



LIQUID FOOD COMPOSTER

-  reduce waste
-  reduce cost
-  reduce CO₂



LFC-100 is pictured

LOOKING FOR A CLEAN AND ENVIRONMENTALLY FRIENDLY WASTE FOOD DISPOSAL SOLUTION?

The LFC (Liquid Food Composter) is a commercial bio digester that decomposes most waste food in less than 24 hours, before safely releasing it to the sewage system. And by diverting your waste food from landfills the LFC helps you significantly reduce your carbon footprint.

The LFC is a fully enclosed automatic commercial bio digester that decomposes waste food at your facility.

Say goodbye to the messy and expensive business of handling waste food forever at facilities including:

- Hotels
- Cafes and restaurants
- Hospitals and aged care homes
- Corporate and university cafeterias
- Convention centers
- Supermarkets and food distribution centers
- Remote sites including mining, immigration and indigenous communities
- Island communities and resorts

The LFC is a clean and environmentally friendly waste food disposal solution that uses a series of processes where microorganisms break down most waste food into grey water that's safe to discharge into the sewage system.

In under 24 hours, the LFC can dispose of most waste food including:

- Fruits and vegetables
- Meat and fish
- Most organic foods
- Cheese
- Bread
- Rice and noodles

With an LFC at your facility your employees won't waste time and risk possible injuries by pushing heavy bins outside for collection. You will dramatically increase your facility's hygiene and reduce flies, rodents and other vermin in and around your waste bins. And by diverting your waste food from landfill, you will be significantly reducing your facility's carbon footprint.

PRODUCT FEATURES

- Decomposes waste food at your facility – can be installed in your kitchen or work area
- Discharge from LFC safe to enter sewage system
- Continuous process allows waste food to be added any time
- No emptying of the LFC is required
- Payback is typically under 24 months
- Waste food weight continuously monitored and reported both graphically and numerically on usage and waste food digested
- Simple, quiet and safe operation with odor free and air tight tank
- All monitoring, reporting, diagnostics and alerts accessible remotely on your PC, iPad and iPhone
- Monitor your carbon footprint savings



History	Waste		Door opened
	lb	kg	
Today	145	2	
This week	970	27	
This month	2,313	180	
This year	34,741	1,406	

Carbon Graph Log Exit

SIMPLE OPERATION

The LFC is constantly digesting the waste and you can add waste food at any time. Simply open the door, throw it in, and close the door. In this way, you can view the LFC as a bottomless bucket.

The motor on the LFC won't run while the door is open for safety. Your operation can be streamlined because large bins and plastic bags are no longer needed to hold waste food. Instead, smaller bins are used that help avoid injuries to employees.

All configuration, indications, reports, and statistics are available through the touch screen. The operator doesn't need to use the touch screen and for most applications the default settings work well. All configurable parameters are protected by password.

WEIGHING THE AMOUNT OF WASTE

Load cells on each corner of the LFC accurately weigh the amount of waste food in the LFC, the amount that is added, and the amount that is digested. This data is automatically stored and reported graphically and numerically. The data can be viewed by the hour, day, week, month, and year.

As the operator adds waste into the LFC, the touch screen indicates how much more can be added. When the door is closed the LFC indicates with a bright LED when more waste can be added with a simple green indication. As waste is added, the indication becomes yellow when no more waste should be added and red if the operator overloads the LFC.

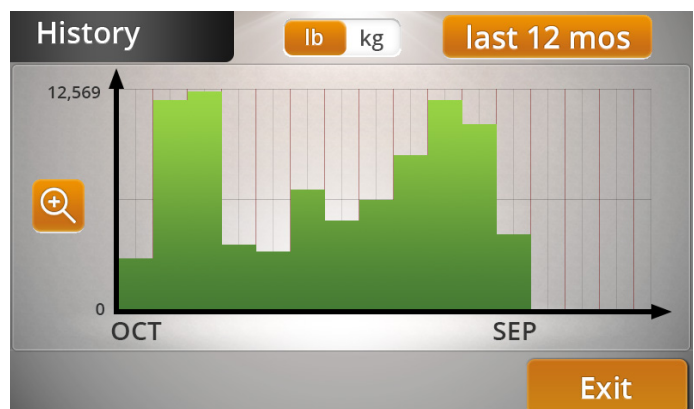
CONNECTION TO THE CLOUD

The LFC can connect through its Ethernet port to a cloud server maintained by Power Knot. The LFC securely sends data about the operation of the LFC to the server and that data is retained for five years. The data includes the amount of waste food digested hourly, daily, weekly, monthly, and yearly; the number of times the door is opened in these periods; and the amount of CO2 diverted from the landfill during these periods. If you have multiple machines, you can aggregate the data into a single report.

Remotely, you can view the health of the system including all diagnostics and when the LFC requires scheduled maintenance.

You have access to view and manipulate the data from any computer, tablet, or smartphone anywhere in the world. This access is available as long as you own the LFC at no charge to you.

The LFC Cloud can send you an e-mail with daily, weekly, or monthly statistics, alert you when it is time for periodic maintenance, and send an e-mail if there seems to be a problem with the LFC. Whilst the LFC is under warranty, Power Knot can also monitor your LFC at no charge.



HOW IT WORKS



Install the Liquid Food Composter (LFC) onsite



Add waste food into the LFC



Microorganisms rapidly decompose waste food

The LFC uses a series of processes in which micro-organisms break down biodegradable material in the presence of oxygen. The environment of the LFC, with our proprietary mixture of microbes and enzymes, accelerates the digestion of most food products and bio-plastics within 24 hours. The output is grey water that is environmentally safe. You can discharge this down the drain or use it to enrich your landscape.

The LFC is a practical alternative to the traditional disposal of waste food. Anything you can eat, including fruits,

vegetables, meat, fish, cheese, bread, rice, and noodles can go into the LFC. The machine can compost both raw and cooked foods. The process is totally green because it uses no chemicals.

As one of earths' oldest processes, composting is the most effective means of stabilizing and converting bio-degradable waste. The waste food is not being chopped but it is decomposed to such a degree that it becomes a liquid and can exit the machine only through a fine mesh screen. The rich by-product is therefore safe and replenishes nature.

WHAT CAN GO IN THE LFC?



Fruit



Vegetables



Banana and skin



Fruit without stones



Nuts



Meat



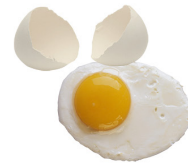
Fish and bone



Crustacean



Stew (when cool)



Egg and eggshell



Bread



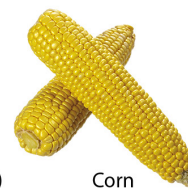
Noodles



Cheese



Pineapple heads (cut)



Corn



CAPACITY

The amount of food that can be decomposed depends on the type of food, the frequency with which it is added to the machine, and the duration of the working day. The rated capacity of a machine is based on a mixture of raw and

cooked food as may be found in a typical restaurant added over a 12 hour to 16 hour working day. The upper capacities in the table below assume that you add waste food over a 24 hour day. Cooked rice, pasta, or bread are some of the foods that are rapidly decomposed and if added in equal portions throughout the day then the capacities can be more than those listed in the table below.

INSTALLATION

The LFC is usually installed inside the area where the food is prepared or it can be placed outside under a suitable protective cover. The machine has castors so it can be rolled into position. The feet on the load cells are then lowered onto the supplied rubber pads that help to reduce vibrations and noise.

The LFC requires hot and cold water input and a 1¼" to 3" drain out (depending on model). It also requires an electrical supply.

SIZES OF LFCs

	LFC-20	LFC-50	LFC-70	LFC-100	LFC-200	LFC-300	LFC-500	LFC-1000
Capacity per day	20 - 35kg	50 - 90 kg	70 - 125 kg	100 - 180 kg	200 - 360 kg	300 - 540 kg	500 - 900 kg	1000 - 1800 kg
Size, width x depth x height, cm	56 x 49 x 73	87 x 68 x 101	95 x 72 x 108	115 x 75 x 111	148 x 81 x 127	154 x 105 x 149	190 x 120 x 162	260 x 141 x 174
Weight when empty	80 kg	168 kg	220 kg	247 kg	350 kg	520 kg	820 kg	1250 kg
Electrical supply	240 V - 50 Hz	240 V - 50 Hz	240 V - 50 Hz	240 V - 50 Hz	240 V - 50 Hz / 415 V - 50 Hz	415 V - 50 Hz	415 V - 50 Hz	415 V - 50 Hz
Maximum power	200 W	650 W	650 W	1.1 kW	1.1 kW	2.0 kW	2.8 kW	4.5 kW
Energy per day	2.3 kWh	3.9 kWh	3.9 kWh	6.2 kWh	6.2 kWh	11 kWh	15 kWh	24 kWh
Water per day	55 litre	150 litre	190 litre	250 litre	530 litre	800 litre	1200 litre	1900 litre

SPECIFICATIONS

Construction: all stainless steel (chassis, side panels, drum, shaft, arms, paddle, and load cells)

Water: ½" FIP, 200 to 700 kPa (29 to 100 psi, 2 to 7 kg/cm²)

AC Power: 240 V - 415 V - 50 Hz (based upon model)

Weighing Accuracy: ±1%

MMI: 22 mm 3-color LED and 4" or 7" touch screen with 65k colours

Ethernet: RJ45, 100 baseT, DHCP or fixed IP address

Operating environment: indoors or covered patio

Operating temperature: 4°C to +35°C

Ingress protection: IP54 – splash proof and dust proof

Operating lifetime: expected to be 15 to 25 years

Warranty: three years on all parts and components

Safety: certified to UL430 (waste disposal machines); CAN/CSA-C22.2 No. 60335-1:11 and EN 60335-1:2010+AMD1:2013 (general safety); CAN/CSA-C22.2 No. 60335-2-16:16 and EN 60335-2-16:2002+A1:2008+A2:2011 (waste food disposers)

RoHS: compliant for EU and China

