

# How VISICS prevented potential fire at refinery

**Wesseling, November 2019** – Last October the digital VISICS system for safe and efficient turnarounds was installed at a refinery in Wesseling. Combined with Dräger’s solutions for remote gas detection, the VISICS system was brought in to accomplish a safer and more efficient turnaround by digitally monitoring the confined spaces. No more than three days later, on October 31st 2019, the VISICS system proved its added value by preventing a potential fire.

## Fluctuating gas values

During this turnaround, the VISICS system was monitoring twelve confined spaces, both from the inside and outside. Using cameras, badge units and alarm units, remote gas detection and a direct connection to the control room, this results in 24 video screen tiles monitored by two operators (one in the operator room and one in the field). In this specific situation, clogged filters were continuously causing fluctuating values of carbon monoxide levels. As the VISICS system includes an integration with Dräger’s remote gas detection units, these values and fluctuations were monitored and analysed in real time by VISICS operator Robert Simons.

## Glowing residue

**Robert Simons:** *“We were aware of clogged filters and how they could cause fluctuations in the detected gas values. That Thursday however, at around 6 p.m. when the night shift was about to start, we noticed that different kinds of gases were detected in one specific kettle. I checked the real-time videos and saw smoke coming out of one of the manholes. We then immediately informed the field operator and the customer’s production specialist and took the required actions.”*

Without any hesitation, Robert and his colleagues from Dräger called the firefighters and guided them to the precise location. Robert then remotely stopped the issuing of permits for that specific space (eVision). Apparently a flammable residue was glowing in this kettle. It would probably have remained glowing, or developed into something worse, until the next shift, if it had not been for VISICS and its operators.

## THE CASE

### INDUSTRY

Refinery

### COUNTRY

Germany

### OBJECTIVE

Safety monitoring of 12 manholes

### MAINTENANCE ACTIVITIES

Sandblasting

### SAFETY PARTNER

Dräger

### THIRD PARTY INTEGRATIONS

Dräger, eVision

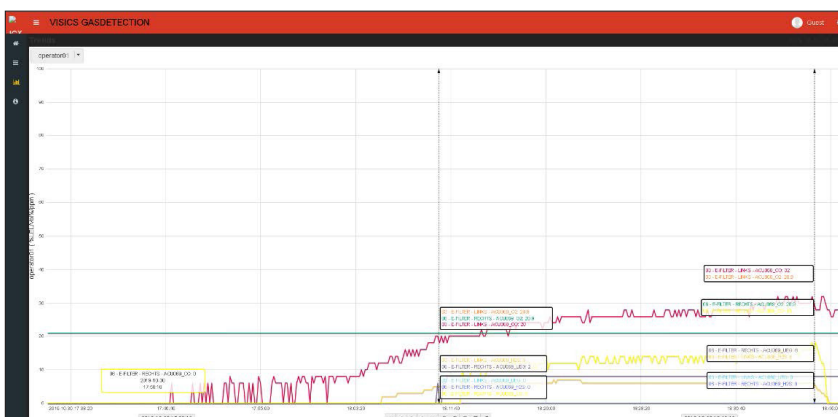


Figure 1 Remotely monitoring gas detection values

## VISICS vs. 'the old fashioned way'

**Production Specialist (customer):** "The VISICS system makes it easier for me to communicate with my safety staff. Instead of 12 individuals, I now only have to communicate with two operators per shift. This makes safety much easier to manage and brings operations to a higher level. This potential fire incident certainly proved VISICS' added value. In 'the old fashioned way' – before VISICS - we would never have detected the smouldering materials in this early stage. As no maintenance activities were taking place at that time, the manholes would not have been monitored continuously and gas detection values would have been monitored manually. Probably by the time the smoke had been noticed, the area would have been evacuated immediately and no one would have been able to identify the exact location of the source. I am very happy with the presence of VISICS and Dräger onsite: it is a true added value to both safety and efficiency, and I hope to work with them in future projects as well."



Figure 2 Video tile showing smoke

## VISICS CASE CONFIGURATION

- 4x** Power Distribution Unit
- 13x** Access Control Unit
- 13x** Camera Inside confined space
- 13x** Camera Outside confined space
- 13x** Badge unit
- 13x** Alarm unit
- 13x** Dräger Remote Gas Detection Unit

(including spares for 1 confined space)

## About VISICS and the Access Technology Group

The Access Technology Group is an innovative Dutch company located in the centre of The Netherlands. We started in 2002 with solutions for wireless infrastructures, public safety and security (Access Innovations BV). In 2005 we added ICT services (internet and phone) to our range of solutions (Access Communications BV). As we sensed an increased demand in mobile solutions, especially in heavy industries with a need for increased safety levels at lower costs, we developed VISICS – the innovative and mobile solution for safe and efficient maintenance turnarounds and shutdowns. The first generation VISICS was launched in 2007. Since then we focussed more and more on this specific industrial application (Mobile Shutdown System BV), which resulted in a mobile high-tech solution providing on demand state-of-the-art observation,

registration and communication techniques. And the innovation continues.

Nowadays, more than 60 people are working on the development, innovation, installation, logistics and support of VISICS. And even more customers all over the world use VISICS as their safety and efficiency solution during maintenance turnarounds and shutdowns.

For more information about the VISICS system and the Access Technology Group, please go to [www.visics.eu](http://www.visics.eu) and [www.accesstechnology.nl](http://www.accesstechnology.nl)