



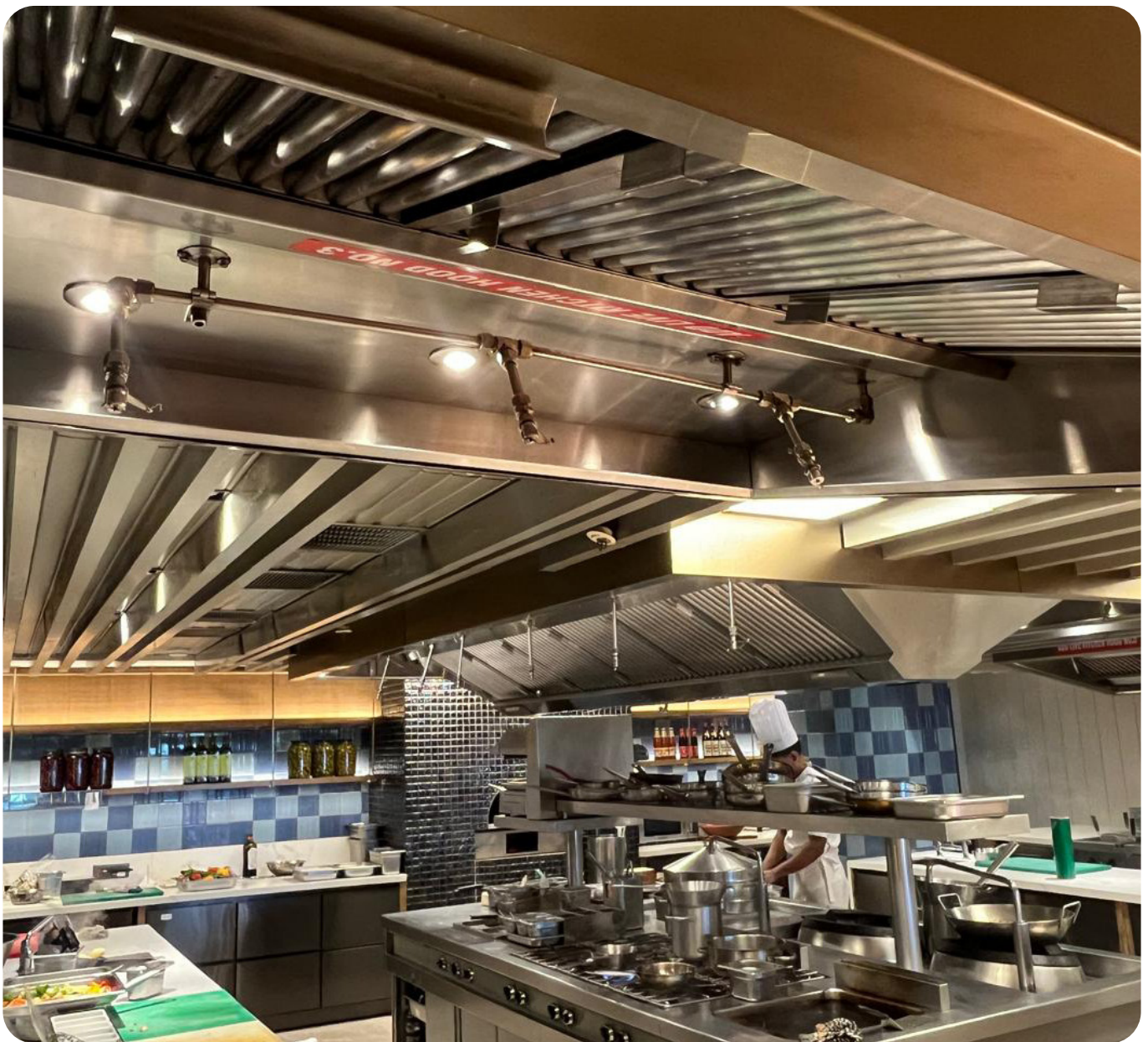
## ADS-X KITCHEN FIRE SUPPRESSION SYSTEM





## **PUTTING AN END TO KITCHEN FIRES WITH ADS-X**

Even the most meticulously maintained and efficiently operated commercial and industrial kitchens can still experience unexpected mishaps. This is because fire is used as a medium of cooking, along with a whole host of cooking appliances and flammable materials present, the risk of fire in kitchens is always high.



ULTRA-X Series Commercial Kitchen Suppression Systems are a cutting-edge, automated, engineered solution that are designed to address the unique fire risks that a commercial kitchen environment poses. These systems are certified to the UL 300 standard and adhere to the NFPA 96/17A guidelines.



## WHAT MAKES ADS-X SERIES CLASS APART?

### 1. Choice of Detection

The system comes with two types of detection module options to suit every kind of kitchen application.

#### A. Electrically Triggered

##### Linear Heat Sensing (LHS) Cable:

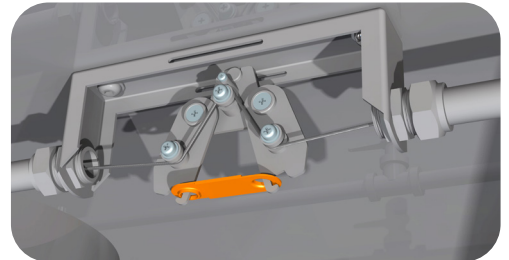
Intelligent LHS-based detection activates the system automatically when the temperature reaches a predefined level in case of a fire episode in a cooking appliance.

##### Probe Detection:

The system can also be configured with the Probe Detector driven detection module, which creates a switching effect and automatically activates at a predefined temperature.

#### **B. Mechanically Activated Fusible Links**

Activated by heat, the two halves of the fusible link separate, triggering the system to discharge the agent onto the appliance that has caught fire.



### 2. Only Two Nozzle Types

The ADS-X Series Kitchen Suppression System uses only two nozzle types for all system configurations and applications, making the system design simpler and error-proof.

- a. 15 degrees nozzle for the plenum.
- b. 40 degrees nozzle for all types of equipment.

### 3. Chef-Friendly & Aesthetically Pleasing Design

UL-listed kitchen suppression systems are designed aesthetically with a universal installation and placement approach, ensuring its adaptability to different kitchen layouts and requirements. The nozzles placed on the front or side of the kitchen hood, with also versatility of height placement, enhance the chef's convenience and operational efficiency.



## 4. Powerful & Earth-Friendly Extinguishing Agent

The system uses a potent 10% concentrated wetting agent capable of rapidly extinguishing various types of kitchen fires within seconds. The 100% biodegradability feature of the agent adds to its environmental friendliness. The agent meets the Reach Compliance and does not contain SVHC (Substance of Very High Concern).



## 5. Easy to Monitor System Readiness

The stored pressure technology of the system with in-built pressure gauge makes it possible for one to know about the readiness of the system by mere observation. Also, the presence of a pressure switch makes it possible to electronically monitor the system through the response panel.



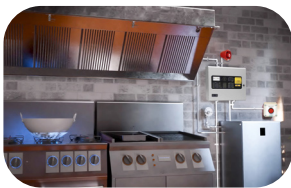
## 6. Quick Installation

We use pressurised compression fittings that makes it easier for our installers to install the system with minimal turn around time. This also aids in the maintenance of the system by easing the process of installing and uninstalling the system components.



## 7. Fully Compliant to EN 16282-7

The compliance to EN 16282-7 ensures that your kitchen suppression system is installed and maintained adhering to world class quality standards. (For more details refer page 10)



## 8. Protects wide range of Equipment & Appliances

Tested for performance and safety on a wide variety of cooking equipment and appliances. (For more details refer page 08)



## 9. Capable Of Protecting Small To Big Kitchen Hoods

The ADS-X Series Kitchen Suppression Systems can protect the smallest kitchen hood length of 800 mm with a minimum of 3 nozzles configuration to a maximum of 7m kitchen hood length with 18 nozzles configuration, with a single container system, providing full protection.



## HOW THE SYSTEM WORKS

In the event of a fire, when the temperature rises to a predefined level the detection module kicks into action to trigger the system. The fire detection module in the ADS-X System could either be Electrical Triggered or Mechanical Fusible Links based.

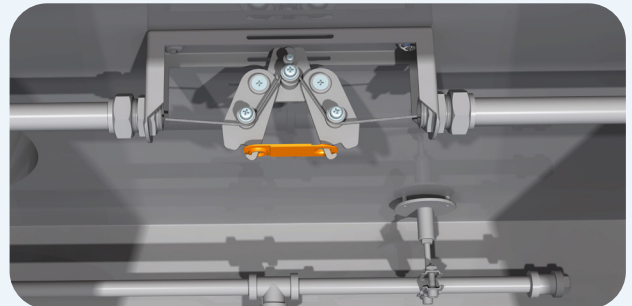
### Electrical Detection

In case of an Electrically triggered system, the Linear Heat Sensing Cable or Probe detector senses the fire when the temperature rises to a predefined level creating a switching effect and signalling it to the control panel. The control panel in turn triggers the system by activating the solenoid valve on the container head.



### Mechanical Detection

The Mechanically activated system gets activated when the two halves of the fusible link separate when the temperature reaches a predefined level due to fire. This mechanically triggers the system via the Mechanical Actuation Unit and activates the valve on the container head, releasing the agent.



## System Activation and Suppression

Activation through either of the above two detection methods... results in the agent being discharged through a dedicated discharge line via specialised nozzles leaving no blind spots. The system is designed to give full protection against fire under the hood, plenum, and duct area.

Once activated, the gas shut-off valve which is an integral part of these systems instantly shuts down the gas supply to the appliances, ensuring complete safety of the premise.

The systems can also be configured to cut off the power supply to an electrically powered cooking appliance, in case that is being used.

The systems are equipped with at least one Manual Pull Station that provides immediate response capabilities, backing up the automatic suppression system.

Electrical Systems also come with the provision of a mechanically-driven manual call point.

## KEY FEATURES

-  **Choice of 2 Detection Modules:** Electrical and Mechanical.
-  **Highly Potent and Eco-Friendly Agent:** 10% concentrated wetting agent highly potent on kitchen fires and 100% biodegradable which meets the reach compliance and does not contain SVHC (Substance of Very High Concentration).
-  **Ease of Shipping:** Supply of the agent in concentrated form allows for convenient shipping and portability.
-  **Versatile Nozzle Design:** Only two nozzle types for all system configurations and applications. Metal caps on nozzles ensure protection against grease deposits & obstructions.
-  **Stored Pressure Technology:** Keeps the system under constant pressure, ensuring prompt and effective deployment of the agent to enhance the system's reliability and responsiveness.
-  **Quick Installation:** The piping network uses compression fittings with 10mm, 8mm, and 6mm branching that allows for quick and easy installation.
-  **Integrated Gas Shut-Off Valve:** Gas Shut-off Valve automatically stops the supply of gas, ensuring the safety of the premise.
-  **Electrical Cut-Off Valve:** The systems can be configured to cut off the power supply to an electrically powered appliance, in case an electrical appliance is being used for cooking.
-  **Highly Versatile System:** One system design that protects an extensive range of cooking appliances and different fuel types.
-  **Stainless Steel Agent Containers:** Stainless Steel epoxy coated containers ensure rust-free and trouble-free operation in the long run.
-  **UL Listed:** System Designs are tested and listed to Underwriters Laboratories (UL) Standard UL300 design to meet the requirements of the Underwriters Laboratory standard UL 1254 and as demanded by NFPA 17A, NFPA 96.
-  **Saves Floor Space:** System allows the placement of the container at a convenient distance from the hood to accommodate all types of kitchen layouts or designs and saves the premium floor space of the kitchen.



## EQUIPMENT AND FUEL TYPES

The AYVAZ UL Listed Commercial Kitchen Fire Suppression System is tested for performance and safety on a wide variety of cooking equipment and appliances like few mentioned below and many more. The tests not only include a wide variety of cooking fuels such as vegetable oil, semi-solid grease, shortening, mesquite wood, lava pumice, and charcoal but also different types of low-fat meats. These tests ensure that we have got you covered for multiple kinds of fire situations.



Deep Fat Fryer



Griddle



Skillet



Wok



Salamander



Chained Broiler



Split Chain Broiler



Split Deep Fat Fryer



Range Top with Circular Pots



## SYSTEM CONFIGURATIONS

ADS-X Series Wet Chemical based Commercial Kitchen Fire Suppression System is configurable to protect kitchen hoods of different lengths. From the smallest size of 800mm up to 7m with a single container, providing total protection. The table below explains the various system configurations possible w.r.t to the container size, agent capacity, and the number of nozzles deployed in the system. Each nozzle is capable of protecting 800\*800mm of space under the hood.

Cylinder Size	Agent Capacity	Nozzles
14 ltr	9 ltr	3
18 ltr	12 ltr	4
22 ltr	16.5 ltr	5-7
27 ltr	20 ltr	6-10
32 ltr	24 ltr	8-12
44 ltr	30 ltr	10-14
64 ltr	45 ltr	15-18



## Electrical System Containers



## Mechanical System Containers



## FULLY COMPLIANT TO EN 16282-7

### About EN 16282-7

“EN 16282-7 is a European Standard that lays forth the technical safety, ergonomic, and hygienic standards for the design, manufacture, and use of kitchen ventilation hoods. The ventilation systems in commercial kitchens, related spaces, and other facilities processing meals meant for commercial use must comply with this European Standard. Kitchens and associated areas are special rooms in which meals are prepared, where tableware and equipment is washed, cleaned, food is stored and food waste areas. A process for verification of each requirement is also well-defined.

By establishing uniform rules for performance testing, servicing & maintenance, and danger classifications such as re, the new technical standard assists in bringing uniformity in regulations across the industry. The standard helps to better protect people, property, and businesses by bringing the restaurant industry closer to more effective commercial kitchen re prevention.”

### Value EN 16282-7 Brings to the Table



Ensures quality installation and maintenance of your kitchen suppression systems by authorised professionals



Reduced risk of kitchen fires



More comfortable and safe working environment for kitchen staff



Clear labels & manuals for quick & easy visual reference in case of fire emergency



Adds reputé to your kitchen, being a globally recognised safety standard

### ADS-X ASSURANCE

ADS-X Series Kitchen Suppression System is a state-of-the-art, meticulously designed, and automated solution that ensures comprehensive 24X7 protection for commercial kitchens.





# **ADS-X KITCHEN FIRE SUPPRESSION SYSTEM**



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