

MONICON NEWS

Diageo Selects the IR80-CO2 Monitor for 2 Irish Breweries



IR80-CO2 Transmitter

Both the Great Northern Brewery in Dundalk and the Kilkenny brewery in Ireland, following exhaustive on site evaluation tests of the new IR80-CO₂-5%, selected the Monicon carbon dioxide gas monitor to provide a critical life safety function in both plants.

Protection against liquid ingress was essential and the IR80 complied with the harsh demands of a brewery environment.

Our distributor, ISSS Ltd, will oversee supply, installation and commissioning. The system design incorporates an RS485 networked array of gas monitors connected by a single cable to a PC network with local alarms driven by on-board volt-free relays on each IR80.

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Oxygen Monitoring and Carbon Dioxide Detection

A common misconception within gas monitoring is to install oxygen depletion monitors to protect personnel from the dangers associated with a CO₂ leakage.

If 100% Carbon dioxide were to leak and displace O₂ levels down to 20% from ambient (20.9% vol), then CO2 levels in the confined space would be 4.3% volume This would be 8.6 times over the STEL occupational exposure limits for CO₂. The STEL limit or 15 minute OEL is 1.5% volume.

*100 - $(20.00 \div 0.209) = 4.3\%$ CO₂

^{*}Dr P Walsh, Measurement of O2 and CO2 in confined spaces. Toxic Substance Bulletin. Issue 50 Jan 2003 HSE, www.hse.gov.uk

If the A1 alarm for the O₂ detection system was set at 19.0% vol, there would be no gas alarm.

If the CO₂ level was 5000ppm (0.5% vol) in the confined space, the O₂ displacement caused by 100% vol CO₂, the remaining oxygen would be 20.8% vol. It is not advised to set an O₂ gas monitor A1 alarm at 20.8% vol or else recurring false alarms would occur.

If the CO₂ level was 15,000ppm (1.5% vol) in the confined space, the remaining oxygen would be 20.5% vol. It is not advised to set an O₂ gas





Akzo Nobel

The Arnhem based plant of Akzo Nobel in The Netherlands have selected the Monicon multichannel rack control panel along with the CGS500-300P-JB poison resistant catalytic sensor to meet their stringent plant safety needs.

Our Benelux based distributor, Enmo bv, based in Belgium will oversee supply and commissioning.

Dr. Kade

A Berlin pharmaceutical company have taken delivery of the new Monicon CGS500-IR gas monitor to detect for ambient levels of ethanol in the range 0-100% LEL at their manufacturing plant in Konstanz.

Bernt GmbH, our distributor in Germany

is responsible for supply and commissioning. The new CGS500-IR has a fail-to-safe

design, is immune to poisoning effects and operates in a low oxygen environment



S500-IR Achieves SIL2

Monicon has released a Declaration of Conformity for the new S500 IR LEL gas monitor in accordance with SIL 2 of IEC

Marine Type Approval for S500

The Monicon S500 combustible gas monitor has recently been granted Marine Type Approval by RINA.

Autotech Marine Automation, our Greek distributor actively engaged with RINA to secure Type Approval and have supplied the S500 into numerous Greek shipping companies to monitor combustible gas build up in ballast tanks, manifolds and void spaces in ocean going tankers.

The S500 is also offered for use in the Autotech PLC controlled 48 channel LEL sampling system. The AUT-BGD sampling system meets the latest

Ozone Monitoring and Swimming Pools

Ozone is becoming more routinely used as a disinfectant instead of more corrosive compounds such as chlorine. It is an oxidiser and effects the respiratory system.

Ozone is a heavier than air, colourless / blueish gas with a pungent odour at 0.01ppm

The Hong Kong municipal authorities recently installed ozone generating systems to purify the water in 5 public swimming pools.

Monicon T100-O₃ gas monitors along with the 4 Channel control panel was installed in each of the plant rooms. T100 gas monitors are installed at the ozone generators and at the ozone destruct units.

In the event of a gas alarm, the volt-free relays on the 4 Channel panel will drive the ventilation system along with local alarms.

The T100-O₃ gas monitor is configured to monitor ozone in the range 0-3ppm.

The gas monitor may be positioned below the potential gas release location.

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