

## H.W. COATES GETS ACTIVE WITH ATEX FORKLIFTS IN SOLVENT-BASED PAINT STORE

CHEMICAL WAREHOUSE AND TRANSPORTATION BUSINESS H.W.
COATES IS OPERATING A FLEET OF LIFT TRUCKS FEATURING PYROBAN'S
ACTIVE EXPLOSION PROTECTION SYSTEMS IN ITS NEW HAZARDOUS
CHEMICAL WAREHOUSE IN CHESHIRE, UK.

"Our new state-of-the-art, temperature-controlled warehouse was purpose-built for a long-standing customer to store solvent-based paint," says Matthew Coates, Director and Site Manager at the Middlewich facility. "In this warehouse alone, we have 5,500 pallet spaces for flammable products, with a 27,000 pallet capacity on site. Our Middlewich site is an Upper Tier COMAH\* site and we have extremely strict safety processes and equipment."

The warehouse is classified as a Zone 2 hazardous area under DSEAR\*\* (ATEX) because a flammable atmosphere is not expected unless there is an accidental spillage or release.

"Forklift trucks are a crucial part of our paint handling operation, but we needed to make sure they could not be the source of an ignition and had full ATEX\*\*\* compliance," Matthew says. "We selected Pyroban's system6000 explosion protection product to provide our team with the very best levels of safety and make sure they are alerted to any spillage or accidental release of solvent vapours."

Two Linde V08 low-lift order pickers are in use alongside two Linde N20 low-lift order pickers featuring a vacuum arm that supports the regular picking of 20L paint tubs which can weigh up to 40 kg. With top shelves of 9m high in the hazardous chemical storage warehouse, three ATEX 3G Aisle-Master articulated lift trucks are also used.

"Flammable material is contained within tubs, tins and pales at H.W. Coates, so a flammable atmosphere is not expected, but it could happen," says Rob Vesty, Sales Manager for Pyroban. "In these Zone 2 hazardous areas it is important that operators are not blind to the risks and are made aware when a potentially explosive atmosphere is present so that the cause of the flammable atmosphere can be investigated and rectified,"

Active gas detection systems are used on the lift trucks which play a vital role in significantly improving onsite safety. If any solvent vapour is detected at 10% LEL\*\*\*\* (propane in air), operators get a visual and audible warning prompting them to drive away from the area and raise an alert for investigation and clean up. If the vapour levels rise to 25% LEL the trucks will automatically be brought to a controlled stop preventing any potential explosions.

Pyroban's system6000 combines the gas detection with various explosion protection methods including the modification of arcing, sparking and hot components. Restricted breathing enclosures were used to restrict the ingress of any flammable vapour where appropriate, hot surfaces are monitored, forks were clad with a non-sparking material and more. The vacuum arm was also converted as part of the overall ATEX compliance.

"Quality, compliance and sustaining the long-term relationship between Linde, Pyroban and H.W. Coates was critical," says Dominic Lewis, Key Account Sales Manager from Linde.

"This is now a very busy site processing in excess of 500 orders per day, so the reliability of the trucks and Pyroban systems is critical."

Matthew Coates, Director and Site Manager at the Middlewich facility

"The Linde trucks were built in Germany and France and converted at Pyroban's UK factory receiving a single CE marking in time for the inauguration of the warehouse last year."

Alongside the ATEX compliant trucks, H.W. Coates also added Gascheka Zone 3 to a shrink wrap machine used in an area close to the Zone 2 warehouse. The gas detection system is designed for places where explosive atmospheres may occur, but not in such quantities that would require full ATEX compliance. On the Robopac turntable pallet wrapper, Gascheka Zone 3 provides awareness and automatically shuts the equipment down before dangerous levels of vapour form.

"This is now a very busy site processing in excess of 500 orders per day, so the reliability of the trucks and Pyroban systems is critical." says Matthew, explaining that they have had pro-active service support from Pyroban since the beginning including familiarisation training for the operators.

"In excess of 100 people work in Middlewich and we are pleased to provide the highest standards of safety and equipment for our workforce across the site," says Matthew. "Pyroban is an important part of our overall safety process and strategy."

- \* COMAH The Control of Major Accident Hazards (COMAH) Regulations.
- \*\* DSEAR Dangerous Substances and Explosive Atmospheres Regulations.
- \*\*\* ATEX The ATEX Directive 2014/34/EU covers equipment and protective systems intended for use in potentially explosive atmospheres.

\*\*\*\* LEL - Lower Explosive Limit



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## ABOUT PYROBAN

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

For almost 50 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.

