



## MyGug Mini The complete food waste solution for your small food business



Figure 1: MyGug Mini – Food Waste Digester for Cafés and Small Food Businesses

**MyGug** Microscale Anaerobic Digesters are a complete disposal system for all types of food waste, cooked and uncooked. Through the process of Anaerobic Digestion food waste is turned into biogas and liquid bio-fertiliser.

**HOW IT WORKS: MyGug** can be used to dispose of 99.9% of all your food waste from your kitchen<sup>1</sup>. This includes cooked and uncooked food waste as well as all types of liquid and semi liquid wastes including stews, porridge, toast, bread, cheese, eggs, cornflakes, yogurt, beans, peelings, soups, fruit, vegetables, cakes, sugar, preserves, oils fats and grease etc... Collect your food waste in a bowl and bring it over to **MyGug.** Remove the cover from the sink and turn on the macerator, turn on the tap and then deposit your food waste in the sink.

<sup>&</sup>lt;sup>1</sup> Hard bones and large stones such as mango and avocado cannot be digested are not suitable for use with the macerator. Citrus peels have antibacterial properties so only minimal amounts should be macerated or they will affect digestion efficiencies.





After the food waste is macerated it flows to a balance tank **MyGug's** automated controls will take care of everything else! Every couple of hours some of this food waste is dosed into the egg digester where it is digested by anaerobic bacteria. These bacteria turn the food waste into biogas and liquid bio-fertiliser. Anaerobic bacteria work best when they are warm (about body temperature) so all MyGug digesters are insulated and heated so will operate in all climates. There is also a recirculation pump that operates every so often to mix the contents of the digester providing optimal digestion conditions.



Figure 2: MyGug Mini Anaerobic Digester

**Technical Details:** 

MyGug Mini							
Model	Food Waste Per day Kg	Liquid fertiliser per day L	Food Waste Per Year Kg	Biogas production per day (up to) L	Biogas energy produced per day (up to) kW.Hrs	Power Rating kW	Power <sup>*</sup> consumption per day kW.Hr
Mini	5.5	11	2000	1000	6	0.5	0.5 – 1.5

<sup>\$</sup>Biogas production will vary depending on type of food wastes.

\*Power requirements reduce in summer when it is warmer and increase in winter when it is colder





## What is supplied with Each Unit:

- 1. Cabinet and Egg Digester you see in the diagram.
- 2. 1000L MyGug Biogas storage bag (about enough for 1-2 days gas storage)\*
- 3. Single ring biogas stove along with a 20w biogas pump and 30m of gas pipeline. (\*additional storage can be added as required)



Sample Layout with dimensions (Note: Gas bag can be positioned away from the unit).

Each unit can be delivered and setup in 1 to 2 hours. You will need power and hose points to connect to the unit. We will provide a bacterial inoculum to get your digester started. Each unit is installed outside, near your home or business or up to 80m away from the kitchen. A minimum footprint of 1m x 3m is required and a solid base is recommended for the unit. Once the unit is operating you will never have to worry about food waste again!

## MyGug's Integrated Technology:

MyGug digesters are supplied with Internet of Things capability. We use a micro controller to automate the digestion process and monitor the digester health on an ongoing basis. This operational data is sent via the cloud to our MyGug Dashboard which allows us to monitor each unit remotely. We can assist our customers and optimise the performance of your digester from afar. It is important to us to minimise our transport emissions while at the same time supporting the efficient treatment of your food waste. The data from our system will help you to document the amount of energy you are producing from your food waste along with the carbon savings you have made.

## Specification Sheet © WWW.MyGug.eu 2021





**MyGug Dashboard** 



MyGug data trends





MyGug Anaerobic Digestion Vs Composting						
	MyGug Anaerobic Digester	Composting				
Accepts cooked and uncooked food waste including meat and dairy	✓	×				
Does not require an additional carbon source to work properly	✓	×				
Will create energy from the food waste in the form of biogas	✓	×				
Is fully enclosed so will not attract vermin and flies	✓	x				
Is fully insulated	$\checkmark$	x				
Will produce a constant supply of fertiliser	✓	×				
Will treat liquid wastes such as yogurt, soups, milk etc	✓	×				

The ethos of MyGug is to be environmentally friendly, contributing significantly to the reduction of greenhouse gases and creating food waste solutions that work to support consumers and a healthier global natural environment.

Visit us at: www.mygug.eu

*MyGug* is a bin that never fills, a gas bag that never empties and an unlimited source of liquid bio-fertiliser.