

Technical Specifications of Bio Methanation Plant of 0.5 TPD Capacity to be uploaded on GeM portal

S.No.	Parameters	N or Ch	Value 1	Value 2	Value 3	Unit
General Parameters						
1	Capacity		0.5			TPD
2	Type		Containerized, Compact, Modular and Plug & Play Model (transferrable Unit). PUF insulated for making it suitable for all climatic conditions			
3	No contact Part of the Entire Plant/ Unit shall be of Mild Steel		Yes			
4	Area Required					sq.m
5	Power consumption		12			KW/day
Feeding System						
1	Shredder provided		Yes			
2	Crusher provided		Yes			
3	Feeding mechanism		Screw pump	Centrifugal Pump		
4	Slurry Recirculation system provided		Yes			
5	Slurry Recirculation pump capacity					hp
6	Buffer tank provided		Yes			
Digestion						
1	Predigesters provided		Yes	No		
2	If yes, No of Pre digester					
3	Predigester Type		Horizontal	Vertical	NA	
4	Main Digester Type		Mesophilic	Cyclic	Thermophilic	
5	Main digester Retention Capacity					kg
6	Temperature regulation provided		Yes			
7	Temperature regulation Type		Automatic heat exchanger system			

Biogas Storage						
1	Storage type		Balloon			
2	Storage capacity		25			cu.m
3	Storage material		PVC			
4	Separate Area required for Biogas storage		No			
Biogas Purification						
1	Purification Unit with H2S Scrubber & Moisture Trapping with Dehumidification Arrangement		Yes			
2	Type		Dry			
3	Moisture removal		Moisture Trap			
Biogas Utilization						
1	Biogas flow meter provided		Yes			
2	Flow Meter Type		Digital			
3	Biogas pipeline material		GI			
4	Biogas blower provided		Yes			
5	Biogas burners		1 Domestic			
Other Key Parameters						
1	Monitoring system		Remote monitoring system- SIM card based			
2	Parameters to be monitored		Gas flow, Temperature, Pressure, Waste Feed,pH			
3	Flaring system		Biogas flare of suitable size with flame arrestor; manual ignition			
4	Slurry Drying system		Sludge Drying Bed with multi bed type			
5	Output of Plant		>=40			m3/day
Testing and Certification						
1	Norms and Specifications		As approved by Ministry of New & Renewable Energy (MNRE), GOI, SWM Rules 2016 , BIS code IS-16087 and also meet the requirements of statutory Authorities/Agencies/Board/Commission of State/Centre.			
2	Conformity to Class-A Explosive License		Yes			

3	Conformity to CPCB norms		Yes			
4	Conformity to Fertilizer norms		Yes			
5	Installation, Testing & Commissioning of Whole plant		Yes			
6	Testing of Output Methane		>=45%			
Performance Parameter						
1	Warranty of Plant		5			year

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