

RAPID DEGRADATION SYSTEM Generation-5



**The Rapid Degradation System
With Hybrid Electrical Power**

Saicharan Urja, Nagpur is the Waste Management Co. in service since 1997. We are specialised in Biogas based Electrical Power Generation, Biogas Scrubbers, Dual Fuel Engine & D-Watering system etc. We are Registered Vendors for

- **IKOS France**
- **Melhem Pune**
- **CSIR Thiruvananthapuram**
- **IIT Kanpur**
- **29 No. Municipal Corporation Tamil Nadu**
- **MGIRI Wardha**
- **Shapoor ji & Palloon ji at Kanpur Clean Ganga**
- **Anant Udyog Faridabad etc.**

Based on our experience we are now Introducing Rapid D-gradation system Gen-5.

We have the most sophisticated & reliable technology to maintain the waste. We convert waste food into manure.

The hot oil based Rapid Degradation System G-5/2022 machine is useful for every Canteen, Vegetable Market Yard, Hotels etc where unavoidable & degradable food waste is produced. If not treated properly, the bad odour & mosquitos create unhygienic condition resulting to infection and health problems in the society.

The G5 converts all degradable waste into Good Manure in just 8 hr. only. You have to pour the waste at the entrance of the machine, After closing the door the machine gets controlled by the PLC in a systematic way. After crushing & processing the waste material finally the manure is created. The machine undergoes complete natural process. In first 3 hours the waste gets fermented, in next 3 hours evaporation & degradation starts and in remaining 2 hours it gets dried.

The process is assisted by heating elements and the required electric power is a hybrid one which is generated through Solar Energy as well. The Size of waste get shrinked upto 86%, The waste gets converted to Brown-Black Gold colour comes out with 5 to 7 % of moisture.

Following are the types of Waste which can be converted into manure within 8-9 hrs

- A) Vegetables Waste, Hotel Left-over Food, Veg. & Non-Veg.
- B) Slaughter House Waste
- C) Any waste which is degradable

Models Available:

- 20 to 50 kg
- 50 to 75 kg
- 75 to 150 kg and many More...

The System
Which Crush
& Process
The Waste
Material



The PLC
Control Panel
with
operating
system



The secret of success

- We have designed & tested a Bearing through which the air doesn't pass through even if it is rotating and it vacuums up to 7 pascal.
- Normal Automobile Bearings have rollers. They meet each other at one point but there is huge gap at the bottom & top of the Rollers & rolling path of a the Bearing

There will be
same result in
Rain / winter /
or Summer



The Process

- The Waste enters from the hopper of the Machine. After closing the door the PLC controls & follows the process as programmed.
- All heaters are switched on & reaches upto the desired temperature of media (oil) up to 90°.
- The inside material is roated and crushed with interval.
- During 8 hrs cycle in first 3 hours the waste gets fermented, in next 3 hours evaporation & degradation starts and in remaining 2 hours it gets dried.
- The vapors rapidly get out of the chamber with vacuum.
- The size of the waste gets shrinked upto 86 % and comes out with 5 to 7% moisture.

G-5 Models with Capacity & Their Requirement

CAPACITY	AREA REQUIRED	ELECTRICAL POWER + SOLAR POWER	APPROX. CONVENTIONAL ELECTRICAL UNITE FOR A BATCH.
35 to 50 kg	6x7x4 feet	2 + 500 Watts Solar	10 Unites
50 to 75 kg	7x7x4 feet	2 + 1 Solar	14 Unites
75 to 125 kg	9x7x4 feet	3 + 1 Solar	19 Unites
125 to 250 kg	12x7x4 feet	3 + 1 Solar	27 Unites
250 to 500 kg	12x7x6 feet	5 + 2 Solar	35 Unites
500 to 1000 kg	20x7x7 feet	7 + 2 Solar	50 Unites



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