



ExBio EX SERIES FOOD DIGESTERS

LOW, MEDIUM & LARGE CAPACITY





ExBio

EX SERIES FOOD DIGESTERS

LOW, MEDIUM & LARGE CAPACITY

The latest in food waste processing technology, the aerobic ExBio Food Digesters Ex Series are an innovative solution, diverting your food scraps from landfill and converting it to a liquid form within 24 hours, for safe discharge as grey water.

These cutting-edge systems efficiently break down all organic food waste, converting plate scrapings, leftovers, meat, fish, bones, bread, dairy, and more into a convenient liquid form. Unlike anaerobic methods, our digesters use oxygen, select microorganisms, and warm water to process from as little as 25 kg to an impressive 10,000 kg of food waste daily (depending on the model), with minimal environmental impact.

The ExBio Food Digesters Ex Series range can manage food waste from residential, small to medium businesses, and larger commercial facilities to industrial-scale food processing plants. This solution not only provides an alternative for waste going to landfill but has significant financial benefits with payback mostly well under 12 months.

Our experienced team at Waste Initiatives is here to ensure you get the waste management equipment and solutions you require to move your business forward. Look to us for your range of custom-designed solutions, including food digesters, recycling equipment, and more.

BENEFITS

- **Quick ROI:** Return on Investment typically achieved in 1 - 3 years.
- **Cost Savings:** Reduces labor and transport expenses.
- **Landfill Reduction:** Decreases food waste disposal in traditional landfills.
- **Fast Transformation:** Converts food waste into grey water within 24 hours.
- **Simple Operation:** Safe and easy operation with minimal maintenance.
- **Continuous Feed:** Waste fed continuously, no need to wait for batches.
- **Real-Time Monitoring:** Monitors ingested and digested food quantity in real-time.
- **Odor Control:** Minimises unpleasant odors.
- **Pest Prevention:** Eliminates vermin and bugs.
- **Zero Solid Waste:** No management is needed for solid waste output.
- **Broad Food Compatibility:** Enzymes work effectively on all food groups.
- **Environmental Benefits:** Reduces methane emissions and groundwater contamination.



FEATURES THAT GUARANTEE HIGH PERFORMANCE

KEY FEATURES

Bio Star™ Accelerator

ExBio's **Bio Star™** agent utilises select microorganisms to break down food waste into water and CO₂ within its porous structure. With a substantial 1800 µm surface area, it securely houses microorganisms, preventing washout and enabling controlled aerobic decomposition in the ExBio food digester.



Microorganism Enzyme 159

ExBio's research with Bio Star™ and select microorganisms revealed biotechnical potential through growth and resilience. This resulted in the development of **medium-temp Enzyme 159**, a key component in optimising aerobic food waste decomposition within the ExBio Food Digester system.



Stirring Technology

Stirring efficiency is high, which increases the decomposition rate. The rotating shaft of the product is positioned on the lower side at a 2.3° angle for optimal processing. A proprietary mixing pattern ensures maximum oxygen contact with food & enzymes.

Sealed Shaft Technology

The subordinate part of the shaft is hermetically sealed, meaning there is no concern of leakage and the life span of the motor and equipment is semi-permanent.

Low Power Usage

Low power usage with internal electrical inverters keeps electric consumption super low.

Drainage Feature

The straight shower nozzle developed by ExBio completely removes any sludge collected at the bottom. Due to this technology, the decomposed and treated water can be discharged without any blockage.

Safety & Ease of Use

For low to medium-capacity models, features include automatic closing lids/doors, digital touch panels, emergency switches, and seamless plug-and-play functionality.

The larger capacity range boasts additional features such as an auto bin lift, automatic doors, check doors, access door for easy cleaning, high-pressure water pump, emergency stop, and breaker box access.

AEROBIC FOOD DIGESTION PROCESS



Input Bio Star & Enzyme

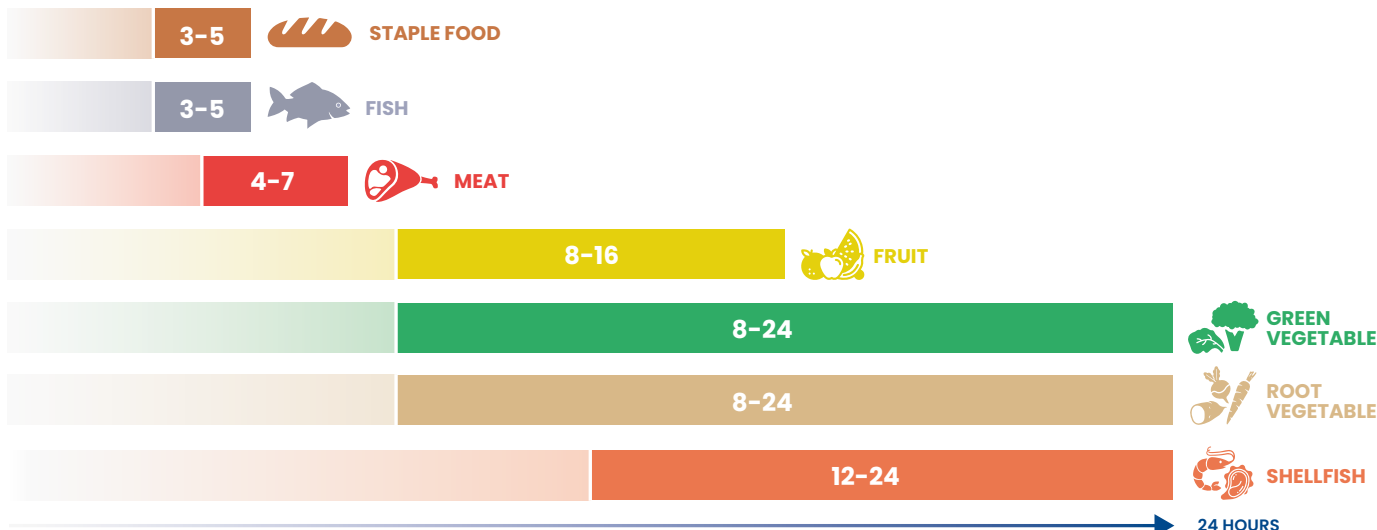
Input Food Waste (0-6 hours)

Mixed with Microbes (6-12 hours)

Decomposition (12-24 hours)

Discharge Greywater (24 hours)

DECOMPOSITION TIME (HRS)



SPECIFICATIONS



Model	EX-20	EX-25	EX-50	EX-100	EX-200	EX-300	EX-500	EX-1000	EX-2000	EX-3000	EX-5000	EX-10000
Width (mm)	562	620	830	1136	1496	1562	1872	2610	3340	4020	4620	5632
Depth (mm)	470	458	588	654	880	980	1138	1450	1730	2071	2606*	3018
Height (mm)	711	701	1047	1130	1267	1332	1500	2527*	2973*	3010*	3580*	4168*
Disposal Capacity (kg/day)	20	25	50	100	200	300	500	1000	2000	3000	5000	10000
Power Supply (A)	15 1 Phase	15 1 Phase	15 1 Phase	15 1 Phase	15 1 Phase	15 1 Phase	15 1 Phase	20 3 Phase	32 3 Phase	32 3 Phase	50 3 Phase	63 3 Phase
Weight (no load) (Kg)	84	95	180	220	350	450	710	1390	2740	4156	7150	12600
Water Input (mm)	15	15	15	15	15	15	15	15	15	15	15	20
Drain Pipe (mm)	32	32	32	50	50	65	80	80	100	100	100	100
Input Water Temperature	30 – 35° C Input Water Temperature Requirement											
Bio Star (L)	16	18	35	70	140	210	350	700	1600	2100	3500	7000
Enzyme (L)	0.2	0.25	0.5	1	2	3	5	10	20	30	50	100

*includes bin lift allowance

*Please note: Specifications are indicative only and may be subject to change without notice. Equipment is sold with an operation manual and risk assessments relating to the equipment as supplied. It is the responsibility of the purchaser to conduct their own assessments and determine the suitability of the equipment for the intended use. Other models and custom builds are available on request.

