



Amerex Corporation

Restaurant Fire Suppression Systems

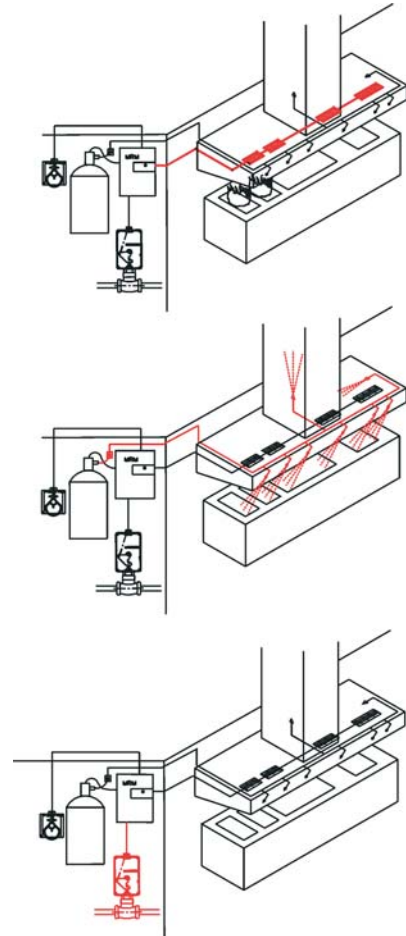
A photograph of a chef in a white uniform working in a kitchen. In the background, a large fire is visible, likely from a stove or fryer. The chef is seen from the back, looking towards the fire. The kitchen has stainless steel walls and equipment.

**Kitchen
Fire Suppression
Protection**

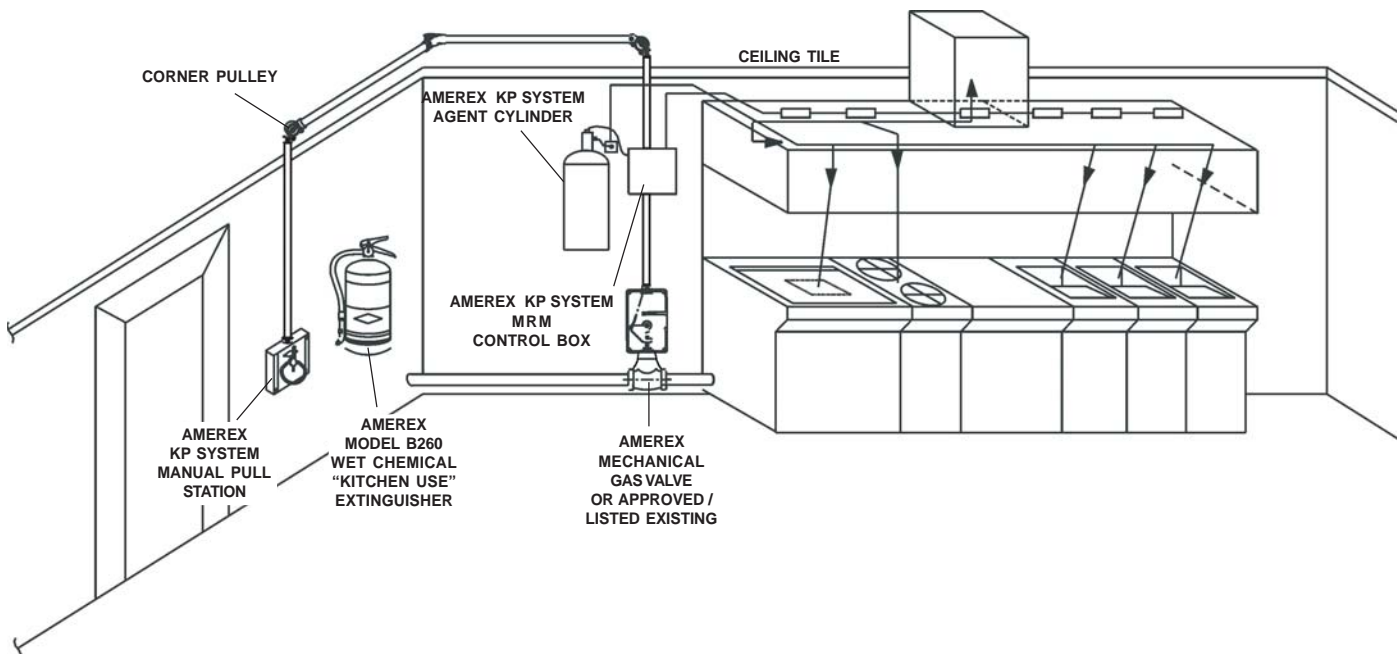
The Amerex KP automatic restaurant fire suppression system protects the hood, duct and appliances.

In either automatic or manual actuation the system works in this manner:

1. When a fire starts, the detection network, consisting of fusible links or pneumatic tubing, will automatically detect the fire or the manual pull station can be used, releasing a low pH agent throughout the hood, duct and onto the appliances.
2. Either method of actuation will interrupt gas or electrical power to the appliances preceding system discharge.
3. The Amerex KP agent quickly suppresses the fire and cools the fuel while securing the vapors with a smothering foam reaction.



The combination of the Amerex KP system and an Amerex Model B260 or B262 Wet Chemical extinguisher provides restaurants with a “ONE-TWO” attack against the threat of business loss due to cooking operation fires.



RESTAURANT KITCHEN GAS APPLIANCES PROTECTED BY: AMEREX KP RESTAURANT FIRE SUPPRESSION SYSTEM SPECIFICATIONS

GENERAL:

The Amerex KP Restaurant System is a pre-engineered, wet chemical, stored-pressure type with a fixed nozzle agent distribution network. The system is listed by Underwriter's Laboratories, Inc., ULC and tested to U.L. Standard 300. The system shall be designed, installed and maintained in accordance with: Amerex Part No. 12385 "Design, Installation and Maintenance Manual", N.F.P.A. 96, N.F.P.A. 17A, local codes and ordinances by an Authorized Amerex KP Systems Distributor using factory trained personnel.

AGENT:

The system agent is Amerex KP liquid fire suppressant, a potassium acetate based solution that suppresses cooking grease fires both through saponification and cooling. The agent has a pH of 9 or less and does not harm stainless steel surfaces.

AGENT CYLINDER :

The agent cylinder is a mild steel DOT 4BW 240 specification cylinder, tested to 480 PSI (3309 kPa). The agent cylinder/discharge valve assembly is fully factory charged with Amerex KP liquid agent and pressurized to 240 PSI (1655 kPa).

DETECTION:

The detection network uses a continuous cable run with detectors specifically listed for use with the Amerex KP System. No "S" hooks are allowed.

MECHANICAL RELEASE MODULE (MRM):

The mechanical release module is the spring-loaded type using a mechanical input and electrical, mechanical or pneumatic outputs. It is capable of actuating from one to ten cylinder/valve assemblies using one nitrogen cylinder and is operated either automatically by the detection network or manually by a remote manual pull station.

The MRM enclosure, available in either stainless steel or red painted steel has a system status indicator and a window to observe the nitrogen cylinder pressure. The enclosure has provisions for applying tamper seals after final testing or periodic maintenance. The MRM enclosure has knockouts on three sides (top, bottom & right) to accept conduit. The MRM has one SPDT micro switch pre-installed.

PNEUMATIC RELEASE MODULE (PRM):

The PRM offers superior detection by using a linear pneumatic detection system. The PRM detection system consists of the PRM, tubing and end of line fitting. The tubing is pressurized through a small "accumulator" inside the enclosure, routed throughout the hazard area, and has a UL listed fixed temperature of 435°F. When exposed to a fire condition, the tubing ruptures, relieving all of the pressure in the tubing and accumulator thus firing the system using a nitrogen cylinder. The PRM comes complete with enclosure, accumulator, end of line fitting, connector for mechanical manual pull, one SPDT microswitch, and "knock-outs". It is capable of firing up to 10 KP 375 cylinders and releasing up to 2 gas valves.

ACTUATION CYLINDER:

The actuation cylinder is filled with 10 cu. in. of nitrogen and has an integral pressure gauge which allows easy field verification of pressure. This cylinder is capable of being refilled in the field by an Authorized Amerex KP Systems Distributor.

AGENT CYLINDER BRACKET:

The agent cylinder bracket is steel, painted red, with a factory supplied discharge hose and pipe outlet or discharge fitting.

STAINLESS STEEL CABINET (Optional):

An optional stainless steel cabinet housing an MRM and one agent cylinder is available. The pressure gauges for the nitrogen cylinder and the agent cylinder are visible without removing the front cover of the cabinet.

DISCHARGE NOZZLES:

Discharge nozzles are made of chrome plated brass, and shall consist of a body, strainer, tip, retaining nut and blow off cap.

MANUAL PULL STATIONS:

The manual pull stations are a "dual action" type. Both a ring pin and lever must be pulled in order to discharge the system manually.

MECHANICAL GAS VALVES - ¾ TO 2 INCH SIZES:

A mechanical gas valve, specifically listed by U.L. for use with the Amerex KP system, shall be installed for automatic shut off of gas whenever gas appliances are used. The valve has a "pull to close" design requiring a pull force to trip a latch which holds the valve in the open position. The cover of the gas valve has a visual indicator showing the valve's position. Existing mechanical valves, if operating, may be used according to the listed manual.

ELECTRICAL GAS VALVE:

If an electrically operated gas valve is required, it must be U.L. Listed for use with the Amerex KP system and operate by using a micro switch and a U.L. listed manual reset relay.

ELECTRIC MICRO SWITCH:

U.L. listed electric micro switches are provided to accomplish system output functions. The switches are "stackable" inside the MRM / PRM without requiring extra mounting hardware. From 1 to 4 sets of dry form "C" contacts are available.

Amerex recognized and addressed the unique hazards of modern restaurant cooking by creating the Model B260 and B262 Class "K" Wet Chemical "Kitchen Use" fire extinguisher.

This extinguisher along with the research and tests to develop it has changed the way that NFPA regards cooking grease fires. After July 1, 1998, all new installations of fire extinguishers protecting cooking hazards require a Class "K" extinguisher. This class recognizes the unique nature of cooking grease which requires not only extinguishment but the cooling effect which is best obtained with WET CHEMICAL extinguishers. When the KP System is used in combination with the Amerex Model B260 or B262 you have the perfect two step attack for kitchen fire suppression!



NFPA-10 (5.7.1) "Class K fire extinguishers shall be provided for hazards where there is a potential for fires involving combustible cooking media (vegetable or animal oils and fats)."

First of its kind UL rating: 2A:K



ISO 9001:2000
CERTIFIED

For more information please contact:

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