Protection of Archives, Libraries and Museums with water mist

Archives and libraries contain large quantities of valuable materials and documents, such as artwork or sensitive data.

Protection of these areas is of particular importance and necessitates special fire protection measures.

A high priority is given to the protection of human life.

Conventional sprinkler systems are not suitable for such risks, because of high water damage in case of activation, which easily can exceed the damage caused by the fire itself. Gas extinguishing systems do not damage the protected goods, but usually require very large cylinder storage areas as well as sealed compartments. They can only be activated after a pre-warning time and most of the gases are of environmental concern or even toxic.

FOGTEC systems use so little water that the resulting water damage is much lower. This allows the use of early detection systems triggering the water mist system without fear of a false alarm.

Detectors can be used for activation as well as fast response glass bulbs.

FOGTEC systems for archives and
libraries can be designed as total flooding or automatic single head operated system. Sensitive areas such as archives and libraries, which have been left unprotected in the past, can be protected effectively with a FOGTEC system.

The fine water mist reaches also hidden spaces within shelves, unlike a sprinkler. At the same time the temperature in the protected area is significantly reduced and the fire is immediately enclosed. This effect is of particular importance to reduce the spread of fire to other valuable items.

A much better effect in regard of smoke scrubbing is achieved by FOGTEC systems compared to sprinklers and gas systems. Taking into consideration that smoke usually causes most of the damage, smoke scrubbing can not be valued high enough especially for applications such as archives and libraries.

Due to the very small pipe sizes required by FOGTEC systems, retrofits can easily be carried out also in buildings with special requirements in regard of the building architecture.

The central pumping unit requires considerably less space than in case of sprinkler systems. Large water storage tanks are not required.

System - Advantages

• Safe for people
• No pre-warning time
• Safe for the environment
• Water consumption approx. 10% of conventional sprinklers
• Minimal water damage
• High cooling effect
• Only little space for pump system
• Simple installation