

FOR THE BALANCE SHEET.

ONLY ONE METHANE RECOVERY MONITORING SYSTEM MAKES BUSINESS SENSE.

Methane means money. As a greenhouse gas, it's subject to a raft of legislative protocols that have made methane recovery a significant revenue stream for mining, landfill, biogas and petrochemical industries around the world.

With all energy sources now under scrutiny because of environmental concerns, there's also a new awareness that even small quantities of waste methane can be valuable for power generation, or sale to aggregators.

The key to success, as so often in business, is good information. With Sentrum, continuous monitoring data, accurate to plus or minus 0.5%, means you can forecast accurately and reduce downtime through damage caused by gas mix fluctuations. It can also save costly delays, by ensuring you get the accreditations that you need as speedily as possible.

- Cost-effective information management
- Access to real-time data anywhere in the world
- Proven technology avoids costly downtime

FOR ACCURACY.

30% OUT CAN MAKE A BIG DIFFERENCE.

Where there's methane, there is often a range of other higher-hydrocarbons and compounds too. While the proportion in the mix may be small, their presence can seriously compromise the accuracy of conventional methane sensors – by up to 30%, or sometimes even more. So you could be wasting a valuable resource, or failing to maximise 'methane to market' revenue, by a huge factor. You could also be risking damage to equipment, as well as putting lives in danger.

Uniquely, the precision engineered Sentrum system uses calculation algorithms to determine the ratios of component gases, and arrive at a methane level that's a true and verifiable reading, rather than an estimate – to an accuracy of plus or minus 0.5%, whatever the operating conditions.

- Unique error-correction software
- Accurate to plus or minus 0.5%
- Gas velocity measurement with mass flow conversion

FOR ALL THE RIGHT REASONS.

Whatever your methane monitoring needs, we could save you time, trouble and money. At Trox, we've been supplying reliable, specialist monitoring systems for 50 years. As a preferred supplier to many of the largest names in mining, petrochemicals, utilities and heavy industry, our experience working with project developers, engineering companies, regulators, consultants and advisers has given us unrivalled knowledge.

Please get in touch, and we'll be delighted to put all that expertise at your service.



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» SENTRUM FROM TROLEX

Until now, methane recovery monitoring has been largely guesswork.

Frightening, isn't it?



TROLEX

» SENTRUM MAKES SENSE.

The Sentrum Methane Recovery Monitoring System from Trolex uses state-of-the-art software to determine exact levels of methane, and can be applied in virtually any industry, in virtually any environment.

Methane matters. It's a potent greenhouse gas, a valuable resource and – in the wrong place at the wrong time – an extremely dangerous flammable gas.

Accurate measurement is crucial. But until now, most methane recovery monitoring systems have been frighteningly inaccurate at measuring actual methane levels.

Why? Because the presence of higher-hydrocarbons and other compounds in the gas mixture can fool conventional systems into errors of up to 30% and sometimes more. At best, their readings are an approximation. At worst, they're just inaccurate.

FOR SAFETY.

WHAT COULD YOU SAVE, WITH THE WORLD'S MOST ACCURATE METHANE RECOVERY MONITORING SYSTEM?

Methane explosions still happen with shocking frequency. Often, it's because the methane detection used simply isn't accurate enough. When an explosion can occur at concentrations of 5% - 15%, or as little as 2% with coal dust in the air, even a small margin of error can have tragic consequences.

Based on proven technology, enhanced with sophisticated new implementation techniques, Sentrum is a major step forward – the world's most accurate methane recovery monitoring system by far.

With its in-built system integrity routines and leak detection feature, Sentrum can safeguard life and equipment not just in mining and landfill but in high-risk processes such as transportation, flaring and petrochemical production too. With the capability to be custom-linked to any SCADA system, an alert can be acted upon instantly – in circumstances where delay could be catastrophic.

- Can work in hostile environments
- Monitors dry or wet gases
- Can monitor system integrity to pick up early warning signs

FOR THE POWERS THAT BE.

MOST METHANE MONITORS ARE EASILY FOOLED. ENVIRONMENTAL INSPECTORS AND AUDITORS WON'T BE.

Methane is an extremely potent greenhouse gas, with a global warming potential some 21 times that of carbon dioxide. As such, it is the focus for a forest of legislation, with ever-tighter regulatory needs, policed by auditing companies and environmental inspectors. Yet many typical methane recovery monitoring systems produce readings that are little better than guesstimates, because their readings are compromised by the presence of other compounds and higher-hydrocarbons in the gas mix.

As providers of the world's only accurate, cross-industry methane recovery monitoring system, Trolex have unrivalled expertise in dealing with every aspect of the Clean Development Mechanism and other legislative frameworks.

With data integrity and verification processes built-in, the Sentrum monitoring system meets the very toughest standards, ensuring that your project stays operational and profitable even under the most intense scrutiny.

- Built-in data integrity routines
- Operational on UNFCCC approved projects
- The only Group 1, single-source system certified for use underground in the world

INTRINSICALLY SAFE

Group I (M1 mining) and Group II Intrinsic Safe



Certified intrinsically safe for use in M1 mining applications and 2G hazardous areas.

EXCEPTIONAL RELIABILITY

Constant on-line monitoring of the sampling pump efficiency status and transport pipe blockage ensures maximum system reliability.

HIGH ACCURACY

Even in the presence of non-methane hydrocarbons and other compounds Sentrum's unique software algorithms can specify the precise levels of methane in the gas mixture.

FOR THE RECORD.

SENTRUM METHANE RECOVERY MONITORING SYSTEM: THE ADVANCED TECHNICAL BENEFITS.

Highly accurate, even in the presence of non-methane hydrocarbons and other compounds.

NMHCs can falsify the readings of standard infrared systems. Only Sentrum has correction routines that accurately reflect the actual methane levels.

Real-time monitoring.

With Sentrum, continuous data is produced, and can be used in whatever form you need it – live display, periodic logging, or linked via SCADA to a central monitoring station.

Highly reliable.

Sentrum is based on proven technology, but implemented with sophisticated new techniques to achieve high levels of accuracy. Self-checking routines protect system integrity at all times.

Certified and proven.

Sentrum is certified intrinsically safe for use in hazardous areas both above and below ground, and has been proven reliable in the most arduous conditions.

Worldwide support.

With our network of subsidiaries, service centres and agents, Trolex can handle every aspect of installation, calibration and on-going support, anywhere in the world.

