Hugros Inc.

Solid Waste
Collection and Recycling Systems

www.hugros.com

Our Mission

"Cleanliness is Next to Godliness" – Mahatma Gandhi

His Vision is Our Mission……

As Gandhiji said *" Be the Change that you want to see in the World"* , we are working hard towards creating a complete awareness to preserve our nature for our future generations. If we have to change this world then we all have to be that change.

Our Divisions

Environmental Solutions

- Spillage, Process Material Collection and Recycling
- Dust and Fume Extraction Systems

Automation and MetrologySolutions

- Automation Systems for Engineering and Automobile Industries
- Online SPC based Electronic and Air gauges

Solid Waste Processing and Recycling Solutions

- We provide all types of solid waste processing solutions for industries, and municipalities.

Our Products for Solid Waste Recycling

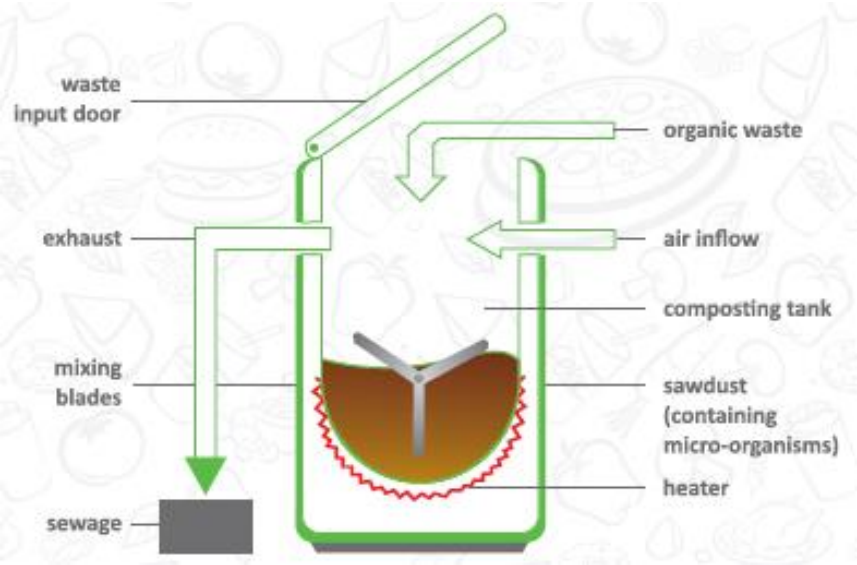
- Organic Waste Composting Machines
  a) 24hrs Composting Machines
  b) BIOCHEST Series natural Composting Machines
  c) In - Vessel Rotary Drum Composting Machines
- ENERGYBIN Portable Biogas Plants
- PET bottle Flaking Machines
- Vacuum Litter Picker

Organic Waste Composting

Composting is a biological process that is optimized when the starting carbon to nitrogen ratio is in the range of 30:1 and the moisture and oxygen levels and temperatures are closely managed and monitored. When processing household organics, it is of critical importance to have the right starting mix of feed stocks, and to manage moisture, oxygen and temperatures closely in order to minimize the risk of nuisance factors and environmental impacts. The composting process takes around 4-8 weeks time to get a natural mature compost. This process can be catalyzed by automation to reduce the composting time. Proper aeration is adequate to maintain the proper process and eliminate the formation of leachate and anaerobic conditions to avoid bad odor coming out. Agitation is done for proper mixing of waste with the bacteria to work on. The composting machines are distinguished by their methods implemented to achieve the good quality compost output.

24 Hrs - Organic Waste Composting Machines

As the name implies it reduces the waste volume by 80-90% using within 24hrs time using an in built heating system and the composting of the dry waste will take 10 days after which the compost can be collected on a daily basis. This model is best suited for compact space requirements and a faster processing of the daily waste is required. There is no need of adding bacteria culture since a part of the compost containing the useful bacteria is kept inside the machine.



Biochest - Organic Waste Composting Machines

Biochest series is designed to boost the natural way of composting by providing adequate air and mechanized mixing of the waste with the active bacteria. Air is required in composting process to avoid the anaerobic conditions which will result in leachate production. The composting process takes 21 days which is the maximum among all the methods available in composting ensuring a good quality compost which further can be cured for maximum one week for commercial usage.

Pros :

- 70% less power consumption compared with heater based systems
- Good quality natural compost as output
- Less curing time required

Cons :

- Bigger sized machines compared with heater based models
- Bacteria culture addition along with waste

In-Vessel Rotary Drum Composting Machines

As the name implies the composting process happens inside a drum which will rotate enabling the bacteria to have homogenous mixing with the waste. The fresh waste is added from one end and works out with the bacteria for 10-14 days time while moving to the other end and exits automatically. Further curing can be done for one week if desired. To make the process faster an inbuilt shredder is fitted before to make the waste into small and even sized.

Pros :

- The power consumption is the least and is only 3-4 units per day
- Good quality natural compost as output
- Less curing time required

Cons :

- Bigger sized machines compared with heater based models
- Bacteria culture addition along with waste

ENERGY BIN Portable Biogas Plants

EnergyBin is a portable biogas plant which is highly efficient, time saving and most advanced. It has been certified and recognized major institutions including IIT Madras. These plants are best suitable for organizations where the biogas can be utilized either for cooking or in the form of electricity converted using a biogas compatible electricity generator. The liquid manure can be directly used for gardening or farming processes. The return of investment is merely 14 months which is far better compared with the organic composting methods for processing the waste.

Pros :

- Highly efficient and less space required.
- Less Maintenance cost compared with the conventional biogas setups

Cons :

- Water is required
- Liquid manure which ahs to be used for farming or treated.

PET BOTTLE Flaking Machines

PET bottles have become an unavoidable part of human life coming with packaged drinking water and soft drinks that we consume daily. But as the usage increases the recycling and handling of these waste becomes a headache. Our PET bottle flaking machines are user friendly and can be installed anywhere where there is bulk dumping of these bottles are there or compacting is required. These machines can convert the PET bottles into flakes which can be directly transferred to the recycling industries or where the flakes are primary material of manufacturing other by products.

- 8,64,000 pet bottle can be crushed annually
- 85% Volume reduction
- 17.2 tones of waste gets recycled per year
- 1,000 liters of crude oil saved per year on recycling
- 10 times reduction in transportation hence saving in fuel & CO_2 emission
- 13 cubic yard of landfill freed per year
- 43.2 metric tons of Carbon dioxides emissions reduced
- ISO certification/Audit for waste management

LITTER PICKER – Vac 240

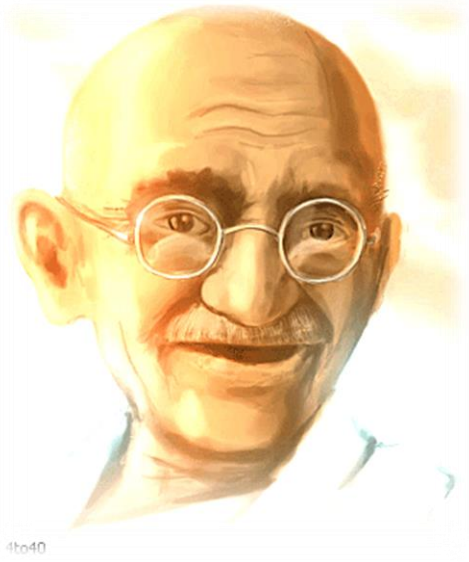
Vac 240 is a portable vacuum liter picker which runs on petrol engine. It's highly useful in collecting all types wastes from the campus.

- Cleaning Capacity : 1500sq.m/hr
- Engine System : Petrol 2 stroke
- Dust Bin capacity : 240 liters
- Hose Diameter : 125mm
- Fuel Tank : 1 Liter
- Running time : 3-4 hrs/liter
- Easy to handle throttle switch on handle

Our Major Clients

स्वच्छ भारत

एक कदम स्वच्छता की ओर



Thank You

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