Le Bulletin

OTC 2021 - Special Edition

ONLINE GAS AND LIQUID ANALYZER EXPERTS

New online analyzer: The MEDOR®easy

The MEDOR®easy is the most simple auto GC-ED (MEDOR® Electrochemical wet cell Detector) for the analysis and monitoring of one or two sulfide mercaptans in natural gas and gaseous fuels.

This turnkey solution has a single configuration based on the type of odorant blend being used. No gas generator is needed, electricity alone is enough to analyze one or two compounds in ppb/ppm concentrations.

The MEDOR®easy includes the high performance of Chromatotec design expertise. Robust and requiring very low maintenance, this all-in-one solution is easy to set up in the field all while maintaining an attractive price.
It analyzes H2S or other compounds, such as blends from Arkema Spotleak® and Chevron Phillips Sentinel® : THT / THT and TBM / DMS and TBM / MES and TBM / TBM, IPM and NPM / EM. There is a MEDOR®easy configuration for each odorant blend or simple compound targeted.

MEDOR®easy

The stand-alone MEDOR®easy is integrated in a wall-mounted box that is ergonomic, modular and available in ATEX, CSA- and IECEX-certified versions.

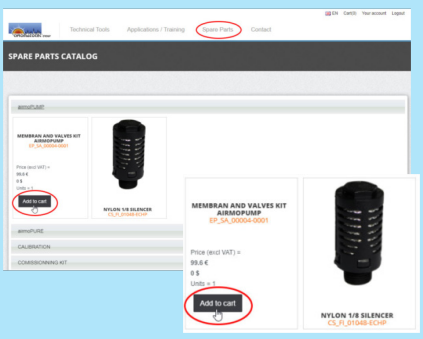
Tradeshows

ASGMT
American School of
Gas Measurement Technology
Houston - September, 13-16 2021

GCC
Gulf Coast Conference
Houston - October, 11-13 2021

New function on the Customer Service website !

Chromatotec's Customer Service website is evolving to comply with our distributors and customers' needs. In order to facilitate spare parts orders for our different instruments' rage, a new feature has just been added : it is now possible to create your own spare parts quote in the spare parts catalog tab. This new function offer a quick overview of the list of parts needed with global amount. The request is immediately received by the Sales and Customer Service team that can deal with your demand quickly.



Continuous identification and quantification of dithiazine in natural gas

Hydrogen sulfide (H2S) represents a very common pollutant encountered in natural gas, oil and gas applications. Undesirable because of its human and environmental toxicity, corrosiveness and unpleasant smell, various methods have been developed to eliminate this contaminant.

For decades, an effective and economical method is employed using MEA-triazine as a scavenger for the H2S, resulting in the formation of the kinetic by-product, called dithiazine. Although the formation of dithiazine is a good indicator of the elimination of the H2S, its poor solubility represents a real issue during the process, leading to reduced permeability and production flow.
Consequently, there is growing interest toward understanding the mechanism of dithiazine formation and quantification in natural gas.

Chromatotec® is currently developing a specific analytical system equipped with a preconcentrating unit, chromatographic column and a mass spectrometer detector for the identification and quantification of dithiazine in natural gas. This robust system is designed to work continuously 24/7 in the field while automatically generating analytical results.

The system uses H2 as carrier gas which can be generated by our Hydroxychrom hydrogen generator. To run the analytical system, only electricity and water are necessary. The MEDOR gas chromatograph can be added to the analytical system to quantify H2S and mercaptans from natural gas.

Continuous monitoring of natural gas and permanent gases

Permanent gas analysis covers a wide range of applications in the petrochemical, chemical, and energy industry fields.
For example, permanent gases such as O2, CO2, N2, Ar, CH4 or ethane are common in pure gas manufacturing, refinery gases, natural gas, fuel cell gases, and many other industrial processes.

Automatic identification and quantification of the concentration of these components can be important for the control of manufacturing processes and production quality.
Chromatotec® has developed a method for the measurement of C1-C6+ in natural gas (H2S can be measured as an option).

The system uses N2 (produced by our Nitroxychrom Nitrogen generator) as its carrier gas and a thermal conductivity detector (TCD). To run the analytical system, only an electric supply is necessary.
The analytical columns are manufactured at Chromatotec® and ensure the good and repeatable separation of the analytes.

The system operates in a manner which enables the detection of the analytes, while other possible interferents are not injected in the main column thanks to a timely commutation.
It is available with a custom configuration for safe and hazardous areas: ATEX, IECEx, CSA and CSA international certifications for its application in refineries and petrochemical plants.

Chroma Ex analyzer in wall-mounted box

Turnkey solution for R&D centers

An important company in the Oil & Gas sector has requested that Chromatotec develop a transportable ATEX analyzer for monitoring the sulfurizing process of catalytic units used in the oil industry.

This turnkey solution requires robustness, as it should be used in hazardous areas and has to support concentration increases without saturation. This project designates several skills that Chromatotec has proven through its cutting-edge technology, including analytical know-how regarding the spectrum of compounds that need to be analyzed, integration in a transportable box and deployment in the field.

This instrument is a real control tool, as it is designed for the optimization of factory startups. Indeed, this type of process is a tool for continuous improvement with a long-term impact in terms of financial and environmental benefits. More and more companies such as industrial R&D centers trust Chromatotec for custom, tailored solutions.

Analysis and monitoring of wastewater quality for refinery processes

Industrial activities must meet compliance requirements on the quality of discharges of hazardous substances into water from environmental protection standards. Particularly targeted by these new guidelines, industrial companies must adapt their monitoring systems to meet these standards.

Chromatotec® has developed a solution equipped with an MCERTS-certified GC FID, analyzing VOCs dissolved in liquid susing a purge & trap sampling system (according to the EPA 502-2 standard) or headspace. This system makes it possible to extract VOCs from a liquid and analyze them by GC, in order to identify and quantify all the contaminants in the water, including BTEX and light to SVOCs.

This cutting-edge technology includes an automatic water sampling system with a fast loop. The sample is taken below the surface of the liquid to avoid aspiration of floating particles and to stay away from the bottom of the tank to avoid extraction of sludge.

This sampling system is placed outside a box, near the location where the source water is collected. A pump carries liquids to the sampling and filtration box, then to the instrument located inside the analytical shelter.

This all-in-one solution is composed of an airmoVOC analyzer, hydrogen generators, zero air catalyzer, and an internal calibration system, which generates reliable results in real time and without human interaction.

The airmoVOC WMS is used in the water markets of the food processing, pharmaceutical, cosmetics and perfumery industries, as well as in the analysis of drinking water, beverages, surfaces, and liquid, consumable products (e.g., milk, soda, wines, spirits, etc.).

airmoVOC WMS Water monitoring system