



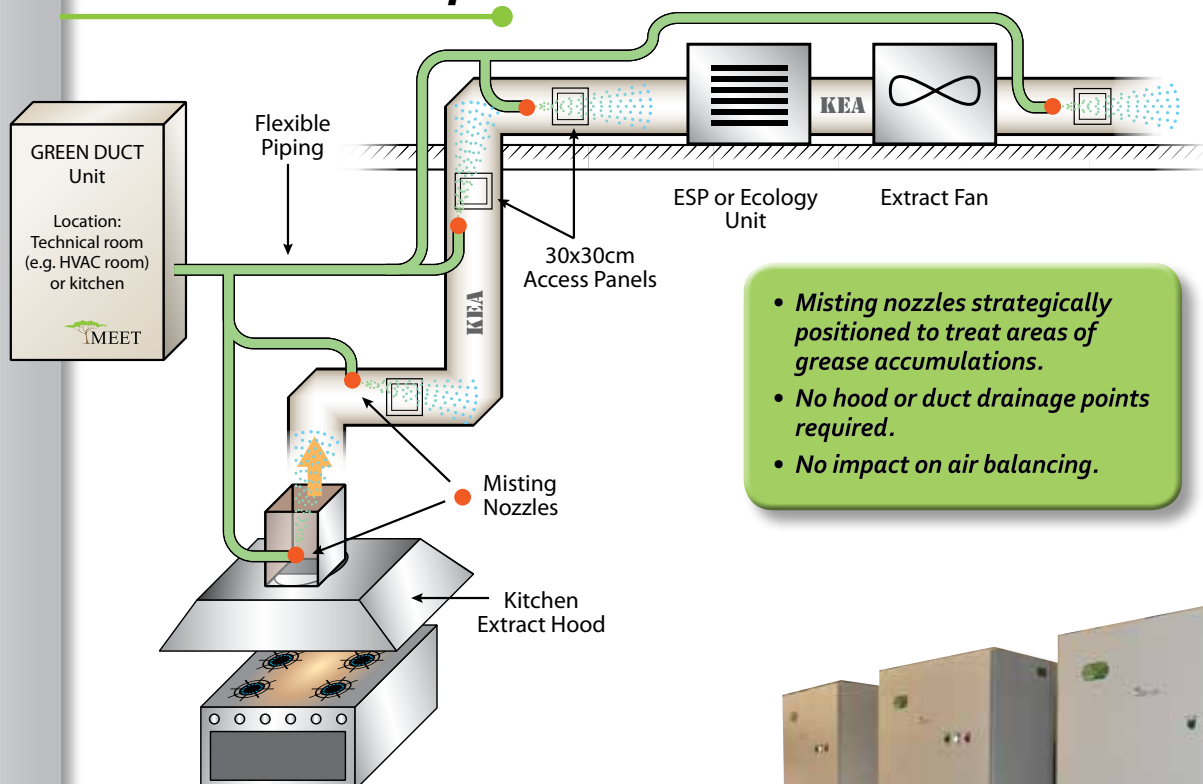
**GD**  
GREEN  
DUCT



GREEN DUCT is a Kitchen Extract Duct degreasing & odor treatment system. It was developed to provide a cost effective, safe and environmentally friendly alternative to expensive and cumbersome technologies such as UV or Misting Hoods. Proprietary technology allows GREEN DUCT to be installed or retro-fitted to virtually any existing Kitchen Extract Duct.

By following the external run of the Kitchen Extract Duct with flexible piping, misting nozzles are placed intermittently inside the duct, from above the hood all the way to the duct extract point. These nozzles produce a fine degreasing mist, which disperses within the flow of air inside the duct. This degreasing mist follows the same path as grease particles, therefore reaching and eradicating all areas of grease deposits inside the duct. GREEN DUCT is a fine mist system that requires no duct drainage.

## Basic Concept



- Misting nozzles strategically positioned to treat areas of grease accumulations.
- No hood or duct drainage points required.
- No impact on air balancing.

## Product Range

Green Duct systems are available in 3 options: single circuit, dual circuit and multi-circuit. Dual and multi-circuits Green Duct systems were designed to treat multiple kitchen extract ducts using only one machine. From a value engineering stand point, dual and multi-circuit Green Duct systems are a highly cost effective option for commercial properties requiring kitchen extract duct degreasing and odor control for several F&B operations, such as in hotels, hospitals and malls.

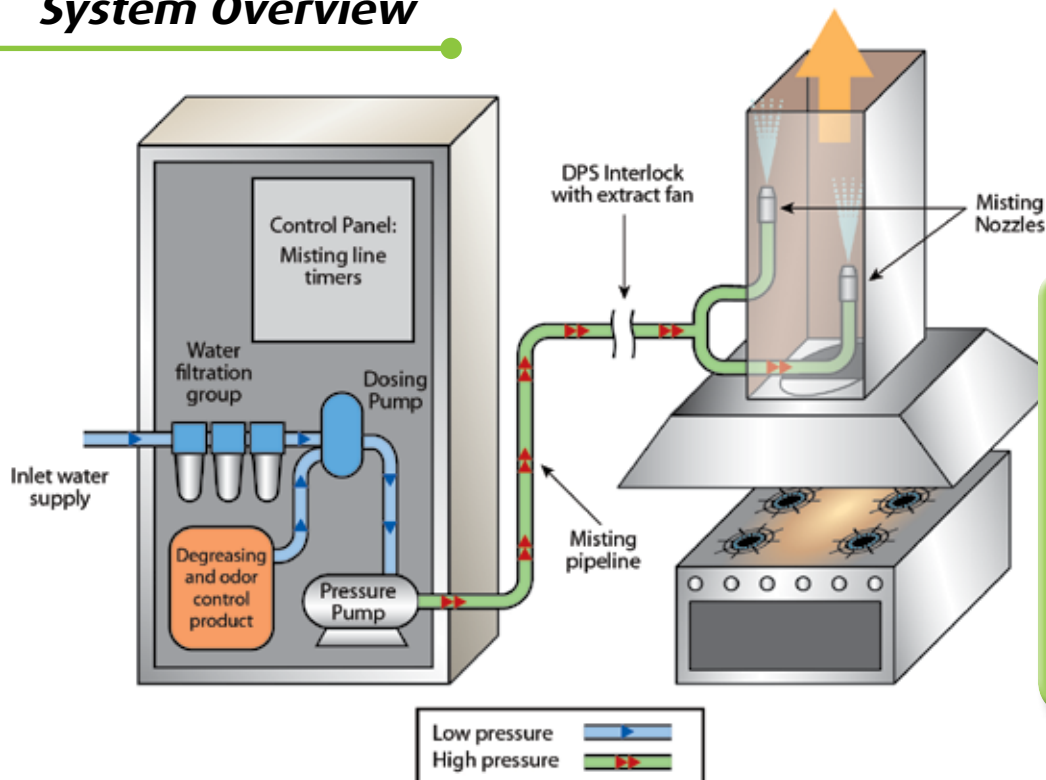


*A Variable Frequency Driver (VFD) enables Dual and Multi circuit units to maintain equal pressure along several independent misting lines at the same time.*



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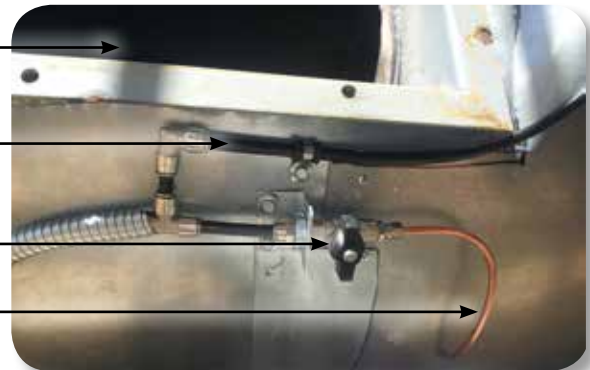
## System Overview



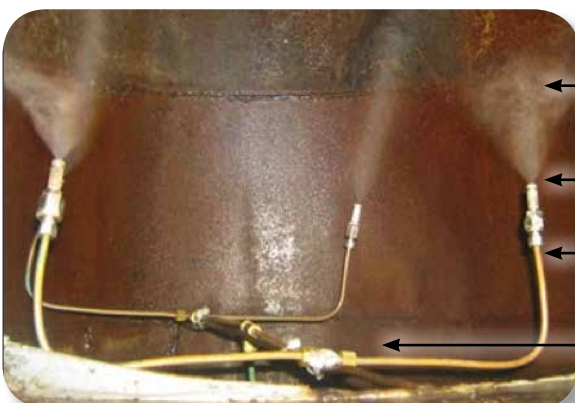
- Green Duct control panel operates the misting lines on daily sequential timers, set to treat ducts during peak cooking cycles
- Control panel fitted with dry patch for BMS connection

## External Duct Piping and Ball Valves

- Standard fire rated kitchen extract duct access panels will be used to install and maintain green duct misting nozzles
- 9.5mm polyamide pipe connects the installation to the Green Duct cabinet
- High pressure ball valves allow for independent nozzle control and maintenance.
- 6mm fire rated copper piping is placed inside the duct, connected to the misting nozzles



## Internal Duct Piping and Nozzles

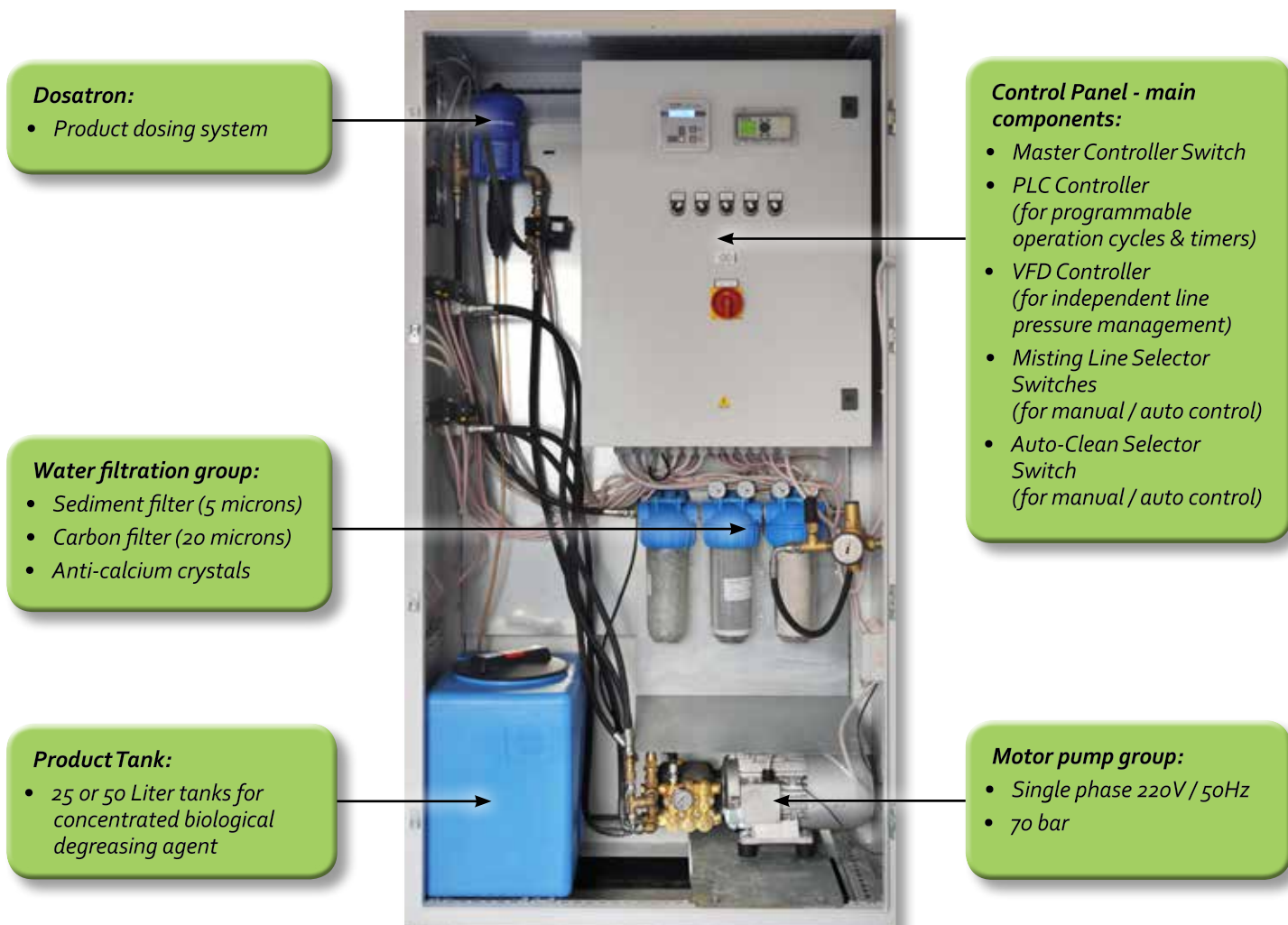


- The droplets size 10–25µm (microns) ensures there is no water condensation and no duct corrosion
- Nozzles of variable flow rates can be selected according to extract airflow rates, duct dimensions and grease content
- Flexible copper piping allows mist to be directed virtually anywhere
- Nozzle configuration can be adjusted to the parameters of the duct (e.g. ring or cross configuration at the base of risers)





## Green Duct Unit



## GREEN DUCT - Kitchen Extract Duct Degreasing & Odor Control System

### Key Benefits:

- **Green Duct installation keeps kitchen extract ducts grease-free 365 days a year:**
  - Eliminates the source of combustible fuel inside the ducts.
  - Reduces extract duct cooking and stagnant grease odors.
- **Green Duct compliance & standards:**
  - Complies with Dubai Civil Defense requirements for duct cleaning - eliminates the need for manual cleaning.
  - Complies with DW172 & NFPA96 Kitchen Extract Duct installation standards.
- **Green Duct is a more cost efficient alternative to UV & Misting Hoods:**
  - Green Duct permanently eliminates all grease in ducts. UV & Misting Hoods don't.
- **Green Duct is easy to install, requires no modification to hoods or extract fans:**
  - Can be pre-fit or retro-fit on existing projects, requires NO duct drainage points and has NO impact on air balancing.
  - Works well in conjunction with Ecology & ESP Units to further reduce smoke and smell.
- **MEET degreasing products is 100% biodegradable and environmental:**
  - NO chemicals, NO hazardous products, NO UV radiation and NO Ozone

## Manufactured in Italy to the highest EU standards



Manufactured exclusively for MEET, by IDROTECH SRL Italy (ISO 9001:2008) in accordance with CE directives:

- 2004/108 CE Directive (EMC Directive) and subsequent amendments
- 2006/95 CE Directive (Low Voltage Directive) and subsequent amendments
- 2006/42 CE Directive (Machinery)

## Certifications



## Green Duct unit range and specifications

CODE	DESCRIPTION	TOTAL NO. NOZZLES	MANAGEABLE NO. LINES	PUMP FLOW RATE (L/MIN)	OPERATING PRESSURE (BAR)	POWER (SINGLE PHASE)	CABINET SIZES (MM)
ICO-70S	Single Circuit System (for one kitchen duct)	< 22*	1	1	56-70	220V-50Hz, 1.1kW	1600 x 800 x 500
ICO70M2-VAR	Two Circuit System (for two kitchen ducts)	30-82*	2	3.8	56-70	220V-50Hz, 1.5kW	1800 x 1000 x 500
ICO70M4-VAR	Four Circuit System (for four kitchen ducts)	40-120*	4	5.6	56-70	220V-50Hz, 2.2kW	1800 x 1000 x 500

\*nozzles with flow rate 0,046 L/m at 70 bar



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