PRE-ENGINEERED AUTOMATIC
FIRE SUPPRESSION SYSTEMS
WITH DETECTION TUBE &
EXTINGUISHING AGENTS

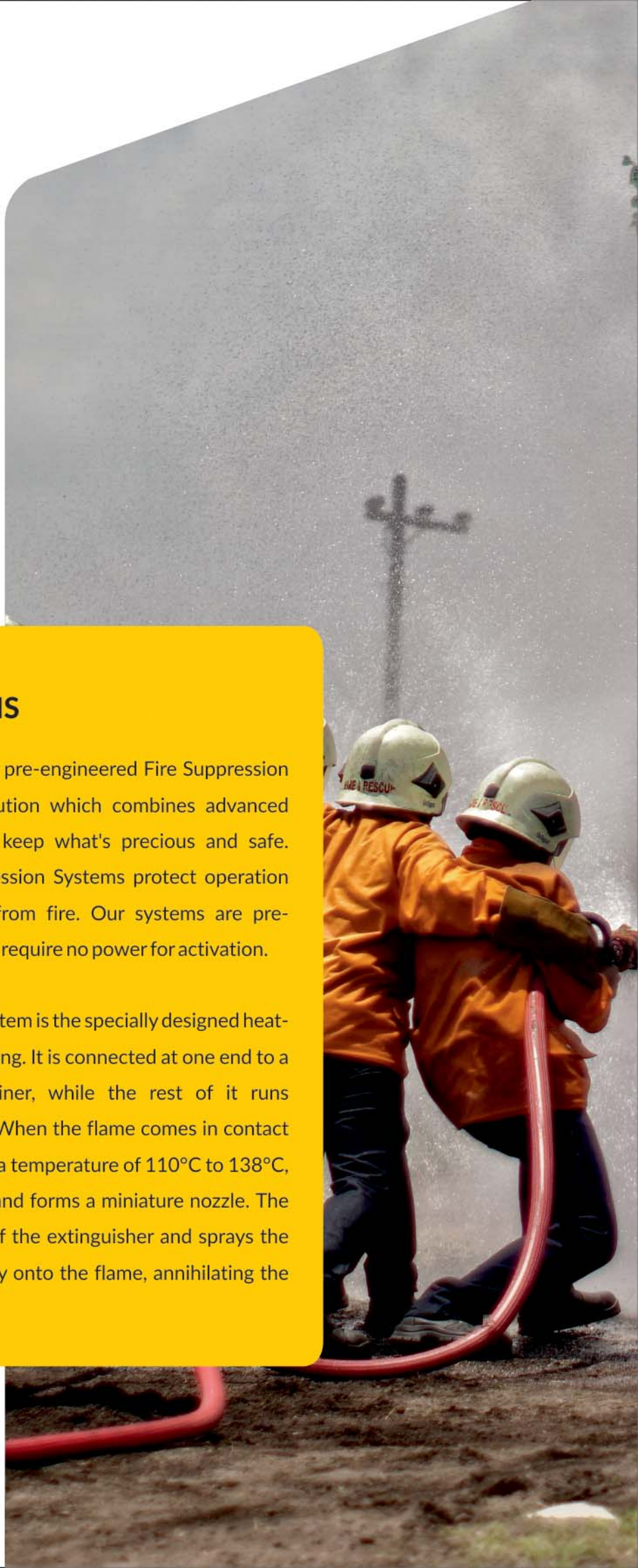
EN APPROVED

LISTED TUBE

FOAMTECH

AUTOMATIC FIRE SUPPRESSION SYSTEMS
KITCHEN FIRE SUPPRESSION SYSTEM

FOAMTECH



PRE ENGINEERED FIRE SUPPRESSION SYSTEMS

Introducing **FOAMTECH®**'s swift response pre-engineered Fire Suppression Systems, a dynamic fire suppression solution which combines advanced technology with functional simplicity to keep what's precious and safe. **FOAMTECH®** Pre Engineered Fire Suppression Systems protect operation specific critical assets and equipment's from fire. Our systems are pre-engineered, self-contained, stand alone and require no power for activation.

The most ground breaking feature of the system is the specially designed heat-sensitive pneumatic polymer detection tubing. It is connected at one end to a **FOAMTECH®** extinguishing agent container, while the rest of it runs unobtrusively throughout the area at risk. When the flame comes in contact with the heat-sensitive tubing and reaches a temperature of 110°C to 138°C, the tubing bursts open at that exact spot and forms a miniature nozzle. The pneumatic mechanism triggers the valve of the extinguisher and sprays the extinguishing agent out of the tube directly onto the flame, annihilating the fire instantaneously.

PRODUCT FEATURES

APPLICATION
Works on class A, B, C fires and electrical Panel fires. Effective on a wide range of flammable and combustible materials.

PNEUMATICALLY OPERATED
Does not require any power supply and will function normally in the event of a power outage.

ELECTRONICS-FRIENDLY
Shown to be electrically non-conductive and is safe for electrically charged equipment, Novec1230/HFC227ea is kinder on electronics than the majority of extinguishing agent available in the market.

SIMPLIFIED HIGH RISK PROTECTION
Suitable for protection on a range of high-value risks as it virtually eliminates damage to high-tech equipment, artwork and other delicate and sensitive objects.

24-HOUR PROTECTION
Automatic detection and actuation controls ensure fire protection is always 'on'.

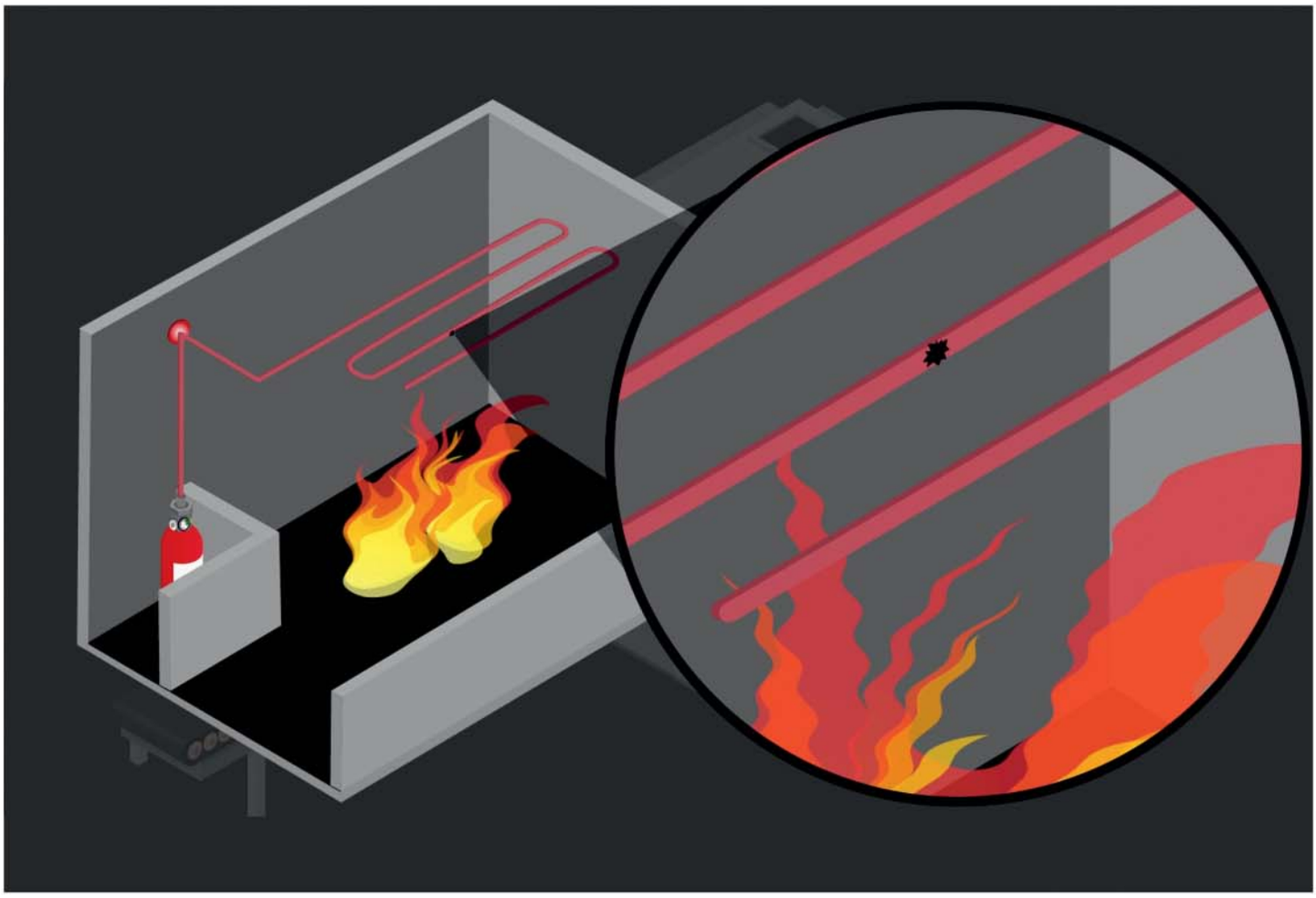
FLEXIBLE DETECTION TUBING
Flexible tubing allows protection in areas that are difficult to access and may not be able to accommodate any other means of detection.

RUGGED DESIGN
Can withstand even harsh conditions where other types of detection systems might be quickly deteriorate.

RESIDUE-FREE
Being a clean agent, it won't leave behind oily residue, particulate or corrosive material.

COST EFFECTIVE
Cost effective & viable alternative to Total Flooding System which saves on space & substantial reduction in pricing.

FOAMTECH



MAJOR SYSTEM COMPONENTS

FOAMTECH® pre-engineered fire suppression systems comprise of the following major components:

- Cylinder/ Valve assembly
- Cylinder Mounting Bracket
- Detector
- Pressure switch
- End plug
- Nozzles
- Master Control Unit (MCU)
- Connectors
- Right choice of agents

RIGHT CHOICE OF AGENTS

FOAMTECH® pre-engineered fire suppression systems are compatible with most commercially available fire suppression agents, including:

- HFC 227ea
- CO2
- FK 5-1-12 (NOVEC)
- Dry Chemical Powder (ABC, BC, D)

APPLICATIONS

ELECTRICAL CABINETS & SERVER RACKS
LT & HT Switchgear Panels, Capacitor Panels, Server racks in Data Centres, PLC & process automation control cabinets; critical data processing equipment; UPS cabinets; medical equipment; switchgears, HVAC Panels, Escalator Panels

CNC /EDM MACHINES, FUME HOODS
Enclosed automated milling machines; EDM machines; robotic welding machines; plastic injection moulding machines, Fume Hoods, Walking fume hoods,

MANUFACTURING & PROCESS APPLICATIONS
Dust & mist collectors, Paint booth, Process Control Cabinets, Chemical storage areas, DG Sets, Engine & Motor bays, Gas Turbines, Electrical Transformers, Dust Extractors, Filtration Plants.

MINING MACHINES & MOBILITY VEHICLES
HEM Vehicles (Engines & Motor bays, Hydraulics, emergency brake, etc.) Excavators, Drag Lines, Dump Trucks, Loaders, Dozers, Drill Rigs, surface miners, U/G Mining equipment's, cranes, Roof bolting, Dredging, Buses and coaches, School Buses and vans.

POWER GENERATION & TRANSMISSION
Wind Turbines, Solar Energy Farms, Energy Storage Systems, Cable Trays & Cable Tunnels, UPS Battery Racks,

AIRPORTS • METRO RAIL • TELECOM • BUILDING
AUTOMOTIVE • OIL & GAS • PHARMACEUTICAL INDUSTRIES
MFG. PLANTS • MINING • MARINE • CONTAINER
DEPOT • POWER • RENEWABLE • ENERGY

FOAMTECH

THE FOAMTECH® CUTTING EGDE ADVANTAGE

- Reliable, 24 x7 Automatic Fire Detection & Protection for equipment and data against Fires.
- Clean Agent Cylinder are welded/seamless & made of High-Grade Aluminium in accordance with the requirements of the relevant PESO/CCOE and ISO standards and carry PESO and CE approval.
- The Valve assembly with Next Gen Isolation Valve equipped with a DLP/ILP valve, with 3 separate ports for- 1x port for mounting/ bonding pressure switch, 1x port for Schrader adaptor with removable pressure gauge to monitor container pressure, and 1 x port for optional Pressure Relief device PRD).
- **Multiple Detection points- FOAMTECH®** Fire Detection Tube (FDT) which is UL listed acts as a Linear Pneumatic Heat detector can detect fire throughout its installed length.
- No "False Alarm" or Discharges, **FOAMTECH®** systems only activate in the event of an actual fire/heat impingement.
- **Environmentally Friendly -** Low Pressure systems utilizing certified Clean Agents is not harmful to equipment or the environment.
- **Interface Options - FOAMTECH®** System comes with various options to initiate activities like annunciation, shut on or shut off Power supply, ventilation, and interface and monitoring through Fire Alarm Panel BMS, SCADA etc.
- **Low Maintenance - FOAMTECH®** systems do not interfere with installation or maintenance of equipment and can also be retrofitted to existing equipment's.Cost Effective Service-can be quickly serviced and recharged after a fire incidence.

FOAMTECH

SYSTEM RANGE

FOAMTECH® Automatic Pre-Engineered Panel Protection System

DIRECT LOW PRESSURE

DLP CLEAN AGENT SYSTEM UNIT

PRODUCT OVERVIEW & PRINCIPLE OF OPERATION

FOAMTECH® DLP- Direct Low-Pressure Clean Agent Systems are primarily a Pre-Engineered Automatic Fire detection and suppression System utilising various Low-pressure Clean agents i.e. HFC227ea, Novec1230/FK-5-1-12, FE 36 etc.

The **FOAMTECH**® Linear Pneumatic Fire Detection Tubing (LP-FDT) is installed and connected to DLP Valve and routed throughout the protected hazard area/enclosure. The primary function of Pneumatic Fire Detection Tube (under pressure) is to detect heat/fire and activate the valve for discharge of the agent by rupturing at the hottest point along its installed length on flame impingement. On rupture a nozzle is formed at the burst point.

The clean agent under pressure, in the cylinder then flows out through the burst point, distributing the clean agent through the protected enclosure.

FOAMTECH

SYSTEM RANGE

FOAMTECH® Automatic Pre-Engineered Panel Protection System

INDIRECT LOW PRESSURE

ILP CLEAN AGENT FK5-1-12 SYSTEM UNIT

PRODUCT OVERVIEW & PRINCIPLE OF OPERATION

FOAMTECH® ILP- Indirect Release Low-Pressure Clean Agent Systems are primarily a Pre-Engineered Automatic Fire detection and suppression System utilising various Low-pressure Clean agents i.e. HFC227ea, Novec1230/FK-5-1-12, FE36 etc.

The FOAMTECH® Linear Pneumatic Fire Detection Tubing (LP-FDT) is installed and connected to ILP Valve and routed throughout the protected hazard area/enclosure. The primary function of Linear Pneumatic Fire Detection Tube (under pressure) is to detect heat/fire and activate the valve for discharge of the agent by rupturing at the hottest point along its installed length on flame impingement.

On rupture due to loss of pressure in the tube connected to the valve, the pressure from the top assembly of the ILP valve is released (can be done by both automatic or manual activation) thereby the internal piston slides to its fully open position, allowing the pressurised Clean agent to travel through any or combination of three outlet ports via delivery hose/pipes and discharge out from the fixed nozzles, within the protected area, flooding the entire area with the agent and suppressing the fire instantly.

Note: To assist annunciation, both Direct & Indirect Low Pressure systems can be connected to FACP through optional pressure switch & potential free contact arrangement.

APPROVALS AND LISTINGS

- UL Listed **FOAMTECH®** Fire Detection Tube
- UL/ FM/ EN approved Fire Suppression Agents
- Filled in UL Listed & PESO approved fill plant
- CE approved cylinders
- Overall System is CE Approved
- The system is in compliance to NFPA: 2001 (Edition 2015- latest amendment)

LISTED FM APPROVED EN APPROVED CE NFPA

FOAMTECH

EN APPROVED

CE

UL LISTED TUBE

Kitchen Fire Suppression System

FOR RESTAURANTS & HOSPITALITY

Knock Down Kitchen Fires

Foamtech Antifire Kitchen Fire Suppression System supress fire fast as it uses dual agent that is our EN approved wet agent along with water to supress the fire of oils & greases in commercial kitchen.

FOAMTECH® AUTOMATIC PRE-ENGINEERED KITCHEN FIRE SUPPRESSION

Risk of fire hazard proves to be very dangerous in the modern Electrical & Gas Operated Domestic & Commercial Kitchens. Fire in kitchen is generally due to burning of oil. However oil & fats burn at relatively high temperature and hence once they catch fire, extinguishing them is very difficult.

With the aim to protect modern kitchens from such risks FOAMTECH has developed Foamtech Automatic Pre Engineered Fire Suppression system according to the NFPA & UL Standards. It can be widely used in the Kitchens of the Hotels, Institutes, Restaurants, and Schools etc.

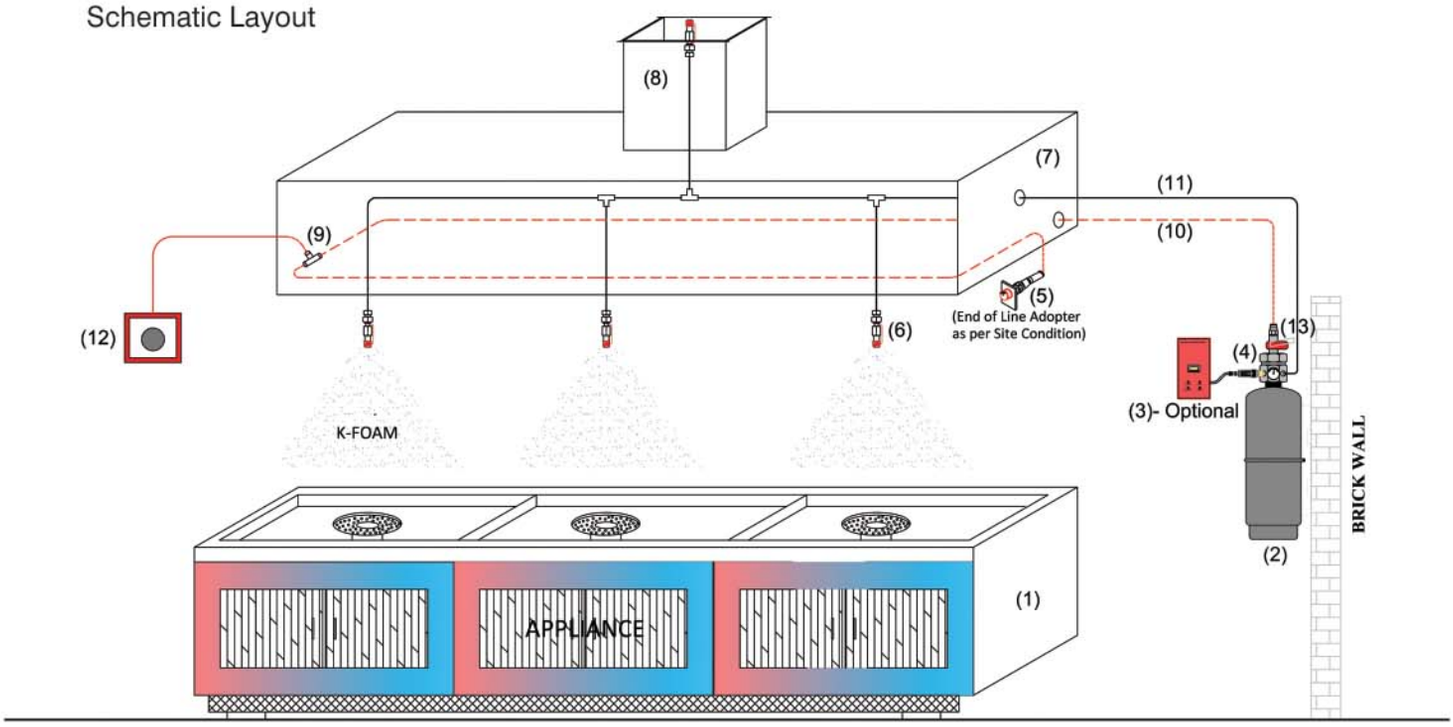
How the System Works?

The Hood is covered with the pneumatic Heat Sensing Tube (HST). On coming with contact with fire, HST burst open at a pre-determined temperature.

This leads to a drop of pressure which signals the indirect valve thereby activating the system. The strategically placed nozzles disperses the extinguishing agent evenly over the entire cook top area ensuring no blind spots during firefighting.

FOAMTECH

Schematic Layout



Applications: Small & Large Kitchens

- Hotels
- Restaurants
- Hospitals
- Schools
- Public Institutions… etc.

Key Components of the System

- Cylinder& Valve Assembly
- Extinguishing Agent
- Heat Sensing Detection Tube
- Master Control Unit (MCU)
- End of line adopter with pressure gauge
- Discharge nozzle
- Tee, Elbow, Connectors
- Discharge piping
- Manual actuation unit
- Anti-tempered seal

Fire Extinguishing Agent

EN Approved FOAMER Brand Kitchen fire chemical K type foam

Listings and Approvals

- CE Certified Foamtech Kitchen Fire Suppression System
- EN certificated Agent K Foam
- UL Certified for the detection tube

UL LISTED EN APPROVED CE

FOAMTECH

• SERVING WORLDWIDE •

YOUR DEDICATED FIRE FIGHTER

FOAMTECH ANTIFIRE COMPANY

Head Office
57 Sharda Niketan, Pitampura,
New Delhi-110034 INDIA
Tel. : +91-11-45700516, 47152444
Tele Fax : +91-11- 27021950

Unit - 1
SIDCUL Industrial Area,
BHEL Complex, Haridwar-249407
(Uttarakhand) INDIA

Unit - 2
HSIIDC, Kundli,
Distt. Sonepat (HR) INDIA
Tel. : +91-130-2370016

Visit Us : www.foamtechantifire.com
Email : sales@foamtechantifire.com