

HI-FOG® water mist is increasingly being recognized as the most suitable fire protection for a wide range of applications and environments. HI-FOG® works by creating a fine mist of water droplets, thus allowing them to use much smaller quantities of water than conventional sprinkler systems. The water droplets have a high surface to volume ratio which dramatically increases its ability to absorb heat from a fire as well as the heat radiating outward. In addition, HI-FOG® will vaporize much faster allowing it to turn to steam and choke off the oxygen from the fire. Effectively, HI-FOG® attacks two sides of the fire triangle, removing both heat and oxygen. This results in:

Cooling: The increased surface area absorbs heat much more efficiently than sprinklers or any other extinguishing agent.


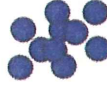
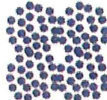
Inerting: The atmosphere is locally inerted by displacing oxygen away from the fire (Water expands >1760 times in volume when vaporized).

Radiant Heat Blocking: Small droplets efficiently absorb and scatter heat radiation.

Smoke Scrubbing: The small mist droplets easily combine the carbon particles in smoke and absorb soluble gases thus cleaning the air.

Environmentally Friendly: HI-FOG® uses a water/nitrogen mixture which is safe for people and the environment and can be rapidly re-filled, offering end-users a truly "Green" approach to fire protection.

HI-FOG Features

	Drop size (µm)	No. of drops	Surface area	Vaporization (sec)
 Sprinkler	>1000	1	1	1
 Class 2/3 Mist	300	40	10	0.1
 HI-FOG®	50	8000	400	0.003

Conventional sprinklers and water spray systems fight fires by the inefficient process of wetting or cooling combustible surfaces. But HI-FOG®, a high pressure mist technology, uses water in the most efficient way, extinguishing by using the mechanism described above. The combination of the right drop size distribution and high velocity ensures efficient penetration and the rapid cooling of the fire plume and adjacent gases.

In addition, HI-FOG® water mist systems do not require a completely sealed enclosure as required for gaseous agents. This allows the fires to be extinguished without having the added costs of closing air-tight doors and vents. This makes it ideal for harsh industrial applications and has no SNAP restrictions as a Halon alternative.

HI-FOG® water mist systems are ideal for applications which include:

Historic Buildings/Museums: Since HI-FOG® use about 10% of the water of standard sprinklers, potential water damage is minimized.

Industrial Buildings: Areas that cannot be easily sealed or contained. Refill costs are practically eliminated since we are using potable water.

Transformer & Electrical Switchgear Rooms: The small water particles are not electrically conductive.

Pharmaceutical Projects: HI-FOG® will not splatter chemical pool fires and minimizes requirements for secondary containment.

Inadequate Water Supply: Buildings without a good source of water are good potential candidates for HI-FOG®.

CO2 replacement: HI-FOG® is environmentally safe for people and property.