Online sulphide determination in water and wastewater

Dosing chemicals as required. Save costs and protect the environment.



sulfimax GX online WATER **ATEX compliant**



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online WATER

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Product description

The **Sulfimax GX online WATER** continuously measures hydrogen sulfide (H₂S) and sulfides in wastewater and other aqueous samples quickly and accurately. This is important for timely and on-demand intervention in process streams and wastewater treatment procedures. In the ATEX compliant version, the analysis system is suitable for use in potentially explosive environments (ATEX zone 1 (gas) according to DIN EN IEC 60079-2).

Effective gas extraction completely expels H₂S from the sample. Interference from the sample matrix is virtually non-existent. The released H2S gas is directed to the highly sensitive sensor, which detects H₂S in the range of 0.01 to 1000 ppm. A measurement takes 5 to 15 min, depending on the sample composition.

With the **Sulfimax GX online WATER**, even industrial wastewater that is basic or contaminated with hydrocarbons or ammonia can be monitored reproduciblu.

Sample aspiration, all rinsing steps and the return to the pipe system are performed automatically. Configurations can be edited and results read out via remote access. The measured values can be transmitted to on-site alarm systems via digital and analog outputs.



Applications

- Online acquisition of the current sulfide concentration
- Environmental analysis, e. g.
 - Waste water analysis for control systems (pump sump, free level or pressure water pipe)
 - Landfill leachate monitoring
 - Industrial sewage treatment plants
 - Municipal sewage treatment plants

Advantages

- Automatic sample dosing
- · Hardly any cross-sensitivities due to indirect method
- Output 4 20 mA for integration of the H₂S signal into the control system
- Short measuring intervals allow fast reaction to changes
- Low maintenance requirements



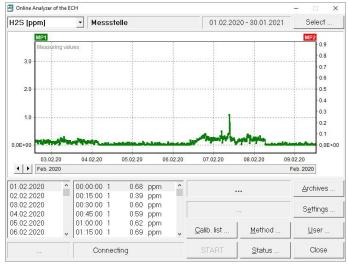
Refinery wastewater treatment plant

Features and Results

- Detection of the true H₂S content directly in the liquid phase and thus independent of weather conditions (even in strongly basic samples)
- Simple calibration
- Simple, clear software
- No cross-contamination due to self-cleaning between measurements
- Long sensor life due to integrated regeneration processes



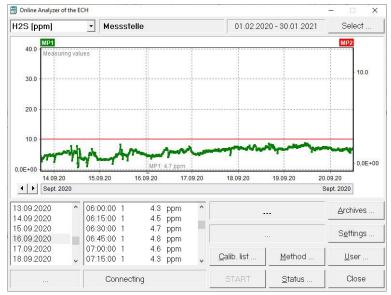
Gas drying



Winter operation with low events



Summer operation with consistently higher but uniform H2S development



Optimal - control to preset setpoint - setpoint 10 ppm

Technical specifications

Sample dosing: Via transfer line (up to 30 m long, from up to 5 m depth)

Typical duration: 5 ... 15 min (depending on the sample)

Range: 0.01 ... 1000 ppm

Resolution: 0.1 µg abs., output signal linear

Sample volume: 0.01 ... 20 mL

Gas supply: Internal pump or compressed air

Gas flow: Up to 50 L/h

Power supply: 220 ... 230 V/50 Hz, 2 A

Power consumption: 250 W Type of protection: IP 65

ATEX compliant: ATEX zone 1 (gas) according to DIN EN IEC 60079-2

Dimensions: $900 \times 315 \times 760 \text{ mm} (W \times D \times H)$

Weight: 28 kg



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ECH Elektrochemie Halle GmbH

Otto-Eißfeldt-Str. 8 D-06120 Halle (Saale)

Germany

Tel.: +49 (0) 345 279570-0 Fax: +49 (0) 345 279570-99 **ECH Scientific Limited**

Building 69, Wrest Park, Silsoe Bedfordshire, MK45 4HS

United Kingdom

Tel.: **+44 (0) 1525 404747** Fax: **+44 (0) 1525 404848**

Email: info@echscientific.com • www.ech.de • www.aquamaxkf.com

