Compressed air foam is generated by the combination of compressed air, water and foam concentrate in the right proportions, to create a homogeneous foam solution similar to shaving cream.

CAFFES is the most advanced and efficient foam system. Especially designed with user friendly features, the CAFFES units are easy to install and maintain.

Examples of hazards covered by this configuration include ceiling level protection for transformers, hydrocarbons & polar solvents processing hazards, pumps, compressors, piping or containers, gas or diesel engine generator rooms, machinery spaces, hydraulic oil or lubricating oil rooms, storage tanks and fueling areas. Non-automatic rotationary nozzles specifically designed to be used with the Compressed Air Foam (CAF) System.
SYSTEM PARTS

FOAM TANK

DESCRIPTION

Foam concentrate is stored inside a normally non-pressurized stainless steel pressure vessel type tank.

TANK SELECTION

The capacity established at the design stage is based on both the maximum system flow and discharge time required for the largest single hazard protected or group of hazards that are protected simultaneously; important factors for choosing capacity are area that must covered with foam and the materials that placed in there.

 ENVIRONMANTEL INFO

Foam concentrate used with Compressed Air Foam Systems are biodegradable. However, as with any substance, care should be taken to prevent discharge from entering ground water, surface water, or storm drains. Since facilities vary widely by location, disposal should be made in accordance with state and local regulations.

CONTROL CABINET

DESCRIPTION

The CAFFES unit cabinet is made of steel depending on the configuration provided. All surfaces are rust proof coated, inside and outside, with fire red, oven baked polyester powder on phosphate base.

Cabinet is provided with two access doors to the hydraulic and electrical sections; one door is combined with the emergency release. Electrical junction boxes are integrated with the cabinet for connection of detection system, auxiliary contacts and signaling devices. Gauges to indicate air, water supply pressure and priming water pressure are all visible through clear windows.

ADVANTAGES

- Compact Layout Saves Floor Space.
- Simplified Operation and Maintenance.
- User-friendly Owner’s Manual With Every Unit.
- Fully Tested and Programmed at The Factory.
Compressed Air Foam is constituted of 90% compressed air. Each cylinder is supplied with a cylinder valve equipped with a safety relief disc which provides relief at 3600-4000 psi. Air pressure regulators are used to reduce the air pressure to a working pressure of 100 psi for the system operation.

There is one interconnection line provided on every air cylinder. The connection is used to supply compressed air between the cylinders and the CAFFES. The piping is factory prepared according to installation arrangement and is supplied with the system. The cylinders pressure is supervised by a pressure transducer sending a low pressure supervisory signal when the pressure goes under the minimum pressure required to provide air supply for the specified discharge time.

The number of cylinders and regulators established at the design stage is based on both the maximum system flow and discharge time required for the largest single hazard protected or group of hazards that are protected simultaneously; important factors for choosing cylinder numbers are area that must covered with foam and the materials that placed in there.
Compressed Air Foam Fire Extinguishing Systems can be installed interior places which prepared by user. The system also can be installed with any scale of container station which customer demands for interior or exterior spaces. All the mechanic and electronic system parts except piping and nozzles must stored in closed place for protection agains sun, wind, rain etc. CAFFES Container Stations prepares fast and easy installation with all kind of capacity needed for fire protection.

**ADVANTAGES**

- **CAFFES Consumes 1:6 Water and Foam Quantity Compared To The Conventional Foam Systems**
- **Same Starter Extinguishing Duration of The Same Kcal Fire Compared To The Conventional Foam Systems**
- **System Eliminate or Reduce The Size of Water Supply Tanks & Fire Pumps**
- **In Comparison To Water-based Systems, CAFFES Reduce Steam Production And Thereby Improve Visibility During And After a Fire**
- **CAFFES can eliminate or reduce the size of drainage and containment systems including spill tanks and oil separators**
- **The significant reduction in foam and water required for CAFFES reduces the costs associated to clean-up and disposal of foam during discharge testing or after a fire.**
- **CAFFES can eliminate or reduce the size of water supply tanks & fire pumps**