DUMECH Made in UAE

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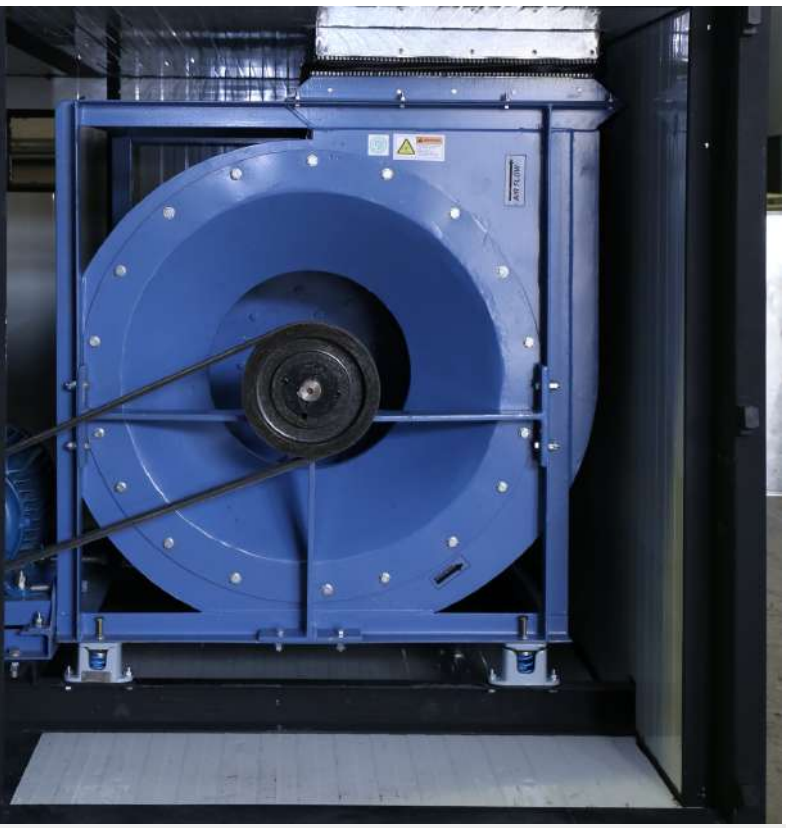
ECOLOGY UNIT



ECOLOGY UNIT

Ecology unit is an important part of the ventilation system. Mainly in commercial kitchens multistage filtration system is required in order to eliminate oil, grease, dust particles, smoke and odor. Only an exhaust fan cannot control cooking effluent. When heat is applied to food in cooking, effluent is released into the surrounding atmosphere.

Excellent Warranty Terms.
Ask Us about it

Ready? Talk to our Sales Rep
Call: +971 50 653 7348

WHY DUMECH ECOLOGY UNIT?

Kitchen effluent consists of heat and contaminants involving

1. Grease particles from 0.01 to 100 microns
2. Moisture
3. Bad odour
4. VOC's (volatile organic compounds)

Effective Ecology unit can remove these substances from the work area of the kitchen and guarantee a harmless neutral exhaust air.

Dumech Ecology units are custom tailored as per the kitchen cooking requirements. Dumech Ecology units provide excellent solution for clients and contractors who need high performance, cost effective, oil, odor and smoke control.

Our ecology units are designed to achieve the maximum filtration of the exhausted cooking fumes. Maximum filtration depends on particle sizes of the kitchen effluent and the face velocity of the fumes passing through the various filters in the ecology unit. Both of these factors establish an efficient filtration process.

Ecology unit capacity and the Filtration stages required in the unit is engineered as per the cooking appliances and the type of cooking in the kitchen. Dumech ecology unit can be retrofitted as per the site conditions. Ecology unit can be hung above the false ceiling or kept on the roof top as per the space constraints.

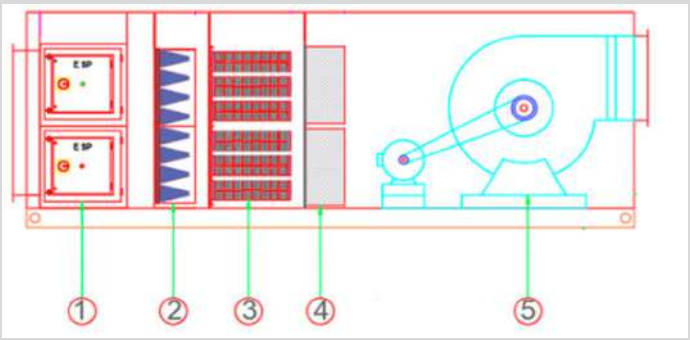
DUMECH Ventilation Equipment Manufacturing Company L.L.C
Address: Dubai, UAE | Tel: +971 4 347 4929 | Email: dumech@eim.ae

WORKING TOWARDS GREEN ENVIRONMENT...
www.dumech.com

ECOLOGY UNIT

Why Ecology Unit is required?

1. Removal of grease from the exhaust air flow is a very important part of commercial kitchen operation. If not grease buildup will develop on the Extract ducts.
2. Grease buildup on the duct will increase the chances of fire hazard.
3. Ecology unit will decrease the frequency of the expensive duct cleaning.
4. Eliminates the bad odor in or near the restaurant surroundings.
5. Eliminates collection of grease on the roof top which could cause deterioration of roof material.
6. Reduces Exhaust fan frequent maintenance due to oil accumulation.



ADVANTAGE OF DUMECH ECOLOGY UNIT

- All imported filters tested to standards.
- Customized sized units to cater clients requirements.
- Remote display for pressure drop monitoring across filters.
- Speed control for the fans using variable frequency drive.
- Ease of maintenance in filters.
- Autoclean system for ESP.
- 2 years warranty for fan.
- Reduced Noise level with optimized fan speed
- Third party Certification available

WORKING PRINCIPLE:

Cooking fumes are extracted from the Kitchen area through the ducts by properly designed extract fan which passes through the Ecology unit for the filtration process.

Stages of filtration is as follows

- 1st Stage involves Prefilter made off metal panels. These filters are used for the safety of the Ecology unit as well as to prevent large particles from entering the Ecology unit. These filters distribute the air evenly across the unit.
- 2nd Stage involves Electrostatic Precipitator. An electrostatic precipitator (ESP) is a filtration device that removes fine particles, like dust and smoke, from a flowing gas using the force of an induced electrostatic charge minimally impeding the flow of gases through the unit. Multistage ESP is used for the high smoke generating application.
- 3rd Stage involves Bag Filters. Bag filter is consisting of High efficiency pleated bags which removes the finer particles from the air stream.
- 4th Stage involves Activated Carbon Filter. These filters are made of activated carbo granules packed in tubular casing in order to have maximum surface contact with the air. Gaseous molecules (odor) are filtered through adsorption onto the activated carbon granules.
- 5th Stage Fan module. Centrifugal fan with properly designed airflow and the static pressure is used to extract the air from the cooking area. Heavy duty motor powered; belt driven fans are used.

JFEA Approved for use in Japan | ETL Listed to UL-1046 & UL-S649 | ATSM 2519-05 Certified | Complies with NFPA 96 Filter requirements

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