



# Proportioning Systems

- Complete range of systems for any application
- All SKUM proprietary designs
- I End-to-end solutions to ensure complete integration

# **Overview**

A proportioning system is the part of the foam system that ensures the correct mix ratio of foam concentrate to water. To ensure that the foam performs to the best of its ability on the hazard for which it is intended, it is essential that the proportioning ratio is correct. Proportioning systems can include pumps, bladder tanks or atmospheric tanks for foam concentrate storage as well as the proportioners and foam inductors themselves.

# Performance

Inline inductors, around the pump inductors and self inducing nozzles all use a venturi effect to proportion the correct ratio of foam concentrate into the water flow.

Bladder tanks and balanced pressure proportioners use balanced pressure proportioning wherein the pressure of the foam concentrate is automatically balanced with that at the water supply. Once the pressure is balanced, accurate proportioning can be gained over a wide flow range.

Accuracy is the best measure of performance of a proportioning system ensuring that the ratio delivered is the same as that required for that foam concentrate.

## **Applications**

All foam systems require some kind of proportioning system to ensure the foam concentrate ratio to water is correct. The correct system is fully dependent on the type of application required and hazards that are being protected against. The only exception being when a ready to use premix is used in a system.



#### Advantages

**Inline inductors:-** the least expensive proportioner method, easy to install and maintain, any foam storage tank can be used with the device in an atmospheric type and can be refilled during operation, no external power supplies.

**Self-inducing nozzles:-** easy to install, use and maintain, foam storage can be refilled during operation.

**Around-the-pump inductor:**- can deal with variable solution flow by adjustment of the pick-up rate into the proportioner, no pressure loss caused by proportioning system, easy to use and maintain, can be refilled during operation, no additional external power sources required.

**Bladder Tanks:-** few moving parts, low pressure drop, variable flow capability, can be used with all types of foam concentrates, no external power sources required.

**Balanced Pressure Proportioners:-** can handle various flows and pressure maintaining nominal proportioning, easy installation, foam tank can be refilled during operation, low pressure drop across the proportioner.

### **Approvals**

SKUM is wholly committed to approving our foam hardware to the latest industry standards. SKUM foam proportioning hardware are tested and approved to the standards most appropriate to that industry, application and risk.

#### Varieties

SKUM offers a complete range of proportioning systems and types to meet most common applications. SKUM proprietary designed proportioners are manufactured at our facility in the UK and tailored to fit the needs of the customer's application and system requirements.

## **SKUM Foam solutions**

As a brand 'SKUM' is synonymous with fire-fighting foam:- SKUM literally means Foam in Swedish.

From its foundation in Sweden in the 1930's SKUM has become the global standard of foam fire suppression in high-risk, high-stake industries.

SKUM offers a complete range of foam agent concentrates designed with performance, efficiency and environmental impact in mind. Products are tested at internationally recognised facilities and approved to the standards most appropriate to that industry, usage and risk.

As a manufacturer of both foam hardware and foam agents, SKUM is able to supply single component needs as well as complete end-to-end systems. An unrivalled history of fire suppression experience and a dedicated Foam Technical Service Team mean that SKUM is happy to address and confident to meet any customer fire-fighting foam requirement.

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