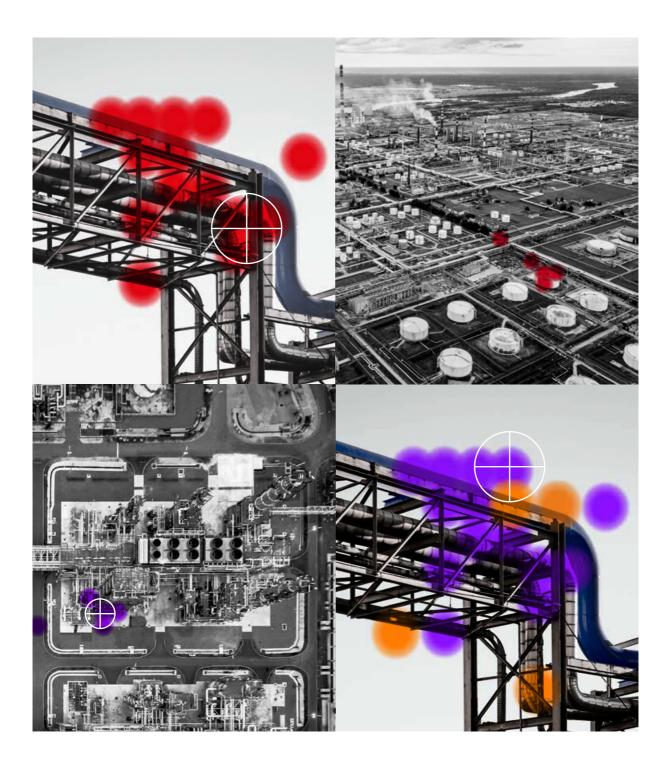


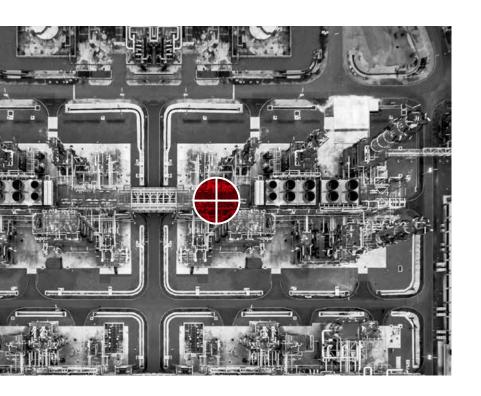
## scanfeld

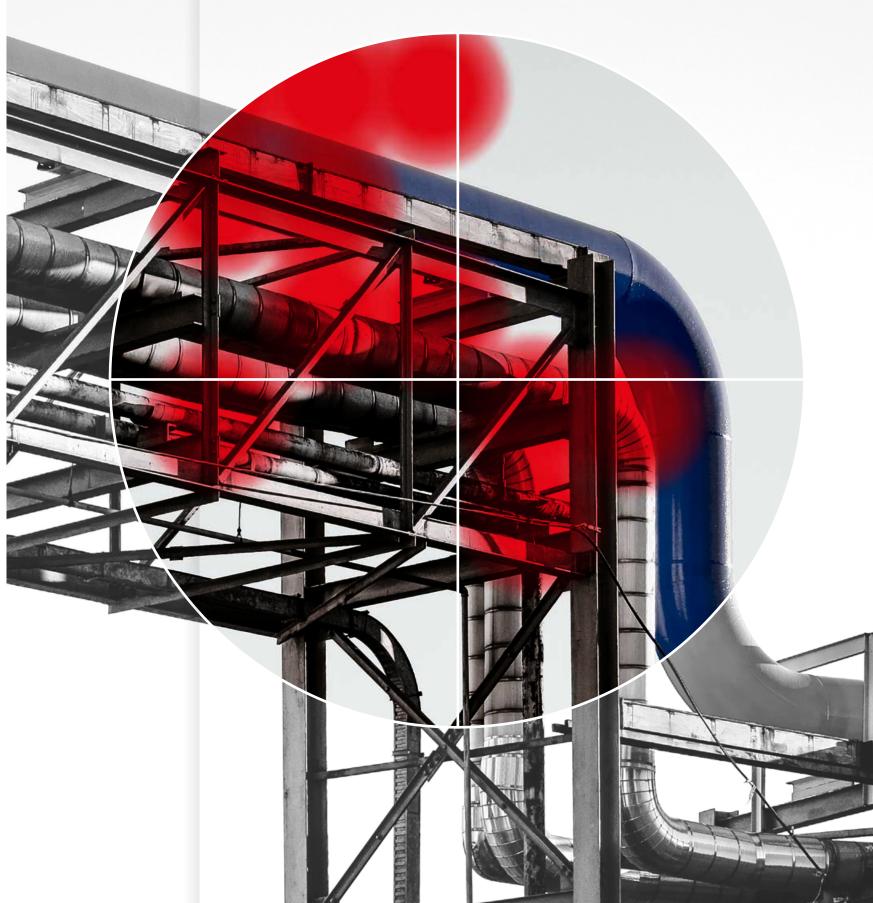
The modular 360° early warning system for gas leaks.



# → Safety through visibility.

Wherever gas is produced, stored and transported, there is the risk of leakage. The innovative **scanfeld** remote monitoring system identifies the chemical composition of the gas cloud and locates the source more reliably than other technologies. Problems are detected faster and more efficiently, wherever in the plant they occur.





## Localise. Analyse. Visualise.

**scanfeld** uses passive FTIR spectroscopy for chemical identification. Hundreds of different gases can be accurately detected from a distance and analysed.



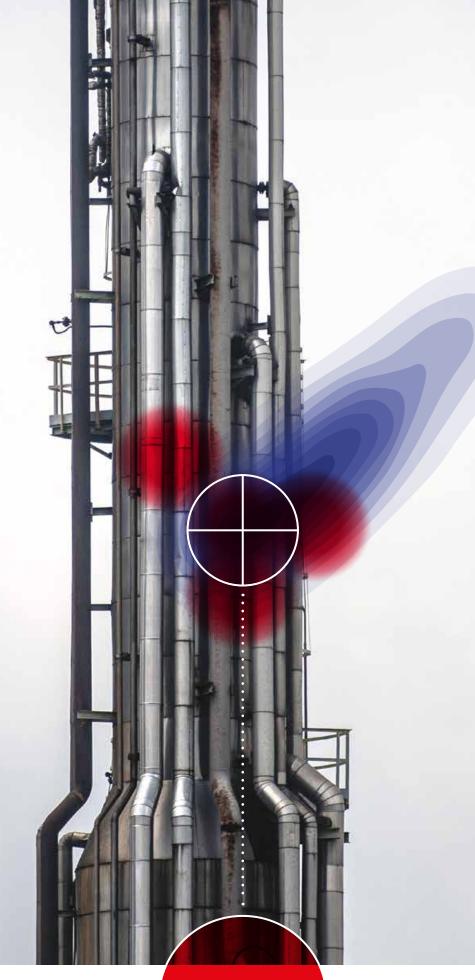
 $\rightarrow$ 

## $\begin{array}{rl} \rightarrow & \text{Something} \\ & \text{in the air.} \end{array}$

 $\rightarrow$  About one third of all dangerous gas leaks are not detected by gas sensors, because in order to work these sensors need to be located in the gas cloud itself. Since the wind will often disperse the cloud, leaks are often only detected if the gas happens to accumulate densely near the sensor.



 $\rightarrow$  The **scanfeld** remote monitoring system takes a new approach. The airspace of the entire plant is scanned by the FTIR spectrometer, the chemical composition of the air is spectroscopically analysed and the gas is identified. Three software modules control the system, visualise and track gas clouds, mark hazard areas and issue an alarm in accordance with the threat level.

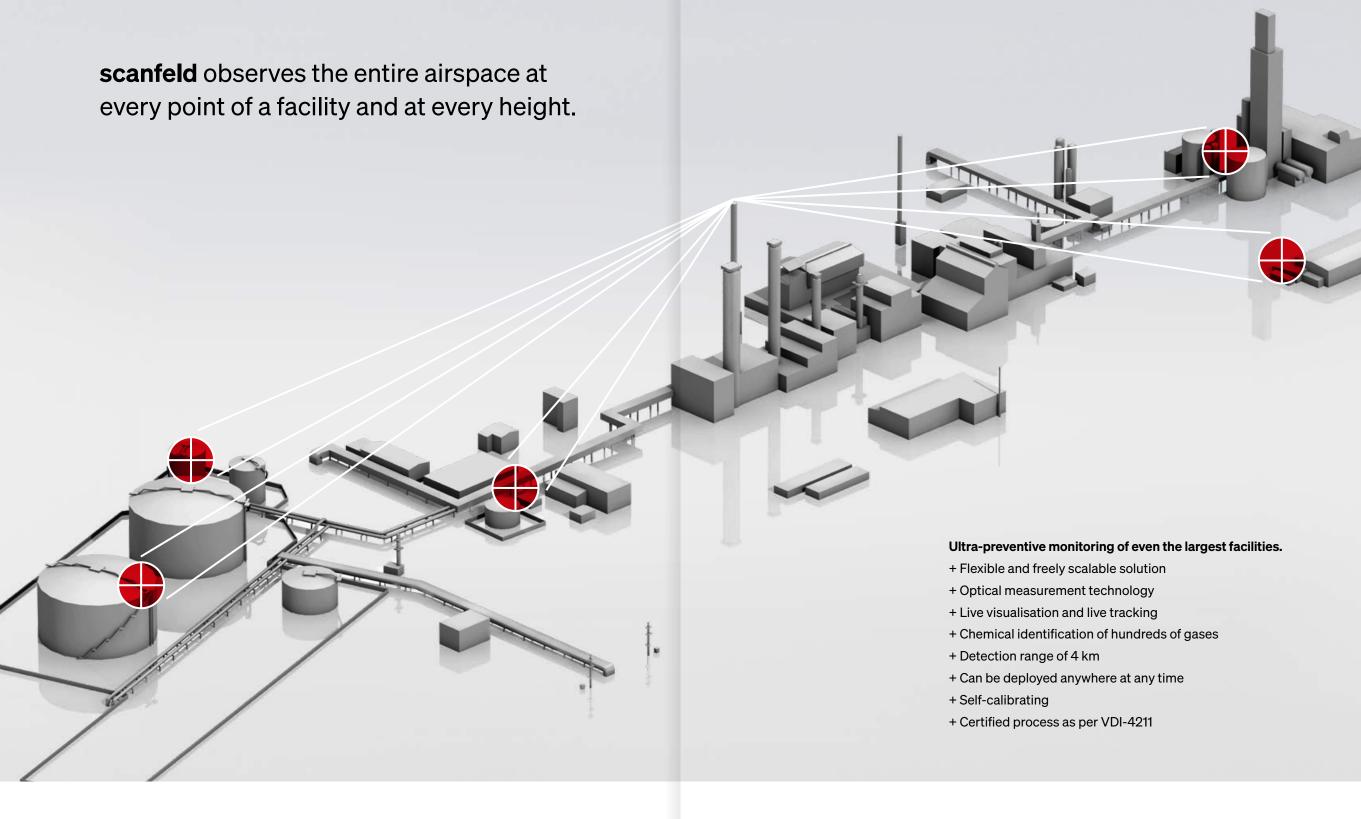


Alarm: ammonia correlation: 99%

## $\rightarrow$ 360° control.



## Gas accumulations and moving gas clouds are localised and chemically analysed.



# → Innovative down to the last detail.

**scanfeld** combines passive FTIR spectroscopy with three practical software modules. Existing sensors can be easily integrated. And the system can be scaled as required – even large facilities can be reliably monitored around the clock.



#### $\rightarrow$ scanfeld imager

Software module for the chemical identification and visualisation of a gas cloud. More than 400 compounds can be displayed and new substances can be added to the database at any time.

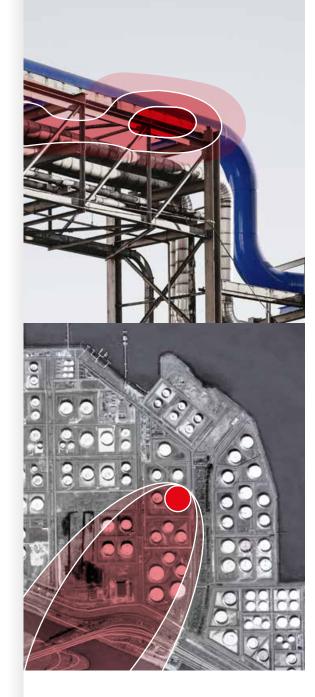
### Automated 24/7 monitoring to protect facilities of every size.

→ scanfeld automatically detects events by measuring the distribution of gas in space and time. Thanks to its spectral depth of information, the measurement data provided by the unit enables substances to be reliably identified. Safety-relevant events are distinguished from fugitive or technical emissions.

 $\rightarrow$  The self-calibrating, selflearning system integrates operational production processes, maintenance cycles and atmospheric influences and uses them for continuous metadata analysis.

 $\rightarrow$  The DCS-interface provides information for different alarm levels. Assessments of indication, persistence, excess quantity and relevance are available in real time at any time.

 $\rightarrow$  Sensor units can be integrated, repositioned or removed as required. **scanfeld** is a freely scalable solution that adapts easily to new conditions and dimensions.



#### $\rightarrow$ scanfeld profiler

Software module for AI-based situation assessment. The operator is informed that gas has been detected or is warned of a high-risk leak. Alarm levels distinguish harmless fugitive emissions and inform about the severity of the incident.

#### $\rightarrow$ scanfeld tracker

Software module for mapbased cloud tracking. The location and concentration distribution of the gas cloud are displayed in real time. See where the cloud is and how it develops.

## → Use, don't buy.

**scanfeld** can monitor your plant, no sizable investment needed: You can simply book and use the innovative Remote Monitoring System. We will take care of everything else.





#### 

 $\rightarrow$  The **scanfeld** monitoring platform can handle any sensor data. Preexisting sensors can be easily integrated. The mix of local and remote monitoring data creates a completely new level of security in a very short time.



## $\rightarrow \ \ \text{A totally} \\ \text{integrated solution.}$

→ scanfeld learns automatically, with continous remote support and optimization. You can easily add additional evaluation modules or expand the target compound library at any time. Or you change and expand the monitoring area easily without any basic costs. The system's design, plus regular remote support and preventive maintenance guarantee maximum uptime.





### → 25 years' remote detection experience.

 $\rightarrow$  **Grandperspective** is a young company rich in experience. Our knowhow in the development and application of remote sensing systems has been developed over years of working with plant operators and first responders all over the world. **scanfeld** bundles this knowledge into an innovative solution for the remote monitoring of plants of any size.

#### Grandperspective GmbH

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