

TECHNICAL SPECIFICATIONS OF BIOGAS PLANT

1	Plant Capacity	Total 7cubic meter (Digester Tank -4500 Ltr. Gas Tank-2500 Ltr.
2	Dimensions	4.0L X 1.5W X 1.3H meters
3	Type of process	It is Single Stage Biomethanation Process .
4	Process Temperature	>20°C /68F
5	Nominal Gas Pressure	10mbar
6	Biogas Generation Details	1.58 Cu. M. per day
7	Gas Pipe Max Length	20 Meter
8	Liquid Fertilizer Generation	Max.120 Liters/Day
9	Daily Feed Material	20 Kg segregated organic wet waste /day ( optional–Cow Dung 70 Kg per day)
10	Biogas Composition Methane CH <sub>4</sub> Carbon Dioxide CO <sub>2</sub> Hydrogen Sulfide H <sub>2</sub> S Moisture and Nitrogen N <sub>2</sub> Hydrogen H <sub>2</sub> Oxygen O <sub>2</sub>	55% - 75% 25% - 50% 0-3% 0% - 10% 0%-1% 0%-0.5%
11	Digester unit	<b>1)Digester tank Capacity-4300Lit.</b> 2)Outer cover high quality material PP sheet coated with polyethylene, BONYL laminated both side, 3)Breaking strength -100Kg/5 cm, 4)Tear strength > 30Kg both directions 5) UV stabilized tested - 9000 Hrs.

12	Gas Storage tank unit	<p><b>1)Gas Tank Capacity-2500Lit.</b>  2)Multilayer polyethylene, polyester and aluminum material for optional strength  .3)Breaking strength -100Kg/5 cm, 4)Tear strength &gt; 30Kg both directions,5) UV stabilized tested - 9000 Hrs.6) Sand Bags 56 in No. of 2 Lit. capacity each</p>
13	Inlet Unit	<p>1)Four inch diameter pipe with 15 inch length,45 degree elbow, Three quantity 110mm lip seal 2) Sink with 4mm stabilizer rope and Plunger</p>
14	Outlet Unit	<p>1) Combined Fertilizer and Gas outlet with 110 mm single lip seal, 4mm Stabilizer Rope 2) gas inlet ,outlet connecting pipe 3) Gas Filter -with activated carbon granules</p>
15	Gas Pipe System	<p>1) Ball Valve 2) 20 mm gas tube (14 meter),screw connector and fitting 3) bands for 20 mm gas tubing with straight and L connector 4) 20-10 mm Reducer with 10mm gas pipe (3meter)</p>
16	Moisture Trap	<p>1) 20 mm Gas Tubing T- joint 2) 20 mm gas tube screw connector and fitting with Ball valve</p>
17	Gas Stove (Burner)	<p>1) Gas stove model- LN600 (Double Burner) 2) Stainless steel body/Carbon coated 3 ) Dimensions- 600x374x145mm 4) Double burner with &gt;55% heating efficiency</p>