Kitchen extract cleaning

Most effective method for cleaning of greasy kitchen extract ducts
Greasy kitchen extracts

Kitchen extract ducts have since long been recognised as a fire hazard. There have been countless fires over the years. The most significant reason for this is inadequate cleaning of the interior of extract ducts.

Every building with cooking facilities has a potential risk of fire that can not be overlooked. Contamination of areas remote from the hood are considered difficult to reach and therefore often not maintained.

The efficiency of an extract system is reduced when it is contaminated with grease, creating a very unpleasant working situation for the employees and increasing the energy consumption.

Insurance losses resulting from fires in kitchen extracts have risen rapidly. Several experts now recommend cleaning kitchen extracts every 6 months.

Dry Ice

Dry ice is the solid form of Carbon Dioxide (CO2). It has no colour, taste or smell and is a natural part of our atmosphere.

Dry ice has a temperature of −79°C. It is made from liquid CO2, which is kept under high pressure.

Dry ice is delivered in sealed insulated containers. Once the container is opened the ice pellets should be used within 3-5 days.

The approximately consumption of dry ice when you use the Danduct Clean Ice robot system is 1-2 kilos per meter duct. The dry ice consumption can be changed on the control panel.

The advantage in our system:

A cleaning that you can see
Effective cleaning of all parts of the ductwork
No water or chemicals used
Grease is easily extracted
Multiple use
THE ONLY WAY TO PREVENT A UNCONTROLLED FIRE IS TO KEEP THE DUCTWORK CLEAN

How the system work

The compressor is placed outside the building and is connected to the Danduct Clean Ice robot, the compressor can be placed up to 90 meters away from the Dry ice machine.

The robot is inserted in one end of the system. It can be controlled either by using the joystick or by using "cruise control". When working in short and turning ductwork it is better to control the robot by using the joystick, whereas "cruise control" is preferred in long straight ductwork.

On the front of the robot is a 360° rotating nozzle, which will spray the dry ice on to the surface. As soon as the dry ice hits the grease, it will remove it from the ductwork.

At the other end of the ductwork a ventilator with a grease filter is connected to the duct to extract the grease from the ductwork.
Technical specifications – Danduct Clean Ice robot Equipment:

- **Ice machine**
  WL1500 Ice machine 1-10 bar, Ice consumption 20-80 kg/h
  230V - 50/60 hz, air consumption 1-10m³/min.

- **Danduct Clean Ice robot**
  Remote controlled robot, with black & white camera, 4 wheel drive, manual lift arm, control box, cruise control and nozzle. 15 mtr. hose for dry ice machine.

- **Danduct Clean Ice steer**
  For vertical and low ducts. Min. height & Ø: 200 mm.

- **Pistol and Hose**
  Standard pistol and 7,5 mtr hose. Other versions on request.

- **Danduct VT5000 Ventilator**
  Powerful Ventilator with build-in grease filter. 4500 m³/h, 220V

Also needed:

- **Diesel compressor**
  You will need a compressor giving 5 m³/min at 10 bars, with water separation. We will be glad to assist you in finding the right compressor to either buy or rent.

- **Dry Ice**
  3 mm pellets, quality 1600 – 1900 kg/m³.

**Danduct Clean**
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