

# Online sulphide determination in water and wastewater

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



**sulfimax GX**  
**online WATER**  
ATEX compliant

made by **ECH<sup>i</sup>**

# sulfixmax GX

## online WATER

ATEX compliant

## Online sulphide determination in water and wastewater

### Product description

The **Sulfixmax GX Online WATER** continuously measures hydrogen sulphide ( $H_2S$ ) and sulphides 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  $H_2S$  from the sample. Interference from the sample matrix is virtually non-existent. The released  $H_2S$  gas is directed to the highly sensitive sensor, which detects  $H_2S$  in the range of 0.01 to 1000 ppm. A measurement takes 5 to 15 min, depending on the sample composition.

With the **Sulfixmax GX Online WATER**, even industrial wastewater that is basic or contaminated with hydrocarbons or ammonia can be monitored reproducibly.

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.



This Sulfixmax GX online WATER fulfils the requirements of the standard ATEX 7733 X

### Applications

- Online acquisition of the current sulphide 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

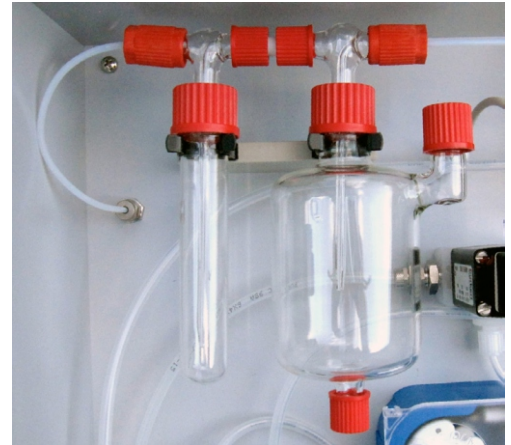
- Automatic sample dosing
- Hardly any cross-sensitivities due to indirect method
- Output 4 - 20 mA for integration of the  $H_2S$  signal into the control system
- Short measuring intervals allow fast reaction to changes
- Low maintenance requirements



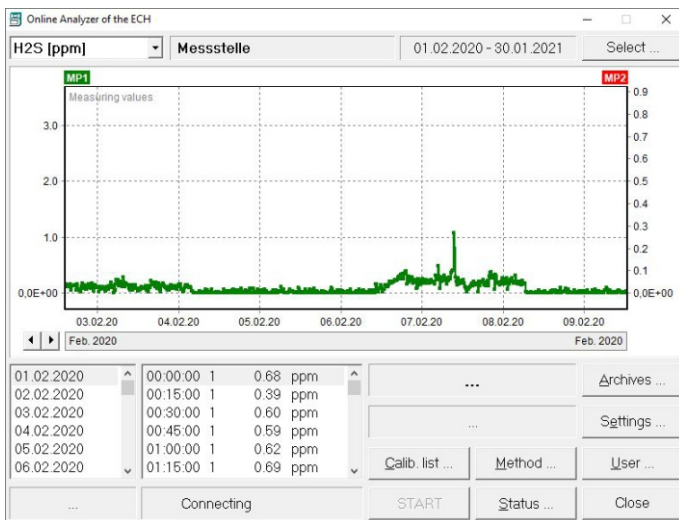
Refinery wastewater treatment plant

## Features and Results

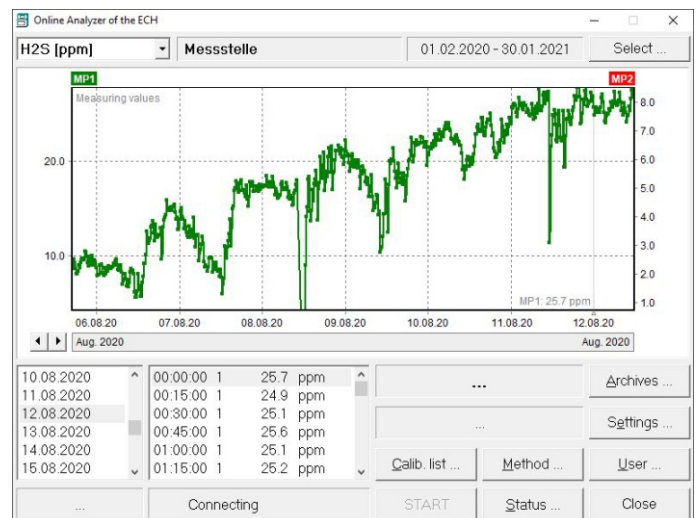
- Detection of the true H<sub>2</sub>S content directly in the liquid phase and thus independent of weather conditions (even in strongly basic samples)
- Simple calibration
- Simple, clear software
- No cross-contamination due to self-cleaning between measurements
- Long sensor life due to integrated regeneration processes



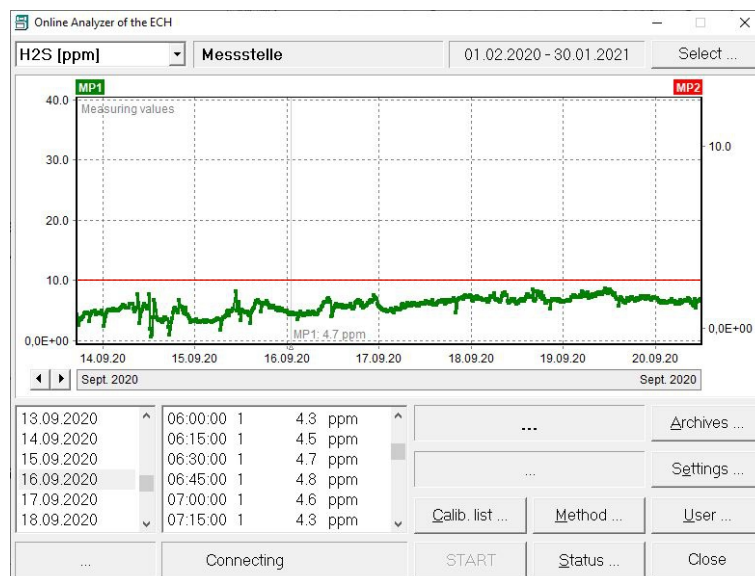
Gas drying



Winter operation with low events



Summer operation with consistently higher but uniform H<sub>2</sub>S 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 x 315 x 760 mm (W x D x H)
Weight:	28 kg



The Sulfimax GX online WATER  
in the standard version

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us to deliver a full demo experience remotely. Please contact [info@echscientific.com](mailto:info@echscientific.com) to book your session.

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