

## Hybrid Automatic Organic Waste Converter



**High moisture content** in waste poses a significant challenge in organic waste management in India. To address this issue, especially for bulk waste generators, we developed a unique solution

We introduce "**Dewatering Composter**," a specialized product tailored to tackle this specific challenge. This solution offers both economical and sustainable methods for effective organic waste management.

### **Operation of the Dewatering Composter & Automatic Organic Waste Converter for Organic:**

#### **Waste Management**

To effectively manage high-moisture organic waste, the Dewatering Composter is designed to streamline the waste processing workflow. Here's a detailed breakdown of its operation:

#### **Feeding Mechanism**

Utilize a screw conveyor system to introduce organic waste into the Dewatering Composter. Ensure a continuous and uniform feed to optimize the composting process

#### **Shredding Process**

The primary function of the Composter is to shred the incoming organic waste. Through this shredding mechanism, the waste is reduced to particles of up to 10 mm in size. This size reduction facilitates better composting and accelerates the decomposition process.

#### **Dewatering with screw press**

Post-shredding, the waste undergoes a dewatering phase using a screw press mechanism. The screw press is instrumental in extracting excess moisture from the shredded waste. This dewatering process aims to achieve a significant reduction in moisture levels, resulting in a 50% reduction in both volume and weight of the waste.

By integrating these sequential processes, the Dewatering Composter offers a comprehensive solution for managing high-moisture organic waste effectively. This approach not only minimizes waste volume but also enhances the quality of the compost produced, making it a sustainable and environmentally friendly solution for organic waste management

**Continues Collection in Holding Hopper:** The holding hopper serves as a centralized collection point for the dehydrated organic waste

**Automated Material Loading via Screw Conveyor System:** A screw conveyor system facilitates this automated transfer, ensuring a consistent and controlled feed rate.

**Conversion Process in OWC Machine:** The OWC machine is designed to transform the loaded waste into the final product through an efficient composting or bioconversion process.

**Final Product Collection and Handling:** After the 24-hour conversion process is complete, the outlet of the Automatic OWC system is opened to release the final product.

The final product can be collected using a specialized compost collection trolley equipped with wheels for mobility.