

Loading arms for Manx legs

Manx Petroleum has undertaken a complete overhaul of its road tanker loading systems. Working with Loadtec Engineered Systems Ltd, all top loading arms have now been replaced with new Emco Wheaton 'World Style' arms whilst bays have been enhanced using 3 metre wide folding stairs with 4 metre cages.



The new user friendly skid

The update will extend the gantries' life as well as meeting the obligations of last year's falls from height legislation. 2005 also saw the company's first bottom-loading skid with 3 x liquid and 1 x vapour arm built by Emco Wheaton. Engineered in conjunction with In-Control Projects, the skid utilises 3 x 4" Alma Meters with Contrec batch controller and additive injection for all three lines and also has two new liquid feed pumps.



Meets with all our expectations

Manx Petroleum's health and safety manager, Peter Quirk, said: "The system was installed and commissioned in a few days and is operating well. After introducing the new system, I am delighted to say that feedback from operators and drivers has been very positive. The new skid is extremely user friendly and has halved the loading time of its top-loading predecessor. The efficiency of design, build and commissioning of the system combined with the electrical and engineering expertise of local contractors, Gough Electrical Ltd and JW Welding, ensured the project met with all of our expectations."

Objectives

Manx was very clear about objectives - top-loading systems to allow access to tanker tops without resorting to harnesses; wide folding stairs with new arms to retain access to all manholes without risking negative drain angles into

the manholes; a stand-alone system with pumps and additive injection; throughput at 2100 litres per minute using 4" meters; and control valves to give faster truck turnaround.

Loadtec's managing director Alec Keeler said: "Manx has enjoyed the low maintenance features associated with Emco Wheaton loading arms since the late 1970s when the E0500 was the arm of choice for global markets. These new arms are stronger, easier to maintain and, relatively speaking, far cheaper than they were back then. The evolution of skid systems has seen an opportunity for loading arm manufacturers to develop



Safer top loading

value-added systems that also solve customer problems. The proliferation of bottom loading skids, especially to authorised distributors, reflects the need for customers to have a 'plug and play' solution. Skids provide minimum downtime during installation and allow the customer to pick and choose the components to customise the package to their exact needs. Yes, it did cost slightly more, but understanding the economics of stationary trucks is increasingly important."❖

Detecting vapour

Although the cause of the Buncefield explosion is still unclear, investigators working for the major incident investigation board, which is supervising the inquiry into the causes of the explosion, have reported that a metre high thick fog was caught on security cameras just before the blast, with a similar leak spotted a few weeks earlier. HSE officials have already announced a major safety drive and inspection process

for more than 1000 sites storing hazardous goods. See page 29.

Oil Depot Services Ltd in Horley, Surrey contacted FON to advise about the development of a new constant vapour sensing and control system. Owner John Webber said: "Following Buncefield, we have designed a completely new system, which gives an early warning when vapour is detected. Whilst the area is clear of vapour, a green light continuously shows but as soon as a low concentration of vapour is detected, this light changes to amber, flashing every five seconds accompanied by a recorded message saying 'vapour sensed -

investigate'. If the vapour concentration rises to a pre-set danger level, the amber light changes to a red light, which flashes every two seconds with a message to evacuate."

"Sensors need to be fitted at each loading rack, offset fill points and in the tank storage area to enable automatic shut down of all electrically operated valves on detection of vapour. The system also incorporates a 'black box', which begins to record when an amber state has been reached. We believe that this equipment, which is based on some 60 years work is a major step in safety."❖