

NEW "ATEX" LIFT TRUCKS FOR WITTON CHEMICALS

MANUFACTURER WITTON CHEMICALS HAS SELECTED PYROBAN TO PROVIDE EXPLOSION PROTECTION ON ITS LATEST FORKLIFT TRUCKS OPERATING IN ZONE 2 HAZARDOUS AREAS.

"As a contract chemical manufacturer for blue chip companies, Witton provides a flexible and responsive service," says Steve Owen, Operations Manager for Witton Chemicals. "Our operations are highly productive with a quick turnaround, supporting a wide range of international customers including some of the largest adhesive, electronic, paint, sealant, petrochemical and pharmaceutical companies worldwide."

"The diversity of our work means that we handle many different raw materials, many of which are highly flammable," says Steve. "Operating as a COMAH* site, safety is our number one priority, and ATEX** and DSEAR*** regulations are central to our operation."

At the plant in Suffolk, UK, raw materials are mainly handled in liquid form, stored in sealed drums, IBCs and in bulk, with chemical process operators using forklift trucks to transport materials in the production areas. Over 40 employees work on a 24-hour shift basis at the site and the company operates a 4-day week, a business strategy that has been proven to be more efficient, allowing for growing capacity should its customers really need it.

"All of our production runs are customer specific and can be up to a thousand tonnes, so reliability of the forklift trucks is critical," insists Steve. "The reactors must be fed at exactly the right time with the right materials, otherwise whole batches of product can be ruined."

The production areas where the forklifts operate at Witton Chemicals have been classified as

Zone 2 hazardous areas which require specially adapted, ATEX 2014/34/EU compliant forklift trucks. Standard forklifts would otherwise be a source of an ignition in the event of a flammable gas or vapour release. Excess heat from the engine, motors, brakes and other components, a spark from unprotected electrical equipment or even a spark from static build up on the truck could create enough energy to cause an explosion.

To meet Witton's handling needs, two new Doosan D25S-5 diesel forklifts were converted by explosion protection safety company Pyroban for Zone 2 (category 3G) operation. Supplied through Windsor Materials Handling, the trucks feature Pyroban's system6000 which incorporates gas detection to continuously monitor the direct environment around each truck. In the event of a vapour release, it will alert the driver and automatically shut the trucks down where necessary, eliminating the risk of an explosion.

The Pyroban conversions also featured restricted breathing enclosures, stainless steel cladding of forks and surface temperature cooling to ensure the engine, motors, brakes, electrics and other components remain below the auto-ignition temperatures of flammable materials.

"Since we started using forklift trucks, we've worked with Pyroban," says Steve, explaining that Witton Chemicals has been at the site since the 1970s. "The current arrangement is the best we have ever had. It seems like the Pyroban system is totally integrated into the forklift truck and keeping us all safe each day."

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Steve Owen, Operations Manager,
Witton Chemicals

"The benefit of the Doosan trucks on a site like this is the simplicity of design, which works very well with the Pyroban system and conversion process," says Josh Newton, Sales Manager, from Windsor Materials Handling. "They are solid and reliable trucks, which has been proven over the last year. To cover every eventuality in this time sensitive production line, we also have a backup Zone 2 converted truck available to Witton."

Steve Owen adds "The service support has been excellent, both from Windsor and directly from Pyroban. We had some teething problems as expected, but they were dealt with very quickly and pro-actively by working in unison."

Inevitable wear and tear on forklift trucks operating in potentially explosive atmospheres can pose a safety risk. To counteract this, Windsor Materials Handling has established a system of preventative maintenance to ensure the equipment continues to be safe, and trucks are regularly serviced by an engineer trained to work on the Pyroban system.

In line with EN60079-17 and ATEX 1999/92/ EC Witton Chemicals also instructed Pyroban to perform its annual safety audit (Ex-ASA) to ensure that the integrity and safety of the trucks were not compromised during the first year.



"SINCE WE STARTED
USING FORKLIFT
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WITH PYROBAN..."

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 website.

