



# **Tank Protection**

- I Specific protection for all tank types
- Fixed foam generators and pourers
- Subsurface and semi-subsurface injection units
- Wide range of bund protection options
- Complete range of complementing foam agents

#### **Overview**

As the value of crude oil, refined products and petrochemicals has risen it has become increasingly important to protect flammable liquid storage tanks efficiently to ensure that, in any fire incident, as much of the contents can be saved as possible along with the tank structure itself. Tyco companies manufacture a range of foam products and services designed to meet these needs and protect against this risk. These include specific tank protecting fixed foam generators and subsurface/semi-subsurface injection products as well as more generic monitors and handlines for surrounding site protection. In addition to that Tyco can provide a 24/7 emergency response service globally to take action when disaster strikes.

### **Performance**

Fixed foam generators apply foam onto the fuel surface to create a foam blanket and suppress the vapours. The positioning is such to minimise the possibility of damage to the equipment from an explosion or fire.

Subsurface injection products inject foam into the bottom of a fuel tank and allow it to float to the surface to spread and extinguish the fire. This method became feasible with the development of foams resistant to fuel contamination.

Where the fuel does not allow subsurface injection, due to contamination risk, Semi-subsurface injection products are used. The foam is separated from the fuel by a flexible hose. Foam is pumped through the hose so that it rises to the fuel surface and extinguishes the fire.

## **Applications**

Foam products are available to address risks in the majority of flammable liquid storage tanks and areas.

These include tanks with cone or fixed roof tanks, tanks with open top floating roofs, covered floating roof tanks and horizontal tanks. The correct product should be chosen depending on the specific tank type and the fuel that is being protected therein

Foam products are also available to protect the surrounding bund areas, pump pits and the perimeter site in general around the tanks.



# TYPICAL TANK PROTECTION APPLICATIONS

- I Hydrocarbons bulk storage
- I Petrochemical processing facilities
- Polar solvent liquid storage
- Aviation fuel stores

# **Advantages**

Versatility:- can be used with all fuels, providing the correct system design and foam concentrate are used.

Economy:- considerably lower foam losses than with foam monitors, also pipework tends to be of smaller bore than some other systems whilst associated valving is often less complicated. Consequently foam generators can often be the cheapest type of installation.

### **Approvals**

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

### **Varieties**

SKUM offers a complete range of tank protection systems and types to meet most common applications. SKUM proprietary designed OFG foam pourers are manufactured at our facility in the UK and tailored to fit the needs of the customers 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.

