



FIXED FIRE-FIGHTING SYSTEMS

We specialize in hazard fire protection products which include fire extinguishers, industrial systems, skids, intelligent detection and communication systems and comprise of the complete line of dry chemical, foam, and clean agent extinguishing agents. We undertake projects on a turnkey basis where we supervise and execute complete installation, repair, maintenance, service, and certification of the systems. Our clients range across Marine, Oil & Gas, Power Plants, Defence, and Real Estate sectors.

INERGEN CLEAN AGENT SYSTEMS



Inergen Clean Agent Systems have been extensively used throughout the world as a preferred gaseous fire suppression agent for over 16 years and remains the longest surviving Halon replacement on the market.

INERGEN is a mixture of 52% Nitrogen, 40% Argon, and 8% CO₂. It has a unique ability to rapidly extinguish fire and yet provide a safe environment for any person within the occupied area. INERGEN agent does not produce fog, so escape routes remain visible and it does not deplete the amount of oxygen in the area.

SAPPHIRE CLEAN AGENT SYSTEMS



The SAPPHIRE Clean Agent System quickly suppresses fires in areas where an electrically non-conductive medium is required, where electronic systems cannot be shut down in an emergency, where cleanup of other agents poses a problem, and in normally occupied areas that demand a non-toxic agent.

The SAPPHIRE system uses 3M Novec 1230 fire protection fluid for total flooding applications. The clear, colorless agent has zero ozone depletion potential, an atmospheric lifetime of just five days, and a global warming potential of 1.0.



FM 200 CLEAN AGENT SYSTEMS



FM200 is a clean, gaseous agent containing no particles or oily residues. It is thermally and chemically stable and does not deplete stratospheric ozone.

The main advantage of FM200 fire suppression is that a small amount of the agent is required to suppress a fire. This means fewer cylinders, and therefore less wasted space. FM200 systems reach extinguishing levels in 10 seconds or less, stopping ordinary combustible, electrical and flammable liquid fires before they cause significant damage.

DRY CHEMICAL POWDER SKIDS



Dry Chemical Skid Systems combine the flexibility of hand portable fire extinguishers with the power to knock down large Class B (flammable liquids and gases) and Class C (energized electrical) fires. Featuring large agent capacity and long discharge time, this system offers the chance to use only the amount of agent necessary to suppress the fire.

Plus, the tremendous dry chemical flow rate provides the power needed to fight three-dimensional fires and pressurized gas/liquid fires.



TWIN AGENT SKIDS



Twin-Agent Fire Suppression Systems combine the fast flame knockdown of a dry chemical with the fire securing capabilities of aqueous film-forming foam. The twin-agent attack provides the most effective extinguishing and securing capability known for many flammable liquid fires.

CO2 SYSTEMS

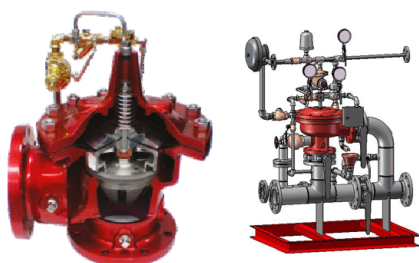


Carbon Dioxide (CO₂) is a colorless, odorless, and chemically inert gas that is both readily available and electrically non-conductive. It suppresses fire without leaving behind any residues after discharge, thus avoiding damage to sensitive equipment.

CO₂ has a high rate of expansion and it extinguishes fire primarily by lowering the level of oxygen that supports combustion.



DELUGE VALVE AND SYSTEMS



The Deluge system is designed to protect high hazard areas containing a severe fuel hazard with high heat release rate bringing a large number of open sprayers into action simultaneously in the event of fire. A typical Deluge valve system comprises of a control valve, a sprinkler operated detection system and a dedicated water supply system.

Deluge valves are hydraulically operated, diaphragm actuated, globe or angle pattern valve that control the water flow in the fire protection sprinkler system.

INTELLIGENT FIRE ALARM SYSTEMS

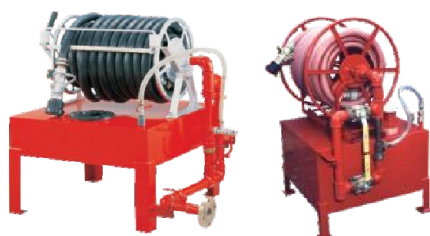


Conventional fire alarm systems provide an adequate and cost effective fire alarm system for many small buildings. In larger, more complex buildings however, more sophisticated 'intelligent' fire alarm systems need to be used.

Intelligent Fire Alarm systems comprise a complex set up equipment which include, heat detectors, smoke detectors, manual call points, control and relay modules, fault isolator modules, monitor modules, control panels, visual and audible alarms, strobes, etc.



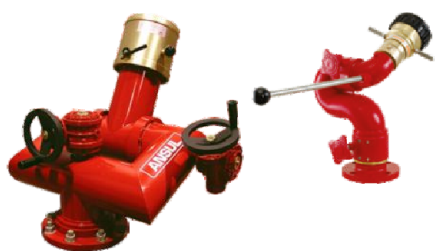
FOAM WATER HOSE REEL STATIONS



The Foam Water Hose Reel Station (FWHR) is a self contained unit that relies on water flow and pressure to place the system into operation. It is designed to be installed in a fixed location such as helidecks, offshore processing areas to control fires or spills of flammable or combustible liquids.

Hose reels have a distinct advantage that they can be opened immediately and put to use; the removal and assembly of hose is not required.

WATER/FOAM MONITORS



Foam monitors are high capacity jets, controlling horizontal and vertical flow, that can be used to deliver large quantities of foam accurately to the affected area in the shortest possible time and from a safe distance.

Nozzles attached to foam monitors can also be adjusted to adapt the foam agent flow from fog or wide beam to jet or straight beam to increase the flexibility to the user. Monitors motion can be controlled automatically using water oscillators, electrically using joysticks, or manually using tiller bars or housewheels.

SPRINKLER SYSTEMS

Sprinkler systems are one of the oldest fire suppression systems still in use today. It consists of a water supply system which provides adequate pressure and flow to a water distribution system onto which the fire sprinklers are connected.

There are various types of fire sprinkler systems such as Pre-action, Dry Pipe, Wet Pipe, Deluge, etc.



tyco

WATER MIST SYSTEMS

tyco



Water Mist Controller



Local Operating Box



Water Mist Skid (Low)



Water Mist Skid (High)

Water Mist is a versatile and highly efficient fire-fighting medium. Water mist has the unique ability to deliver water as a fine atomised mist. This mist quickly gets converted to steam that smothers the fire and prevents further oxygen from reaching it.

The effectiveness of a water mist system in fire suppression depends on its spray characteristics, which include the droplet size distribution, flux density, spray dynamics etc. Immediate action, minimized water damage, non-toxic are some of the few advantages of a water mist system.

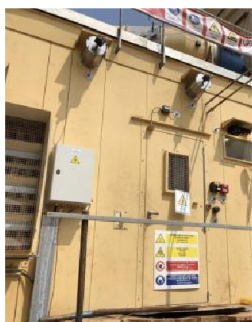
AUTOMATIC FIRE EXTINGUISHERS

SHM brand of modular fire extinguishers provide an automatic detection and suppression system in a single unit. They are available with dry chemical powder (MAP 50% & 90%) and clean agent gases in 2 kg, 5 kg, 10 kg and 15 kg capacities.

The fire extinguisher consists of a UL approved temperature sensitive bulb of 68 C temperature rating. The presence of a pressure gauge provides an instant verification of functionality and reliability of every unit. These extinguishers are ideal for use in server rooms, factories and unmaned stores.



AEROSOL FIRE SUPPRESSION SYSTEM

Stat-X[®] Aerosol Fire Suppression

These systems generate ultra-fine suspension of highly ionized potassium fire-fighting particles upon actuation, delivering 35% savings in equipment and lifecycle costs

HELIDECK FIRE SUPPRESSION SYSTEMS

MATRE

Aluminium Offshore

We provide full helideck fire fighting and safety equipment in accordance with Civil Aviation and related Codes including foam monitors, complementary media and rescue equipment.



HIGH EXPANSION FOAM SYSTEM

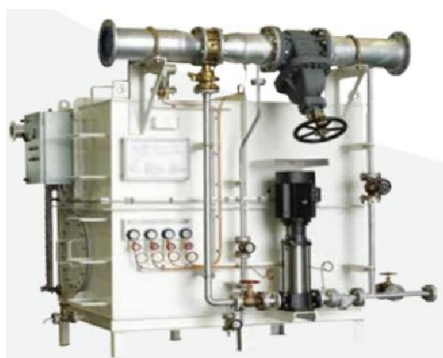
SKUM

SEAPLUS

The high expansion foam system uses foam consisting of a synthetic foam concentrate, water and air, which is highly effective for machinery space applications. Fast and effective and can be installed as a total flooding solution for the entire machinery room or for individual compartments.



DECK FOAM SYSTEM



Foam system for the protection of chemical and oil tank decks or heli-decks in accordance with class requirements and IBC Code.

EXTERNAL FIFI SYSTEM

Most commonly used system to fight external fires in marine environment. Includes a deluge system and deck heads. Foam capability can be integrated as part of the system. Designed as per the basis of international recognized typical class notations for marine systems.

