P 360

www.p360fire.com

Fire Fighting Consulting & Designs

Introduction

P360 Fire Consulting & Allied Service offers a complete bouquet of Product & Services to our Clients which Range from Fire detection & protection systems, Fire Audit Surveys to Analysis till Design and Engineering of Fire Fighting Systems.

Our services begin with a detailed examination of your building to ensure a clear understanding of our engagement, scope of work and successful outcome. For example, we can evaluate your current fire protection systems and building features to determine whether or not the building, contents, and occupants are properly protected in accordance with all applicable codes, standards and local code requirements. Our team can then prepare a clear and concise written report with our findings and recommendations to bring the fire protection systems and building, fire and life safety features into compliance with the locally or state adopted codes and standards.

At P360FCAS, we can also work with our clients to write bid specifications and help select contractors to perform any needed work.

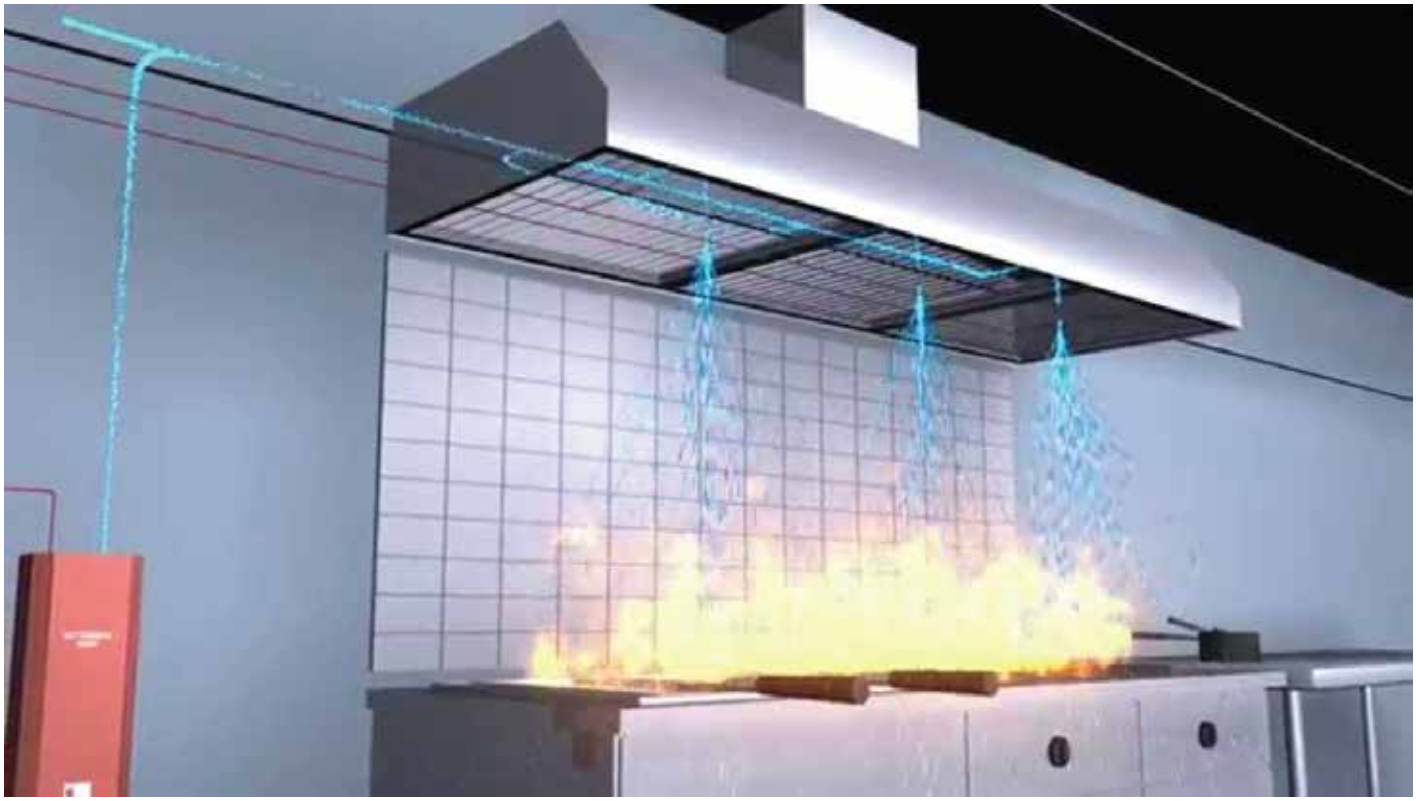
Products

Kitchen Fire Suppression System

Hazardous Oil and grease fire or Kitchen fires takes place due to overheating of oil in the temperature range of 3500C-3800C which is further enhanced by accumulation of oil deposits in plenum (enclosure behind filter) and exhaust ducts of kitchen hoods over periodic cooking leading to further scope of fire in the smoke extraction system. Reasons for overheating of oil in cooking containers have been found due to temporary distraction by the user or complete absence of attention to cooking appliances/vessels during cooking, for example burners left on by mistake after cooking. It can also occur with malfunctioning of automated temperature control equipment in electrical deep fat fryers. In view of the above referring to annual fire incidents in kitchen and their severity necessitate use of automated kitchen fire suppression with a provision of manual actuation option. The user should evaluate their regional laws of land for requirement of such system.

Protection:

- The system incorporates both manual and automatic protection by a heat sensing cable and actuation technique.
- All sensitive areas susceptible to fire such as fire due to overheated cooking oil in vessels/deep fat fryer and oil residual deposits in the extraction system of kitchen hoods are covered by heat sensing cables.
- The system is capable of shutting down other appliances on system actuation, if required.
- Additional equipment such as gas shut off valve, alarm, warning lights etc. can be integrated with the system.



Components of Kitchen Fire Suppression System:

- Gas Supply Auto Shut Off Valve
- Control Panel
- Manual Pull Station
- Electric Siren
- Water Inlet
- Heat Sensing Cable
- Temperature Sensor
- Wet Chemical Agent Storage
- Discharge Line
- Discharge Nozzle

System Features:

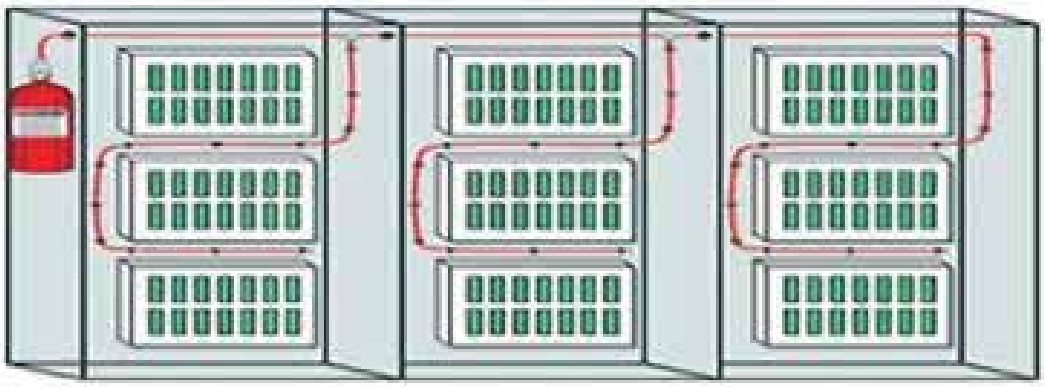
- Pre-Activation Alarm
- Fast Fire Detection
- Automatic & Manual operation
- It is the only system capable of giving an alarm approximately before 30 degree before activation temperature.
- The system can be integrated to BMS as well.
- Dual suppression action for appliances and energy supply (Gas and EC)
- Maximum extinguishing coverage
- Exception design
- Easy kitchen clean-up following discharge
- Stainless steel friendly fire suppressant agent
- Water-based environmental friendly agents
- Cost effective

Panel Fire Suppression System

Most fires are electrical. Fire in Server Racks or electrical panels is generally caused by short circuit or small sparks. In case of fire in such panels/machineries, it is difficult to spot the fire immediately due to enclosed cabinets and hence it's too late because everything inside has already been destroyed by the fire. Therefore we need instant detection and swift firefighting to fight with such fires. In view of the above referring to annual fire incidents electrical fires, introducing In-Panel Gas Suppression System for Electrical Panels, Enclosed Panels & Server Racks which is a very simple but most effective solution to fight small fires then and there it originates.

Protection:

The system incorporates automatic protection by a pneumatic detection and actuation technique. All sensitive areas susceptible to fire such as fire due to sparks in electrical cubical, overheating of cables and sensitive parts/equipment of industrial machinery are covered by Heat Sensing Tube pressurized by dry nitrogen. The Heat Sensing tube is connected to the head of direct low pressure valve mounted on the top of pressurized agent container. The Heat Sensing Tube detects the fire, activates the system and also acts as an extinguishing agent delivery medium. In case of fire, the heat sensing tube ruptures at determined temperature and forms a miniature nozzle which allows releasing the pressure of the tube and operates the direct valve. Extinguishing agent thus released is spread through the heat sensing tube and miniature nozzle.



System Components

- Pneumatic Tube - Heat Detection
- Agent - HFC236fa, Co2 or Inert Gas
- Fire Extinguishing Agent Cylinder - Stored Pressure Type, fitted with Pressure Gauge
- Valve - Direct Low Pressure with Integrated ball valve to minimize leakages, integrated position monitoring of valve for open / close position of valve using potential free reed switch contact. Special key for locking valve position to avoid accidental closure
- End of Line Plug - For fitting at the tube end to terminate the point.
- Pressure Switch - To monitor Pressure in the tube, switch point 11 Bars
- Audio Alarm
- Control Panel – Indicates System Readiness, Alerts if any pressure drop
- End of line adapter: End of line adapter with pressure gauge, brass, nickel plated
- T Connection - brass, nickel plated

System Features:

- Simple self-activating system without human intervention.
- Linear Heat Detection - senses fire anywhere along the entire length of the fire detection Tube.
- Extinguishes fire at an early stage.
- System activates automatically.
- Safe against malfunction.
- More reliable as system does not rely on complex electronics or moving parts.
- System does not need external power supply for detection and extinguishing of fire.
- Easy to maintain because of simple construction.

Total Flooding Gas Supression System

Total flooding system is a clean agent based automatic fixed fire suppression system that achieves extensive coverage. This self-activated system uses advanced technology to achieve maximum extinguishing efficiency and capable to extinguish all types of fire.

The main application of the system is for data centres, server rooms or UPS rooms where important data is stored or expensive material is placed which you cannot afford to lose in case of fire

A fire in areas where electronics are present could not only spell a serious delay for your operations, it can also result in huge financial losses. And putting out the fire doesn't necessarily spell the end of your troubles either. The reality is, in a fire situation many fire suppression systems cause major damage, and even destroy the very things they are supposed to protect. The need of the hour is a system that works swiftly to contain the fire and extinguish it, ensuring minimal damage. Yet one that's kind on electronics.

System Components
1. Agent Tank
2. Cylinder Valves and Actuation Line
3. Nozzles
4. Discharge Hose
5. Detection Devices (Both smoke and heat)
6. Control Panel

OTHER PRODUCTS

Fire Detection Systems & Temperature Monitoring Systems

Conventional, Addressable and Wireless Smoke Detectors & Alarms

- **Addressable Fire Alarm Systems:**
- Wireless Fire Alarm Systems
- Temperature Monitor & Alarm System

Fire Protection Devices & Systems

- Fire Extinguishers
- Fire Hydrants
- Kitchen Fire Suppression System

Services

P360 ensure the following during the Fire Audit Survey

- Legal Compliance
- Fire Risk Management Strategy
  (Fire Prevention System, Fire Protection System, Fire Mitigation System & Fire Load Calculation)
- Suggestions & concerns regards safety by identifying potential areas for improvement
- Actions to establish and enforce high standards of safety system performance.
- Effectively managing future fire safety management program.

- **Hazard Analysis**
- **Fire Audit Surveys**
- **Design and Engineering**
- **System Integration**
- **Loss Prevention & Fire Preventive Maintenance**
- **Fire Protection Systems Evaluations and Specifications**
- **Fire Training Drills**

P 360

DP IV 95, Prayar North,
Prayar PO, Alappuzha (DIST), Kerala,
Pin-690547, India
p360@outlook.in

For enquiries

+919544090867