

Case story | SEM-SAFE® high-pressure water mist system

Shanghai Shuguang Hospital in China

The first land-based project in China using high-pressure water mist technology

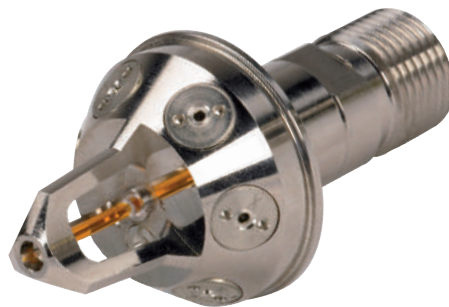
Danfoss Fire Safety A/S



With a rich history that dates back to 1906, Shuguang Hospital is one of the first class general hospitals in China. It is divided in two parts: eastern and western branch. The eastern branch is located in Zhangjiang Hi-Tech Park, Pudong New Area. It covers more than 83,000 m² and has a capacity of 720 beds.

In 2004, the hospital has been provided with high-pressure water mist technology for fire protection and on the 23rd of April 2005 the branch was officially opened.

Shuguang Hospital is a modern and famous hospital, being one of the top 100 national hospitals. It is the 12 times winner of the Shanghai Civil Unit as well as has been appointed national model T.C.M hospital. The hospital has completed accreditation of ISO9001 and is the pioneer TCM hospital accredited by ISO90001 in China.



SEM-SAFE® high-pressure water mist system

Fire test criteria

The system chosen for the Shuguang Hospital had to comply with NFPA750(2000), IMO Res. A.800-2001 as well as China's design code for automatic sprinkler fire systems.

The SEM-SAFE® high-pressure water mist system for fire fighting from Danfoss was therefore tested according to the fire test procedures described in the above standard. The purpose of the test was to prove that an automatic water mist system achieved better results than comparable tests with sprinkler systems.

After successful testing, the SEM-SAFE® high-pressure water mist system was approved by CNCF (the related China National Center for Quality Supervision).

To protect the Shuguang building, one pump unit with three high-pressure pumps PAH80 was used. A total of 224 nozzles were installed. The water mist system was first of all chosen over traditional sprinklers due to its high level of flexible and smaller space requirements. Secondly, the system is environmentally friendly and very safe, for example in connection with the evacuation of patients, because no chemical additives are used. Thirdly, with minimal consumption of water and virtually no water damage, it is very safe for the expensive medical equipment and apparatus.

The hospital is very satisfied with this efficient, environmentally friendly and maintenance free system.



Shuguang Hospital in China, protected with SEM-SAFE® high-pressure water mist system from Danfoss.

SEM-SAFE®

Danfoss Fire Safety A/S · Middelfartvej 9 · DK-5000 Odense · Denmark
Tel. +45 7488 7800 · E-mail firesafety@danfoss.com · www.semsafe.danfoss.com

Danfoss Fire Safety A/S can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss Fire Safety A/S reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specification already agreed. All trademarks in this material are property of the respective companies. SEM-SAFE® logotype is trademark of Danfoss Fire Safety A/S. Danfoss logotype is trademark of Danfoss A/S. All rights reserved.