



ISO 9001:2015

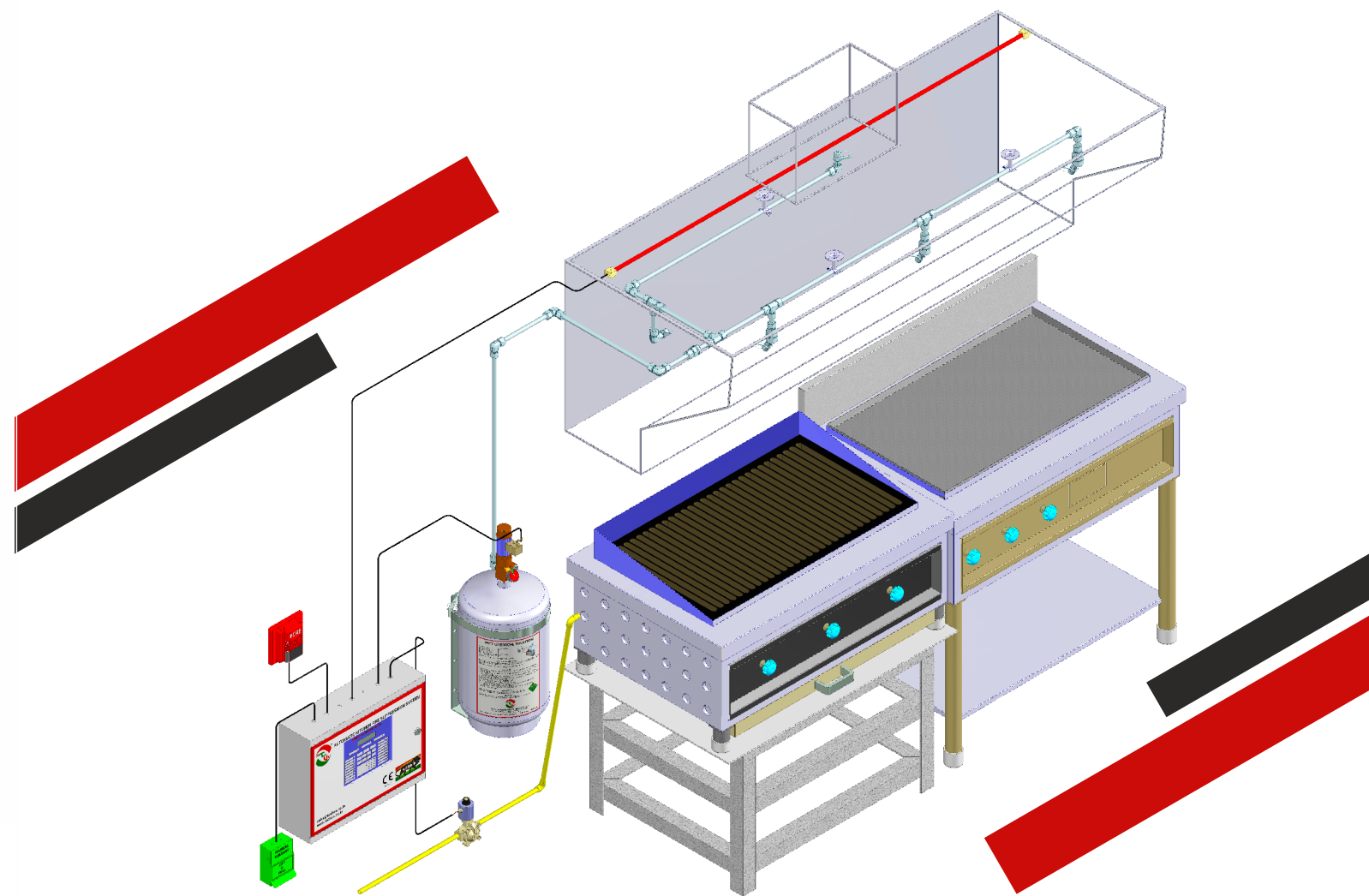


PROUDLY
MADE IN
INDIA



TECH US

KITCHEN FIRE SUPPRESSION SYSTEM



For Any Enquiry Please Visit Our Website or Call Below Numbers



TECH UNIVERSE'S SYSTEMS PVT. LTD.

Plot No. A 290-291 Konar Business Park, Road No. 16/Z, Wagle Estate Thane (W) Mumbai- 4000 604 India

Contact No. +91 8591311681 | +91 8591311673 | +91 8591311678

Web: www.techus.co.in | Email: sales@techus.co.in | info@techus.co.in

Factory: Plot No. D-7/4, Road No. 33, Wagle Estate, Thane (W) Mumbai - 400604 India



TECH UNIVERSE'S SYSTEMS PVT. LTD.

YOUR TRUSTED PARTNER IN FIRE PROTECTION

Company Profile

Tech Universe's Systems Pvt. Ltd. established in 2020, is a premier manufacturer dedicated to delivering high-quality Centrifugal Blower, Industrial Fans, Fire Safety Products, Equipment, Fire Suppression Systems. As an ISO 9001:2018 certified and MSME registered company, we pride ourselves on our comprehensive service offerings, which include Centrifugal Blower & AMC and fire extinguisher refilling. Our commitment to reliability and performance ensures that our products and services consistently meet the highest standards.

At Tech US, we are passionate about providing innovative and dependable solutions for fire prevention and control. Our mission is to protect lives and assets through our cutting-edge technology and meticulous attention to detail. Our expertise and unwavering dedication to excellence make us a trusted partner for businesses seeking to enhance their fire safety measures and ensure comprehensive protection and peace of mind.

Kitchen Fire Protection Solutions

In modern commercial kitchens, fire hazards are exceptionally severe, often originating from high-temperature oils and fats that are challenging to extinguish once ignited. The presence of open flames, extremely hot cooking surfaces & grease-laden environments exacerbates the risk, causing fires to spread rapidly and become difficult to control. To combat these dangers, we have engineered the Tech US- KITCHEN FIRE SUPPRESSION SYSTEM, designed to NFPA and UL standards. This advanced system provides reliable protection, effectively suppressing fires & ensuring safety in diverse kitchen settings, including hotels, institutes, restaurants & hospitals.

Vision

Our vision is to be the foremost innovator in fire suppression and fighting solutions, delivering state-of-the-art technology and unmatched reliability. We aim to protect lives and assets globally, setting new standards in safety and efficiency

Mission

Our mission is to engineer advanced fire suppression and fighting systems that ensure unparalleled protection and reliability. We strive to set industry benchmarks with innovative solutions, exceptional quality & a steadfast commitment to safety.

Major Clients



System Operation Explanation

In the event of a fire, the detection module in the Tech US System is designed to activate when it identifies temperatures that surpass a predetermined threshold. This sophisticated detection mechanism utilizes advanced thermal sensors to monitor heat levels continuously, ensuring rapid identification of potential fire hazards and facilitating immediate system response.

The fire detection system provides flexible activation methods, employing both electrical triggers and mechanical fusible links. This dual approach guarantees a swift and reliable reaction to fire incidents, enhancing overall safety and minimizing damage in critical locations

System Design & Operation

- **Components:** Agent Cylinder with Bracket, SS Nozzle, Fusible Link, Panel & Piping
- **Optional:** Gas Shut Off Valve & Temperature sensor
- **Actuation:** Manual Actuation
- **Activation:** Sprays special form type fire suppressant on the plenum area, cooking surface & exhaust duct at a predetermined flow rate
- **Suppression Mechanism:** Forms a soap-like foam layer on hot grease, insulating it from the atmosphere and cutting off oxygen supply
- **System Capabilities:** Can shut down other appliances upon actuation, if required
- **Integration:** Additional equipment such as gas shut off valves, alarms, and warning lights can be integrated into the system

Applications

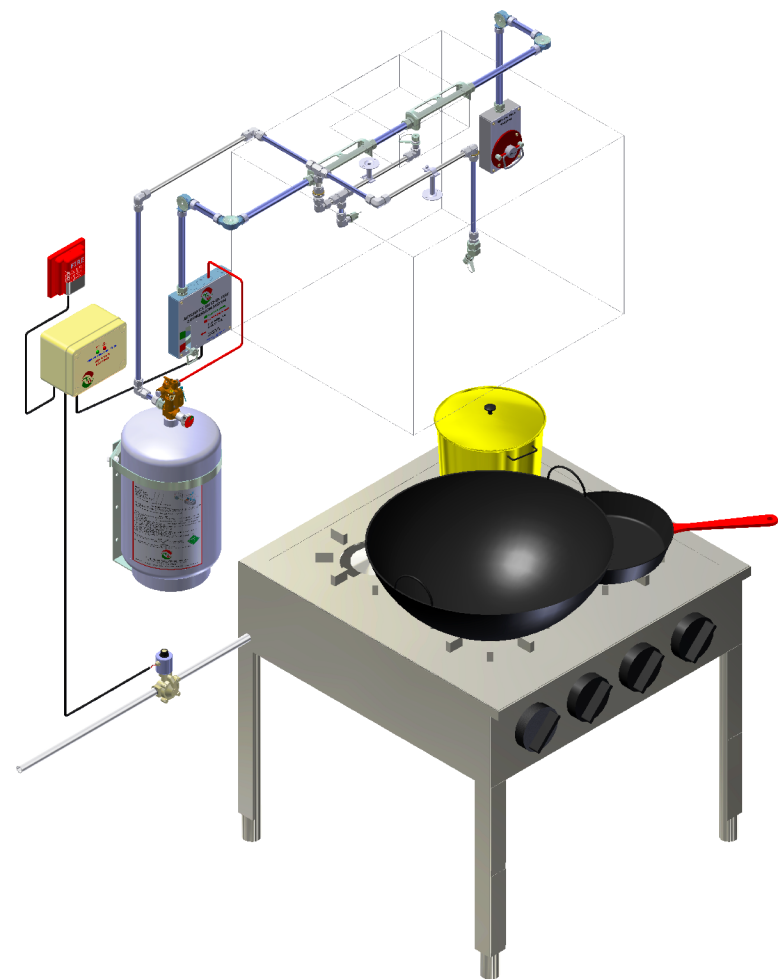
- Schools & Collages
- Office Canteens
- Mall Food Courts
- Ship Kitchens
- Airline Catering Kitchens
- Fast Food Chains
- Hotels & Lodging
- Medical Centres
- Event Venues
- Food Trucks

Additional Services

- » KFSS System Agent Cylinder Refilling & Complete Servicing for Optimal Fire Safety Assurance
- » Comprehensive Fire Extinguisher Refilling & Maintenance for Maximum Efficiency and Reliability
- » Precision Calibration of LPG/PNG Gas Leak Detectors for Accurate Hazard Detection
- » Fire Fighting Equipment AMC: Ensuring Continuous Performance & Safety Compliance Year-Round

Automatic Kitchen Fire Suppression Systems

MECHANICAL SYSTEM



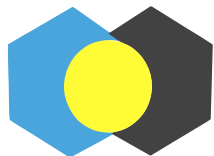
Sr. No.	Description
1	Agent Cylinder with Discharge Valve
2	Activation Relay Unit
3	Mechanical Manual Pull Station
4	Corner Pulley
5	Fusible Link Bracket
6	Fusible Link
7	Automatic Mechanical Activation Pane
8	Discharge Nozzle (SS 316)
9	Hooter Sounder Strobe for Audio
10	Gas Supply Auto Shut Off Valve

AGENT CYLINDER MODEL	AGENT CYL. SIZES	FLOW POINTS
KFS-M09	9 Ltrs.	3
KFS-M12	12 Ltrs.	4
KFS-M15	15 Ltrs.	5-6
KFS-M18	18 Ltrs.	7-8
KFS-M21	21 Ltrs.	8-9
KFS-M24	24 Ltrs.	10-11
KFS-M27	27 Ltrs.	12-13
KFS-M30	30 Ltrs.	14-15

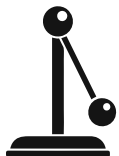
For Non-standard System or Technical Inquiries, contact our engineering support team



24X7 Protection



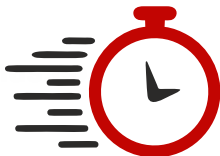
Overlapping Design



Manual Activation



Non Toxic



Minimal Downtime

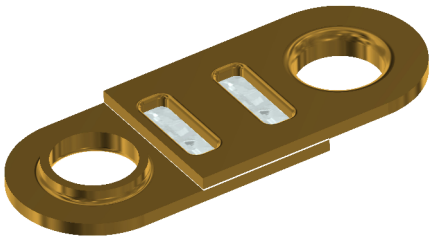
Substance Properties

- » Appearance: Yellowish Liquid
- » pH Level: Around 7.0 to 8.5.
- » Freeze Point: -10°C to -20°C
- » Solubility: Fully soluble in water
- » Boiling Point: Around 100°C.
- » Viscosity: Low, similar to water
- » Specific Gravity: 1.00 to 1.05 at 20°C.
- » Flash Point: above 100°C

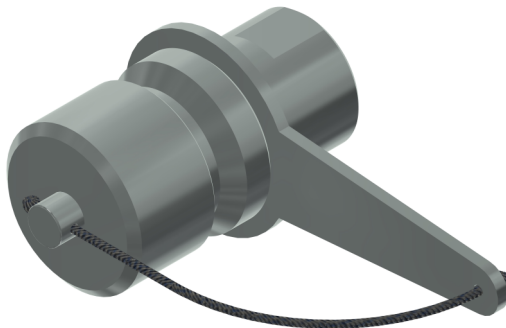
FUSIBLE LINK

Fusible Links are thermally activated, fixed-temperature devices installed above kitchen appliances and ducts. Upon reaching the set temperature, the link's metal melts, compressing the assembly and releasing it under tension.

- Link Specification: FT-185-R Type Cable
- Activation Temperature: 185 °C /365 °F



SPRAY NOZZLE



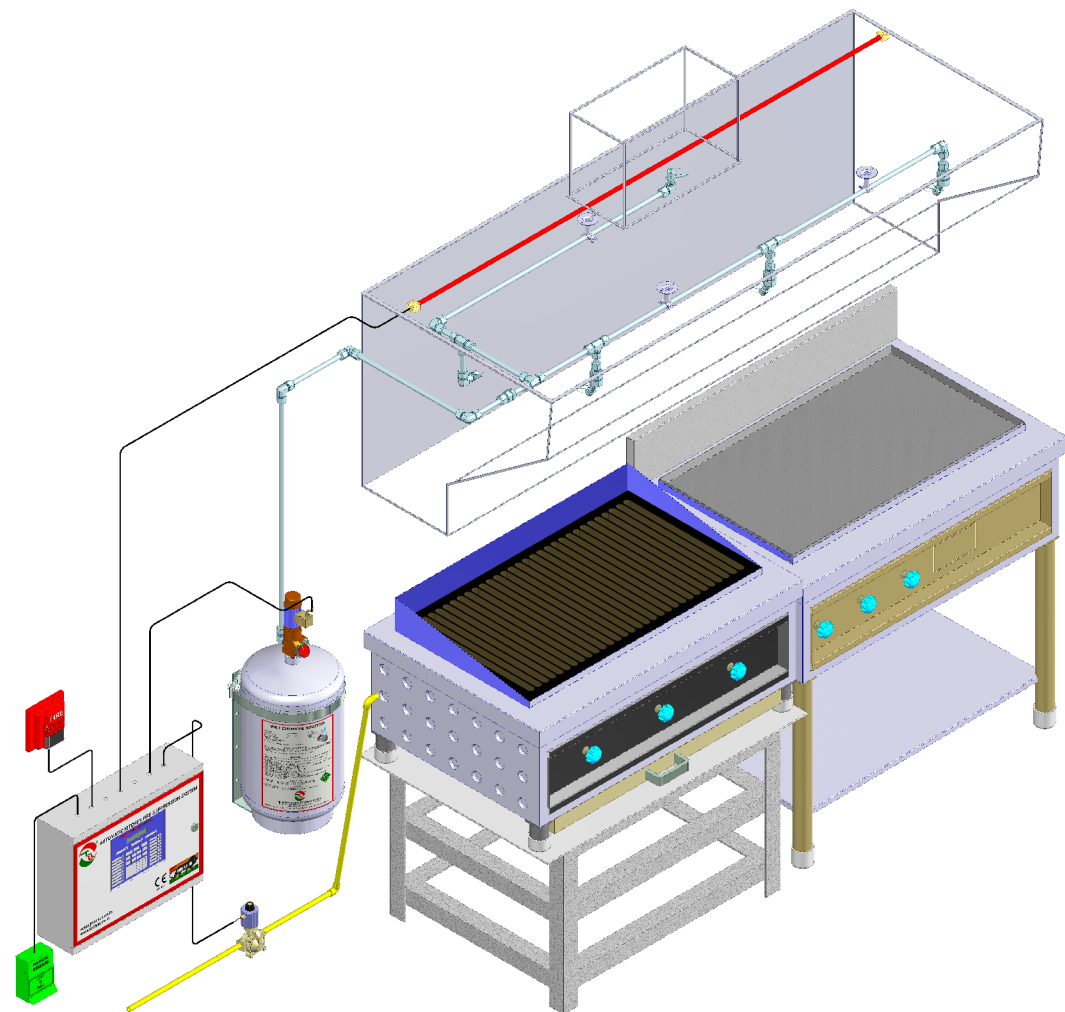
- » Operating Pressure: 15-20 Bars
- » Flow Rate: 2.5 - 3 L/min
- » Spray Angle: 15° | 25° | 45° Full coverage
- » Finishing: Polished
- » Connection Type: 1/4" BSPT Threaded Inlet.
- » Material: Stainless Steel (SS 304)

Our Kitchen Fire Suppression System Features Include:

- Systems & components tested by leading laboratories
- Tough testing methods
- Stainless steel components
- All systems designed, manufactured and tested in ISO 9001: 2015 certified facilities

Automatic Kitchen Fire Suppression Systems

ELECTRICAL SYSTEM



Sr. No.	Description
1	Agent Cylinder with Discharge Valve
2	Release Control Panel
3	Remote Manual Pull Station
4	Electric Solenoid Valve
5	Heat Sensing Cable
6	Thermocouple (Optional)
7	SS Pipe Clamp
8	Discharge Nozzle (SS 316)
9	Hooter Sounder Strobe for Audio
10	Gas Supply Auto Shut Off Valve

AGENT CYLINDER MODEL	AGENT CYL. SIZES	FLOW POINTS
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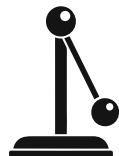
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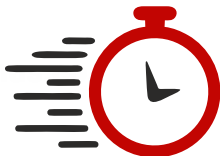
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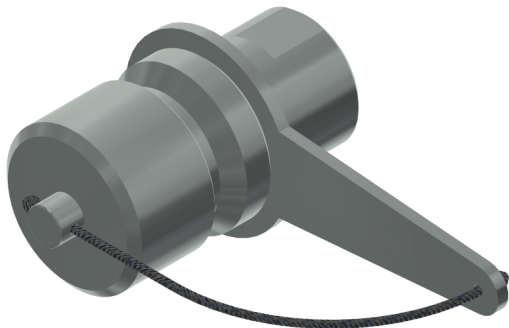
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- » Flash Point: above 100°C

HEAT SENSING CABLE

A fixed heat-sensing cable within the kitchen hood detects fires in Kitchen Fire Suppression Systems. It consists of two steel conductors, each insulated with a heat-sensitive polymer. At 185°C, the insulation degrades, allowing the conductors to contact, creating a closed switch. This action triggers system activation and alarm signalling through the control panel.



SPRAY NOZZLE



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