CONTROLLED OZONE

ODOUR & GREASE CONTROL

TECHNICAL INFORMATION

SELF CONTAINED OZONE GENERATORS WITH CONTROLLED OZONE OUTPUT, IDEAL FOR COMMERCIAL KITCHEN APPLICATIONS

BENEFITS & SPECIFICATION

SAFETY BUILT IN
Air pressure switches ensure activation when extract system is in operation and external ozone sensors make sure ozone levels at the point of discharge are controlled.

ENHANCES PERFORMANCE
Controls odour at the point of discharge as well as reducing grease build to help lessen cleaning and maintenance costs.

LEADING DESIGN
The controlled ozone range represents over 8 years development. A stainless steel case is ideal for use in kitchens, parts manufactured and assembled in the UK.

FLEXIBLE SOLUTION
Compact design, can be mounted direct to canopy or extract ductwork on new or existing systems without an increase in pressure drop.

CLEANER OPERATION
With no UV lamps to get dirty, ozone output is maintained at a constant level and with no fluids to top up, servicing is quick and simple.

EASY INSTALLATION
Ozone generated from ambient air and can be injected directly into the canopy plenum via a single connection for better odour control

BACKGROUND

Ozone has long been recognised as a very effective medium for the neutralising of cooking odours and injection into the kitchen extraction system has proven to be effective in the control of odour emissions however, ozone emissions must be within safe levels and Controlled Ozone products are the first fully controllable, energy efficient, future proof units designed for reducing kitchen odour emissions.

Utilising an integrated smart control system, these units vary ozone production levels relative to the extract air volume within the ductwork ensuring ozone emission levels at the point of discharge are monitored within predetermined levels and not simply ‘on or off’ thereby safely utilising the odour control properties of ozone unlike other products currently on offer.

Controlled Ozone Units start the odour control process by injecting ozone directly into the kitchen extract system as close to the source of cooking emissions as possible i.e. into the canopy plenum of the first section of ductwork. Ozone reacts with odorous compounds contained within the cooking emissions oxidising them into compounds with significantly lower odour characteristics. Controlling ozone output ensures the ozone itself is consumed during these reactions.

An air pressure switch fitted to the unit is activated by air movement within the extract system so ozone production can only occur under safe operation conditions. The S range of standard injectors are designed to operate safely where discharge points are considered low risk and where a single unit has sufficient ozone generation levels to neutralise cooking odours being emitted. For installations where these conditions are not met, Ecovery Innovations have developed the VM range of Controlled Ozone injectors.

DUCTWORK PARAMETERS

Good mixing and the longest practical contact time will promote the oxidation reactions required to neutralise the cooking odours, duct velocities should be as listed by industry standards and guidance, higher velocities lessen the time ozone is in contact with cooking odours. Ozone injection close to source also maximises contact time plus the turbulence created from bends, changes in duct section and size will only facilitate the reactions taking place inside the ductwork.

The extract fan will further aid the mixing of ozone with the cooking odours and the inclusion of a high level vertical discharge terminal with add improved dispersal and dilution to the overall performance of extraction and odour control system. No pressure loss added to the extraction fan.

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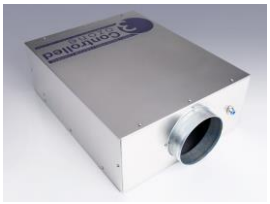
UNIT DATA

Co200S		
Dimensions: 450H x 155W x 155D		Ozone Output: 20 grams / hour
Spigot Size: 98mm O/D		Air Volume Capacity: 1.9 m^3/s
Airflow sensor / Pressure Switch: Yes		Air Quality Sensor: No

Co200VM		
Dimensions: 450H x 155W x 155D		Ozone Output: 10 to 20 grams / hour
Spigot Size: 98mm O/D		Air Volume Capacity: 0.9 to 1.9 m^3/s
Airflow sensor / Pressure Switch: Yes		Air Quality Sensor: Yes

Co400VM		
Dimensions: 450H x 355W x 155D		Ozone Output: 10 to 40 grams / hour
Spigot Size: 123mm O/D		Air Volume Capacity: 0.9 to 3.8 m^3/s
Airflow sensor / Pressure Switch: Yes		Air Quality Sensor: Yes

All units require a 1 phase 220V 50Hz 2A electrical supply.

All units have a stainless steel casement, accessories available include a 3m length of flexible duct, spigot, fixings and clips for connecting to the extract ductwork and the fitting of the airflow sensor.

Co515		
External Ozone Sensor		Protection for installations where discharge is deemed high risk
Dimensions: 450H x 450W x 150D		Detection Level: Variable adjustment to meet local guidelines
Cabinet Protection: IP68		Compatibility: For use with Co200VM & Co400VM

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