





High-pressure water mist fire protection

# Delivering fire protection solutions for hospitals and nursing homes



# Protecting a building, its occupants and contents from fire is paramount

Ultra Fog specialises in delivering highpressure water fog sprinkler systems for fire protection across a wide range of buildings and industry.

The Ultra Fog system was originally designed and developed for marine use, where the demands for effective fire extinction are extremely high. When installed for use on land, it achieves a highly reliable and efficient fire extinction system which works well in sensitive and valuable environments. The Ultra Fog system can be connected to various different forms of surveillance for early fire detection and immediate activation. Together, fast response with low water consumption saves valuable buildings, occupants and property.



## Hospitals

Safety of patients, staff and hospital expensive equipment is a top priority: Ultra Fog's innovative uses minimum quantities pure water to rapidly control, suppress and extinguish fire.

It is therefore safe and can be discharged without the need to evacuate patients and staff beforehand. The system uses a fraction of the water needed by a conventional sprinkler system which avoids the need to stock expensive and wasteful tanks of water, and which minimises clean up and downtime post fire event. The use of fresh water supply reduces the risk of microbes and other bacteria building up in the pipework (e.g. legionnaire's or other common hospital bacteria), which is an important consideration in a hospital environment. Tests have proven that Ultra Fog watermist technology will extinguish fire faster and with less damage to equipment and assets than a traditional sprinkler system. Each system is specifically engineered according to customer's requirements. Increased nozzle spacing and small piping dimensions passes a signicant installation cost saving to the customer which places Ultra Fog at the top of its class in terms of value for money and lifetime system maintenance.

## Nursing homes

Every year there are about 400 fires in nursing homes and other health care facilities in Sweden. These cause an average of 5 people death per year and between 40-70 people are injured. Almost all the fires would not have consequences if the accommodation was equipped with a sprinkler system.

Thanks to the low space requirement our sprinkler solution is easy to install even in existing buildings. Generally, the residents do not have to move during the time in which the installation is performed, this avoids the inconvenience of having to transfer people and ensuring the tranquility of their living environment. The risk of false alarms is very limited since the system does not need any fire detectors. In fact every nozzle is provided with an automatic glass bulb which only breaks if in presence of fire source. The system can also be connected to a SOS alarm, or to existing emergency procedures.



### **Facts**

- O Droplet size: from 10 microns up to 200 microns
- ♦ Water consumption: 85-90% less compared to a conventional system
- 1,700 litres of water vapour will be produced from each litre of water
- Coverage up to 48m² from each sprinkler head

# One of the most reliable water fog systems on the market

The aim of the fire extinction system is to save lives and property. Therefore it is extremely important that the system works smoothly. Our ambition is to design, deliver and install systems and service of the highest possible quality and best possible functionality.



## Features & Benefits

- Major cooling effect when the water droplets transform into vapour
- O Very high extinguishing effect relative to amount of water. Less damage to equipment and faster restoration
- Fast extinguishing fast automatic sprinklers with low RTI value or by detectors
- Arefired oxygen in the fire zone, through water mist
- Over-pressure is produced in the space, which prevents new oxygen from joining fire
- A Risk of flashover reduced to zero

- A Reduced drain and scupper dimensions. The amount of dirty extinguished water will be kept to a minimum
- Environmentally friendly and people safe
  no toxins
- Extremely lightweight requires only 10% of the water storage compared to conventional systems
- Small pipe dimensions and aesthetically considerate nozzle allow for a discreet system, resulting in an installation with no hot work required, meaning retrofits are simple
- O Custom designed solutions, engineered for cost and efficiency



## Fire Testing, Type Approvals and compliance:

Ultra Fog's Water Mist System has been fire tested by the Swedish Test Laboratory (SP), SINTEF - Norway and Danish Fire Laboratory (DFL), and the Southwest Research Institute (SwRI) and Baltic Fire Laboratory (BFL).

1	FM5560 Non-Storag		11C 1 D	0 x + 4 FN114070
L	) FM5560 Non-Stora	je Occupancies	, HC-I, P	'ari 4 EN 14972

FM5560 Turbine and Machinery in Enclosures, Part 14 and 15 EN14972

Part 3 EN14972 OH1

Part 10 EN14972 Annex A OH4

Part 2 EN14972 Annex A OH3

Part 5 EN14972 Annex A OH2

Part 7 & 17 EN14972 Annex A, Residential Water Mist Systems

- BS 8458 - Domestic and Residential Water Mist Systems

- BS 8489 - Commercial and Industrial Water Mist Systems

- NFPA 750

Archive / Library CEN TS 14972 Annex B, ref. fire report BFL2020/TP02/001 and BFL2020/TP02/009

Part 12 EN14972, Fat Fryer & Galley Hood

Component testing by the laboratory of UL and FM

Tunnel: Uptun, Aplus guideline full scale fire test.

Vehicle / Diesel Train: Regulation No. 107, Revision 7, Annex 13; Train test specification ALn663

Since 1990, Ultra Fog has been committed to a continuous programme of product development and fire testing in response to the latest rules, regulations, and standards around the world. Ultra Fog products are 3rd party tested and approved, in accordance with internationally recognised test protocols. The Ultra Fog Drop Size is rated as Class 1 according to the National Fire Protection Association Code (NFPA, USA), which ensure effective firefighting performance.

#### Ultra Fog | Sweden

Faktorvägen 17Q 434 37 Kungsbacka

Telephone: +46 (0)31 979 870

#### Ultra Fog | United Kingdom

Office No. 113 1010 Cambourne Business Centre Cambourne, Cambridgeshire CB23 6DP **Telephone:** +44 (0)1223 499180 Ultra Fog | Italy

Via Dei Ghivizzani 1859 55054 Massarosa

Telephone: +39 0584 390609

### Ultra Fog | Monaco

57 Rue Grimaldi Block C/D 98000 Monte Carlo

Email: service@ultrafog.com Telephone: +377 99901481 Ultra Fog | Italy

Via Vincenzo Monti 52 20017 Rho (Milano)

**Telephone:** +39 02 09943101

#### Ultra Fog | United States

3380 SW 11th Avenue Fort Lauderdale FL 33315 **Email:** salesusa@ultrafog.com

**Telephone:** +1 (954) 581 6996



info@ultrafog.com



www.ultrafog.com



www.linkedin.com/company/ultra-fog





All rights reserved. Ultra Fog AB.

Ultra Fog reserves the right to modify or change the information or specifications in this brochure without notice.



#### Local Ultra Fog Distributor