Online sulphide determination in water and wastewater

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

sulfimax GX online WATER

made by ECH

sulfimax GX online WATER

Online sulphide determination in water and wastewater

Product description

The Sulfimax GX online WATER continuously measures hydrogen sulphide (H_2S) and sulphides in wastewater and other other aqueous samples quickly and accurately. This is important for timely and on-demand intervention in process streams and wastewater treatment procedures.
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 Sulfimax 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 be transmitted to on-site alarm systems via digital and analog outputs.

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

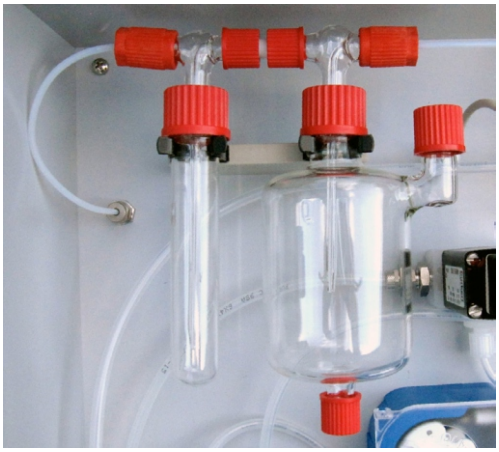
Refinery wastewater treatment plant

Advantages

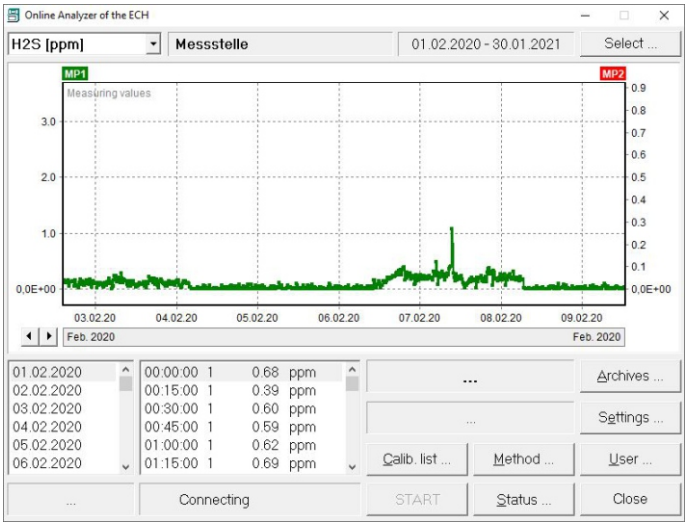
- Automatic sample dosing
- Hardly any cross-sensitivities due to indirect method
- Output 4 - 20 mA for integration of the H_2S signal into the control system
- Short measuring intervals allow fast reaction to changes
- Low maintenance requirements

Features and Results

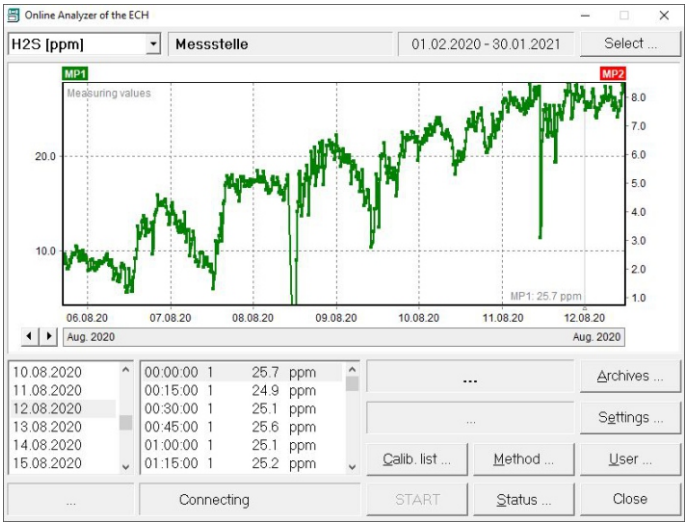
- Detection of the true H_2S content directly in the liquid phase and thus independent of weather conditions (even in strongly basic samples)
- Simple calibration
- Simple, clear software
- No cross-contamination due to self-cleaning between measurements
- Long sensor life due to integrated regeneration processes



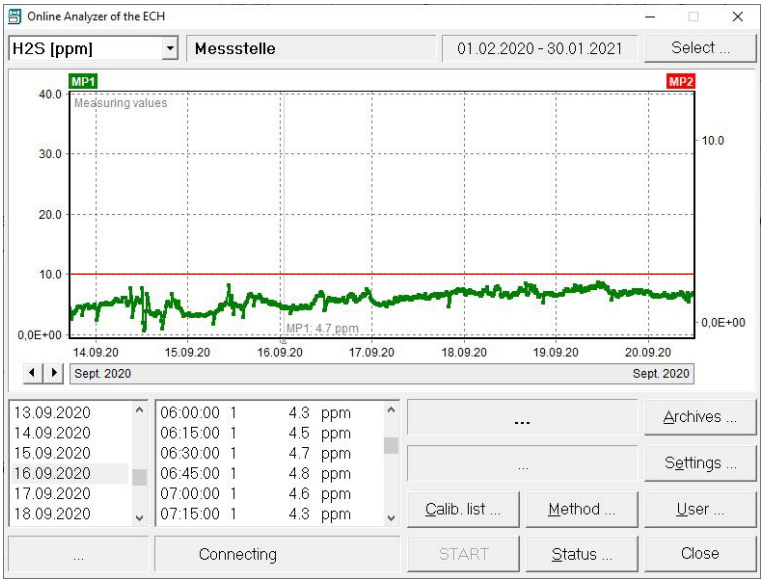
Gas drying



Winter operation with low events



Summer operation with consistently higher but uniform H_2S 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 54
Dimensions:	600 x 370 x 720 mm (W x D x H)
Weight:	53 kg

The Sulfimax GX online WATER as ATEX compliant version is suitable for use in ATEX zone 1 (gas) according to DIN EN IEC 60079-2.

Book your online demo in the ECH Studio

ECH Scientific have a state of the art laboratory fitted with online presentation capabilities, allowing us to bring product demonstrations live and in full HD, with multiple camera angles and software sharing capabilities enabling
us to deliver a full demo experience remotely. Please contact info@echscientific.com to book your session.

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

ECH SCIENTIFIC
part of ECH Elektrochemie Halle
Global Sales Division

230001

the ECH advantage
in-lab | mobile | on-line | process