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Hycontrol strike oil in Ireland

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Maxol Lubricants Ltd is an independent subsidiary of Maxol Ltd formed in 1990 to capitalise on the competitive gap within the Irish lubricants market. The company, which is constantly working to improve product offering and customer service, has built up a strong and loyal client base supplying over 800 different products ranging from automotive engine oils to agricultural and industrial products. The company is also proud to be the exclusive Irish distributor for products from the globally renowned Agip Petroli. Maxol Lubricants are also the sole suppliers of "Greenchem Adblue Solutions" in Ireland and have been at the forefront in developing an Adblue network throughout the island.



The application presented a number of challenges, not only relating to accuracy versus cost factors across



the different sized tanks, but also in terms of providing effective data management and the prerequisite of ensuring minimum operational disruption during installation. Prior to the installation of the Hycontrol system, the levels in the tanks were recorded from sight glass readings and data manually entered into a spread sheet. Not only was this laborious and time consuming, but also did not provide real time inventory information.

Installing the new system was a major step forward for Maxol and their Deputy General Manager Owen O'Neill admits there was some initial scepticism. The significant cross sectional area of the 12 larger rectangular tanks dictates that pinpoint level accuracy is

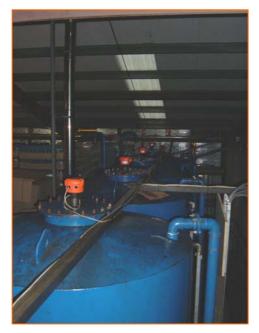
required to ensure measured volume levels

are within acceptable tolerances. To compound matters further, these tanks have many internal support braces to reinforce their structure and therefore the chosen level measurement technology had to avoid spurious signals from the braces. To meet these requirements Hycontrol recommended the use of their highly effective TDR (Time Domain Reflectometry) wave-guided radar units. This technology is ideal for such applications, offering exceptional accuracy of better than 3 mm over the unit's full measuring range of 35 metres. The units also have a very small measuring footprint, permitting, in this application, uninterrupted measurement between the braces over the full depth of the tanks. In addition, performance is not affected by any product build up around the stainless steel wave guide. Hycontrol were confident that their solution would meet the accuracy requirements and to



set managements' minds a rest, they agreed to carry out a six month trial on five large tanks.

Following on from the successful trial, equipment has now been fitted to 39 tanks varying in size from 2500 litres up to 66000 litres. The 27 smaller tanks are fitted with MicroFlex ultrasonic level transmitters. The MicroFlex is a compact self-contained, loop powered, level transmitter which offers excellent performance and features Hycontrol's proprietary PULSE false echo rejection system.



All the level transmitters are powered directly by the WebFlex units which are configured as one master and six slaves. This greatly simplifies the installation and each WebFlex unit can power up to six transmitters, whilst providing the Ethernet connectivity to Maxol's local area network. The master unit is fitted with a GPRS (General Packet Radio Service) modem and this allows highly secure, yet simple to use, access via any standard web browser.

The remote monitoring of storage vessels brings two main benefits; the first related to inventory control; the second to system set up and status monitoring. Although the WebFlex system boasts a number of important features, the main advantage is that it does not use custom software or proprietary interfaces. As a result there is no need for costly and tying monthly licence fees. Each terminal has a built-in web server which effectively means it acts as its own web site with an individual IP address. Using the

dedicated password information, the system can be accessed on any computer anywhere in the world. System configuration is carried out through a standard web browser. Here the user can set and define parameters including vessel dimensions, units of measurement and alarm presets directly on screen. The WebFlex allows SMUA (simultaneous multi-user access) with tiered levels of pre-programmed access.

Hycontrol's unique WebCall technology provides the ultimate solution with low cost connectivity via the Internet. Security is assured through a VPN Tunnel, (Virtual Private Network) routed through the Hycontrol Server, whilst the GPRS system maintains an open communication, enabling rapid data transfer at any time. Users, however, are only charged for actual data exchanged, thereby offering a very low cost basis





compared with GSM or PSTN connections where customers pay for the connection time irrespective of whether, or how much, data is exchanged.

Webflex features a powerful automated reporting and data logging capability. Any of the points being monitored can be data logged and these files downloaded manually or automatically on a scheduled time basis. Separate to the data logging facility, Webflex automatically logs data every 90 seconds to allow the user to view an on-line graphical

representation of all monitored signals for periods ranging from one hour to 32 days.

Owen O'Neill is delighted with the complete installation and as he concludes: "Hycontrol have taken the time to listen to our requirements and concerns. They have adopted a pragmatic and professional approach throughout to provide the perfect blend of modern technology, accuracy and ease of use. The system brings important benefits to our operation and ensures we continue to maintain the best delivery and support in Ireland. We can now access the data on any computer on our local network and this gives us real time



volume information on all our tanks. We have full visibility of our stocks and can ensure we order the right products at the right time to optimise stockholding and deliveries. We can also access information remotely at any location via the web and by using the tab feature of the latest version of Internet Explorer we can simultaneously view data from all the Webflex units on one screen. In future the system can be configured to securely send our suppliers real time level information pertaining to their particular products, thereby initiating an effective remote inventory management system."

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