

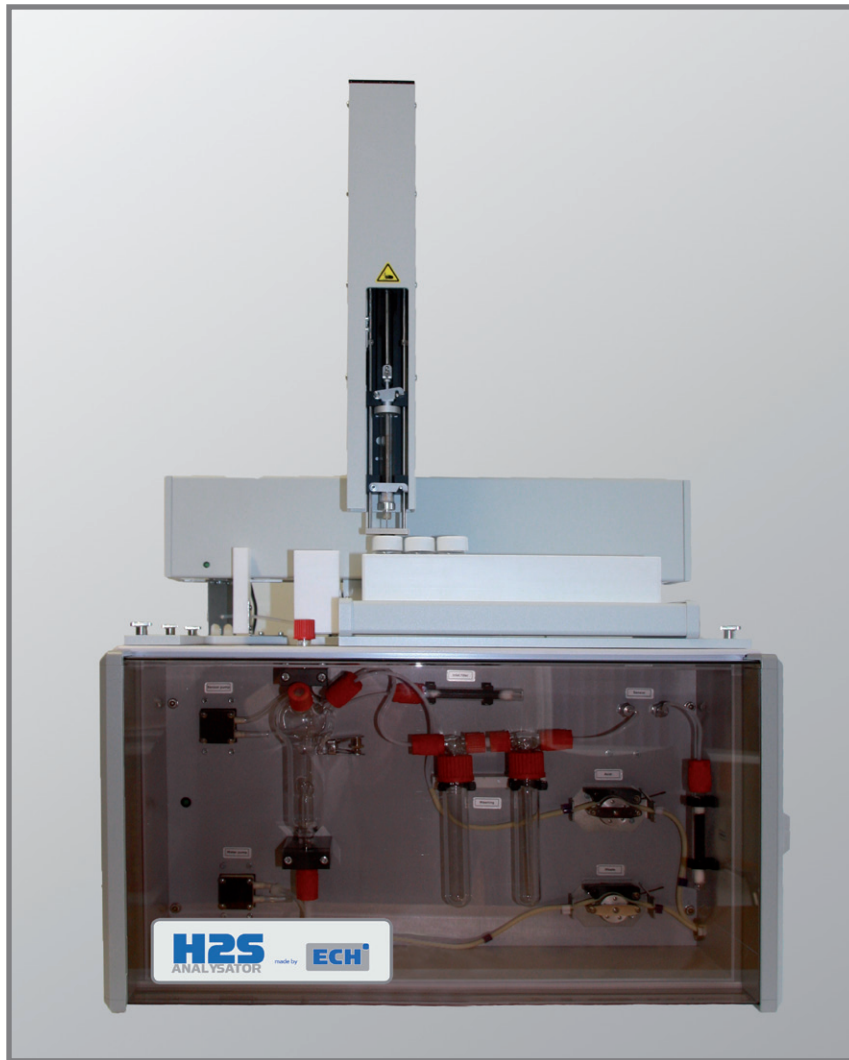
EXPERTS IN ANALYSIS



H₂S
ANALYZER

H₂S-Analyzer for
Laboratory- and
Industrial Application

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Description

The **H₂S-ANALYZER** creates the opportunity for analysis of hydrogen sulfide in gases and liquids in only one device.

The determination of total volatile sulfides in aqueous solutions and oils works through high efficient gas extraction linked with a selective detection method. Thereby, interferences from the sample-matrix will be minimized. The analysis is performed fast and with high efficiency.

Sample preparation is not required, therefore the reproducibility and the accuracy enhance additionally. The dosing of the sample can either happen manually using syringe or optionally using an automated autosampler.

Sample	H ₂ S [ppm]
Landfill leachate	65.2
Urban sewage	3.1
Industrial sewage	186.5
Polluted surface water	4.6
H ₂ S containing mineral oil	1.2
Diesel oil	0.4
Transformer oil	1.4
Engine oil	3.1
Hydraulic oil	0.2
Petroleum	141.2

example of analysis

Applications

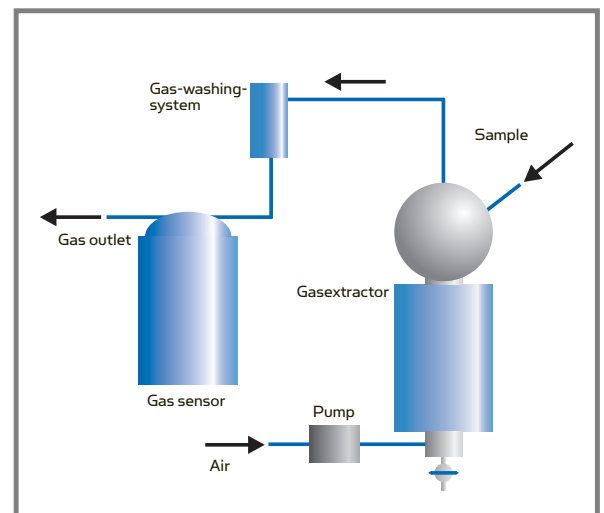
- Sewage analysis
- Monitoring of landfill-leachate
- H₂S in hydrocarbon mixtures e.g. gasoline, kerosene, diesel oil, mineral oil, transformer oil, heavy oil
- Environmental applications
- Gas analysis
- Investigation of technical and pharmaceutical products (e.g. storage stability)
- Quality management



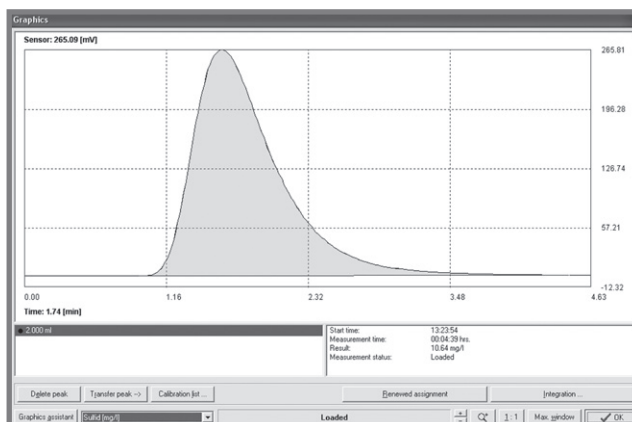
Gasextraction with drying

Principle

- Dosing of the sample via syringe or autosampler in the gas extracting vessel
- Fast release of the gas out of the sample after automatic addition of the acid
- Automatic transfer of the gas onto the electrochemical sensor
- Automatic integration of the measurement graph
- Results in parts per million (ppm), milligrams (mg) or, if requested, in customer specific units by using a formula creator



functional schematic



typical measurement - automatic peak analysis / interpretation

Meas	Date	File name	Sample name	Sample amount	Result
28.1	13.03.2008	2008031300	Standard	1.000 ml	10.77 µg
28.2	13.03.2008	2008031300	Standard	1.000 ml	10.91 µg
28.3	13.03.2008	2008031300	Standard	1.000 ml	10.70 µg
30.1	13.03.2008	2008031302	Standard	1.000 ml	10.77 µg
30.2	13.03.2008	2008031302	Standard	1.000 ml	10.55 µg
30.3	13.03.2008	2008031302	Standard	1.000 ml	10.63 µg

Evaluation of sub measurements

Statistics

Arithmetical mean: 10.72 µg
 Standard deviation: 0.13 µg
 Rel. standard deviation: 1.20 %

table of results of a multi measurement

Advantages

- Electrochemical sensor for precise, reproducible and sensitive micro-analysis
- Complete separation of H₂S from the sample
- Fully automated analytical procedure
- Analysis of the original sample
- No sample preparation
- Definition of own methods for device control
- Simple calibration
- Dosing manually or optional fully automatic
- Minimized cross sensitivity through the indirect method
- Gas extracting technique for a fast release and separation of H₂S from the sample
- Robust and fast analysis (up to 40 measurements per hour)
- Software: simple, clear, intuitive



Device version for on-site-applications

Specifications

Measuring range:	0.01 – 10.000 ppm
Resolution:	0.1 µg abs., output signal linear
Typical duration:	1 – 15 Min (dependent on the sample)
Sample volume:	0.01 – 20ml
Oven temperature:	max. 150°C, optional, individually adjustable
Gas flow:	up to 50 l/h
Power supply:	115-230V, 50-60 Hz
Power input:	100W
Dimensions (width x depth x height):	430 x 350 x 140 mm
Weight:	2 kg

We are here for you



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