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EXPERTS IN GAS ANALYSIS

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Customer Service: from 9 am to 6 pm we are at your disposal for all requests regarding gas analysers / software / maintenance and after sales service / calibration. To receive our newsletter, please send your email to: info@chromatotec.com

Chromatotec Newsletter

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SALONS 2007

INDUSTRIAL ANALYSIS PARIS-LA DEFENSE January 30 –February 1st, 2007 http://www.mci-salons.fr/ai/

ARAB LAB – Dubai February 11 – 14, 2007 www.arablab.com

ACHEMASIA – Beijing May 14 – 18, 2007 www.achemasia.de

EURODEUR – Marseille June 26 – 28, 2007 www.eurodeur.com

AWMA – Pittsburgh June 26 – 29, 2007 www.awma.org

CEM – Zürich (Dübendorf) September 5 – 6, 2007 www.cem.uk.com

POLLUTEC 2007 Paris Nord Villepinte November 27 – 30, 2007 http://www.pollutec.com/

CLUB COV Day AIRAQ Bordeaux, France

On March, 27th 2007, **CFROMATOTEC** organized a "user day" thanks to the French approved air quality monitoring association, AIRAQ. The French representatives of the different air quality monitoring network were invited to participate to this meeting.

This day was the occasion for **CFROMATOTEC** to show users that its **VOC** and **BTEX** analyzers fullfil the requirements of the market, in terms of **normalisation** or **efficiency**, at the national or international level.

The company has presented the different **updating, transformations and improvements** which have been brought to the analyzers in order to facilitate the utilization and to raise their performance.

CFROMATOTEC has for the occasion listened carefully to the user's presentations and remarks.



French Air Quality Monitoring Network (ATMO)

Airaq Bordeaux

Club CO

Experiences of ATMO network

(The French Air Monitoring Network)

The French Law on Air and rational use of Energy of December 30th, 1996 gives the right for everyone to breathe an air which does not damage health.

In that sense, the French environmental ministry entrusts the Air quality monitoring to approved associations called **AASQA** « approved air quality monitoring associations ».

The group of these AASQA is also the **ATMO** network and the technical coordination is done by the **ADEME**.

The volatile organic compounds **COV** considered as greenhouse gases , **ozone precursors**, are among the most pollutants to be monitored. These pollutants which are present in weak concentration in ambient air and require high efficient means of on-line detection.



AirmOZONE cabinet in a van

CFROMATOTEC proposes autonomous analysis systems which are adapted to this type of measures.

The instruments have been made for these users who are continuously confronted with concrete problems for which we are trying to find solutions.

In that sense our instruments of analysis have evolved and we will keep on developing them to become the more efficient and as easy to use as possible (see page 2: **Upgrade analysers BTX**).

Continuous and on-line monitoring of BTX

To analyze **BTEX** (Benzene, Toluene, Ethyl-benzene, Xylenes) in continuous, we propose 2 ranges of instruments. The **main difference** between these 2 equipments concerns the **detector** :

- > AirTOXIC (ref. A74022), with PID detector
- AirmoBTX 1000 (ref. A31 ou A34) with FID detector

	PID	FID	
Measurement	Non destructive	Destructive	
Drift	yes	no	
Gas feed	N ₂ , 6 ml/min 3bars	H ₂ , 30 ml/min Air, 180 ml/min	
Performances	Quantitative : RSD<3% Retention time : RSD< 0,3%		
Detection threshold	< 0.01ppb	< 0.050 ppb	
Sampling volume	20 to 240 ml	30 to 700ml	
Column	Metal 30m, 0.28 id		
Trap	Tenax or Carbotrap ambient temperature		
Analyses	COV except : CCl4 / 1,2 dichloro propane	COV / Halogenated agent	

Comparative table of detectors

The analyzer is integrated in a 19" rack (115 or 220V) with or without supervisor. It works with an automation software **VISTACHROM** compatible with Windows.

The new version of the software is now available, 1.44, much more intuitive than the previous 1.34 version, it will allow access to new calculation and data treatment functions.



AirmoBTXA34 - 5U - Integrated computer

VistaCHROM software Automation module

- Statistics calculation
- Calculation of rolling averages
- Filing
- Alarms monitoringI/O monitoring
- G/C monitoring (default analyzer)
- Auto-calibration (automatic adjustment of sensivity factor from measurement of one reference gas with a known concentration)

BTX analyzers Upgrade Comparison between A31 and A34 model

The drum with three tubes and the concentration pre-column are replaced by a new concept based on an injection valve and a single trap.

The column in fused silica is replaced by a new metallic column.

This new model uses an injection valve with **3 bars air necessary for the actuator**.

Our airmoBTX (A34) always respects European Regulations concerning cycle times which are 15, 20 or 30 minutes.



airmoBTX A34 internal view

Advantages of this new version (A34) :

- the three tubes of the previsous version (A31) would grow old at different times ; their replacement by a single trap has solved this problem.
- The drum could meet tightness problems which is not the case with injection valve already used in the airmoVOC C₂C₆ for years.
- The column in fused silica is replaced by a new metallic column much more sturdy.
- Internal calibration integrated inside the new model allows daily validation of measures and good running of the instrument.



Certifications, Norms

CNR official norm



AirToxic analyzers have been certified in 2006 by an accredited organisation, the CNR (Italy), for BTEX detection with PID.

DIN BTX Norms



The **AirmoBTX** analyzers have been **certified in 1996 by the TÜV** (Germany) acccording to the national reference method.

NF EN 14662-3 Norm

To match the EN 14662-3 norm, we have injected the 10 compounds which are seperated from Benzene ; S0



there is no INTERFERENCES

airmOZONE

It is a **complete** and **autonomous** system for on-line **analysis of VOC** C_2 to C_{12} . These compounds usually of anthropogene origin are known for being precursors in the tropospherical ozone synthesis.



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