

PYROBAN®

**CALOR:
EXCEEDING
NATIONAL
SAFETY
REQUIREMENTS**

Plymouth, UK

www.pyroban.com



CALOR WORKS WITH PYROBAN® TO EXCEED NATIONAL SAFETY REQUIREMENTS

FOR CALOR, THE UK 'S LEADING SUPPLIER OF LPG (LIQUEFIED PETROLEUM GAS), SAFELY HANDLING EXTREMELY FLAMMABLE GAS IS AT THE CORE OF THE ENTIRE BUSINESS. TO MAINTAIN A CONSISTENTLY HIGH LEVEL OF SAFETY AND REDUCE COSTS ACROSS A NETWORK OF OVER 50 SITES, SAFETY SPECIALIST PYROBAN HAS HELPED CALOR STANDARDISE SAFETY NATIONWIDE TO PREVENT ITS FORKLIFT TRUCKS BEING A POTENTIAL SOURCE OF IGNITION.

Over 4 million UK homes and businesses rely on the clean burning fuel of Calor Gas for a variety of applications from farming, catering, heating and materials handling through to barbecuing and camping. The company supplies its customers nationwide through a network of distribution centres and retail outlets, exchanging old for new cylinders or managing their bulk tank requirements.

The familiar Calor Gas cylinders or bulk tanks contain LPG in the form of Propane or Butane which are extremely flammable gases. When handled correctly, the tanks or cylinders pose no danger or threat of explosion, however, the risk of fire or explosion cannot be ruled out in Calor's cylinder filling operations, or where the gas and cylinders are held in significantly high concentrations.

Calor Gas works closely with the HSE to ensure that all of its operations are run with safety as the number one priority especially in areas where the risk of fire or explosion exists. Under DSEAR*, all potentially explosive atmospheres in any company must be assessed and classified using a zoning** system, to determine the level of risk and the level of safety protection required, if any.

Calor's 9 gas storage and distribution centres are classified as Zone 2 with pockets of Zone 1, due to the volume of gas stored and the filling activity that occurs on a daily basis. In addition, 7 of the sites are classified as Top Tier under the 1999 COMAH*** regulations, like many other locations in the Petrochemical and Natural Gas Industries.

At these sites, forklift trucks are essential for the movement of pallets of gas cylinders of varying size and also bulk tanks in zone 2 areas. Without adequate protection, the forklift could be the source of an ignition from sparks, hot surfaces, ingestion of

gas into the engine causing air inlet flashback and many others. To ensure high levels of safety, Calor has exceeded the minimum requirement for Zone 2 and implemented an internal engineering standard for all forklift trucks used at their sites known as FLT2a.

Rosemary Scott, a Buyer for Calor Gas at the company's headquarters in Warwick who is responsible for the purchase of all Calor's forklift trucks nationwide explains "FLT2a is a Calor specification developed by our safety and engineering teams together with Pyroban. It means that every new forklift truck will include Pyroban's system 5000 explosion protection solution which incorporates gas detection to alert the operator of a potential gas leak. Our suppliers must also demonstrate that every service engineer working on our site is trained on the Pyroban systems and maintains the equipment according to Pyroban's recommendations."

With System 5000, Pyroban converts a standard forklift truck so that it is ATEX**** compliant using explosion protection methods which include reducing the surface temperature of the engine and exhaust gas temperature, assessing and modifying arcing and sparking components and preventing a flame reaching the atmosphere through the inlet system or overspeed if the engine were to ingest a vapour.

Previously Calor had used several different methods of safety on its forklift trucks resulting in a mixture of approaches across the country.

"Some sites had trucks built for zone 1 areas, which was not entirely necessary and more costly. Pyroban helped us to readdress our processes so that we could standardise safety and reduce the overall fleet cost by standardising it for Zone 2 operation."

Calor's Plymouth site has just received 2 new Toyota

“Pyroban is an essential part of site safety to ensure that if there is a release of gas, the operators are made aware and the forklift truck cannot be an ignition source.”

Andrew Willmott, Plant Manager at Calor's facility in Plymouth, UK.



Tonero trucks converted by Pyroban to Calor's FLT2a specification. The trucks were purchased through Calor's Warwick Headquarters and replaced existing Pyroban 2G (zone 1) equipment. A 2.5Tonne capacity truck is used to feed the conveyor of the filling operation where operatives segregate, fill and leak test cylinder sizes of 3.9kg up to 47kg. The truck is then used to remove full pallets of refilled cylinders from the filling area to the storage areas. In a different area of the facility, a 3.5Tonne capacity truck is fitted with a clamp to safely handle empty propane bulk tanks.

Andrew Willmott, Plant Manager at Calor's facility in Plymouth explains “We store and process large volumes of LPG at the Plymouth site and turn round an average of 10 cylinder trailers per day which equates to approximately 40 Tonnes of product. Pyroban is an essential part of site safety to ensure that if there is a release of gas, the operators are made aware and the forklift truck cannot be an ignition source.”

At the Calor retail centres which are classified as non-hazardous areas and do not legally require any special explosion prevention measures, Calor has implemented a new standard known as FLT3a. Every new truck brought into the centres will meet with FLT3a specifications as a cautionary line of defence in the unlikely event that there is a release of gas. The FLT3a includes a number of Pyroban features such as Gascheka, which is a gas detection and shutdown system, cladded forks to prevent mechanical sparks and a seat trigger which deactivates the engine after a given period if the operator leaves his/her seat.

Rosemary Scott continues “A major part of Calor's business is the supply of LPG for powering forklift trucks. FLT3a specification with Pyroban's Gascheka allows us to safely use LPG trucks on our own sites.

A release of gas is not expected, however if it does occur, the LPG forklift will be shutdown automatically.”

An essential element to Calor's decision making process was the responsive level of service support that Pyroban provides directly in support of the dealer engineers through its national network of CompEx accredited technicians.

Calor has been working with Pyroban for over 5 years and has developed a strong working relationship. As Pyroban's Customer Services Manager Rob Vesty explains “Calor has taken the right approach in standardising its purchasing criteria as their storage facilities, distribution sites and retail operations are standard across the country. With these new specifications, we expect to reduce Calor's total materials handling fleet costs and enhance overall safety for every Calor site that uses a forklift truck.”

ABOUT PYROBAN

Pyroban provide explosion protection solutions for materials handling equipment and diesel engines.

For over 40 years we have been at the forefront of the industry developing products to protect your people, your site and equipment when operating in hazardous & added safety areas.



**For more information on
Pyroban's explosion protection
solutions contact us or visit our
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