



Firenor



Standalone Compressed Air Foam Systems

The purpose of a foam extinguishing system is to separate burning liquid from oxygen by covering the liquid, resulting in suppression of the combustion. The Firenor CAF systems delivers Florine free foam solution to protect various applications by creating a fine foam solution which attacks all three sides of the fire triangle simultaneously.

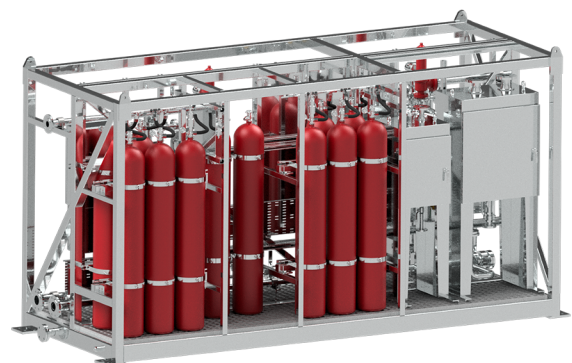
SYSTEM DESIGN

The Firenor standard design of the CAFS system was developed based on decades of firefighting industry experience. The system connects the water supply to a series of open foam nozzles through a network of dry pipework. The system uses pressurized N₂ or air stored in high-pressure cylinders to propel the water out of the water vessels and the foam out of the foam vessels, mixing water and foam through a foam proportioner. Water/foam solution flows through the CAF Generators where nitrogen is mixed into the water/foam generating compressed air foam.

The Firenor CAFS system can all be custom built to meet specific project requirements. Custom built systems will always be compliant with its design manual as the CAFS is a pre-engineered system. Number of the nozzles required to protect an object, will dictate the amount of water, foam and propellant gas. Distribution piping to the nozzles shall be carefully design according to the design manual in order to achieve the optimum design.

VERIFICATION

Every system can be customized, upon request, for compliance with applicable rules, regulations and project specific requirements as well as standard such as CE, FM, UL, ASME, DIN, DNV, BV, NMD, IMO, NFPA, Norsok. Full documentation for any tailor-made products is available and include all necessary certifications, third party verifications such as DNV/GL, BV, ABS, etc., and full scale test reports, if required.



Maintenance Services



◀ STANDALONE COMPRESSED AIR FOAM SYSTEMS (CAFS)

FEATURES

- Flexible Design
- Compatible with various hazardous area classification and regulations (ATEX, UL, CSA etc)
- Compatible with IEC 61508 for Safety Integrity Level 2
- Working environment friendly design

MATERIAL

Every Firenor system is available in the following materials:

- Super duplex
- Duplex
- SS316
- 6Mo
- GRE

FOAM SUPPLY

The foam supply for this system can be provided by a separate tank outside or inside the skid depending on the exact project specifications. The foam can be mixed with a variety of solutions listed below:

- Turbine foam proportioner
- Balanced pressure foam proportioner
- Foam inductor

Control System

An optional SIL rated control system is available for Firenor CAFS. The control system can be operated through both

locally and remotely, allowing for quicker firefighting responses during an emergency. All Firenor control systems can be designed to communicate with any other safety system, if required.

DOCUMENTATION

The engineering department produces documentation relevant to all phases of the project. Documentation normally includes the following:

- Quality plan
- ITP
- Drawings
- Data sheets
- Indexes
- Procedures
- Calculations
- Certificates
- Reports
- User manual
- MRB



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Firenor International AS
Holskogveien 48
4624 Kristiansand, Norway

Office +47 99 09 73 00
E-mail post@firenor.no

www.firenor.no