

Solutions, Services and Products offered

We design and install fixed fire detection and suppression systems that are both superior in quality and value, providing significant customer satisfaction in product, solution and service.

Our turnkey offering includes the design, installation and maintenance of all fixed fire systems, consisting of:

- > Addressable and Conventional Fire Detection and Control Systems
- > Clean Agent Gas Suppression Systems
- > Dry Powder Suppression Systems
- > Foam Stand Alone Pre-mix Suppression Systems
- > Water Suppression Systems (sprinkler, deluge and mist)
- > Hydrants and Hose Reels
- > Foam Inducing Water Suppression Systems
- > Kitchen Suppression Systems
- > Portable Fire Fighting Equipment
- > Fire and Support Equipment
- > Evacuation Systems
- > Maintenance Solutions
- > Fire Water Pumps and Tanks
- > Fire Water Reticulation

We provide these services to the following industries:

- > Construction
- > Mining and Process Plants
- > State-owned Enterprises
- > Hospitality
- > Industrial and Manufacturing
- > Service, IT and Banking
- > Commercial
- > Storage

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 essentially two different types of fire detection systems: addressable systems and conventional systems. An addressable system is able to pinpoint the location of each and every detector and other devices, where a conventional system only differentiates between zones. A selection of application-specific detectors can be utilised 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.

Flame Detector



Aspirating Detector



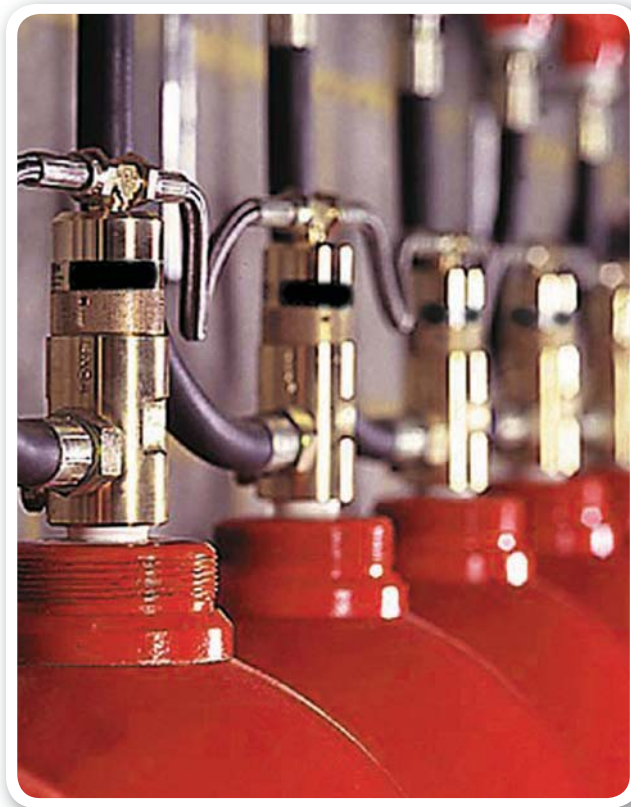
Optical Smoke Detector



Beam Detectors



Gas Suppression Systems



Gaseous fire suppression is a term used to describe the use of inert gases and chemical agents to extinguish fires, also known as clean agent fire suppression systems. These gaseous mixtures leave no residue behind and are designed to protect enclosures where there is a need for quick reaction to extinguishing a fire. A fire detection system is needed to trigger the gas suppression system.

These clean agents are governed by the NFPA Standard for Clean Agent Fire Extinguishing Systems. Approval listings include UL, ULC, FM, SABS and MEA. Gases we use include FM200, Novec, CO₂, Inergen, Pyroshield, Pro-Inert and Argonite. The most common uses for gas fire suppression systems are in server and computer rooms, MCC cabinets, museums, libraries, art galleries, archives, document stores, and medical and pharmaceutical applications.

Foam Suppression Systems

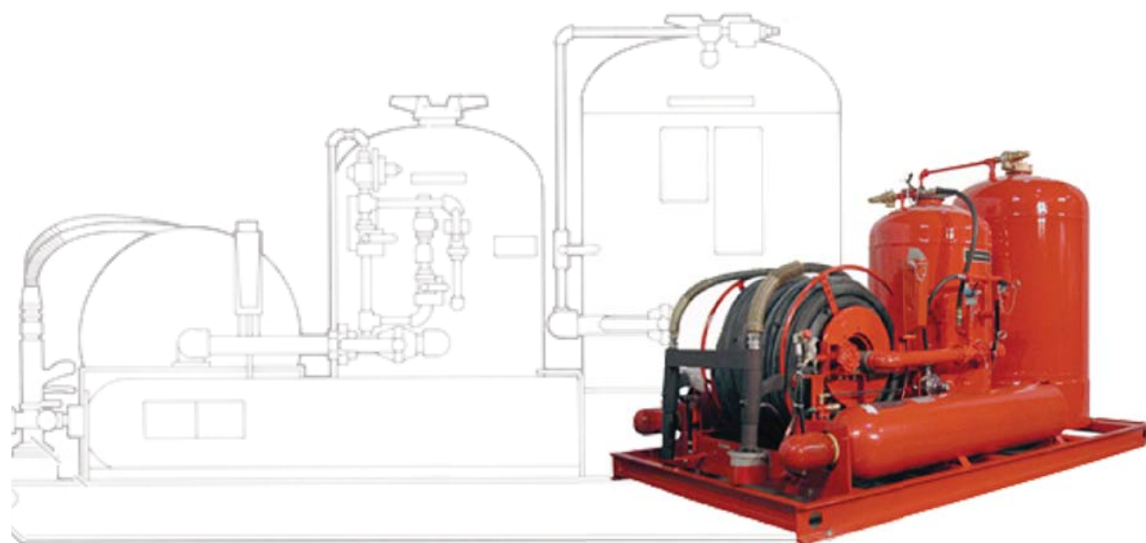
Foam fire suppression systems protect against virtually any hazard where flammable liquids are present. These hazards are common to a multitude of industries, including petrochemical, chemical, oil and gas, aviation, marine/offshore, manufacturing, utilities, military and transportation. The role of the foam is to cool the fire and to coat the fuel, preventing contact with oxygen to suppress combustion.

Foam fire suppression systems are used in flammable liquid storage, loading racks, processing areas, refineries, dike areas, aircraft hangars, heliports, jet engine test facilities, LNG storage/manufacturing, marine applications and warehouses.



Twin-agent Hose Line Fire Suppression Systems

Where a hazard area requires rapid extinguishment and securing surrounding areas, twin-agent systems are often recommended. Twin -agent systems combine the use of dry chemical and foam agents. Purple-K and Ansulite AFFF are combined as a single unit, where Purple-K provides rapid flame knockdown and extinguishment while Ansulite AFFF is used to blanket the fuel with a thin film, preventing the escape of flammable vapours and assisting in cooling. When used in combination, a single operator can extinguish large three-dimensional fires during the first attack. Twin-agent attack provides the most effective suppressing and securing capability known for many flammable liquid fires.



Pre-engineered Dry Chemical Piped Systems

Large industrial dry powder systems are static piped systems that are typically used for liquid storage areas, transformers and many more. Designed for flexibility, the IND-X system protects against a variety of light to heavy industrial hazards. This integrated system combines the suppression capability of dry chemical with reliable fire detection to help safeguard loading racks, refinery processing equipment, compressors, paint and solvent mixing, flammable production disruption and personal injury often associated with industrial fires.

A specially designed system to meet your requirements is available in various sizes, from 68kg to 1 350kg. Various dry chemical agents are used, such as Foray [ABC], Purple-K [BC], MET-L-X [Class D], NA-X [Sodium, Potassium and Sodium].

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 which provides adequate pressure and flow rate to fire sprinklers connected to a water distribution piping system. A fire sprinkler is the 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 high rises, 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 by the use of medium or high velocity water spray nozzles, which can be activated manually or automatically by means of hydraulic, pneumatic or electrical fire detection systems.



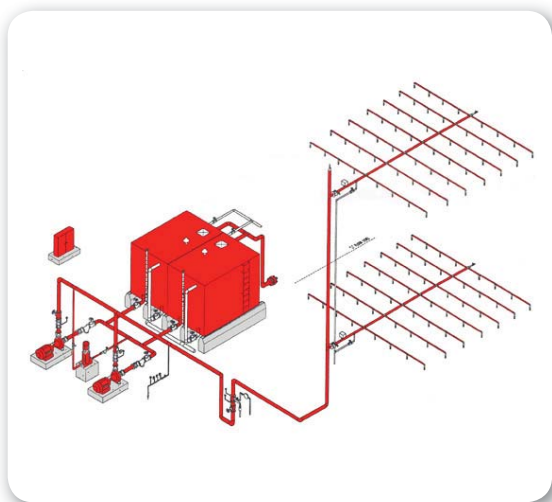
Water mist fire suppression systems operate by forcing water through micro nozzles at a very high pressure to create a water mist vapour. The extinguishing effects result in optimum protection by cooling, due to heat absorption and inerting due to the expansion of water by over 1 700 times when it evaporates.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

We design, install and commission fire water storage tanks, fire water pumps, fire hydrants and hose reels.



Fire Water Pumps and Tanks

Containerised
Fire Pumps



Fire Water Reticulation