

FYREXTRA 3P FOAM SYSTEM



Knowsley SK Limited - Designer and Manufacturer of Fire Fighting Equipment & Systems

We know Fire. We know safety. We know you.





Established in 1896, Knowsley SK Ltd has an enviable reputation for manufacturing quality fire fighting equipment and systems for high-value asset protection that can be relied upon whenever danger strikes.

01 Product Overview

- No external power source required
- Continuous uninterrupted foam production
- Storage tank can be refilled whilst the skid is in operation
- Packaged skid unit for ease of installation
- Accurately proportions over a wide range of flow rates
- Suitable for use with all commercially available foam concentrates
- Suitable for 1% 3% or 6% admixing systems
- Low maintenance
- Low pressure drop

Foam storage and proportioning is at the heart of all foam fire fighting systems. The Knowsley SK "Fyrextra 3P" foam skid was developed specifically for installations where external power is unavailable or undesirable, and has been successfully deployed the world over.

The 3P - 'Pelton - Pump - and Proportioner' are carefully matched to ensure accurate and reliable foam proportioning over a wide range of flow rates. The whole system is skid mounted for ease of installation and is completely bespoke. Each unit is designed and manufactured to meet a particular fire scenario assuring the end user of optimum fire fighting capability.



Figure 1. Typical 3P foam skid with actuated control valve

02 Dimensions

Each system is designed to meet specific client requirements and hence configuration and dimensions will vary.

Foam storage tank capacities range from 5 cu M to 100 Cu M as a 'standard' with flow and pressure in the range 125 LPM to 16100 LPM at 16 Bar

03 Product Materials

All common and high-grade materials are utilised, as the project specification or geographical location demands. Our fabricators are fully coded and certified to the highest standards. Typical materials include:

Foam Concentrate storage Tanks: HDPE / SS304/SS316/GRP

Pelton Wheel Pump: Gunmetal, Phosphor Bronze, Stainless Steel

Proportioner: Bronze / Stainless Steel

Foam Concentrate pipework: SS316L

Foam Solution pipework: To Suit client requirements / site conditions.



Knowsley SK Limited, Centrepoint, Marshall Stevens Way, Trafford Park, Manchester M17 1AE
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Registered in England No. 1789152 VAT No:383475131



Our Century of experience, continuous product development and world-wide support network provides the confidence for clients to select Knowsley SK as their first choice for asset protection whatever, whenever and wherever the risk.



04 Product Details

The Knowsley SK Fyrextra 3P is a bespoke foam fire fighting system designed to store, pump and proportion foam solution accurately and reliably. The system fundamentally comprises a foam concentrate storage tank, a pelton wheel driven foam concentrate pump, inline balanced pressure foam proportioner, interconnecting pipework and valves and instrumentation. Firewater is used to drive the pelton wheel pump which draws foam concentrate from the storage tank. This is then fed into the firewater main via an inline balanced pressure proportioner which ensures correct mixing ratio irrespective of fluctuations of firemain flow and pressure.

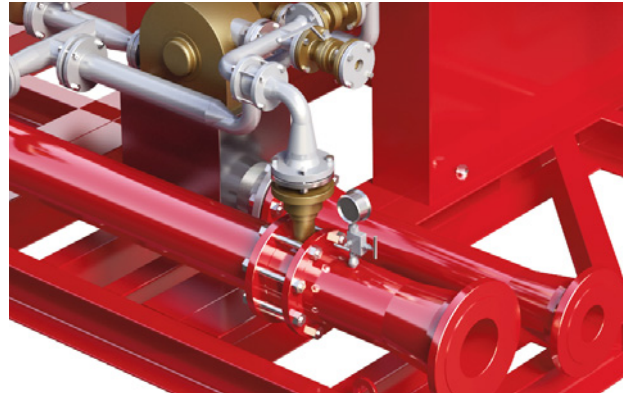


Figure 2. Pelton driven pump and balanced pressure foam proportioner

05 Performance Data

Capacities and flow rates can be tailored to meet most conceivable scenarios:

Storage Tank Capacities: Standard range - 5 Cu M to 100 Cu M

Pelton Wheel Pump Standard Capacities: 2 Cu M /Hr to 24 cu m / Hr

Foam Proportioner: 125 LPM to 16100 LPM

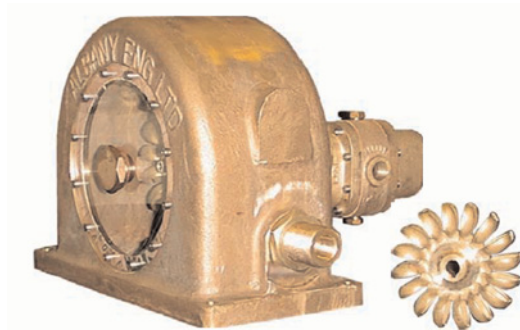


Figure 3. Typical Pelton Pump

06 Spares Information

Please contact our dedicated spares department for standard spares kit listed below, and any other requirements: spares@knowsleysk.co.uk

Foam proportioner:

Balance tube assembly

Membrane and modulating tube

Foam Concentrate pump:

Gaskets

Seals

Bushes

Bearings



Figure 4. Typical foam proportioner



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