

Fire Fighting Systems | Fire Protection Systems

We deal in Fire Fighting Systems like Water Hydrant Fire Fighting System, Water / Foam Monitor Fire Fighting Systems, Water / Foam Sprinkler Fire Fighting System, Water / Foam Spray Fire Fighting System, Water / Foam Hose Reel Fire Fighting System, Fire Detection Fire Fighting System and Fire Suppression / Extinguishing Fire Fighting Systems. We specialize in Designing, Installation and Maintenance of Fire Fighting Systems. We follow the standards for the Designing, Installation and Maintenance of Fire Fighting Systems. We have qualified team for the installation of Fire Fighting System.

Water Hydrant Fire Fighting System

Water Hydrant Fire Fighting System consist of hydrants attached to same pipeline, the other end of the pipeline is attached to the pumps and water supply tank. The Fire Fighting Hydrant line is close loop pipe system to maintain the pressure in the water hydrant fire fighting system. In Water Hydrant Fire Fighting System hydraulic calculations are done according to NFPA Standards. Fire fighting piping may be underground and above ground. MS pipe is use for above ground Fire Fighting Piping and HDPE piping is use for underground Fire Fighting Hydrant line. Fire hose cabinet with two hoses is installed near each Fire Hydrant to use fire hoses at the time of fire hazard emergency.

<u>Water / Foam Monitors Fire Fighting System</u>

Water / Foam Monitor Fire Fighting System works same as Water Hydrant Fire Fighting System instead of hydrants fire monitors are installed on the fire fighting pipeline. Fire monitor fire fighting systems are installed on open type hazards. Fire monitors has high velocity nozzles attach to the end of the pipe which laminate the water steam and project it at a long distance more than 100 feet. In foam type monitor fire fighting system each







monitor is separately provided with foam container or foam is injected into the fire fighting system pipeline via foam proportioner by bladder type system or any pressurize system. We installed these Fire Fighting Systems according to NFPA standards.

Water / Foam Sprinklers Fire Fighting System

Water / Foam Sprinkler Fire Fighting System consists of fire sprinklers attached to the fire fighting pipeline and are installed at the top on ceiling or on the wall. The water sprinkler fire fighting system may be wet type of dry type depending upon the temperature and distance of fire fighting water source from the hazard and nature of fire hazard. In dry type sprinkler dry air or nitrogen is used. The Water / Foam Sprinkler fire fighting system is controlled by the alarm check valves. The fire sprinkler is consists of bulb and deflector. Bulb is filled with heat sensitive fluid. When the temperature of the surrounding increase the liquid in the bulb expand, ruptured the bulb glass, the fire sprinkler orifice is opened and water sprinkler fire fighting system is activated. The fire sprinklers have deflector type head to project the water stream at particular position. In Foam sprinkler fire fighting system foam is injected into the fire fighting pipeline with foam proportioner and open type fire fighting sprinklers are installed. The whole fire fighting system is control by deluge valve via any detection system

Water / Foam Spray Fire Fighting System

Water / Foam Spray Fire Fighting System is the same as the sprinkler fire fighting systems except instead of bulb fire sprinklers open type high velocity or medium velocity fire spray nozzles and deluge system is installed instead of fire alarm check valve. Water spray fire fighting system is activated mechanically by a fire sprinkler systems that is installed with the same pattern







as nozzles or electrically by solenoid valve from control panel with sensing devices such as heat detector and smoke detector that detect the fire and pass signal to control panel .In foam spray fire fighting system foam is injected into the fire fighting system after the activation of fire fighting system (deluge valve) by the foam proportioner that make the 3%, 6 % or 9% foam solution according to adjustments. We installed both foam based or water based fire fighting systems according to requirement of hazard by following NFPA.

Water / Foam Hose Reel Fire Fighting System

Water / Foam Hose Reels Fire Fighting System consist of fire hose reels that are installed on the inside of the building in the form of reels in a cabinets. Fire hose reel cabinets are fitted with the fire hose reel or fire hose rack. The water supply to these hoses is from pump room or main fire fighting hydrant line. The hoses have different kind of nozzles at its ends for different type of fire hazards. The fire hoses are made of different material and sizes that are installed according to the nature of hazards. Fire hose reels are both water base and foam base. In foam base hose reels fire fighting system the foam tank is installed under the fire hose cabinet and the mixing of the foam is by foam eductor installed after the landing valve. The percentage concentration of the foam is depends upon the fire hazard type.

Fire Extinguishing Fire Fighting System

The C0₂, Argon, HFCs, FM200 & high pressure water mist are used in these kind of fire fighting systems, the extinguishing agent is kept in cylinders at high pressure. The fire extinguishing fire fighting system is controlled by pilot cylinder or control valve by fire control panel via heat detectors or smoke detector depending upon the nature of hazard area. The fire fighting system area calculations are done according to NFPA standards. Fire alarm & flashers are also installed in combination with extinguishing fire fighting system to evacuate the area to be protected to alert the occupants before the activation of the fire fighting system.







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Fire Detection & Alarm System

The Fire detection & Alarm Systems are conventional and addressable system. The detection fire fighting systems are divided into zones depending upon the nature of fire or hazard area. The detection fire fighting systems also contain manual push buttons sounders and flashers that activated a few second before the system to alert the occupants from fire. The conventional fire fighting system are installed with less number of inputs and outputs devices but addressable are multitask fire fighting systems that also merged with other systems to control the butterfly valves, Solenoid valves and pressure switches to activate the fire fighting systems like foam system activation. The heat detectors, smoke detectors and flame detectors are the fire detection devices that are installed on these fire fighting systems that send input fire signal to main control panel to activate the sounder & flasher and also alert the fire safety person.



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