

# **PYROBAN<sup>®</sup>**

# **system6000<sup>™</sup>**

Preventing explosions, protecting people



The new generation of explosion prevention conversions for zone 2 (ATEX)

Combining science and software, **system6000** offers workers and sites the latest safety when used in the chemical, pharmaceutical, paints, coatings, defence, food, flavours, cosmetics, manufacturing and logistics sectors. Now available with either infrared or pellistor based gas/vapour sensing to suit all Zone 2 applications.

**ZONE 2  
SAFETY**

Pyroban is a specialist engineering company that converts standard forklift trucks and similar mobile equipment so that they cannot cause a fire or explosion when used within industries that process, store and distribute flammable materials.

# system6000™

system6000 is a zone 2 solution for all types of diesel & electric equipment combining gas detection with various explosion protection methods. This includes restricted breathing enclosures, surface temperature limitation to ensure the engine, motors, brakes, electrics and other components remain below the auto-ignition temperatures of flammable materials. Stainless steel cladding of the forks then completes the conversion.

The system provides audible and visual warning when it detects a gas or vapour (at 10% Lower Explosive Limit (LEL) propane in air) and at 25% LEL, it shuts down the protected equipment automatically, eliminating the risk of an explosion.

The system auto-calibrates and self-tests the gas head at start up to ensure it is working correctly.

ATEX 94/9/EC compliant in line with EN 1755:2000+A1:2009 and offered with IECEx certification to IEC 60079 standards.

Conversion, testing and certification takes place at Pyroban factories. Passive solutions for zone 2 are also available.



system6000 Control Module



Motors, engine and other components are risk assessed and modified as required



Fully type tested in Pyroban's facility - according to EN1755 requirements

Equipment operators know they are safe due to auto calibration & a forced gas test to check system integrity at start-up, as required under European Standard EN1755.

It is critical that the gas sensing head is selected according to the materials being handled. The wrong choice will mean the equipment may be blind to the presence of a flammable atmosphere, putting the operator and surrounding environment at risk.

Nigel Tester, Principle Project Engineer, Pyroban Group Ltd

## INFRARED AND PELLISTOR SENSING OPTIONS

Choose either infrared or pellistor gas sensing to suit the application. Both options have their advantages and limitations and should be specified according to the risk and application.

### Pellistor option

Our traditional pellistor system detects more than 95% of hydrocarbons and is therefore the most versatile system for users in the chemicals and paints/coating industries and when handling a comprehensive range of products. However, pellistor based systems may not be suitable if silicones are present in the environment.

### Infrared option

Infrared technology is particularly suited to operations with specific hazards. For example, it suits distilleries, aerosol operations and the oil and gas sector. The Pyroban Infrared system offers faster start-up and lower lifetime costs.



Choose either infrared (left) or pellistor gas sensing heads according to the application.



Safe & Secure - Drivers rely on system6000

# LIFETIME SAFETY

Explosion proof equipment will be delivered to site safe, however it should be maintained safely throughout its life. Follow these three steps:

## 1) ENSURE MAINTENANCE BY TRAINED PERSONNEL

Pyroban provides full training courses and certification for customer engineers maintaining the equipment.

End users should ensure that service engineers maintaining the equipment have a current Pyroban safety certificate.

## 2) FOLLOW MAINTENANCE SCHEDULES / GENUINE PARTS

Ensure the equipment is serviced according to Pyroban maintenance schedules using Pyroban approved parts.

## 3) EX-ASA - ANNUAL SAFETY AUDITS

Ensure equipment has an annual EX-ASA Audit, in accordance with EN 60079-17:2007.



Pyroban provides a full range of explosion prevention solutions. Dust solutions are also available.

## About Pyroban

The Pyroban Group provides explosion proof safety and environmental solutions for industry worldwide. Founded in 1972, Pyroban now operates manufacturing facilities in Europe and Asia with regional sales and service centres throughout the world. With continued investment in research, development and customer services, Pyroban remains a global leader in its field.

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