



WATER



GAS



ENVIRONMENT



PEST CONTROL

## BIOLOGICAL DRAIN MAINTENANCE SYSTEM

# BIOCEPTOR

## Combined FOG intercept and treatment system

designed to retain and break down Fats, Oils and Grease (FOG) to prevent them from entering the drainage system.

The system utilises GreasePak's proven biological treatment solution in conjunction with a new FOG, Intercept and Treatment (F.I.T) unit. Optimally designed to maximise the retention & management of FOG onsite.



Independently tested and certified to **ASME A112.14.3 and PDI-G101**

Highly efficient at capturing FOG, with an **average efficiency rating of 95.6%**

Designed using flow control technology, allowing the F.I.T unit to be **much smaller than a standard interceptor**

BioCeptor's dosing component, GreasePak, is the only **BBA (British Board of Agrément) approved** bioremediation dosing system on the market

Helps satisfy legislation and building regulations

**Quick release clean kit** makes it simple to clean floors, walls and surrounding areas

**Reduced frequency of maintenance/ servicing** due to the powerful bio-fluid degrading FOG within the F.I.T unit

Less need to open the F.I.T unit, **lowering the associated hygiene risk**





WATER



GAS



ENVIRONMENT



PEST CONTROL

## BIOCEPTOR - BIOLOGICAL DRAIN MAINTENANCE SYSTEM

### HOW IT WORKS...

1

The GreasePak dosing module delivers a daily dose of bio-fluid into the BioCeptor FOG Intercept & Treatment (F.I.T) unit below.



2

Inside the F.I.T unit the specially formulated bio-fluid gets to work degrading Fats, Oils & Grease (FOG) into smaller, simpler molecules that cannot reform or solidify.

3

Frequency of emptying and cleaning the F.I.T unit is greatly reduced and you will help to maintain free flowing drains within the premises and the sewerage system.

### First...

BioCeptor's F.I.T unit slows down the flow of wastewater discharged from a food service operation, intercepting FOG through the design of internal baffles.

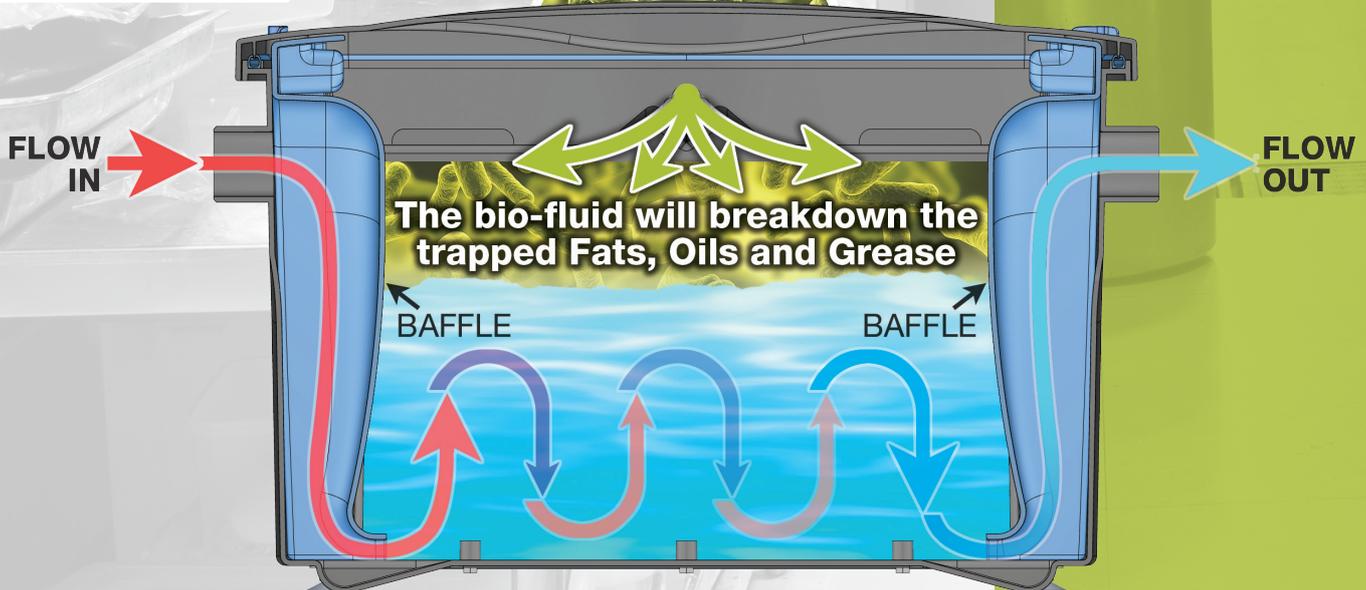
### And then...

GreasePak Multi-Strain Grease Degradator (MSGD) fluid is dosed into the F.I.T unit, transforming it in to an active biological treatment zone.

MSGD fluid is a highly concentrated active bioenzymatic fluid specially formulated to degrade FOG.

It is naturally occurring, nonpathogenic and contains in excess of 500 million bacteria per gram.

It is the **MOST POWERFUL** on the market.





WATER



GAS



ENVIRONMENT

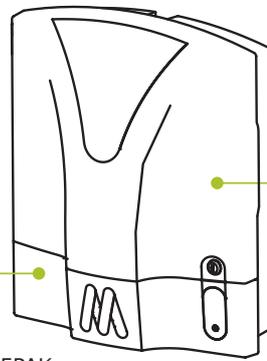


PEST CONTROL

## BIOCEPTOR - BIOLOGICAL DRAIN MAINTENANCE SYSTEM

### FEATURES & BENEFITS

- Utilises the traditional principles of entrapment and retention alongside the natural process of bioremediation.
- The combined technologies create a highly effective environment, perfect for permanent degradation of FOG.
- Held within the F.I.T unit bacteria forms into biofilms and breaks down the captured FOG.
- Biofilms also populate the drain lines downstream from the F.I.T unit providing a safety net of protection for drains.
- Less need to open the F.I.T unit, lowering the associated hygiene risk.
- The GreasePak dosing module is approved by the British Board of Agrément (BBA).
- The F.I.T unit is certified to ASME A112.14.3 and PDI G-101.
- Helps satisfy legislation and building regulations by providing an effective means of grease removal.
- Makes it even easier for food service outlets to meet best practise advice.



**GREASEPAK BIO-FLUID DOSING MODULE**

The dosing module is a simple design, few working parts – trouble free!

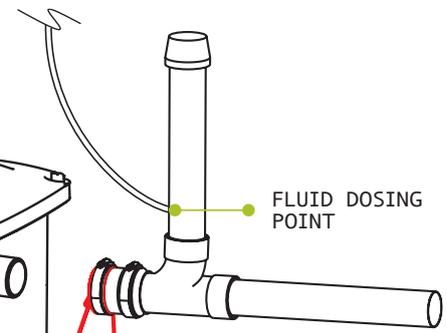
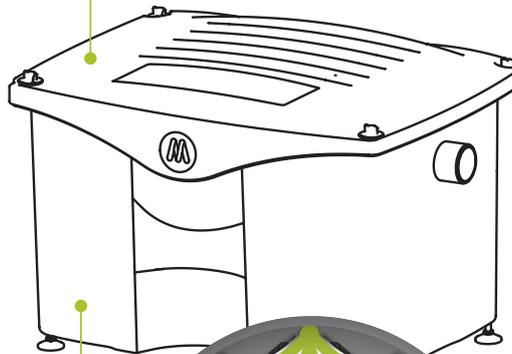


Bio-fluid refills are easy to store, handle & change.

- Eco-friendly, uses no harsh chemicals.
- Bio-fluid doses automatically – so the operator doesn't need to remember.

**FOG INTERCEPT AND TREATMENT (F.I.T) UNIT**

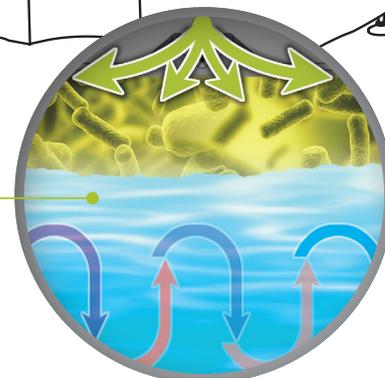
Smaller than a standard grease trap due to flow control technology.



**FLUID DOSING POINT**

**PLUGS**

- Ease of disconnection using the Plugs supplied with the Rubber Connectors.
- Together with the Plugs and the lightweight nature of the F.I.T unit this means it can be completely removed from situ.
- The floor, wall and local area can be completely and hygienically cleaned, reducing risk and maximising safety.



- BioCeptor's F.I.T unit is highly efficient at capturing FOG, with an average efficiency rating of 95.6%.



WATER



GAS



ENVIRONMENT



PEST CONTROL

## BIOCEPTOR - BIOLOGICAL DRAIN MAINTENANCE SYSTEM

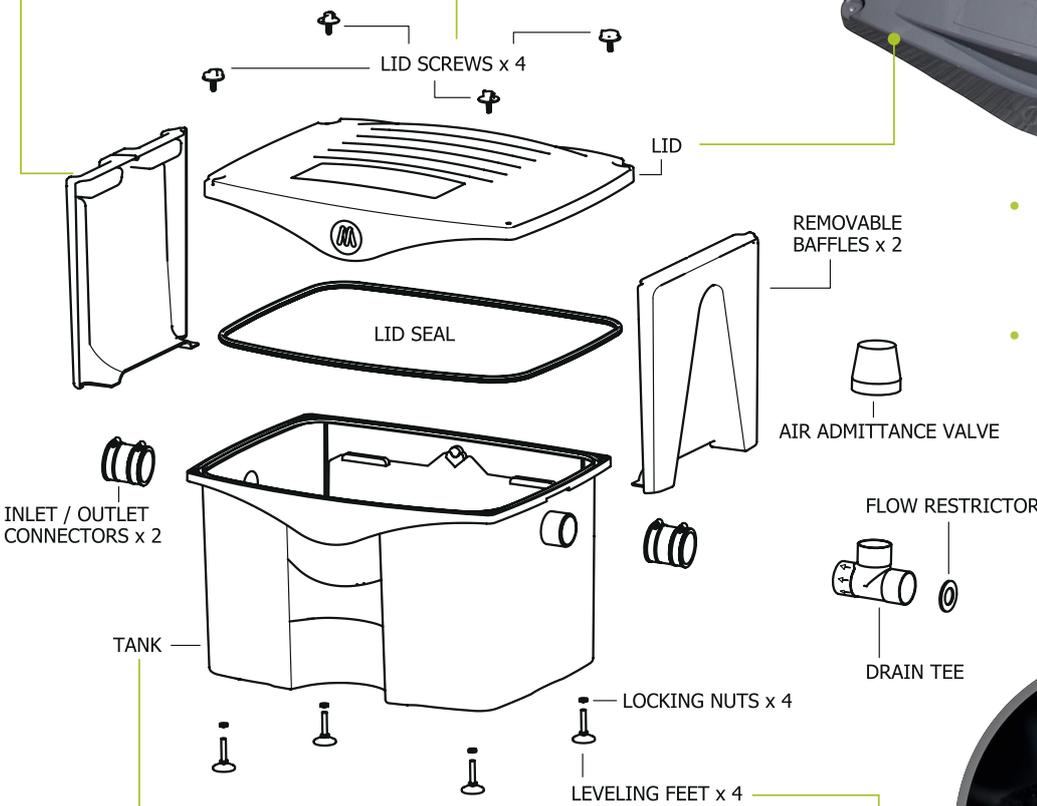
### FEATURES & BENEFITS



Easy to remove baffles to facilitate easy cleaning and maintenance.



Easy to remove, mechanical lid fittings for engineers to access tank – no special tool needed.



- Made from high strength injection moulded high-density polyethylene.
- Stylish, rounded modern design – no sharp corners for organic waste to collect.

- Quick disconnect cleaning kit – designed for easy cleaning and with hygiene in mind.



- All materials are recyclable.
- 10 year warranty on the tank and lid.
- Simple to install, supplied with universal fittings (R to L or L to R).
- Air tight chamber with sealed lid. Reduced Odours / Infestation risk.
- Optimised inner working design to maximise the retention of FOGs.



- Supplied with four adjustable levelling feet, which can help compensate for uneven floors and can help to create a flow fall through the F.I.T unit if required.

**BIOCEPTOR - BIOLOGICAL DRAIN MAINTENANCE SYSTEM**

## Mechline BioCeptor Sizing Guide

The Mechline BioCeptor F.I.T unit has been designed to be as compact as possible by using flow control technology, which allows the product to be much smaller than a standard grease trap.

The Mechline BioCeptor F.I.T unit has been independently tested by NSF and meets and exceeds the performance requirements of ASME A112.14.3-2000.

The following sizing table is based on ASME A112.14.3-2000 and applies to the Mechline BioCeptor. Volumetric sizing calculations may apply to standard grease traps.

BioCeptor Flow rates - [ based on ASME A112.14.3-2000 ]						
BioCeptor Flow - sink bowl/s flow time						
Bowl size - mm	Total Drainage Load	DRAINAGE LOAD – Sink bowl 75% Volume	Mechline BioCeptor (96Lpm) - time to discharge	DRAINAGE LOAD – 2nd Sink bowl 66% Volume	DRAINAGE LOAD - Total for 2 x Sink bowl unit	Mechline BioCeptor (96Lpm) – combined time to discharge
250 x 250 x 200	12.5L	10.0L	6 secs	8.25L	18.25L	11 secs
400 x 400 x 300	48L	36.0L	23 secs	32L	68L	43 secs
500 x 400 x 250	50L	37.5L	24 secs	33L	70.5L	44 secs
500 x 400 x 300	60L	45.0L	28 secs	30L	75L	47 secs
600 x 450 x 250	67.5L	51.0L	32 secs	44.5L	96.5L	60 secs
600 x 450 x 300	81L	61.0L	38 secs	53.5L	114.5L	72 secs

**PDI/ASME** size interceptors based on their ‘flow’ control measurement, to determine the possible peak flow from kitchen drainage. ‘Size’ in the traditional sense, i.e. volume, is not relevant – a ‘big’ trap won’t necessarily be good at stopping FOG.

With Mechline’s BioCeptor, FOG retained in the F.I.T unit is broken down through the process of bioremediation, which prolongs the time it takes to reach maximum capacity (and requires emptying).

BioCeptor is efficient at capturing FOG and then effective at breaking it down which means the FOGS cannot reform or solidify, keeping drains clear and free flowing.

**Sizing rational based on volume capacity fails to consider these variables.**

In the UK many specify interceptors based on volume, which is not key criteria for determining performance. In fact, the greater the capacity of FOG within a unit, without any bio treatment, the less effective it is and the more maintenance / servicing is required.

**BioCeptor’s F.I.T unit has been independently certified to ASME and PDI to retain on average 95.6% of FOG at 1.6 litres per second (96 litres per minute).**



WATER



GAS



ENVIRONMENT

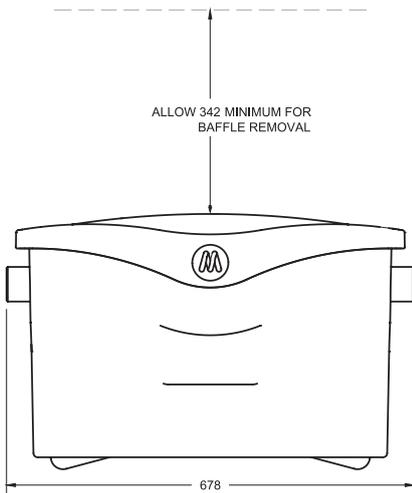


PEST CONTROL

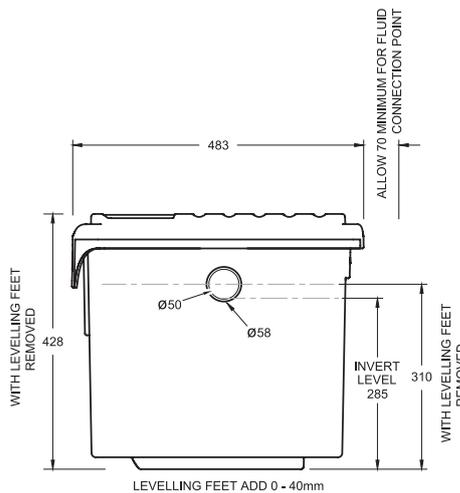
## BIOCEPTOR - BIOLOGICAL DRAIN MAINTENANCE SYSTEM

### BioCeptor F.I.T Unit

Length (side to side): 678mm / 26<sup>11</sup>/<sub>16</sub> inches    Depth (back to front): 483mm / 19 inches  
 Height (not including dosing tube): 428mm / 16<sup>7</sup>/<sub>8</sub> inches



FRONT VIEW



SIDE VIEW



ASME A112.14.3 / PDI G101

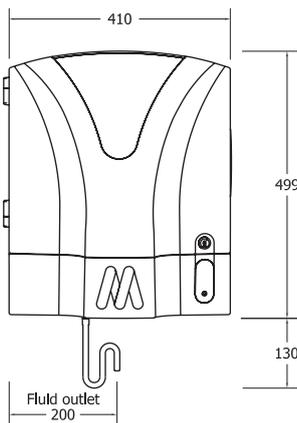
F.I.T unit - independently tested and certified to ASME A112.14.3 and PDI G-101\*.



GreasePak dosing module - approved by the British Board of Agrément (BBA).

### GreasePak Dosing Module

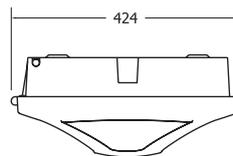
Length (side to side): 410mm / 16<sup>9</sup>/<sub>64</sub> inches    Depth (back to front): 186mm / 7<sup>21</sup>/<sub>64</sub> inches  
 Height (not including dosing tube): 499mm / 19<sup>5</sup>/<sub>8</sub> inches



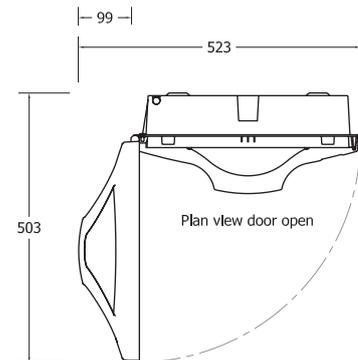
FRONT VIEW



SIDE VIEW



PLAN VIEW



PLAN VIEW DOOR OPEN

\*ASME A112.14.3 and PDI-G101 are recognised standards used to meet regulatory obligations in many countries, often cited by government agencies and referenced in plumbing codes.