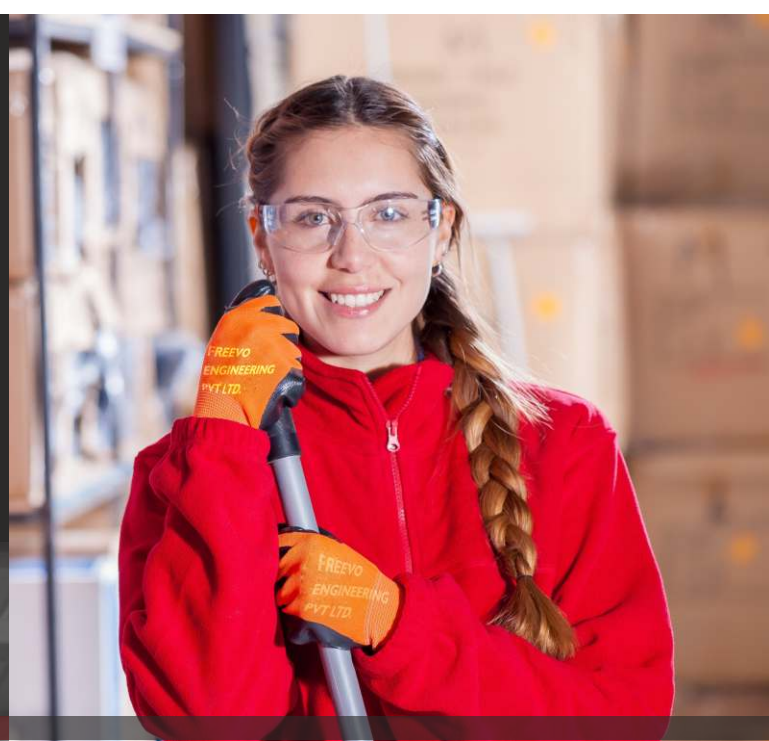


# WE PROMISE THE BEST AIR DUCT CLEANING WITH THE QUALITY



- ▶ COMPREHENSIVE DUCT CLEANING TECHNOLOGY
- ▶ AIR VENTILATION & DUCT CLEANING FOR COMMERCIAL & INDUSTRIAL HVAC SYSTEM
- ▶ KITCHEN EXHAUST SYSTEM, HOOD AND DUCT CLEANING



**FREEVO ENGINEERING PVT LTD.**  
फ्रीवो इंजीनियरिंग प्राइवेट लिमिटेड





- ▶ ROBOTIC DUCT  
CLEANING  
TECHNOLOGY
- ▶ LIVE HEALTHIER  
BREATHE EASIER
- ▶ IMPROVING  
INDOOR AIR  
QUALITY
- ▶ ENVIRONMENTAL  
ENERGY SAVING

**Freevo Engineering Pvt Ltd** being a specialist contractor in the field of Indoor Air Quality (IAQ), building remediation and engineering solution; has the knowledge, skills and expertise in undertaking the “Project”. As the service provider, we shall provide all necessary resources and equipment to execute the Air Duct & HVAC Cleaning services required by our clients. We shall execute air duct assessment, analysis, inspection and record the data, thus providing a comprehensive report with accordance to standards by National Air Duct Cleaners Association (NADCA).

### What Services Do We Offer ????

- Kitchen Exhaust System, Hood and Duct Cleaning
- AHU Servicing and Disinfection Treatment.
- Air Duct Cleaning & Disinfection Treatment.
- Robotic Air Duct Inspection.
- Chiller and Condenser Coil Descaling .
- Cooling Tower and Air Washer Unit Servicing & Maintenance.
- Sealing (encapsulate) insulation in Duct work .

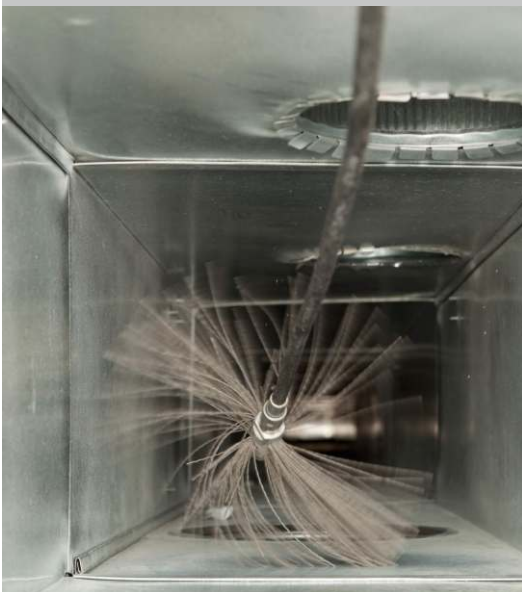
### Why do HVAC Air Ducts need cleaning

The most important fact is air ducts are, hiding places for indoor pollutants such as, mold, mildew, airborne bacteria, viruses and allergens, all of which will affect the sanitation and health of indoor environments. **Air ducts cleaning improves indoor air quality**, Control bacteria growth in the ducts, Contaminants, pollutants, allergens, and mold tends to settle along air vents & ducts. Fire Risk- The dirt transport the fire in the system. **Even though most duct work systems have Air Filters, Not all these contaminants will be able to contain by these filters.** Regular cleaning of Air Ducts improve Airflow, which reduces bacteria's and contaminated particles. By removing the build-up of debris in your air ducts, you instantly create better airflow .This process contributes to less expensive heating and cooling costs by increasing the circulation of air throughout the ducts. As the system is cleaned the air conditioning system will struggle less to deliver the desired temperature. This would mean less consumption of energy. In other words, Duct cleaning can boost energy efficiency. A thorough Duct cleaning can improve HVAC systems life expectancy.

**BEFORE**



**AFTER**



# What You Should Know About Air Duct Cleaning...

## Are there health benefits from HVAC system cleaning?

A five year study conducted by the Environmental Protection Agency (EPA) showed that indoor air pollutant levels exceed outdoor levels by 200 to 500 percent. Many hazardous contaminants, such as mold spores, fungi, bacteria, pollen, animal dander, etc. have the potential to affect your health. Harmful contaminants are pulled into air ducts where warmth,

darkness and humidity create a breeding ground for these contaminants. Your HVAC system will continue to disperse these contaminants back into the air that you breathe. The removal of such contaminants from the HVAC system and Indoor area should be considered as the first step in an overall plan to improve your indoor air quality.

## Will Air Duct cleaning result in lower energy bills?

Research conducted by the EPA has shown that removal of debris that builds up inside HVAC systems can improve air flow up to 20% or more. This means that your system

should not have to run as long to do the job it was designed to do. Running your system less will reduce energy bills.

## What are sanitizers, and why would they need to be used?

Sanitizers are anti-microbial chemicals applied to the interior surface of the Air-Handling Unit

Evaporator Coil & Air ducts and are designed to control microbial contamination.





## Air Duct Cleaning Process

- Operatives to shut down and tag out HVAC system and isolate power
- Operatives to identify location of air duct.
- Operatives to remove diffusers and install plastic sheet at outlet.
- Operatives to perform pre duct inspection through Robotic Technology.
- Operatives to clean and sanitize all diffusers and registers.
- Operatives to create and install access panels on air duct system.
- Operatives to perform zoning of air duct for cleaning
- Operatives to fit HEPA filtered Vacuum Ventilator unit at the end of duct.
- Operatives to perform air duct cleaning utilizing Robotic equipment's, DC-4 and PD-4 brushing system.
- Operatives is to ensure all dirt, dust and other contaminants are transferred into Vacuum Ventilator unit.
- Operatives to perform air duct inspection upon completion of works documentation of "Before" and "After" cleanliness of the system.
- Operatives to re-install access doors and diffusers.
- Operatives to tag out the HVAC unit and run a performance test.

## Air Duct And HVAC Cleaning

Dust particles, contaminants, and microbes will accumulate in air conditioning ducts and on cooling coils over time, causing the growth of bio-film, mold and bacteria. Such build-up, if not cleaned and remedied within 3 – 5 years, increases energy usage and creates 'Sick Building Syndrome. We provide advanced robotic solutions

for the assessment, cleaning and restoration of HVAC (heating ventilation and air conditioning) systems. Air duct inspection utilizing robotic video imaging technology; Agitation and duct contamination removal utilizing dirt extraction technology, and Air duct sanitization and anti-microbial treatment.

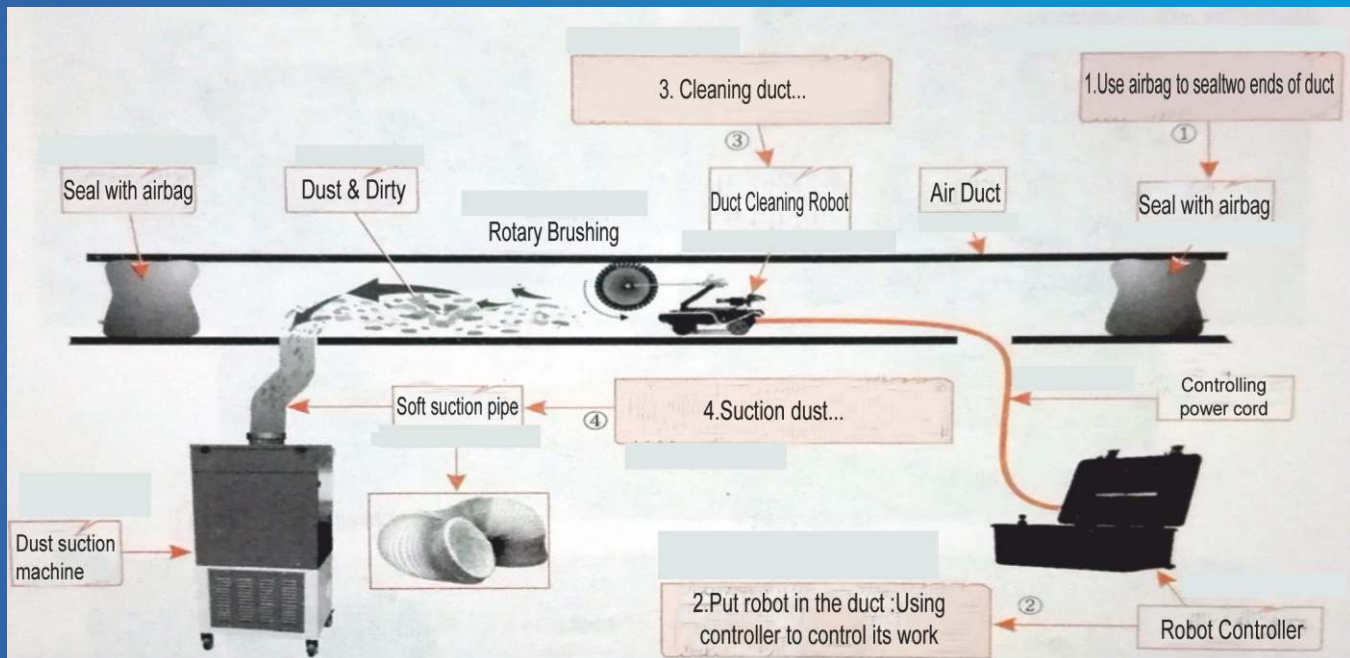
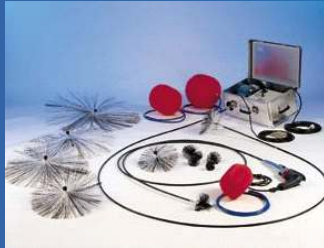


Before



After

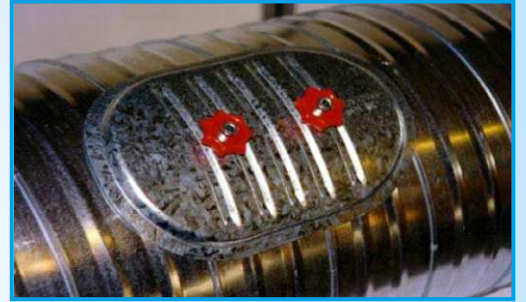
# FREEVO RANGE OF DUCT CLEANING EQUIPMENT'S





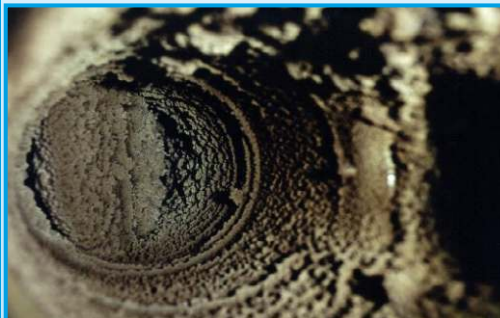


## How to mount a ventilator hose



## Inspection Of HVAC Air Ducts

A damper is almost blocked



## KITCHEN EXHAUST DUCT CLEANING



Providing you the best range of Kitchen Hood & Duct Cleaning Services and Blower Cleaning with effective & timely delivery. Fats from the fumes gets travelled through the Hoods, Filters gets concentrated forms Grease in the duct leading exhaust fan. If this grease concentration is not cleaned at regular intervals it may catch fire from a single spark from the Kitchen. This fire spreads

throughout the duct resulting in a major property damage and loss of life also in some event. Air Duct HVAC Systems cleans your entire exhaust system as it is the most necessary and required option to prevent fire accidents. Cleaning of Kitchen Exhaust System starts from the point where the fumes enters i.e. from the Hoods, Filters to the entire duct to the Exhaust/Blower Fan.



Kitchen exhaust systems in food production outlets can accumulate grease, oil, and other deposits which pose a hazardous fire risk. Our flexible cleaning schedule is usually arranged outside client Operating hours such as after

closing, early morning or weekends to avoid closing of food outlets during the cleaning process. After the completion of the job we will be providing you with the photos of the system to affirm the cleanliness work carried.





## REGULAR CLEANING WOULD HAVE PREVENTED IT

Industrial kitchens have exhaust systems designed to expel smoke and smells. The fumes expelled are high grease which builds up in filters, hoods and the extractor. This grease is highly inflammable, and is responsible for most fires which occur in restaurants. Dirty systems also force the ventilator to work harder, consuming more energy than necessary, creating unpleasant smells, through inadequate ventilation. By regularly cleaning out the installation, you can avoid these unnecessary risks.



## **FREEVO ENGINEERING PVT LTD.** **फ्रीवो इंजीनियरिंग प्राइवेट लिमिटेड**

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