



FIREMIKS[®]

THE SWEDISH ORIGINAL

THE BASICS OF FIRE FIGHTING WITH FOAM AND FIREMIKS

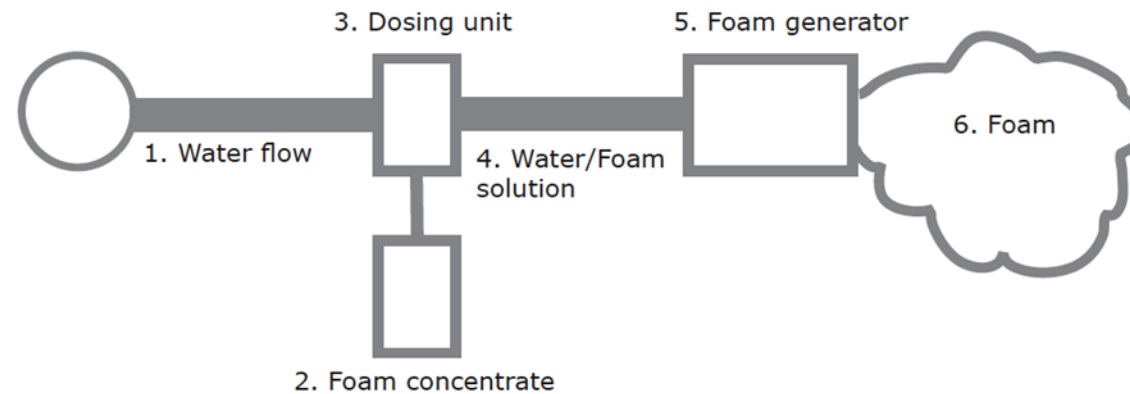
1. The basics of fire fighting with foam
2. The function of foam
3. Foam proportioning and foam generation
4. The basic working philosophy of FIREMIKS[®] system
5. The operating principles of FIREMIKS[®] system



THE BASICS OF FIRE FIGHTING WITH FOAM

To mechanically produce foam for the purpose of fire-fighting you will need the following:

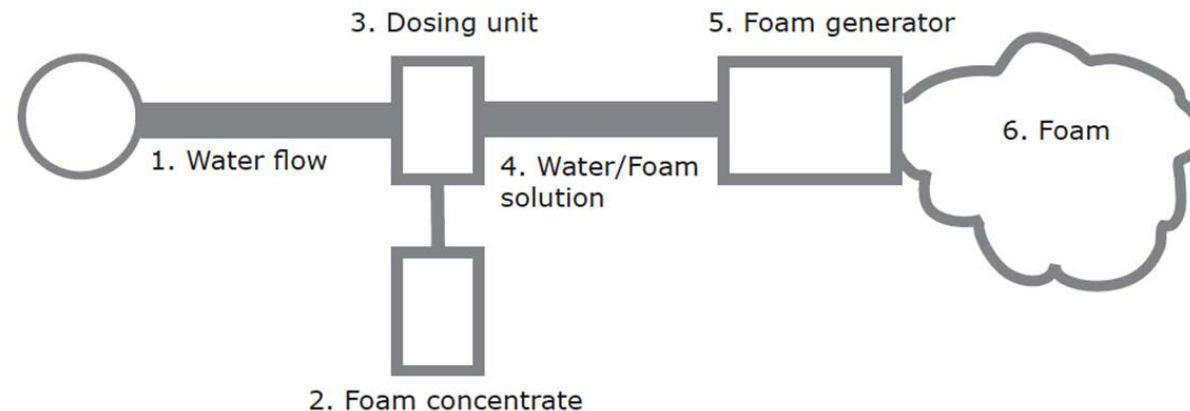
1. Water flow.
2. Foam concentrate.
3. Proportioning (dosing) unit, to mix the Foam concentrate with water into a:
4. Water/Foam solution.
5. Foam generator, to add air into the Water/Foam solution to produce:
6. Finished foam.



THE FUNCTION OF FOAM

Foam extinguishes and/or prevents fire mainly by the following methods:

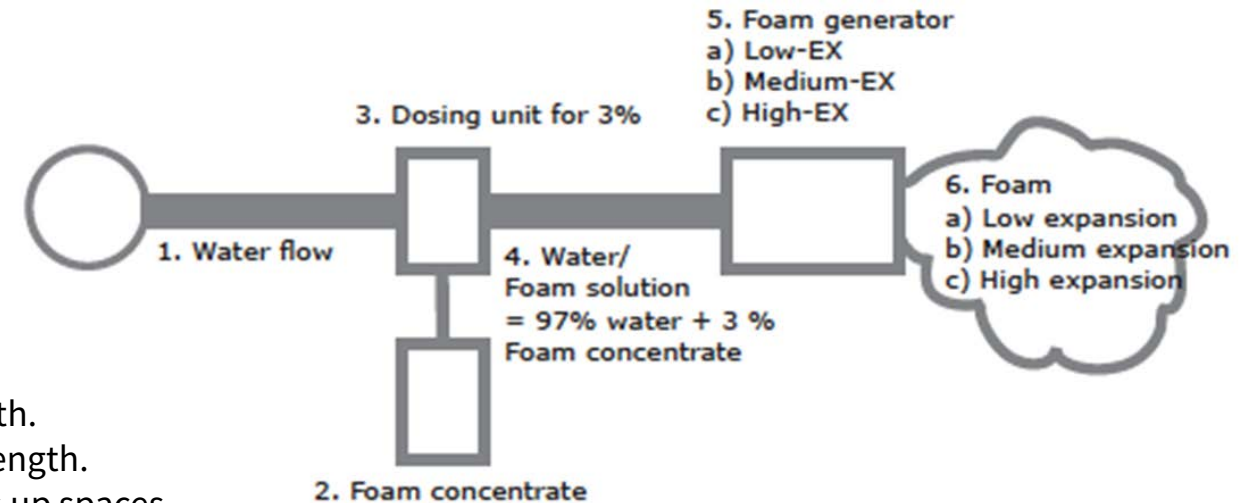
1. Separates the flames from the fuel surface.
2. Retards vapor release from the fuel surface.
3. Cools the fuel surface and any surrounding metal surfaces.
4. Excludes oxygen from the flammable vapours.



FOAM PROPORTIONING AND FOAM GENERATION

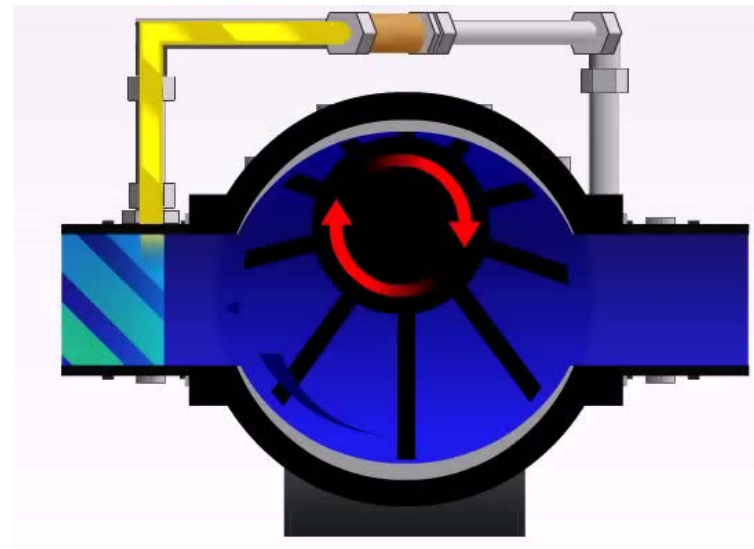
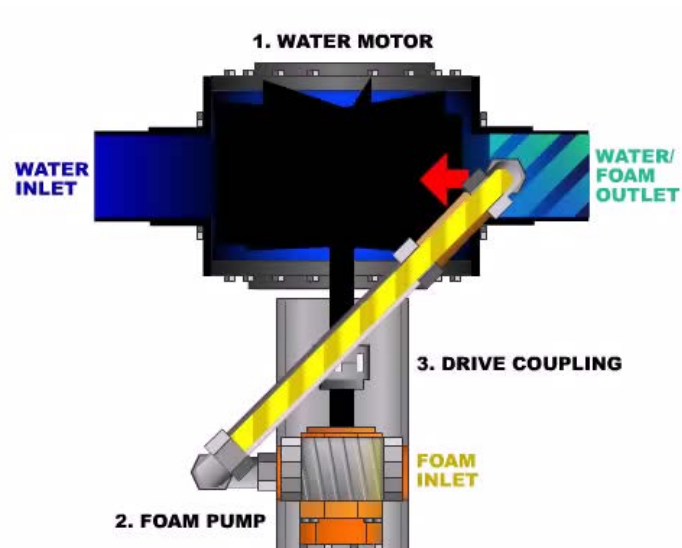
Proportioning and foam generation is made according to the following (3% example):

1. Water flow
2. Foam concentrate
3. Dosing unit for 3% to mix the Foam concentrate with water into a:
 1. Water/Foam solution, = 97% Water + 3% Foam concentrate.
 1. Foam generator to add air in three different ratios:
 1. Finished foam:
 - a) Low expansion, wet, long throw length.
 - b) Medium expansion, medium throw length.
 - c) High expansion, no throw length, fills up spaces.



THE BASIC WORKING PHILOSOPHY OF THE FIREMIKS-SYSTEM

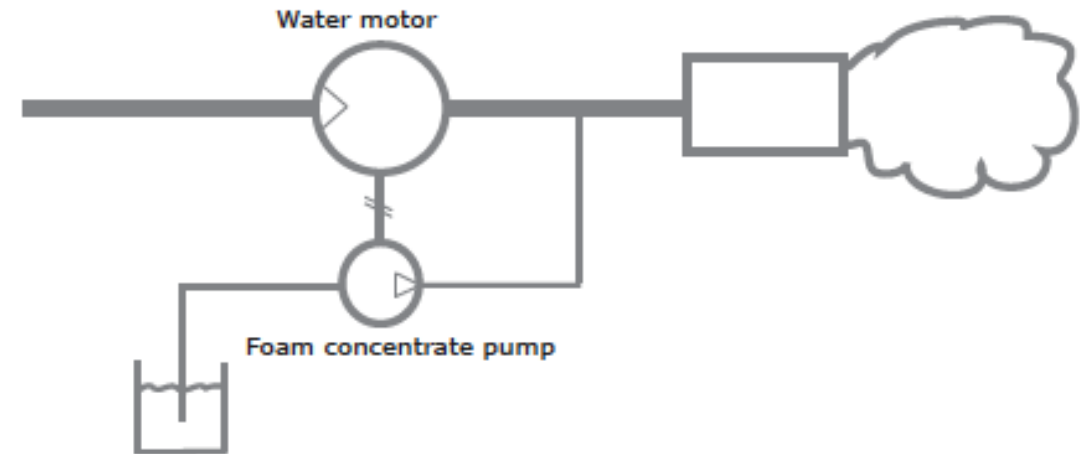
1. A mechanical system driven only by the existing water flow - No external energy is required.
2. Proportioning should be made automatic, i.e. the system should adjust itself for changes in flow and pressure, without any calibration needed.



THE USER-FRIENDLY DOSING SYSTEM

MAIN ADVANTAGES WITH FIREMIKS

1. FIREMIKS hydraulic water motor is driven by the main water flow, thus generating a circular rotor motion.
2. Both units – water motor and foam pump - are of displacement (volumetric) type and linked mechanically with the direct drive.
3. The foam concentrate pump will always follow the speed of the water motor through the direct drive coupling.
4. The ratio between the displacements of the foam concentrate pump vs water motor will determine the nominal dosing rate, f.ex. 3%
5. The above gives a practically constant dosing rate, regardless of changes in flow and pressure (within the min. and max. limits).



THE USER-FRIENDLY DOSING SYSTEM

A FAMILY COMPANY FOR THREE GENERATIONS

Originally founded in 1979 – as a Swedish family based business –
Firemiks AB is operated by the third generation.

Throughout the years, our main focus has been to develop, manufacture and distribute our product line of water motor driven proportioning systems worldwide.

With more than 30 years of experience in the international firefighting market
– **Firemiks AB** is a company to count on!





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