



GW MISTERY HOOD UNIT





Overview

Commercial cooking kitchen – whether in a restaurant chain, a hotel, a school or hospital cafeteria, or the corner diner – all contain the elements necessary for a sudden fire – grease and heat form an ignition source – putting people and property at risk.

Almost 50% of all accidental fires in hotels, restaurants and fast-food outlets start in the kitchen and the majority of these involve cooking oil or fat. These fires are difficult to extinguish because they burn at a high temperature and re-ignite easily. Without effective suppression, cooking-oil fires can cause serious damage to property and loss of life.

Traditional kitchen systems tend to flood the kitchen area with extinguishment regardless of the point of fire. Since the Mistery Hood attacks the fire at source, containing and extinguishing in a localised area, damage and disruption along with food loss, clean up and down time of the kitchen operation is kept to a minimum.

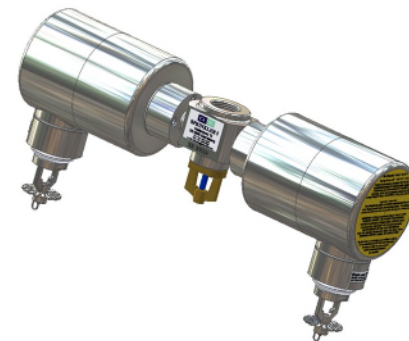


Mistry Hood Unit

The GW Mistry Hood – Twin Nozzle system is a water-based twin fluid system for the automatic fire protection of commercial deep fat fryers.

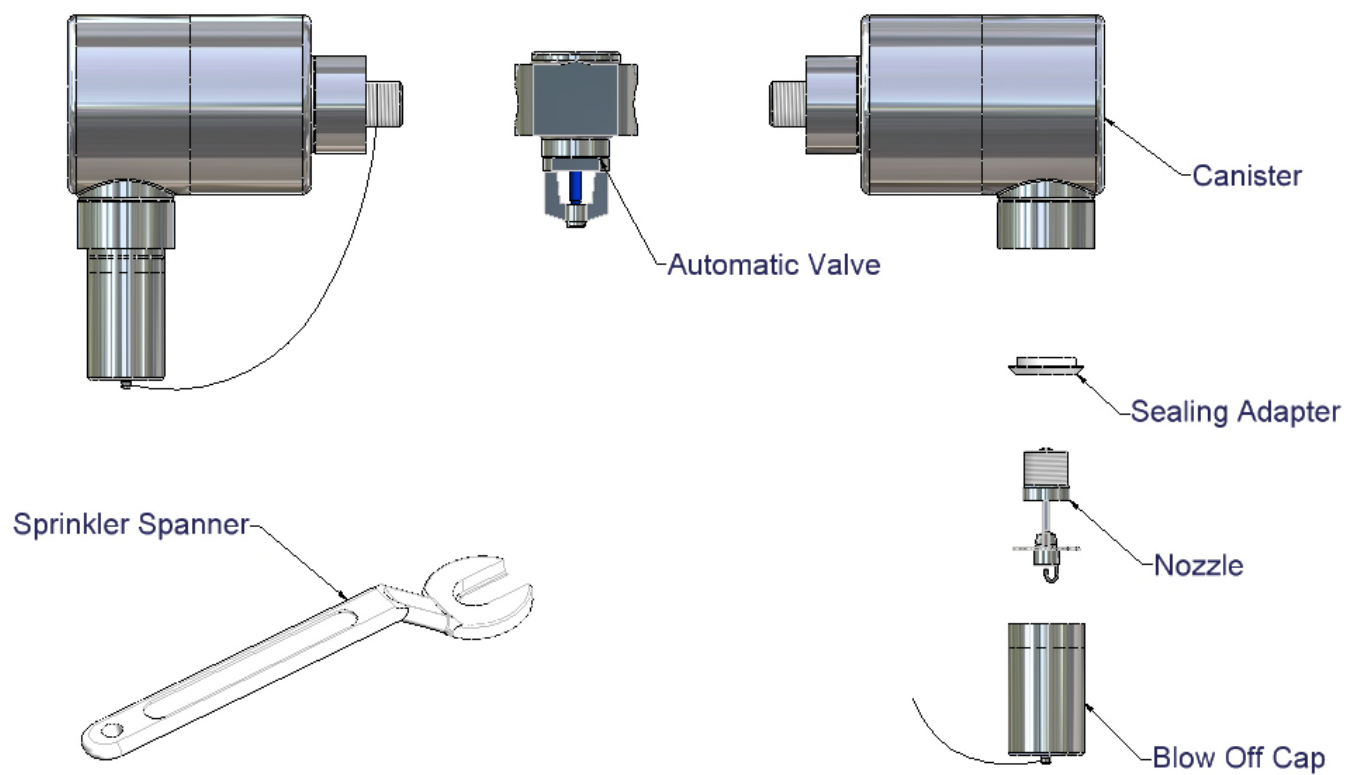
A large proportion of kitchen fires start when the oil in the deep fat fryer ignites on reaching and exceeding its flash point.

The Mistry Hood – twin nozzle system is designed to attack the fire at the point of initiation and immediately contain and extinguish the fire before it has a chance to spread.



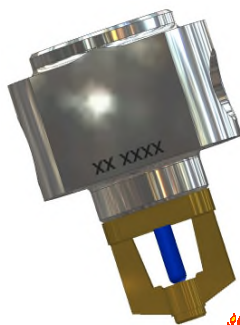


Mistery Hood Components

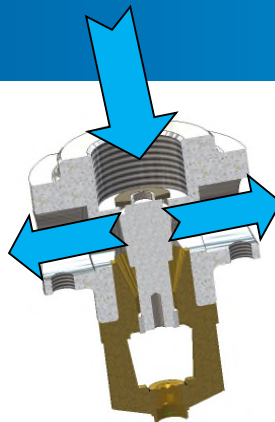




How It Works?



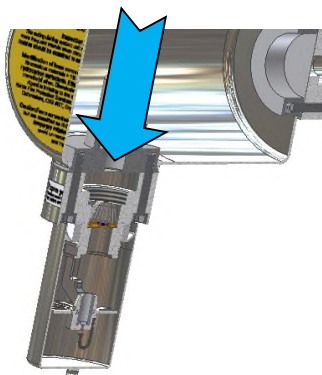
Fire causes the bulb to shatter.



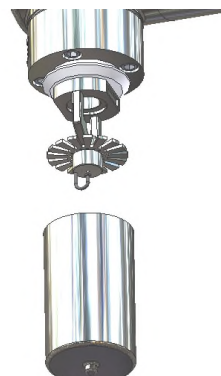
Water Flows into the valve.



Burst disc at canister inlet breaks. Water flows into the canister.



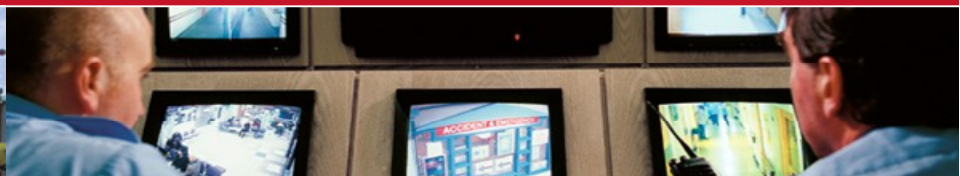
Burst disc at canister outlet breaks.



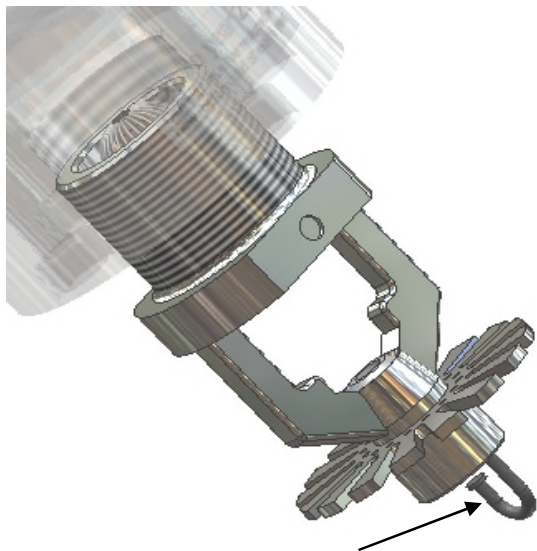
Protective cap blows off.



Extinguishing agent released followed by water mist.

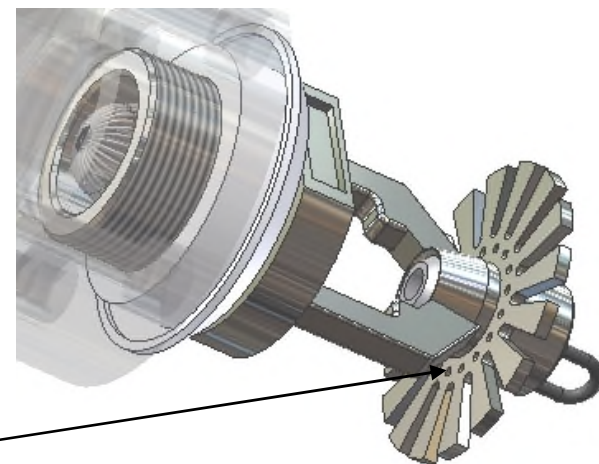


Close Up; K18 Nozzle



The J deflector is designed to break up the large water droplets to create water mist.

The GW-S K18 Nozzle is designed to distribute foam concentrate and water mist onto the source of the fire.



The 16 Holes in the deflector are designed to spray a water curtain of water mist around the heat source, this confines the fire until suppressed.



Installation Guidelines

The GW Mistery Hood Unit must be installed, operated and maintained according to the GW Mistery Hood Twin Nozzle System Installation Manual.

Installation in kitchen hoods:

Water supply capacity:

Spray Nozzles (K-Factor)

1.2-1.25m above the Fat Fryer,

min. 67 l/min @ 3.5 bar,

2 off K-18 (protected by blow off caps)

Connection to water supply:

Minimum water pressure:

Max. fryer pool size:

Fat Fryer Volume:

3/4 inch BSPT (or NPT),

3.5 bar,

0.35m x 0.53m, (14" x 21" incl. drip board)

40 Litres

Nominal release temperature:

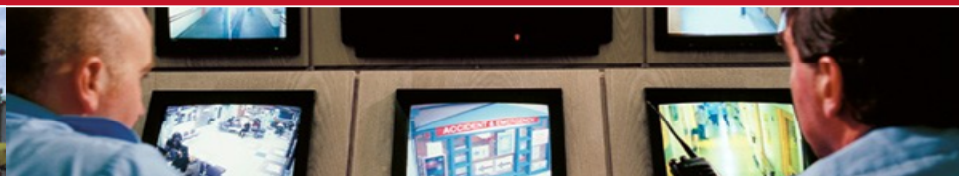
200°F (93°C) Green

286°F (141°C) Blue

360°F (182°C) Black

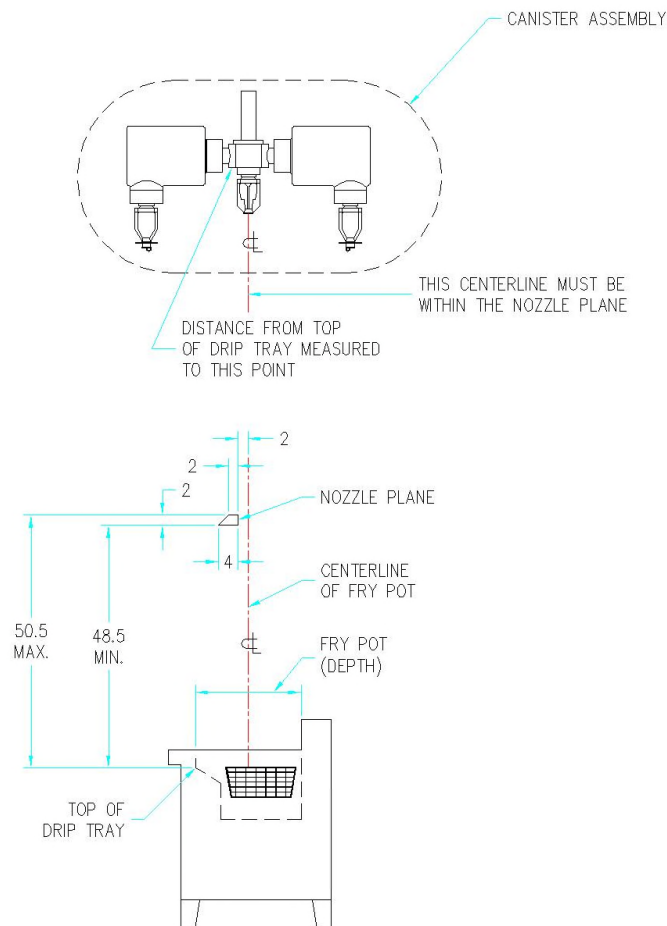
Heat response class:

Standard response



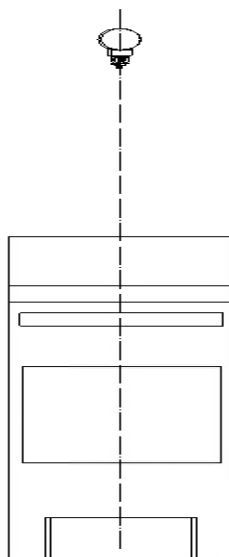
Maximum Coverage Area

The Mystery Hood System is suitable for the protection of fat fryer baths with a maximum pool surface area (including drip board area) not exceeding 14in. x 21in. (0.35m x 0.53m). The GW Mystery Hood System must be installed with the two canisters in parallel with the length of the fryer pool. The unit nozzles shall always be installed in the pendant position (tip of the nozzles/blow off caps pointing downwards).

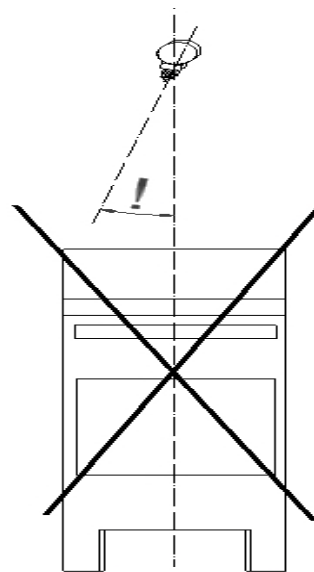




Orientation Of The Mistery Hood

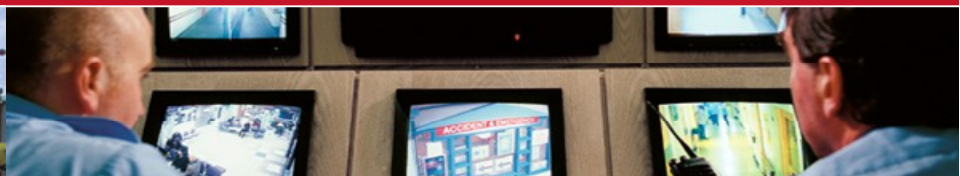


OK!



WRONG!

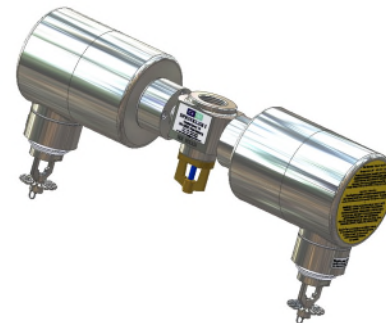
Ensure that the nozzle in the mistery hood is perpendicular to the fryer / oil pool.



Benefits of Mystery Hood Unit Over Wet Chemical Systems

MISTERY HOOD:

- Controlled Discharge: only nozzles activated discharge,
- Unlimited Discharge Media (by sprinkler system water supply),
- Reduction in Food Loss and Clean up Time,
- Easy & immediate return to service,
- UL-listed, tested to UL199E



CHEMICAL SYSTEMS:

- Whole system discharge,
- Discharge media limited to system capacity,
- Large clean up and lengthy kitchen down times,
- Recharge system, replace links, actuators and Agent,





Mistery Hood Unit - referenced in NFPA 13

