

Techniclean

Techniclean is a slim-line in-duct unit designed to break down odour and grease in the kitchen extraction air by the mechanism of photolysis and ozonolysis - combining high intensity UV-C light with ozone technology.

Techniclean can be used on its own or in combination with an electrostatic precipitator for the control of grease, smoke and gaseous odours.

Utilising the latest long-life lamps with perfectly matched power supplies, Techniclean delivers superior performance and enhanced lifetime.

Product Specification		
Model	5000 UV-C6S	7500 UV-C8S
Dimensions	533H x 1090W x 220D mm	533H x 1550W x 220D mm
Power	0.7kW	0.552kW
Weight	25kg	30kg
Supply	230Vac / 1 phase / 50Hz	
Min/Max working temperature	4 / 60°C	
Max relative humidity	75%	
Pressure	<50Pa	



Combining UV-C light with ozone technology, Techniclean keeps the downstream extract ductwork virtually grease free, significantly reducing duct cleaning and enabling heat recovery to take place.

The key advantages of the Techniclean System are:

- Slim-line, small footprint design
- High intensity UV-C and ozone technology
- Perfectly matched power supplies combined with long lasting lamps
- Destroys grease and gaseous odours
- Dramatically reduces ductwork cleaning
- Low cost and limited maintenance requirements
- Enables heat recovery due to grease-free air
- Temperature control option for energy efficiency

Oxidation of odour and grease by a combination of photolysis and ozonolysis is a recognised means of pollution abatement (DEFRA, 2005: Guidance on the Control of Odour and Noise from Commercial Kitchen Exhaust Systems). The Techniclean UV-C system can be used across a wide range of applications from restaurants and cafés to food factories located in residential and business areas to control odour and grease from commercial cooking processes.

Safety

The unit contains high power UV-C lamps and direct exposure can be damaging to the skin and eyes. The lamps are contained within the reactor and are not visible from the exterior. The unit is to be interlocked with air flow to ensure that the lamps are switched off before opening the housing to prevent direct exposure.

Optional Features

- Temperature control
- MCB protection
- 24V circuit control
- Engineers run back timer to indicate tube replacement
- Flow proving switch
- Sequential lamp frame start-up
- Lamp failure alarm

Installation

The system has been designed to sit in the duct run and should be located as close to the cooking process as possible in order to reduce grease content downstream.

The system has a low back pressure and is to be interlinked with airflow to ensure that the system operates automatically when the extraction system is activated. Full installation and operating instructions are provided.

Operation and Maintenance

Over time, and dependent on usage frequency, a fine layer of ash is deposited on the UV-C lamps. These require occasional cleaning by simply wiping them with a damp cloth which has been soaked in detergent.

Maintenance and lamp replacement can be carried out under a stringent Plasma Clean maintenance contract.

Electrostatic Precipitators

Where there is a high level of grease and smoke released into the ventilation system, Plasma Clean recommends that an electrostatic precipitator is used in conjunction with the Techniclean UV-C Filtration system. This helps to protect the UV-C lamps from

the build up of grease and smoke residues, ensuring that the system continues to operate to a high level of efficiency.

Electrostatic Precipitators or ESPs work by ionizing and trapping grease and smoke particles onto collector plates. They have a low pressure drop and high particulate removal efficiency and can be configured in single, double or triple pass depending on the nature of the cooking. The collector plates require periodic cleaning to maintain the high level of efficiency expected from this equipment.

For further information refer to Plasma Clean Product Sheet -Combined Electrostatic and UV-C.

Any questions?

Contact one of our engineers who will be at hand to advise on the most appropriate odour control solution.

Email: ask@plasma-clean.com Tel: +44 (0)161 443 4125

