

FOGTEC FIRE PROTECTION FOR TIANJIN BRIDGE CULTURE MUSEUM

This building is FOGTEC's first project in Tianjin City. It is also the first project for museum application in China. The new buildings of the Tianjin Museum are a landmark in the city and one of the largest projects of Tianjin city government in 2011. The structure of this new building area covers 55,000 square meters and was opened to public from May 2012. Around 1.5 million visitors a year will come to this museum, which is in the shape of a flying swan and one of most impressive buildings in China.



The FOGTEC water mist technology protects 8,000 square meter area in the Tianjin Bridge Culture Museum, including several cultural relict storerooms, chinaware storerooms, jade storerooms, ancient books storerooms, archives rooms, equipment room and control room. In total there are 59 protected areas with more than 1000 nozzles in the museum.

Originally, the use of a conventional CO₂ system was planned to protect a large number of precious cultural and historic relicts including ancient books and paintings, but due to the lethal risks of CO₂ to person inside the rooms, this system was canceled. After comparing alternative fire protection solutions, the owner decided to use the most beneficial one; a FOGTEC high pressure water mist system.

In public buildings high priority is given to the protection of human life. FOGTEC water mist, with its highly efficient cooling properties, is therefore ideal for immediate limitation of the fire spread. Temperatures are immediately reduced to a level allowing better escape conditions for people. FOGTEC systems thus provide optimal fire protection for these types of buildings. When using conventional sprinkler systems or low-pressure mist systems, the resulting water damage often



even exceeds the damage directly caused by the fire. FOGTEC systems, in contrast, use the water so efficiently that the risk of water damage is reduced to a minimum. Sensitive areas such as the Tianjin Bridge Culture Museum archives can be protected effectively with a FOGTEC system without fear of major water damages.

Operators appreciate the additional benefit of shorter interruptions. Very small pipe diameters mean that the system can be unobtrusively be fitted in these new buildings and are ideal where modern architectural elements have been employed. The central pump unit requires considerably less space compared of sprinkler systems. Large water storage tanks are not required.