## **GfGsafety.com**



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### Dear readers,

Microchips and processors are integral to nearly every electronic product, from household appliances to vehicles. Most of them come from the semiconductor factories of Intel, TSMC, and others, which are

meeting the rising demand with new plants – not only in Asia and the USA, but increasingly in Europe as well.

Since the complex production of wafers – the raw material for semiconductor components – involves various gases, some of which are highly toxic and corrosive, semiconductor fabs (fabrication plants) have strict requirements for gas monitoring. With the D-ReX family of products, we are confident that we have developed a cutting-edge solution that meets the high standards of this demanding industry.

Sincerely,

Hans-Jörg Hübner

Hans-Jörg Hübner, CEO GfG Gesellschaft für Gerätebau mbH

# Smart solutions for safe gas handling in manufacturing

Monitor more than 60 gases with three flexible measurement options.

The D-ReX is a modern solution designed to meet safety and quality standards in the semiconductor industry. Depending on your needs, it allows you to measure gases in three ways:

- **1. Diffusion at the point of use** Ideal for monitoring room air
- **2. Diffusion with external sensor** Measures gases up to 1,200 meters away, such as in pipelines.
- **3. With integrated pump** Extracts gases from rooms or pipes for safe analysis (optionally with pyrolyzer and line integrity monitoring).

Electrochemical, pellistor, infrared, and PID sensors are available for detecting more than 60 different gases.



### Save time and costs on service and sensor replacement

When developing the D-ReX, we focused on ease of service and low ownership costs. The smart sensors are pre-calibrated and ready for immediate use. They are housed in sensor cartridges that can be replaced without tools during operation. For greater sustainability, the sensor cartridges can be reused after being equipped with a new sensor.

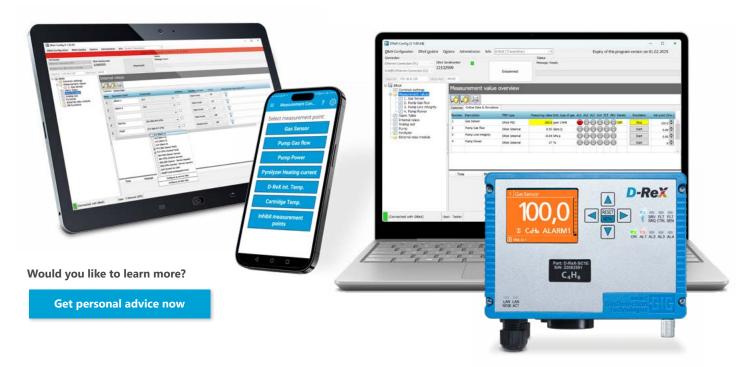
# **Key features:**

- » Monitor gases in diffusion mode, external sensor, or pump
- » Bluetooth and network (Power over Ethernet)
- » Easily replaceable cartridges with smart sensors
- » More than 60 measurable gases (even more with optional pyrolyzer)
- » Interfaces: 4–20 mA | Modbus RTU | Modbus TCP | LonWorks (optional)

# Introducing a new safety feature: simulate measured values, alarms, and faults

Simulate gas concentrations between -7.5 % and 112.5 % of the measuring range, or select a preset alarm level from 1 to 4. This new feature is our response to customer feedback, providing a user-friendly and comprehensive simulation to check the integrity of gas detection systems and connected system controls – without the need for test gas.

Our measured value simulation takes it a step further: you can simulate not only gas concentrations but also faults, maintenance, deviating pump flow, or line pressure for the D-ReX with pump, as well as deviations in heating current and temperature faults when using a pyrolyzer. Safely and reliably put your gas detection devices and safety measures to the test with our measured value simulation!



# Discover new developments at international trade shows in 2025

As we wrap up a successful trade show year in 2024, during which we had the pleasure of meeting many new and existing customers in person at events across Africa, Asia, Europe, and North and South America, we'd like to give you a sneak peek at what's ahead for 2025.

The year kicks off in January with Hyvolution in **Paris** and the Health and Wellbeing Show in **Manchester**. In the summer, we'll be in **Johannesburg** for the A-OSH Expo, and for the first time at 112 Rescue in **Dortmund**.

The BHP Forum in **Warsaw** will open the fall trade show season, followed by other major events like SEMICON West in **Phoenix**, Arizona, and the leading international trade show for occupational safety, A+A in **Düsseldorf**. These are just a few of the trade shows where you can visit us next year.

Would you like to meet us in person?

View GfG's trade show calendar



# World first: Monitor your hose lines for leaks

The D-ReX is the first gas detection device to offer optional Line Integrity Monitoring alongside flow measurement. This technology continuously monitors the negative pressure in gas-carrying lines. An additional pressure sensor measures the ambient pressure as a reference. If the pressure ratio between the line's negative pressure and the ambient pressure changes, it indicates a leak or blockage in the line. In such cases, the D-ReX reports a fault, allowing immediate action to be taken.

Looking to enhance safety in your production processes?

We're here to help. Contact us for expert advice.



# NF3 ON FLT GasDetection rechnologies Control of the control of

Pyrolyzer add-on for the D-ReX PoS

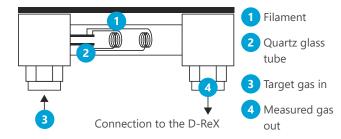
Do you need to monitor fluorine compounds in your application?

Find out more about the Py-ReX here

# Our solution for NF<sub>3</sub> detection

If you need to monitor fluorine-based gases, such as nitrogen trifluoride, that cannot be measured directly with conventional gas sensors, our Py-ReX is the ideal solution.

The Py-ReX is a pyrolyzer extension for the D-ReX PoS with an integrated pump. It breaks down the target gas into a measurable gas fraction and other components through pyrolysis. The concentration of the target gas is calculated from the measured value. The Py-ReX is installed between the intake point and upstream of the D-ReX, which also controls the pyrolyzer's heating flow. This ensures the exact temperature required for the pyrolysis process is maintained.



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