RECTIFIER		
1	Make	Ador Powertron Ltd	
2	Sr.No	1597 - 01 - 09 - 2003/1596 - 09 - 2003	
3	AC Input Voltage	415 V ac	
4	AC Output Voltage	95 KV	
5	AC Input current	93 Amps	
6	AC Output current		
7	Frequency	50 Hz	
8	KVA	38.595	
9	DC Voltage	95 KV	
10	DC Current	400 mA	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

LIST OF SUB-STATION & EQUIPMENT

56	33 KV BREAKER SS END - ALSTOM	
	Sr.No &	17224/P3
	Type & Rating	PCOB 36 VCB and 36 KV
	Rated Frequency	50 HZ
	Normal Current	630 Amps
57	LIGHTNING ARRESTERS - ALSTOM	
	Sr.No	33030093
	Type and Rating	Class- 3 and 30 KV, 10 KA
58	CURRENT TRANSFORMERS	
	Make & SI No	Laxmi Engineering, 33030093
	Type and Rating	84792 – 94 and OD CT
	Core	2 - Core
	Rating	10VA, 0.2 Class
	Normal Current	150/1-1Amp
59	PROTECTION TRANSFORMERS	
	Make & SI No	Laxmi Engineering, 33030093
	Type and Rating	84792 – 94 and OD CT
	Core	2 - Core
	Rating	10VA, 0.2 Class
	Normal Current	150/1-1Amp
60	OUT DOOR C & R PANEL	
	Make & SL No	ELPRO, SI No 422
61	24 V BATTERY & CHARGER	
	Make	Dubas Electric
	Rating	40 AHR

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

11 KV LA SC PT CT	
62	SURGE CAPACITOR
Make & Sl No	MADHAV, 03/12/392,380,378
Tag & Type	SC R Y B Type -----
63	LIGHTING ARRESTER
Make & Sl No	ELPRO, 12KV 44 45 46
Tag & Type	LA R Y B Type -----
64	CONTROL TRANSFORMER FOR EXCITATION
Make & Sl No	Pragati, 03/153991
Tag & Type	PT-3 R Y B, Type: Apoxy Resin-cast
65	CONTROL TRANSFORMER FOR METERING
Make & Sl No	PRAGATHI, 03/153992 to 03/153994
Tag & Type	PT-2 R Y B, Type: Apoxy Resin-cast
66	CONTROL TRANSFORMER FOR AVR
Make & Sl No	Pragati, 03/153995 to 153997
Tag & Type	PT-1 R Y B, Type: Apoxy Resin-cast
67	CURRENT TRANSFORMER FOR GEN .NEUTRAL SIDE
Make & Sl No	Pragati, 03/15540 To 15542
Tag & Type	T12,T13,T14, Type: Apoxy Resin-cast
68	CURRENT TRANSFORMER FOR GEN .METERING & PROTECTION
Make & Sl No	Pragati, 03/15543 To 15545
Tag & Type	T1,T2,T3,T4,T5,T6, Type: Apoxy Resin-cast
69	CURRENT TRANSFORMER AVR
Make & Sl No	Pragati 03/15546 To 15547
Tag & Type	T7, T8, Type: Apoxy Resin-cast
70	EXCITATION TRANSFORMER
RATION	11000/415V
BURDEN	5KVA
VECTOR GROUP	Y d5

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

LIST OF BEAKERS

71	33 KV BREAKER PLANT END - ALSTOM	
	Sr.No	17223/P3 Type : PCOB-36(VCB)
	Rated Voltage & Frequency	36 KV, 50Hz
	Normal Current	630
	Short Circuit Current	Breaking 25, Making 62.5
	Short Circuit duration	3
72	33 KV BREAKER SS END - ALSTOM	
	Sr.No	17224/P3, Type : PCOB-36(VCB)
	Rated Voltage & Frequency	36 KV, 50 Hz
	Normal Current	630
	Short Circuit Current	Breaking 25, Making 62.5
	Short Circuit duration	3
73	GENERATOR INCOMER - ALSTOM	
	Sr.No	504700034/2, Type : VCB 1250A
	Rated Voltage & Frequency	12 KV, 50 Hz
	Normal Current	1250
	Short Circuit Breaking Current	25
	Short Circuit duration	3
74	GRID INCOMER – GENERATOR INCOMER - ALSTOM	
	Sr.No	504700034/1, Type: VCB 1250A
	Rated Voltage & Frequency	12 KV, 50Hz
	Normal Current	1250
	Short Circuit Breaking Current	25
	Short Circuit duration	3
75	HOME LOAD TRANSFORMER - ALSTOM	
	Sr.No	504700034/3, Type: VCB 1250A
	Rated Voltage & Frequency	12 KV, 50Hz
	Normal Current	1250
	Short Circuit Breaking Current	--
	Short Circuit duration	3

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

INSTRUMENTATION FIELD INSTRUMENTS LIST

76 PRESSURE GAUGE & TEMPERATURE GAUGE		
Sl	Name	Range
1	DRUM PRESSURE GAUGE	(0-160 Kg/cm ²)
2	SOOT STEAM LINE PRESSURE GAUGE	(0-60 Kg/cm ²)
3	MAIN STEAM LINE PRESSURE GAUGE	(0-160 Kg/cm ²)
4	FEED WATER LINE PRESSURE GAUGE	(0-160 Kg/cm ²)
5	ECONOMISER PRESSURE GAUGE	(0-160 Kg/cm ²)
6	MAIN STEAM PG (FURNANCE FLOOR)	(0-160 Kg/cm ²)
7	DRUM PRESSURE GAUGE (FURNANCE FLOOR)	(0-160 Kg/cm ²)
8	ECONOMISER O/L PG (FURNANCE FLOOR)2	(0-160 Kg/cm ²)
9	SUPER HEATER TEMPERATURE GAUGE	(0-600°C)
10	MAIN STEAM LINE TEMPERATURE GAUGE	(0-600°C)
11	ESP OUTLET TEMPERATURE GAUGE	(0-600°C)
12	ECONOMISER TEMPERATURE GAUGE	(0-300°C)
77 LEVEL & PRESSURE & FLOW TRANSMITTER		
Sl	Name	Range
1	DRUM LEVEL TRANSMITTER FOR L.H.S & R.H.S	(-5000 - 0 Kg/cm ²)
2	DEAREATOR LEVEL TRANSMITTER	(-5000 - 0 Kg/cm ²)
3	DRUM PRESSURE TRANSMITTER	(0-160 Kg/cm ²)
4	MAIN STEAM PRESSURE TRANSMITTER	(0-160 Kg/cm ²)
5	SOOT STEAM LINE PRESSURE TRANSMITTER	(0-30 Kg/cm ²)
6	MAIN STEAM FLOW TRANSMITTER	(0-5000 MMWC)
7	FEED WATER FLOW TRANSMITTER	(0-5000 MMWC)
8	FD FAN OUTLET FLOW TRANSMITTER	(0-5000 MMWC)
9	SA FAN OUTLET FLOW TRANSMITTER	(0-5000 MMWC)

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

78 CONTROL VALVE & MOV'S			
SI	Name	description	
1	MAIN STEAM ISOLATION VALVE	ROTORK Make	
2	MAIN STEAM BY PASS VALVE	ROTORK Make	
3	STARTUP VENT VALVE	ROTORK Make	
4	SOOT BLOWER CONTROL VALVE (PCV-02)	FISHER Make	
5	FEED WATER CONTROL VALVE	FISHER Make	
6	30% CONTROL VALVE	FISHER Make	
7	100% CONTROL VALVE	FISHER Make	
8	ATTEMPERATOR CONTROL VALVE	FISHER Make	
9	HOTWELL LEVEL CONTROL VALVE	MAZDA Make	
10	HOTWELL RECIRCULATION CONTROL VALVE	MAZDA Make	
79 TEMPERATURE ELEMENTS			
SI	Name	Range	description
1	MAIN STEAM LINE THERMOCOUPLE	(0- 1200)	K Type
2	SUPER HEATER TEMPERATURE THERMOCOUPLE	(0- 1200)	K Type
3	FURNANCE TEMPERATURE THERMOCOUPLE	(0- 1200)	K Type
4	SUPER HEATER TEMP* OUTLET THERMOCOUPLE	(0- 1200)	K Type
5	ESP OUTLET TEMPERATURE THERMOCOUPLE	(0- 1200)	K Type
6	ID FAN INLET TEMPERATURE THERMOCOUPLE	(0- 1200)	K Type
7	ECONOMISER OUTLET TEMPERATURE THERMOCOUPLE	(0- 300)	pt100 RTD
8	ECONOMISER INLET TEMP* THERMOCOUPLE	(0- 300)	pt100 RTD
9	FD FAN OUTLET TEMPERATURE THERMOCOUPLE	(0- 300)	pt100 RTD
80 PRESSURE/DIFF PRESSURE INDICATING SWITCH/ LEVEL SWITCH			
SI	Name	Description (Tag No)	
1	INSTRUMENT AIR PRESSURE-LOW	PSL-200	
2	FURNANCE PRESSURE V.HIGH	PSHH-100	
3	FURNANCE PRESSURE V.LOW	PSLL-100	
4	BFP-1 SUCTION STRAINER	DPS-1	
5	BFP-2 SUCTION STRAINER	DPS-2	
6	DRUM LEVEL V.HIGH	LSLL-01	
7	DRUM LEVEL V.LOW	LSLL-02	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

R.O PLANT TECHNICAL DATA		
81	CHLORINE DOSING SYSTEM (CLARIFIER FEED)	
1	Quantity of tank	ONE x 100 Litres
2	M.O.C. Dosing Tank	MSRL
3	Quantity of dosing Pump	Two nos. (1 Op+ 1 st.bv)
4	Dosin Range	0 -5 LPH
5	Maximum operating pressure	10 bar
6	M.O.C. Dosing, Pump Diaphragm	PTFE
7	Type of Pump	Electronic Diaphragm type
8	Make of Pump	Meter Pum
9	Model no.	IMB 05-10
82	COAGULANT DOSING TANK	
1	Quantity of tank	ONE x 250 Litres
2	M.O.C. Dosin Tank	MSRL
3	Quantity of dosing Pump	Two nos. (1 Op+ 1 st.bv)
4	Dosin Range	0 - 15 LPH
5	Maxim Operating Pressure	5 BAR
6	M.O.C. Dosin Pump	PP
7	Type of Pump	Electronic Diaphragm Type
8	Make of Pump	Meter Pum
9	Model no.	IMB 15-05
83	POLY- ELECTROLYTE DOSING SYSTEM	
1	Quantity of tank	ONE x 100 Litres
2	M.O.C. Dosin Pump	MSRL
3	Quantity of dosing Pumps	Two nos. (1 Op+ 1 st.bv)
4	Dosin Flow range	0 -4 LPH .
5	Maxim Operating Pressure	5 bar
6	M.O.C. Dosin Pum	PTFE
7	Type of Pump	Electronic Diaphragm Type
8	Make of Pump	Meter Pum
9	Model no.	IDB 04-05

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

84	CHLORINE DOSING SYSTEM (MGF FEED)	
1	Quantity of tank	ONE x 100 Litres
2	M.O.C. Dosing Pump	MSRL
3	Quantity of dosing Pump	Two nos. (1 Op+ 1 st.bv)
4	Dosing Flow range	0 -5 LPH
5	Maxim Operating Pressure	10 bar
6	M.O.C. Dosing Pum	PTFE
7	Type of Pump	Electronic Diaphragm Type
8	Make of Pump	Meter Pum
9	Model no.	IMB 05-10
85	MULTI GRADE FILTER:	
1	Quantity	One no.
2	Normal Operating Flow	8.66 M3/hr
3	Maximum Operating Flow	8.66 M3/hr
4	Operating Pressure	3.5/cm ² .
5	Dimensions - dia x hos	1000 mm X 2200 mm
6	Material of construction	M.S.R.L
7	Filter media	Multi layered Sand.
8	Max. Allowable Pressure drop	1.0 kg/cm ²
86	SOFINER:	
1	Quantity	One no.
2	Normal Operating Flow	8.66 M3/hr
3	Maximum Operating Flow	8.66 M3/hr
4	Operating Pressure	3.5/cm ² .
5	Dimensions - dia x hos	700 mm x 2200 mm
6	Material of construction	\I.S.R.L
7	Resin	RESIN -CS,A9 Na+
8	Max. Allowable Pressure drop	1.0kg/cm ²

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

87		DE-CHLORINATION DOSING SYSTEM	
1	Quantity of tank	ONE x 100 Litres	
2	M.O.C. Dosing Pump	MSRL	
3	Quantity of dosing Pump	Two nos. (1 Op+ 1 st.bv)	
4	Dosing Flow range	0 -4 LPH	
5	Maxim Operating Pressure	5 bar	
6	M.O.C. Dosing Pum	PTFE	
7	Type of Pump	Electronic Diaphragm Type	
8	Make of Pump	Meter Pum	
9	Model no.	IMB 04-05	
88		ANTISCALENT DOSING SYSTEM	
1	Quantity of tank	ONE x 100 Litres	
2	M.O.C. Dosing Pump	MSRL	
3	Quantity of dosing Pump	Two nos. (1 Op+ 1 st.bv)	
4	Dosing Flow range	0 -4 LPH	
5	Maxim Operating Pressure	5 bar	
6	M.O.C. Dosing Pum	PTFE	
7	Type of Pump	Electronic Diaphragm Type	
8	Make of Pump	Meter Pum	
9	Model no.	IMB 04-05	
89		ACID DOSING SYSTEM	
1	Quantity of tank	ONE x 100 Litres	
2	M.O.C. Dosing Pump	MSRL	
3	Quantity of dosing Pump	Two nos. (1 Op+ 1 st.bv)	
4	Dosing Flow range	0 -5 LPH	
5	Maxim Operating Pressure	10 bar	
6	M.O.C. Dosing Pum	PTFE	
7	Type of Pump	Electronic Diaphragm Type	
8	Make of Pump	Meter Pum	
9	Model no.	IMB 05-10	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

90	MICRON CARTRIDGE FILTER UNIT	
1	Tag No.	MCF -3101 / MCF - 3102
2	Quantity	1 No
3	Max. Operating Pressure	6.0 Kg/ cm 2
4	Normal flow rate	8.66 M A 3/Hr.
5	MOC	SS316
6	Cartridge Type	Wound
7	Cartridge size	20" X 5 Micron
8	Cartridge quantity	3 & 2 Per Filter
91	HIGH PRESSURE PUMP	
1	Description	Specification
2	Tag No	P3101 A/B
3	Type	Centrifugal Multistage Vertical
4	Design Capacity	8.66 M3/ hr.
5	Discharge Pressure	14.7 Kg/Cm 2
6	Max. Rated Speed	2900 RPM
7	Liquid Handle	Water
8	Location	Indoor
9	M.O.C.	
	- Casing	SS316
	- Impeller	SS316
	- Shaft	SS316
	- Base Frame	MS
	- Shaft Sleeve	SS316
10	No. of Stages	18 Nos.
11	Drive Transmission	Direct
12	Quantity	2 Nos. (1 Wk. + 1 st.)
13	Make	DP Holland
14	Model	DPVS - 10-180

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

92	R.O. SKID	
1	Quantity	One no.
2	Type of membrane	Siral wound membrane.
3	Make of membranes	Filmtec corporation, (DOW) (USA)
4	Size of membranes elements	8" (200 mm) Ø x 40" Ion
5	No. of membranes	07 Nos.
6	Operating pressure	13.97 kg/Cm2
7	Material of construction	TFC
8	R.O. PRESSURE TUBE	01 Nos
	Operating pressure	250 PSI
	Material of construction	FRP
	Dia / length of ores tubes	8" dia
93	MB FEED PUMP	
1	Make	Kirloskar/JOHNSON
2	Tag No:	P4101-A,B
3	Type	Horizontal Centrifugal
4	Design Capacity	5 M3/ hr
5	Pump Head	31.5 MWC
6	Liquid Handle	Water
7	No. of Stages	2 No.
8	Location	Indoor
9	M.O.C.	
	Casing	SS - 316/ CF8M
	Impeller	SS - 316/ CF8M
	Shaft	SS - 316/ CF8M
	Shaft Sleeve	SS - 316/ CF8M
10	Base Frame	MS
11	Prime Mover	A.C. Motor, 440 V, 3 Phase, 50 Hz.
12	Drive Transmission	COUPLING
13	Quantity	02 (1 Op . + 1 St.)

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

94	MIXED BED UNIT	
1	Quantity	One No.
2	Size - Dia x Hos	900 x 2900 HOS
3	Operating Pressure	05 M3 /Hr.
4	Material of Construction	M.S.R.L
5	Resin Quantity	700 ltrs. CSA H, 1010 ltrs. ASB- 108 OH
6	Max. working Pressure	5.0 Kg/cm ²
7	Normal Working Pressure	3.0 Kg / cm ²
95	ACID MEASURING TANK	
1	Quantity	TWO x 100 Litres
2	M.O.C.	M.S.R.L
3	Make	DOSHION
4	Dimensions	500 ø x 700 ht
96	CAUSTIC DILUTION TANK	
1	Quantity	TWO x 100 Litres
2	M.O.C.	M.S.R.L
3	Make	DOSHION
4	Dimensions	500 ø x 700 ht
97	MIXED BED BLOWER	
1	Tag No,	MBB5101 ,- A,B.
2	Type	Twin Lob Blower
3	Design Capacity	1.5 M3/ MIN
4	Head (Maximum)	3500 MMWC Max
5	MOTOR HP	2.3
6	MOTOR SPEED	1450 RPM
7	MOC	
8	Quantity	02 Nos 01 Op . + 0/ SD.

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

98		D.G. BLOWER	
1	Tag No.	DGB4101 - A,B.	
2	Type	Centrifugal	
3	Design Capacity	5 M3/MIN	
4	Head Maximum	55 MMWC	
5	MOTOR HP	0.25	
6	MOTOR SPEED	1450 RPM	
7	MOC	CI	
8	Quantity	02 Nos (01 OP + 01 ST).	
99		CHEMICAL CLEANING PUMP	
1	Type	Horizontal , Centrifugal	
2	Design Capacity	8.25 M3/hr	
3	Pump Head	21 MWC	
4	Max. Rated Speed	1450 RPM	
5	Liquid Handle	Water	
6	No.of Stages	1 No.	
7	Location	Indoor	
8	Base Plate	MS	
9	Impeller	SS - 316	
10	Shaft	SS - 316	
11	Shaft Sleeve	SS - 316	
12	Coupling/ Coupling Guard	CI/CS	
13	Quantity	01 No.	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

COLLING TOWER TECHNICAL DATA

100 COOLING TOWER		
1	Type	Counter flow induced Draft
2	No. of cells Working/ standby	3W + 0S
3	Flow through each cell	1270 M ³ /Hr
4	Total flow	3810 M ³ /Hr
5	Hot Water Temperature	40°C
6	Cold Water temperature	32°C
7	Design wet bulb temperature	27°C
8	Range	8°C
9	Approach	6°C
10	Plenum pressure drop	< 10% of the System pressure drop
11	Cell lentgh	27.72 M
12	Cell width	9.24 M
13	Water loading	7.5 to 15 TPH
14	Air inlet Velocity at tower inlet	1.5 to 4.5 M/Sec
15	Air exit Velocity at stack outlet	minimum 6.0 M/Sec
16	L/G Ratio	1.5 to 1.7
17	Velocity Pressure Ratio	minimum 5.0
18	Average fill air Velocity	minimum 1.8 M/Sec
101 CIVIL		
1	Cold water basin	RCC
2	Super Structure till deck level	RCC
3	Fan Stack	RCC
102 HYDRAULIC SYSTEM		
1	Cooling Fills	FILM FILL TYPE
	Height of fill	1.2 M
	Fill material	PVC
2	Drift Eliminator	CELLULAR TYPE
	Material	PVC
3	Main Riser/ header	PIPE TYPE
	Diameter	500 NB in MM
	Material	PVC
4	Lateral Distribution	PIPE TYPE
	Diameter	160 OD in MM
	Material	PVC
5	Sprayers	DOWNWARD TYPE
	Diameter	29 in MM
	Material	Polypropylene

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

103		FAN DRIVE ASSEMBLY	
1	Axial Flow Fans		
	Diameter	5490	in MM
	No. of blades	6	Nos
	Air Flow	148.8	M ³ /Hr
	Material of blades	Fiber Reinforced Plastic	
	Material of hub	MS Galvanized	
2	Gear Reducer		
	Type	Bevel Helical	
	Lubrication	Splash	
	Reduction Ratio	6.901 : 1	
3	Drive Shaft		
	Type	Torsionally stiff, Full floating	
	Length	2436	in MM
	Span	Single	
	Material	SS 304	
4	Electric Motor		
	Rating	22 / 1475 KW / RPM	
	Type	Squirrel Cage, TEFC	
	Voltage	415 Volt	
	Frequency	50 Hz	
	Insulation	Class F	
	Protection	IP 55	
104		COOLING TOWER ACCESSORIES	
1	Material Handling System		
	Type	Monorail beam	
	Chain pulley block	1 T	
3	Flow Control on Main Riser		
	Type	Butterfly valve (Flanged)	
	Diameter	500	in MM
	Material	Cast Iron	
4	Sludge Valve		
	Type	Gate Valve	
	Diameter	200	in MM
	Material	Cast Iron	
5	Low Oil Level Switch & Vibration Switch		
	Type	Electro Mechanical	
	Protection	IP 55	

**7.5MW Biomass Power Plant- Excellent Running Condition - Not For Scrap Sale.
Only Plant related Machinery & equipment & Accessories Sale.**

FIRE FIGHTING PUMP-03 NOS	
105	DIESEL FIRE FIGHTING PUMP
MAKE	KIRLOSKER
Sr.NO	---
TYPE	---
CAPACITY	137 M ³ /hr
HEAD	79 m
PRESSURE	9.00 kg /cm ²
SPEED	
106	FIRE FIGHTING PUMP
MAKE	KIRLOSKER
Sr.NO	10219180912
TYPE	DB80/20
CAPACITY	170 M ³ /hr
HEAD	70 m
PRESSURE	8.80 kg /cm ²
SPEED	2900
107	JACK PUMP
MAKE	KIRLOSKER
Sr.NO	10203180803
TYPE	DB32/20
CAPACITY	10.8 M ³ /hr
HEAD	56 m
PRESSURE	8.80 kg /cm ²
SPEED	2890