



HI-FOG® for the food industry

HI-FOG® controls, suppresses and extinguishes fires by using very small amounts of the world's most environmentally friendly fire-fighting agent – water. HI-FOG® is a proven solution with reliability and performance that ensures minimum business downtime in case of a fire.

Using small amounts of pure water, HI-FOG® provides clean, fast-acting fire protection. HI-FOG® water mist penetrates the fire and blocks radiant heat, quickly bringing a fire under control. With proven high performance, HI-FOG® is ideally suited for industrial oil cookers and ovens.

HI-FOG® fights fire by:

- Cooling
- Radiant heat blocking
- Local oxygen inerting

HI-FOG® benefits:

- Proven performance
- Low water usage
- Environmentally friendly
- Uses potable water
- Fast acting
- Low water usage

General

Industrial oil cookers, also known as deep fat fryers, are a unique fire hazard in the food industry. The fire protection system needs to extinguish the flames as well as cool down the oil to prevent re-ignition, without contaminating the oil or the food.

Large, industrial ovens represent a second major fire hazard in the food industry. Here it is the food remnants that may ignite from the excess heat of the ovens. Here, too, the fire protection system

needs to extinguish the flames as well as counter the heat of the ovens.

Compact and light weight, HI-FOG® requires little space for installation. With its low water and power consumption, along with essentially free refills, HI-FOG® is an economical, high performance fire protection system.

HI-FOG® systems for the food industry can have a wide variety of configurations based on project-specific requirements.

HI-FOG® system for industrial oil cookers

HI-FOG® systems for industrial oil cookers and deep fat fryers are usually configured to provide protection for frying pan, drip plate, air filters, takeout conveyor, and the vertical exhaust ducts.

The primary goal is to effectively mitigate damage due to fire and smoke within the protected spaces, as well as minimize water damage from a discharge. The system is typically a deluge type, releasing from all spray heads »

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» of each protected section simultaneously when the section valves are opened.

HI-FOG® also has specially designed spray heads to protect ducts. The spray heads are kept protected outside the duct when not in use, preventing clogging of the nozzle openings.

The entire system is served from a single electric pump unit. The pump size varies depending on the size of the protected area.

System discharge can be activated either manually or through a detection system. The detection system consists of heat detectors, flame detectors, along with a control panel.

HI-FOG® system for industrial ovens

HI-FOG® systems for industrial ovens are configured to protect the spaces above and below the conveyor. As with oil cookers, the primary goal is to effectively mitigate damage due to fire and smoke within the protected spaces, as well as minimize water damage from a discharge.

The system is designed for automatic or manual activation of the spray heads simultaneously. To comply with NFPA750 standard, the system must have a minimum designed operation time of 30 minutes. However, operation time can be extended as long as there is water and electricity available.

Each system is served by an electric pump unit. The spray heads are mounted both above and below the oven. The system is supplied with a detection system consisting of heat

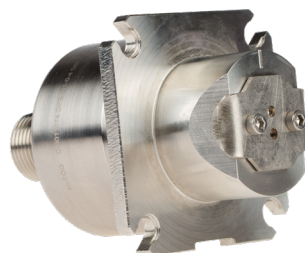
detectors, flame detectors, along with a control panel.

FM approved

With thousands of full-scale fire tests completed, the HI-FOG® Water Mist Fire Protection System is the world's most tested water mist solution.

After completing fire-tests series supervised by FM, including oil cookers with different lengths and with hoods both in the lower cooking and upper maintenance positions, Marioff's HI-FOG® system utilizing electric-powered pump is FM approved for the protection of industrial cookers.

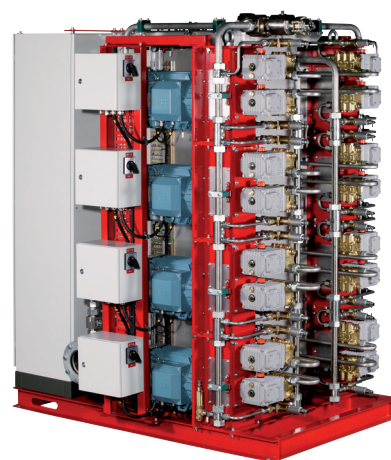
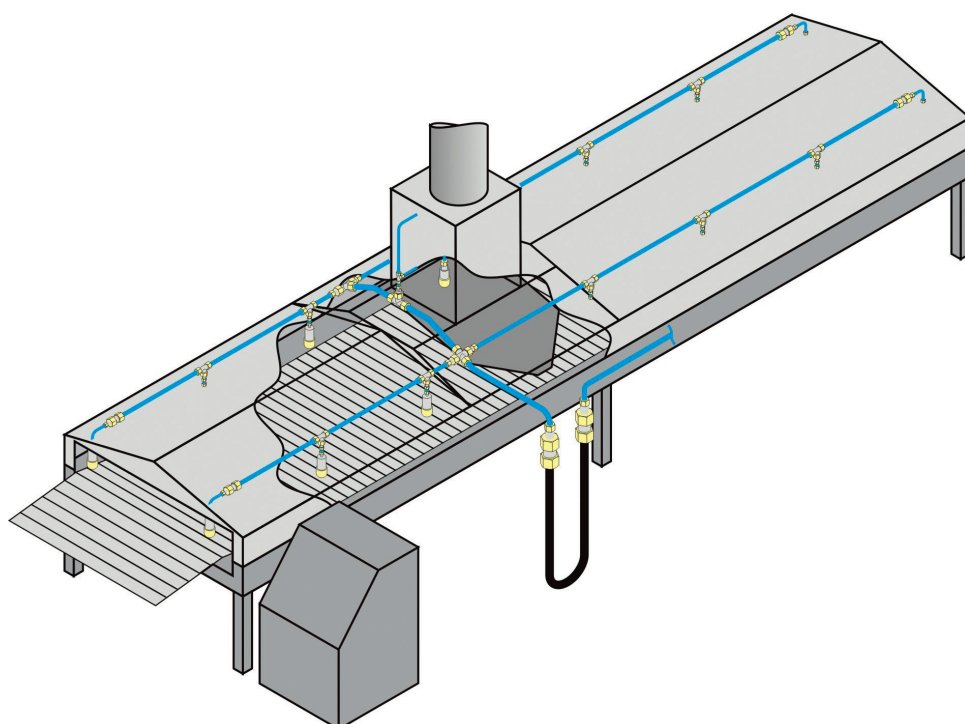
The FM approved HI-FOG system is scalable and adaptable for a large range of oil cookers.



HI-FOG® duct protection spray head



HI-FOG® spray head



Electric driven pump unit (SPU)



Marioff Corporation Oy
Äyritie 24
01511 Vantaa, Finland
+358 (0)10 6880 000
marioff.com

Marioff reserves the right to revise and improve its products and recommended system configurations as it deems necessary without notification. The information contained herein is intended to describe the state of HI-FOG® products and system configurations at the time of its publication and may not reflect the product and or system configurations at all times in the future.

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