



French family firm Chromatotec continues to advance innovations in niche oil and gas markets with its specialised hazardous-area gas analysis systems. Export Project Manager Jean-Philippe Amiet revealed more about the new developments to Andy Probert.

THE GAS ANALYSER EXPERTS



French-family firm Chromatotec has retained its edge in the global market of gas analytics thanks to its uncompromising attitude to its expertise in specialised hazardous-area gas analysis systems.

"Customers are always requesting high reactivity and good products. Through our complete approach, we offer support in different languages and provide answers to clients within 48 hours," commented Mr Jean-Philippe Amiet, Chromatotec's Export Project Manager.

"A lack of reaction on our part may lead to a difficult relationship and we prefer to decrease that risk as much as possible."

Decreasing risk is all part of Chromatotec's make-up in the highly competitive market of identification and quantification of pollutants in the environment. Its expansion has come about with the creation

of Chromato-Sud in the South of France, the acquisition of airmotec in Switzerland and Germany, and Medor, initially a Parisian company but now a product name in sulphur and odour in natural gas analysis.

As natural gas is a natural resource present on the earth it can vary in composition depending on where it is extracted. To use and valorise natural gas, it is necessary to control its composition.

Even if it is composed mainly of methane, natural gas contains some traces of sulphur compounds that can affect its quality and can have dramatic effects for its transportation, such as pipe corrosion.

Therefore, companies that work with natural gas control the level of sulphur compound impurities as well as adding specific mercaptans to make it odourised and therefore easily detectable in case of a leak.

New development

For this purpose, Chromatotec has developed and manufactured a new version of MEDOR which measures sulphur compounds such as DMS, DMDS and mercaptans.

These new instruments are designed to work in the most hazardous of areas without any purge gas required. These hazardous areas are classed from Zone 0 to 2 for gases, with the highest risk of an explosive atmosphere being present.

Chromatotec's MEDOR solution is one of the only instruments capable of analysing such compounds since it only needs a very small

amount of zero air or nitrogen to operate (down to 4 ml/min). Its MEDOR® wet cell Sulphur Specific Detector is capable of detecting sulphurs as low as 1 ppb. This solution can be used with 230V, 115V and 24V DC power supply making it unique on the market. This analyser has been chosen as reference system for the ASTM D7493-08 norm.

Mr Amiet commented: "The global market for hazardous area equipment is anticipated to register an increase in value from \$6.24 billion in 2016 to \$8.82 billion by 2022."

He added that solutions for hazardous areas would become compulsory for the oil and gas market. "Chromatotec is already proposing an ATEX solution using purge systems and may not be easy to implement at some sites. Our idea is to develop a solution which can operate in hazardous areas without any external purging gas."

"A solution suitable for ATEX Zone 1 was developed keeping in mind the possibility to get the certification necessary for other areas in the world – such as CSA for America. Now Chromatotec is one of only a few companies to measure sulphur components at very low concentration (µg/m³ or ppb) – like H₂S, mercaptans, sulfides and TS – with only small amount of nitrogen."

"Other technologies require at least two gases to operate, such as hydrogen and zero air. It can also be a problem for some customers to use hydrogen cylinders in hazardous areas, the risk of leaks remaining a mental barrier to their use."

Increasing turnover

Mr Amiet said the group had continued to grow and increase turnover thanks to its top distributors around the world, mainly across Europe, China and North America.

He said: "China continues to be our most important market in terms of turnover and USA is our first market for natural gas. We have employed new people in our Beijing subsidiary and are developing our Houston office to face this continuous growth. We've built long term relationships with our distributors and offer them value-added support."

The group now employs over 50 people and, as Mr Amiet revealed, plans to recruit more by the end of 2017.

"We continue to grow in the ambient air and industrial sectors at industrial zones, refineries and petrochemical sites in the Americas, Europe, Middle East and Asia."

The US EPA evaluation, which recommends Chromatotec analysers for volatile organic compounds VOCs monitoring in ambient air, has been a key point of success for the group.

Mr Amiet said that there is a clear global tendency for analysing sulphur compounds in the oil and gas field but also on other markets, with a demand under expansion in industries like shale gas, biogas, odour and CO₂ in beverage. This should remain important in coming years.

The company's challenge will be to maintain its business growth, while retaining service and support for clients.

"Certifications are also an important issue for us as we have to continue to invest in these processes to validate our technology for specific fields and applications. The diversifications of the process and the need for efficiency improvements result in customers looking for customised and performant solutions."

"These specific needs are at the base of Chromatotec's evolution."

