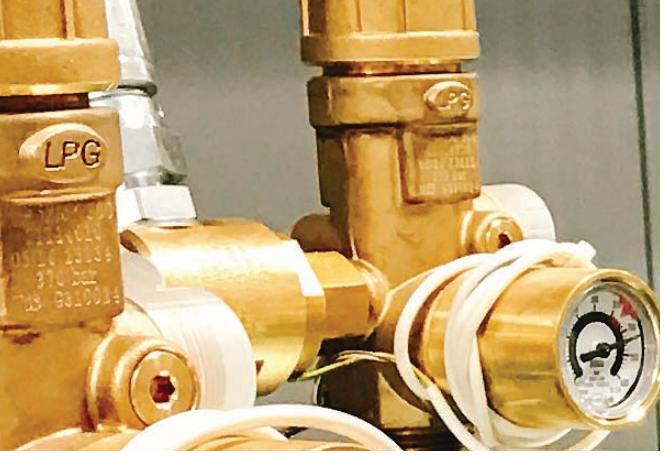
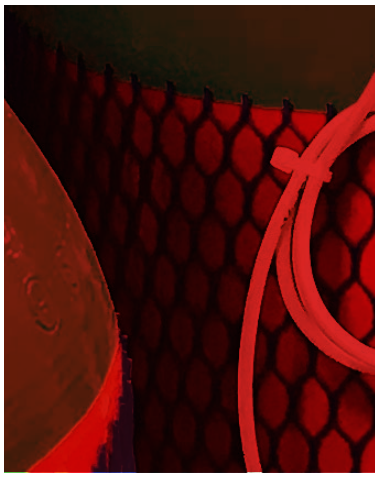
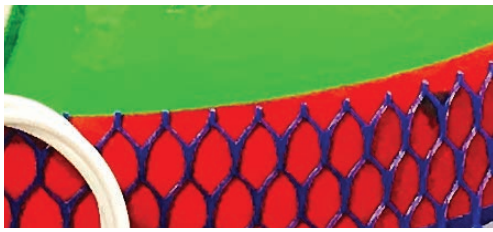
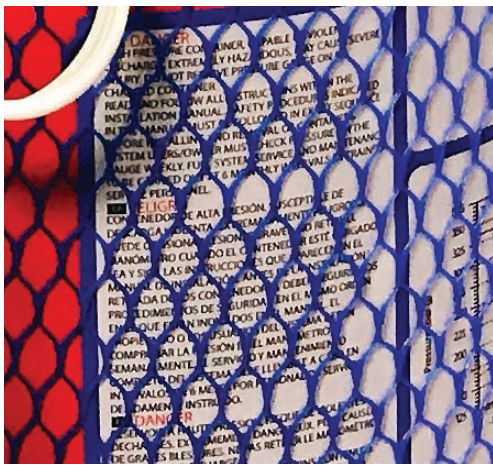


GAS AND WATER SUPPRESSION SYSTEMS

Fire suppression systems help minimise the losses and liabilities associated with fire. Preventing damage to property and products, loss of life, financial loss, consequential loss of profit, loss of productivity and insurance repercussions.







011 869 2142

sales@advancedfst.co.za

@advancedfiresuppression technologies

linkedin.com/in/advanced-fire-suppression-technologies-928bb7146

ADVANCED
FIRE SUPPRESSION TECHNOLOGIES

GAS SUPPRESSION SYSTEMS

The use of inert gases and chemical agents to extinguish fires is known as gaseous fire suppression. These types of suppression systems are also known as clean agent fire suppression systems. The gaseous mixtures leave no residue behind and are designed for use in areas where quick reaction is paramount.

The most common uses for gas fire suppression systems are in server and computer rooms, Medicines Control Council (MCC) cabinets, museums, libraries, art galleries, and medical and pharmaceutical applications. These gas suppression systems can be manually triggered or activated with fire detection systems.

These systems are governed by the National Fire Protection Association (NFPA) standard for clean agent fire extinguishing systems, South African National Standards (SANS) numbers SANS 306 and SANS 14520, Underwriters Laboratories (UL), Underwriters Laboratories of Canada (ULC), and Factory Mutual (FM). The gasses used in these systems include FM200, Novec, CO2, Inergen, Pyroshield, Pro-Inert and Argonite.

WATER SUPPRESSION SYSTEMS

All water suppression systems are designed and installed to industry standards and regulations.

A **fire sprinkler system** is a pressure-bearing fire suppression measure, consisting of a water supply system that provides adequate pressure and flow rate to fire sprinklers connected to a water distribution piping system. A fire sprinkler is that part of a fire sprinkler system that distributes water when the effects of a fire have been detected, such as when a predetermined temperature has been exceeded. Sprinkler systems are used in apartment and office buildings, warehouses, shopping malls and casinos, to name only a few.

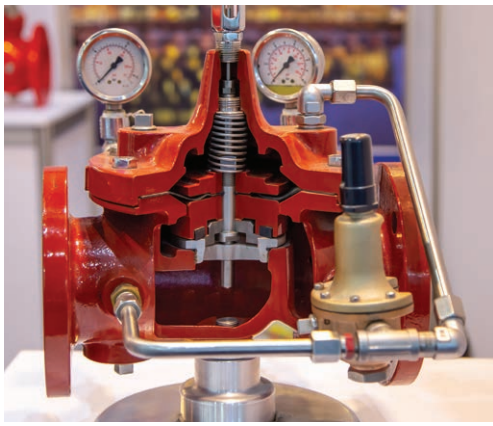
Deluge fire protection systems are engineered with water spray nozzles connected to a fire water piping system as open-ended sprinklers. The mechanical heat-sensing element common to sprinkler systems is removed, and replaced by a fire detection system, engineered to be fit-for-purpose to specific areas. Common applications include power-generation equipment (e.g. transformers), belt conveyors, flammable liquid storage, oil and diesel tanks and process plants. Fire suppression is achieved using medium or high velocity water spray nozzles, which can be activated manually or automatically by means of hydraulic, pneumatic or electrical fire detection systems.

Water mist fire suppression systems operate by forcing water through micro nozzles at a very high pressure to create a water mist vapour. The extinguishing effects result in optimum protection by cooling, due to heat absorption and inerting due to the expansion of water by over 1 700 times when it evaporates. Water mist systems provide improved protection for personnel and assets while minimising potential water damage, as most of the water mist evaporates. Water mist systems are available for total flooding, local applications and special risk areas. Advanced FST designs, installs and commissions fire water storage tanks, fire water pumps, fire hydrants and hose reels.

ELECTRONIC FIRE DETECTION AND CONTROL SYSTEMS

Fire detection systems provide constant monitoring and, therefore, early warning, to minimise the losses and liabilities associated with fire. This prevents damage to property and products, loss of life, financial loss, consequential loss of profit, loss of productivity and insurance repercussions. There are different types of electronic fire detection systems and accessories to suit every situation, ranging from small office installations to large scale warehousing and mining applications.

There are two different types of fire detection systems: addressable systems and conventional systems. An addressable system can pinpoint the location of each detector and other devices, where a conventional system only differentiates between zones. A selection of application-specific detectors can be used on either system. Detectors include optical smoke detectors, heat detectors, linear detectors, beam detectors, gas detectors, aspirating air sampling detectors and many more. Fire detection systems are widely used in offices, hotels, warehouses, factories and mines, to name a few.



For more information go to
www.advancedfst.co.za