



# CONVERTING FOOD WASTE INTO WASTEWATER

THE MOST EFFICIENT WASTE MANAGEMENT SYSTEM IN THE WORLD

---

# IT'S TIME TO THINK ABOUT THE WAY WE DISPOSE OF FOOD

---

- You are tired of managing and separating biowaste
- You have too much biowaste and too little space for disposal
- You are fed up with the smell, irregular collection, worms in bins, containers
- While you manage biowaste, other services do not
- You bear the cost of collection 0.14€ + VAT / kg
- Waste appears at every link in the distribution system. From the farm to the distributor, through the retailer to the consumer

We are the world leader in digester devices.

We have been present in the global market for over 20 years.

We supply hotels, restaurants, camps, cafeterias, public kitchens, etc.

The smallest device handles 10 kg / daily processing.

Do you need 25, 50, 100, 200, 300, 500, 1000 kg?  
We are the only company in the world that offers 3000, 5000, 10000 kg / daily processing.

We systematically develop the replacement of microorganisms and Biochips.

Intervals of every 6-12 months for Enzymes, as well as 1.5-2.5 years for Biochips.

The ability to monitor the amount of food input and processed in real-time provides transparency and control over the process.

The plug and play system with low energy consumption adapts to your needs (220 V 50/60Hz).

ExBio devices comply with the provisions of Articles 12 and 13 of the Ordinance on limit values for wastewater emissions NN 26/2020, and meet the provisions.

# FACTS ABOUT FOOD WASTE

---

- The world generates a large amount of food waste, specifically 1.3 billion tons annually
- 40% of that waste comes from restaurants, cafeterias, hotels, and HoReCa channels; companies that serve food continue to rely on expensive and inefficient methods of biowaste disposal

**750 million €**

is spent annually on biowaste disposal.

60% of food grown on independent farms  
never reaches the market.

23% of methane emissions result from food  
waste.

25% of annual food waste in America and  
Europe could solve global hunger.

The food industry loses

**15 billion € annually**

on unsold fruits and vegetables.

Restaurants leave on the table

**2 billion € annually**

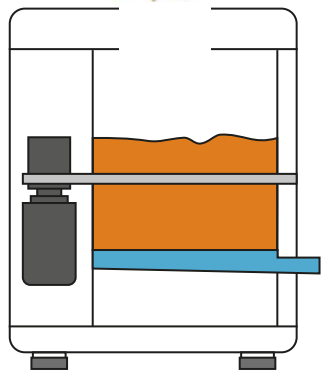
in food waste.

# HOW IT WORKS

---

- Our on-site aerobic digester uses natural microorganisms in the presence of oxygen
- The technology effectively breaks down food waste into liquid within 24 hours or less, without the use of grinding or shredding
- The effluent that comes out of the machine goes directly into the sewer and can be further recycled in wastewater treatment plants
- We save you time and money while simultaneously reducing your environmental impact compared to other disposal methods. You comply with food waste regulations and think green





## Aerobic Digestion Process



### Waste Input

Food waste is placed into the machine



### Microorganisms

Microbial mixtures are added



### Oxygen O<sub>2</sub>

With the help of oxygen, mixing with the waste occurs



### Decomposition

Food waste is broken down into smaller pieces and ultimately converted into wastewater



### Final Action

The wastewater is safely filtered through a filter screen into the existing water infrastructure



# BENEFITS

---

- No food waste in landfills
- No unpleasant odors
- No flies, mice, or rats
- Reduced CO2 emissions and no methane
- Hygienic working environment
- No solid waste output
- Effluent goes into the sewer
- Safe and easy operation
- Simple maintenance



# Features of the digester



## **Complete Decomposition Process**

- Primary decomposition within 24 hours using ExChip (microbes + their habitats)
- Secondary water decomposition of non-returnable solid substances
- Complete decomposition by microbes when water is discharged into the sewer



## **Reduced Unpleasant Odors**



## **Ease of Use**

- Since food waste is completely decomposed in water, there are no food residues
- No action required other than putting food waste into the machine
- Space utilization is achieved with a flat top surface of the machine
- Remote monitoring and operational management system capability



## **Safety**

- Load sensor monitors weight and alerts for machine overload
- Start/Stop safety halt when opening the machine door for waste insertion or removing foreign objects
- Alarm system in case of malfunction and indicator for faulty parts



# ALLOWED



**FRUIT**



**EGG SHELLS**



**PASTA**



**VEGETABLES**



**NUTS**



**MEAT**



**GOULASH**



**FISH & FISH BONES**



**BREAD**

# NOT ALLOWED



**SHELLS**



**BONES**



**PAPER**



**PLASTIC**



**METAL**



**PLATES**



**GLASS**



**WOODEN ACCESSORIES**



**CLOTH**



# Sustav Interneta stvari (IoT) u digestoru hrane

The Internet of Things (IoT) system in a food digester enhances its functionality and efficiency.

IoT integration allows real-time monitoring and management of processes, enabling remote control via mobile apps or web interfaces.

Sensors monitor various parameters such as temperature, humidity, and operational status, ensuring optimal performance and timely maintenance.

This smart technology integration makes food digesters more user-friendly, efficient, and sustainable.

# OUR MODELS

---

- Conversion of food waste into water within 0-24h
- Discharge into sewer and compliance with Article 12 and 13 of the Regulation on limit values for wastewater emissions NN26/2020
- Own aerobic technology; ExBio enzymes and Bio Star chips
- High efficiency in food waste decomposition
- Digital touch screen display enables real-time monitoring of food input, digestion progress, and aerobic digestion temperature
- Safe and easy operation with minimal maintenance
- Stainless steel construction
- Automation features and security at access points, with supervisory alarms
- Service intervals: enzyme change every 6-12 months, BioChip change every 2.5 years

# Household Food Digester

## Attached to the sink

Compact round shape that attaches directly to the sink, ensuring easy installation and maintenance while saving space under the sink.

## Double Water Curtain Technology

ExBio's patented double water curtain system blocks even subtle odors to provide a pleasant environment in your kitchen.

## Economical Maintenance Costs

Minimized monthly energy consumption eases the maintenance burden of the product.

## Small and Quiet Synchronous Motor

Unlike existing food waste disposers on the market, ExBio's small and quiet synchronous motor does not create noise.



# EH-500



**Type of Waste**  
Organic food waste



**Dimensions (cm)**  
Dijametar/Height 20/32



**Weight**  
3,2 kg



**Daily Capacity**  
1,5 kg



**Power Supply**  
220V – Single Phase



# EX-10



**Power Supply**  
220V – Single Phase



**Type of Waste**  
Organic food waste



**Daily Capacity**  
10 kg



**Enzyme**  
100 ml



**Dimensions (cm)**  
Length/Width/Height 47/33/60



**Weight**  
50 kg





# EX-25



**Power Supply**  
220V – Single Phase



**Type of Waste**  
Organic food waste



**Daily Capacity**  
25 kg



**Enzyme**  
200 ml



**Dimensions (cm)**  
Length/Width/Height 62/46/71



**Weight**  
95 kg



# EX-50



**Power Supply**  
220V – Single Phase



**Type of Waste**  
Organic food waste



**Daily Capacity**  
50 kg



**Enzyme**  
300 ml



**Dimensions (cm)**  
Length/Width/Height 83/59/105



**Weight**  
180 kg



# EX-100



**Power Supply**  
220V – Single Phase



**Type of Waste**  
Organic food waste



**Daily Capacity**  
100 kg



**Enzyme**  
1000 ml



**Dimensions (cm)**  
Length/Width/Height 118/79/116



**Weight**  
260 kg



# EX-200



**Power Supply**  
220V – Single Phase



**Type of Waste**  
Organic food waste



**Daily Capacity**  
200 kg



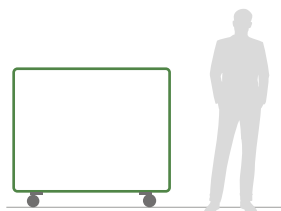
**Enzyme**  
2 liters



**Dimensions (cm)**  
Length/Width/Height 150/88/128



**Weight**  
350 kg



# EX-300



**Power Supply**  
380V - 3 Phase



**Type of Waste**  
Organic food waste



**Daily Capacity**  
300 kg



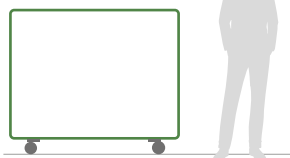
**Enzyme**  
3 liters



**Dimensions (cm)**  
Length/Width/Height 157/101/146



**Weight**  
480 kg



# EX-500



**Power Supply**  
380V - 3 Phase



**Type of Waste**  
Organic food waste



**Daily Capacity**  
500 kg



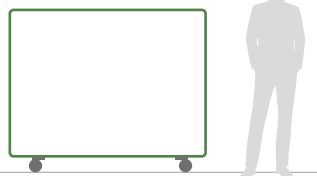
**Enzyme**  
5 litara



**Dimensions (cm)**  
Length/Width/Height 192/120/163



**Weight**  
780 kg



# EX-1000



**Power Supply**  
380V - 3 Phase



**Type of Waste**  
Organic food waste



**Daily Capacity**  
1000 kg



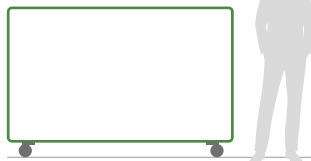
**Enzyme**  
10 litara



**Dimensions (cm)**  
Length/Width/Height 261/145/189



**Weight**  
1390 kg



Our **decomposition technology** converts **food waste** into **water** within 24 hours



Add Bio Star and  
Enzymes



Insert Food Waste



**6-12 hours**  
Mixing with  
Microorganisms



**12-24 hours**  
Decomposition



**after 24 hours**  
Release of Waste  
Water

**ExBio**  
AUTHORIZED DEALER



DARRER D.O.O.  
Ilica 49, Zagreb, Croatia  
[office@darrer.hr](mailto:office@darrer.hr)  
[d-organic.eu](http://d-organic.eu)