

The main title is presented in two stacked blue rectangular boxes. The top box contains the words "Mobile monitoring for" in white, serif font. The bottom box contains the words "all drilling rig operations" in the same white, serif font. The background of the text boxes is a solid blue color. The text is centered horizontally across the width of the image.

Mobile monitoring for all drilling rig operations

Time is money – especially when it comes to onshore oilfields. This is why a mobile gas warning system, that can be quickly and easily deployed for all new drill sites can be an attractive and cost-effective alternative to stationary gas warning systems.

Task: To find an efficient solution for short-term deployments

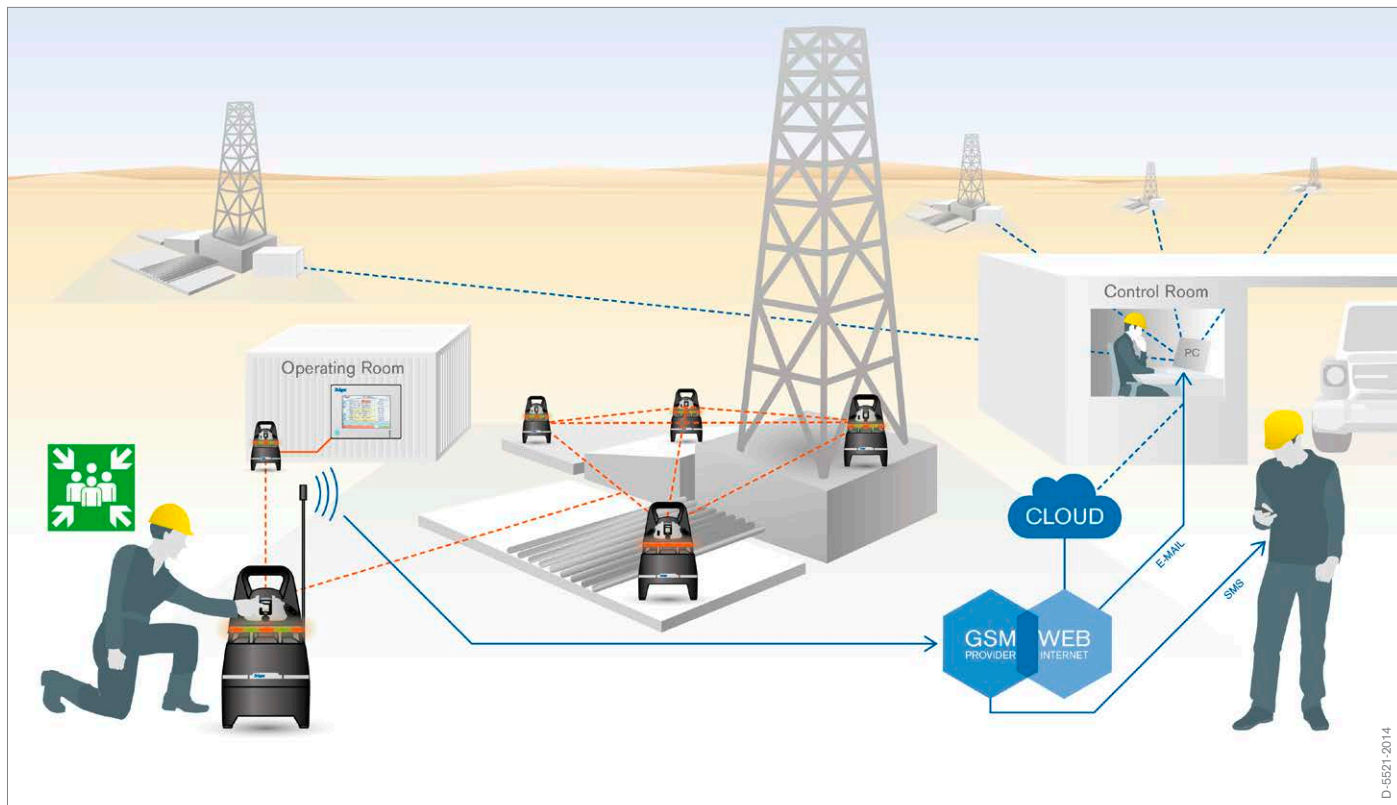
Aside from dangerously explosive gasses, all drill sites in areas with sour gas must be continually monitored for hydrogen sulphide and the corresponding sulphur dioxide levels in the air and all around the site where H₂S and SO₂ could possibly occur.

“When the value of an active rig can be 10.000 \$/hr, it’s every drilling company’s goal to maximize uptime.”

John Anderson, Dräger Safety Inc.

In order to ensure protection, gas detectors are placed at certain points around the drilling rig, as well as the Control Room and working stations.

If stationary gas measuring technology is used, each detector head must be installed and connected by cable to the central master display before any work can begin on the drilling rig. This means that when more gasses need to be detected, the time, material and manpower required for the setup is not always in proportion to the short time frame for the job.



Simply set up into position, activate and the drilling work can begin. Up to 15 X-zones can be arranged in a group. They make sure that the operations are safe and secured according to API standards. Easy and free from the hassles associated with cables.

Performance & perfect control also without the cables

As reliably, but with considerably less effort for installation the control for mobile area monitoring can be ensured with the Dräger X-zone. The units are simply placed in the desired location and everywhere, where dangerous gasses can occur, as well as those places required by the location. What's more, the Dräger X-zone not only offers a convenient mobile solution, but also meets the standards of the API (Recommended Practice)

The units communicate without the use of cables and automatically connect to one another. Changes of position and expansion are done quickly and easily. Via a Modbus interface, the X-zone can also be connected to the existing stationary monitoring systems.

Each Dräger X-zone displays its current measurements, as well as the highest measurement of its connected group. If, for example, an additional unit is positioned in an area where people are supposed to gather in case of emergency, then the exact gas concentration measurements in the affected area can be read and thus determined to be safe or unsafe at the moment. Moreover, the reading can show if a false alarm occurred and if the zone is ready to be worked in again. Additionally, the unit can display where the highest gas reading occurred.

At the same time, all measurements are sent wirelessly to the master display and (when using the Dräger X-zone com) per SMS to the smartphone of the safety supervisor. In this way, he is contacted and informed even when he is outside the danger area.



From there, he can not only get the current measurements and highest concentration readings, but also see the exact spot on the drilling rig where the alarm was sounded. The safety supervisor can also react from a remote location as the alarm can be operated from a smartphone. The supervisor can trigger an evacuation alarm to the X-zone group. Not just for dangerous gas concentration but also where other hazards have been identified.

Added value: A real game-changer

Thanks to its quick, flexible and cost-effective installation, the mobile benefits of the X-zone can be experienced right away: A definite advantage over stationary systems. Another benefit is the flexible configuration: At the heart of the X-zone is the multi-gas detector Dräger X-am, which can be set up to meet the individual demands of various drilling operations. In this way, one does not have to install different gas detection devices on the rig for each different gas.

The optimal network connection to the master display, and safety engineer greatly increases the quality of monitoring and heightens the overall safety of the whole operation. Even during evacuation times, the X-zone is there to efficiently help the process by keeping the eventual production halt as safe and short as possible.

TECHNICAL DETAILS

X-zone

- Gases flexible configurable
- Detects up to six gases simultaneously
- Approx. 120 h (24 Ah battery)
- Audible 360°; > 108 dB in a distance of 1 m (30 ft.), 120 dB in a distance of 30 cm (1 ft.)
- Modbus-interface for adaptation to stationary Visualisation

X-zone Com

- GSM-based Communication module
- Plug & Play
- Data available via Smartphone and via the Cloud



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