

AQUAFOG

- **Ecological. Does not harm environment**
- **Safe for the protection of equipment and occupied areas**
- **Minimal water damage**
- **Efficient for flammable liquid fires**
- **Electrically non conductive (use of demineralised water)**
- **Rapid temperature reduction**
- **Independent system or pumping equipment**
- **Economical. Minimum cost of extinguishing agent**

Water mist system **AQUAFOG®** optimises the quantity of water used, maximising effective water volume by means of distribution of droplets of very tiny size, which produce a cooling effect. Thus, damage is reduced by reduction of volume of water used.

This system operates at working pressures of 80 to 200 bar, producing droplets of very small diameter at very high velocity. Spray heads are designed to discharge water in the form of water mist.

Water mist systems provide a fast and efficient extinguishment for class A, B and C fires, eliminating the hazard of re-ignition (offering an incomparable capacity of suppression of deep seated fires). One of the most outstanding factors is the small amount of water used. We offer several models of spray heads, depending on the hazard to be protected.

Spray heads are made of stainless steel, incorporating a filter to prevent obstructions. Micronozzles, which produce proper water mist, are made of stainless steel suitable for a working pressure of 200 bar. Currently water mist systems can be found on civil and military ships protecting machinery rooms, generator rooms, berths and public areas.

The option to use water mist systems as an alternative has increased to cover such areas as data processing centers, archives, subways, escalators and transport.



Water mist owes its extinguishing efficacy to the joint actuation of 3 main effects:

- **Smothering:** Vapour generated displaces an equivalent of oxygen volume, thus producing a smothering effect.
- **Cooling:** Water spray in droplets of micrometric size produce a large heat collector surface.
- **Attenuation:** Mist generated in the enclosure absorbs a great amount of radiant heat, thus protecting adjacent objects.

A dilution effect is also observed: Actuation of water mist contributes to decrease of flammable vapour concentration up to levels below flammability limits.

PUMP SYSTEMS:

The pumping water mist systems **AQUAFOG®**, have been developed as an alternative for the water mist centralised systems when the quantity of water required for the protection of the installation does not allow the use of them.

The pumping water mist systems **AQUAFOG®** can be used in installations for "Total flooding systems" or "Wet pipe systems". In the first case, the system allows the discharge of the extinguishing agent through all the watermist nozzle heads which are connected to the piping net; normally the detection of the fire is independent from the extinction. In the second case, the system maintains in the normal working conditions (without fire) a water pressure on the net around 20-30 bar. The nozzle heads connected to the net include a fire detection element that once is activated, it allows the discharge of the pressurized water. A pressure drop on the net activates the extinction system and consequently, the discharge of the nozzle heads takes place. In this case, a jockey pump is incorporated to the main pumping equipment.

APPLICATIONS:

As control (total flood application):

- Computer rooms
- Occupied rooms and class A fires
- Archives
- Cable trays
- Telecommunication centres
- Spill of flammable liquids

As fire suppression (local application):

- Commercial kitchens and food industry
- Warehouses containing flammable liquids
- Turbine and transformer rooms
- Engine test cells
- Diesel engines and alternators
- Paint spray booths
- Mechanical escalators (not including the electrical-type risks in the drive rooms)