

# MicroVac

Automated food waste removal system using vacuum technology



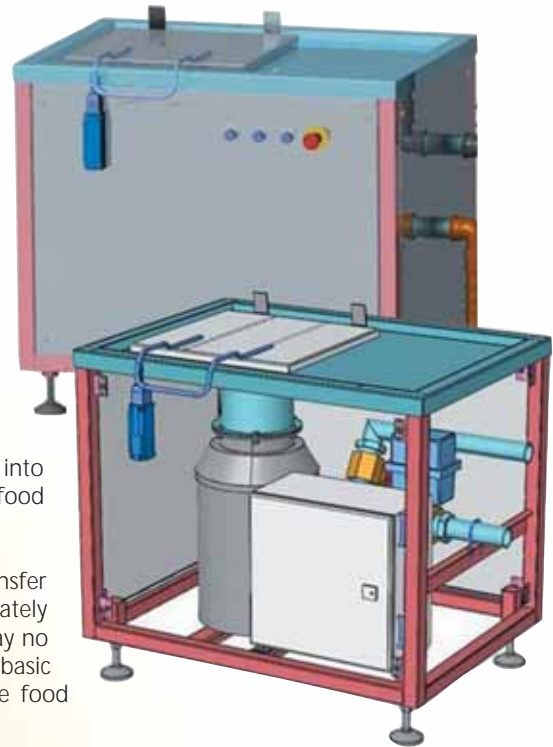
## Freestanding bench inlet

**Model MV-180** freestanding bench type waste inlet with a 170mm cylindrical opening designed to accept and macerate up to 180lt per hour of general kitchen food waste such as vegetables, meat and fish leftovers and trimmings, soups and sauces, and small bones of chicken, lamb, pork, fish, etc.

Forming an integral part of the waste inlet is a Disperator model 530-DRR food waste disposer with a motor rating of 2.2kw and complete with solenoid valve and in-line strainer. A safety interlocked lid prevents access to the rotating grinding unit during operation and vacuum extraction. Also provided will be a selector button for manual or timed extraction, start and stop button, tank level alarm, and a prominent emergency stop, all controlled by an electrical panel that is incorporated within the sub-frame. A twin core signal cable is required between the food waste inlet and the vacuum pump unit.

During each macerating cycle, the introduction of a minimum amount of water (2lt) into the waste inlet converts the 6lt of food waste to a liquid slurry, enabling an efficient food waste transfer to the holding tank.

MicroVac is a one-way fully enclosed waste removal system that is designed to transfer waste food from kitchen preparation and wash-up areas at a speed of approximately 25mt/second, to a holding tank located remotely within a waste room or loading bay no more than 70mt distance from point of food deposit. The system comprises four basic components which are the bench inlet described, the vacuum pump module, the food waste storage tank, and the interconnecting pipe network.



**MV-7.5 vacuum pump and PLC control module**



**View of waste inlet with water flushing nozzles**



**MV-DSK double sided tray stripping inlet**



**Manual feeding of MV-180 freestanding bench inlet**

The system is impervious to insect or rodent infestation and offers the operator a rationalised and effective handling of general catering food waste, whilst ensuring the highest level of hygiene within the kitchen. No requirement either for costly air-conditioned or refrigerated storage space for bagged or binned food waste. Within the waste collecting area the risk of operator injury is eliminated and noise pollution of neighbouring properties caused by frequent waste collections at unsocial hours is greatly reduced, thanks to the reduced frequency of food waste collections. Reduced collections also result in considerable cost savings.

*The macerating of the food waste into a slurry creates a natural process that allows the 'ANIMO' acids to be released under storage and stops the rotting process. This process reduces the pH level of the food waste slurry within the storage tank to between 3 and 4.5, preventing the growth of micro-organisms and eliminating unpleasant odours. Depending on the capacity of storage tank installed, food waste can be held for periods of up to 8 weeks or more before being removed from site for anaerobic digestion and composting, or alternatively for biogas production.*



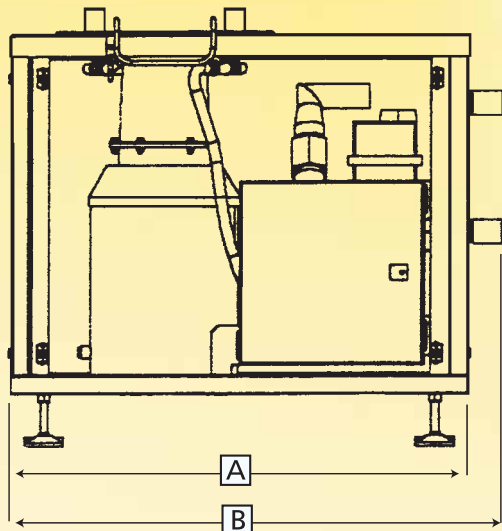
**Working for a Sustainable Future**

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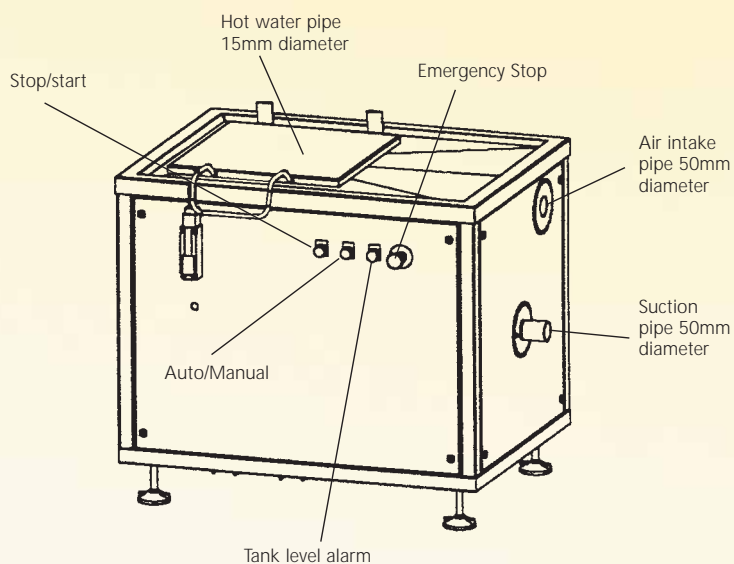
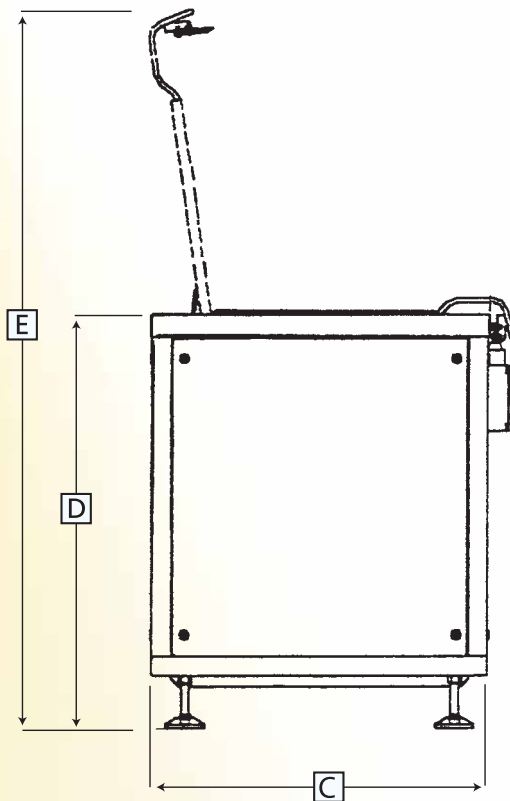
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FRONT VIEW



END VIEW



Freestanding bench inlet	MV-180
Food waste throughput	180lt/hour
Hopper capacity	6lt/charge
Connected load	2.2kw
Electrical rating	400/50/3ph
Control current	24 volt
Water consumption (hot 55°C)	60lt/hour
Water connection	15mm
Air intake pipe diameter	50mm
Waste suction pipe diameter	50mm
Overall width	A 950mm
Overall width with pipe outlet	B 1020mm
Overall depth	C 700mm
Overall height	D 850mm
Overall height with lid open	E 1470mm

A maximum of 2 inlets can be connected to the vacuum pump model MV-7.5, provided that the conveying length is no more than 70mt distance from the food waste holding tank. The maximum throughput of food waste will be 180lt/hour, either with a single or 2 inlet system. It is possible to convey the food waste slurry over a greater distance, however this requires the introduction of an intermediate receiving and transfer tank sited no more than 70mt from the inlet, along with a pipe network of 40mm diameter to transfer the food waste slurry to the remotely sited food waste storage tank. There are a number of alternative sized tanks available ranging from 2000lt to 10000lt, and available with or without integral waste separators.

**Please contact our sales office on 01753 215120 for further information.**

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