



VIKASIT ECOSYSTEMS

Technology for Waste Management

Transforming Waste Management through application
of Technology, Processes and Collaboration.

Suchithwa Mission Empanelled Service Provider

Process and Technology as per NGT and Pollution Control Board Guidelines

www.vikasiteco.com

Vikasit Ecosystems is building a bubble of life through waste management services. We use our proprietary tools and technology to transform waste management and close the loop for a circular economy.

Our mission is very simple, bring technology, people and processes together to transform waste management solutions for a better future.

We have a dedicated team with expertise and experience in executing projects in three major business verticals

1. Design and Manufacturing (Organic Waste Composting Machines and auxiliary products)
2. Consulting in Waste Management (For Large Bulk Waste Generators) and Government entities)
3. Legacy Waste Management (DPR, Budgeting, Execution, Material and Land Recovery)

We will consistently invest in R&D to create technology enabled Industry 4.0 products and processes to develop solutions for waste treatment across various segments.



SOIL MAKER- The Smart Organic Waste Composter

Soil Maker is a blend of the conventional process of composting with modern technology. Soil Maker is the result of 7 years of research and rigorous product development and testing. Our composter sustainably converts any type of organic waste into compost - naturally in the least amount of time.



OUR FLAGSHIP PRODUCT



Design, Process and Output complying with NGT and Pollution Control Board Norms

THE SOIL MAKER



Process Time
6-8 Hours



Temperature does not exceed 50-60 Degrees



Natural Aerobic composting process



Compost Output used after 14 days for all types of plants



Compact Size 7x7 Ft Area for 100Kgs



Power consumption 7- 8 units per day for 100KG



Design and Developed in Karnataka



BENEFITS OF THE SOIL MAKER



BUILDERS

- 1 Real estate savings with small size machines
- 2 Value-add to the property by having a world-class waste Management system.
- 3 Enable Zero waste Campus

OPERATORS OR FACILITY MANAGERS

- 1 Manpower saving – only ½ hour per day for loading and unloading
- 2 Disposal cost savings
- 3 Low Electricity consumption
- 4 Savings on fertilizer costs for landscaping/farming

APARTMENTS AND INDIVIDUALS

- 1 Low running costs
- 2 A fully self-sufficient solution takes away all the uncertainty with relying on outside waste collection agencies.
- 3 Feel-good factor – knowing you are doing your part for our cleaner, brighter future.

BENEFITS OF THE SOIL MAKER SYSTEMS

- 1) Elimination of the need for Landfills and all their negative impacts
- 2) Savings in Lower Cost Machines — 40-50% lower than other composting products in the market
- 5) Manpower saving — with our efficient system, 2 staff can easily handle upto 2000kgs with only 4 hours of work per day. — upto 40-60% lower than current system
- 6) Low Electricity consumption — 40-80% lower than other products in the market
- 7) There is no foul smell or leachate, so the waste management plant does not have any limits as to where it can be set up, even in residential areas.

SITE REQUIREMENTS:

- 1.) Approx. — 500 Sqft Area is Suffice for OWC Room for processing 1000kgs of WET Waste..
- 2.) The room should be Enclosed to protect from rains & weathering
- 3.) The OWC Area should be well-lit & well-ventilated
- 4.) Enough room should be allocated for the operators and vehicle access
- 5.) Provision should be made for 3-ph power
- 6.) Isolated MSB should be provided with trip switch

MACHINE CAPACITY - PER BATCH OPERATIONS

<u>CAPACITY PER BATCH</u>	<u>POWERCONSUMPTION</u>	<u>ENCLOSED AREA REQUIRED INCLUDING STORAGE OF COMPOST FOR 30 DAYS</u>
20 KG	1-2 Units	30 sqft
30 KG	1-2 Units	40 sqft
50 KG	2-3 Units	60 sqft
70 kg	2-3 Units	80 sqft
100 kg	3-4 Units	100 sqft
150kg	4-5 Units	130 sqft
200kg	5-6 Units	150 sqft
250kg	5-6 Units	150 sqft
300kg	7-8 Units	180 sqft
350kg	8-9 Units	200 Sqft
400kg	8-9 Units	250 sqft
500kg	9-10 Units	350 sqft
600kg	10-12 Units	380 sqft
700kg	12-15 Units	400 sqft
800kg	14-18 Units	450 sqft
1000kg	15-20 Units	500 sqft



WHAT WE OFFER _____○

○ **Products**



- Organic Waste Composting Machines – THE SOIL MAKER
- Shredders (Dry/Wet)
- Bailing Machines
- Conveyors
- Incinerators
- Trommels

○ **Consultancy**



- Waste Audits for Government / Corporates
- Implementing CSR Projects
- BIO Mining & Legacy Waste Management

○ **Waste Management as a Service**



- Provide end to end waste management as a subscription service (Collection to reuse/recycle to disposal)
- Enable Zero Waste Campus for Residential and Corporate communities
- Zero Waste Certification
- Integrated Ecosystems and Collaboration



MORE PRODUCTS WE OFFER



Incenerators



Shredders



Trommels



Conveyors



Bailing
Machine



DETAILED COMPARISON

Process/Technologies for Processing WET Waste

TYPE OF TECHNOLOGY	Traditional Pit Composting/ Vermi Composting / Bin composting	Tank/ BIN Composting	Semi-Automatic	24 Hr Composters	VIKASIT's OWC – THE SOIL MAKER
TIME FOR PROCESSING	Approx 21-45 days	Approx 7-30 days	Approx 15 min processing and 2-3 weeks curing	Approx 24 hour	Approx 6-8 hours
PROCESS TYPE	Layering a heap of wet waste in a man-made pit or bin and then waiting for more than a month for the materials to break down into humus/compost	Pre-Shredded waste material is added daily to the metal or plastic tank in which the decomposition process is speeded up by adding bacteria. Tank may or may not be heated.	Machine shredded waste is processed for 15 mins and then cured in racks with bacteria and water sprinklers or aerators for about 2 to 3 weeks to produce compost	Chamber is heated to 80 -150 degrees (anaerobic process) & waste is burned reducing the volume by 80-90%.	A Completely Natural Bio-Mechanical process maintained at the right temperature, air and moisture to facilitate aerobic composting quickly. A proprietary bio culture is used to fasten the composting
MANPOWER REQUIREMENT	Labor Intensive - Regular turning, changing of Bins, etc. Labor intensive process.	Shredding of Material Loading and unloading at regular intervals	Labour Intensive Shredding material, unloading in crates, crate rotation, water sprinkling	Shredding of material and then loading and unloading	60 mins total per day - loading and unloading
SPACE REQUIRED	800 - 1200 Sqft for 100 Kgs/ Day	800 to 1000 Sqft for 100 Kgs/ Day	500 Sqft for 100 Kgs/ Day	150 Sqft for 100 Kgs/ Day	60 Sqft for 100 Kgs/Day
ELECTRICITY CONSUMPTION	NA	NA	5-8 Units	25- 30 Units/ Day	3-4 Units/ Day
ROI EXPECTATION	NA	NA	3 - 5 Years	High Operational Cost/ Low Output	2 to 3 Years
OUTPUT USABILITY	GOOD - Organic Content	GOOD - Organic Content	GOOD - Organic Content	Not Good - Sometimes Harmful	GOOD - Organic Content



COLLABORATIONS & CLIENTS





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