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**Product Name :**  
Aerobic Digester

**Product Code :**  
LBNY-0005-1190009



#### **Description :**

The equipment consists of a ten litre reactor vessel mounted on a vacuum formed plastic base, with a liquid feed pump, air supply and instrumentation for monitoring and controlling the process.

The porous liner is removable for cleaning, and a spare liner is supplied.

Waste water is drawn from a floor-standing feed tank (not supplied) by a DC motor driven peristaltic pump.

Rotational speed and thus flow rate, are accurately set by a ten-turn potentiometer. The pump delivers the feed to the reactor vessel through a transparent lid.

The cylindrical wall of the reactor is made from a porous plastic material to retain the suspended solids while allowing treated water to pass through to the outer, annular exit chamber. This design allows the essential features of the aerobic treatment process to be studied without the distractions of having to settle the solids adequately enough for external recycle - a well known laboratory problem.

Air is supplied at a measured rate by a small compressor, and discharges into the base of the reactor via a spider-arm dispenser, designed to prevent blockages as well as to produce sufficient bubbling for stirring and reaction.

Discharge is by gravity to a floor-standing product tank (not supplied).

The reactor temperature is maintained by a 3-term controller which varies power to an immersion heater within the vessel. Any temperature between ambient and +35deg C may be selected, the best conditions being a few degrees above the diurnal maximum in the user's laboratory.

The liquid level in the reactor is maintained at a constant value of 5-10 litres, by an adjustable overflow device connected to the outer annular chamber of the vessel.

#### **Technical Specification :**

The reactor consists of a cylindrical porous liner held in position with sealing rings between the lid and the base

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to facilitate removal for cleaning and replacement.

A 10 litre bench mounted aerobic reactor, complete with peristaltic feed pump, air compressor and temperature control system.

Dissolved oxygen and pH probes and meters are included.

This digester system is designed to operate safely and reproducibly for periods of many days.

Suspended solids are thus held within the reactor volume, whilst treated water permeates through the porous liner into an outer annular exit chamber.

The equipment is mounted on a moulded plastic base, equipped with an internally moulded drain channel, designed to cope with spillages and wash-down water.

The water level is maintained by an adjustable constant head overflow device.



**Laboratory Instrument India**