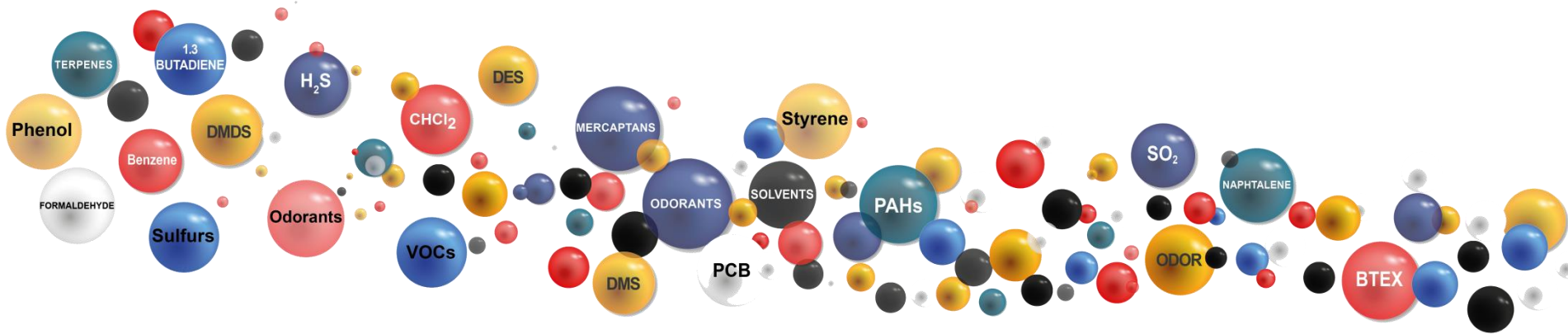




Online Gas and Liquid Analyzer Experts



Chromatotec Group presentation 2021

40 years of expertise in gas and liquid analysis



Online Gas and Liquid Analyzer Experts

- 1975** Medor range launched on the market by RN Electronique with « Gaz De France », (Research Center)
- 1986** **Foundation of the firm CHROMATO-SUD by the current managers in BORDEAUX**
- 1990** Creation of airmotec AG SAS, Switzerland (Instruments dedicated to the analysis of ambient air - technology coming from the Swiss pharmaceutical industry).
- 1992** GIRA instruments revival (Elf Aquitaine)
- 1996** **airmotec AG, Chromato-Sud and RN Electronique integrated in Chromatotec Group**
- 1998** Electron captur with LETI
- 2001** airmOZONE and VistaCHROM development
Chromatotec Inc in Houston
- 2002** Launching of air toxic range with new PID detection in ambient air and industrial hygiene
- 2005** **New Office in Beijing**
- 2009** ASTM Standard Test Method for Online Measurement of Sulfur Compounds in Natural Gas (MEDOR range)
Analyzers for Hazardous areas range launched
- 2010** Chinese certification for VOCs system
- 2011** European mCERTs certification for VOCs analyser EN 14662-3
- 2012** Auto GC/MS analyzer for industrial or laboratory application with trap

40 years of expertise in gas and liquid analysis



Online Gas and Liquid Analyzer Experts

2013

Establishment of a Chinese subsidiary in Beijing

European mCERTs certifications: EN 14662-3 / EN 15267-1 / EN 15267-2

2014

ISO 9001 certification / GOST certification

US EPA autoGC evaluation test: the only rack mounted autoGC selected by the national US EPA for VOCs monitoring

2015

ATEX certification for Zone 1 and 2

2016

Introduction of PAH analyzer on AQMS market

2017

Introduction of Formaldehyde analyzer on AQMS market

Expansion of the production site in Virsac

New building for IT department : software, hardware and network team

2018

New Office in Houston for customer support improvement in Americas

Extension of the Beijing Office for increased customer support in Asia including India

2019

Own technology-based gas and liquid generators

2020

New H₂O detector, probes and sampling

Chromatotec presence in the world



Online Gas and Liquid Analyzer Experts

2300 m² on 4 offices
2 in Europe, 1 in Asia
and 1 in America



Houston (USA)

Chromatotec Inc :
Sales and cust. Service
New Office fully operational
beginning of 2019



Saint-Antoine (33), France

- Chromatotec Group Holding
- Airmotec AG SAS: sales, R&D
- Chromatotec®: cust. & admin. Services



Virsac (33), France

- Chromato-Sud SARL:
Production site



Beijing (China)

Chromatotec Trading Co., Ltd. :
Sales and cust. Service
Expansion planned in 2018
for laboratory and customer support



Chromatotec Group in 2021



Online Gas and Liquid Analyzer Experts

57 people over 4 locations around the world

- 20 people for production and quality control
- 8 people for analytical and IT R&D
- 7 people for customer support worldwide
- 6 people for commercial support

Everybody bilingual at least and often trilingual :
French, English,
Spanish, Portuguese,
Chinese

ISO 9001 certified company

Continuous improvement is our priority !



Electronic and software

- Electronic boards developed and assembled in our factory
- Vistachrom and VistaMS software

Analytical key components

- Detectors: FID, PID, D FPD, TCD, ED, ECD and OEM Quad - MS
- EPC: Piezzo valve
- Pre concentration traps and liquid sampling devices
- GC oven
- Multiplexing devices

Improved production capacity



Online Gas and Liquid Analyzer Experts

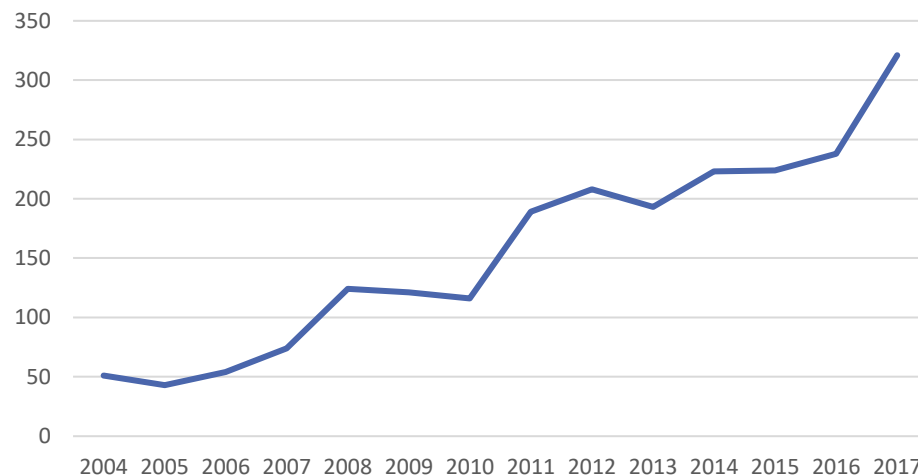
20 people involved

More than 1000 m² for production

More than 400 instruments produced in 2019 excluding cabinets and specific production

Since 2010, instruments production has more than doubled

Evolution of production



Available stock of spare parts in France and China and raw material :
1 million €

Improved production capacity

Reorganization of our production site to improve efficiency

- Implementation of an ERP for Manufacturing Management

Customers

- Quoting / Estimating
- Sales order processing
- Warranty tracking
- Shipping

Materials

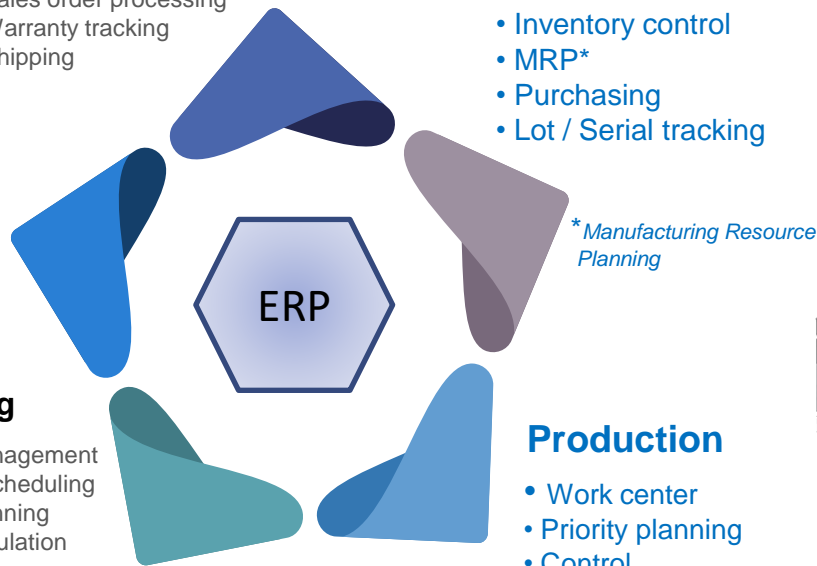
- Inventory control
- MRP*
- Purchasing
- Lot / Serial tracking

Finance

- Product costing
- Job costing
- Financial integration

Scheduling

- Demand management
- Production scheduling
- Capacity planning
- Planning simulation

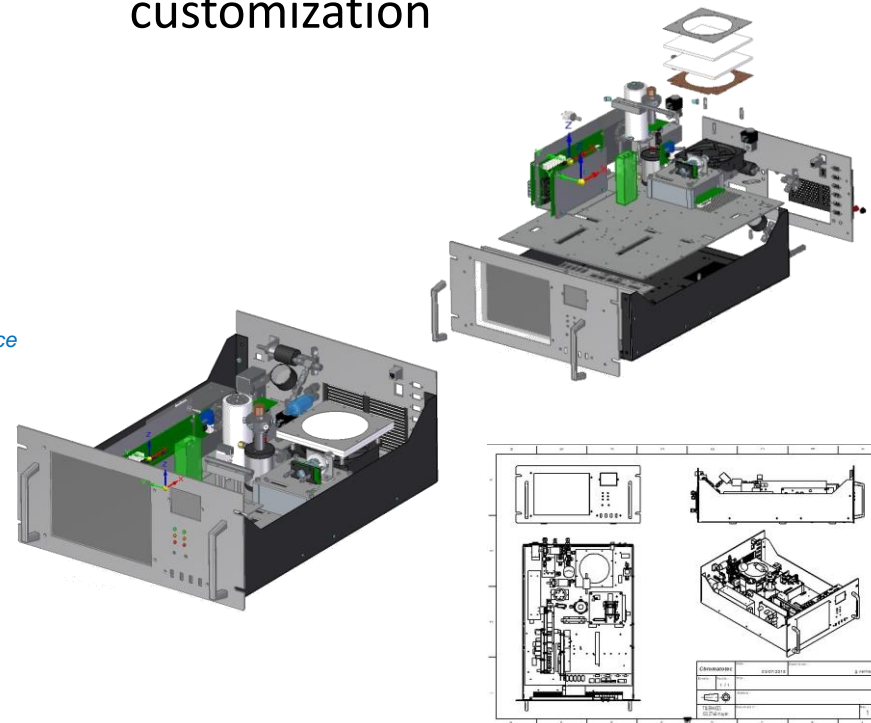


* Manufacturing Resource Planning

Production

- Work center
- Priority planning
- Control
- Data collection

- Creation of a design office with 3D CAD system for better customization



R&D at the heart of our strategy



Online Gas and Liquid Analyzer Experts

6 engineers and technicians involved

204 m² of Laboratories for analytical and IT developments

- Annual Investment of 500 k€ in R&D
- Focus on homemade developments for better reactivity
 - Internal production from gas generators, calibration and analyzer



airmOzone and airmOzone MS
in Beijing Office and in French
office

Customer service-orientated



Online Gas and Liquid Analyzer Experts

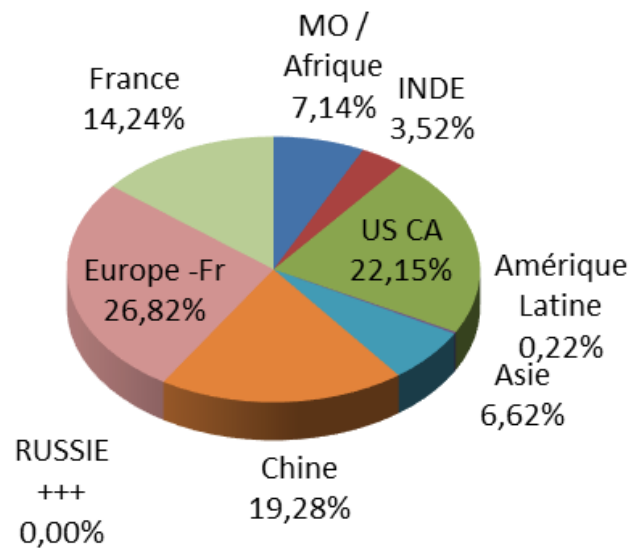
- **7 engineers and technicians for Customer Service**
- **International team for quality support worldwide**
- **CHROMATOTEC customer service website:**
 - <https://support.chromatotec.com/>



→ Follow-up from the quotation to the installation

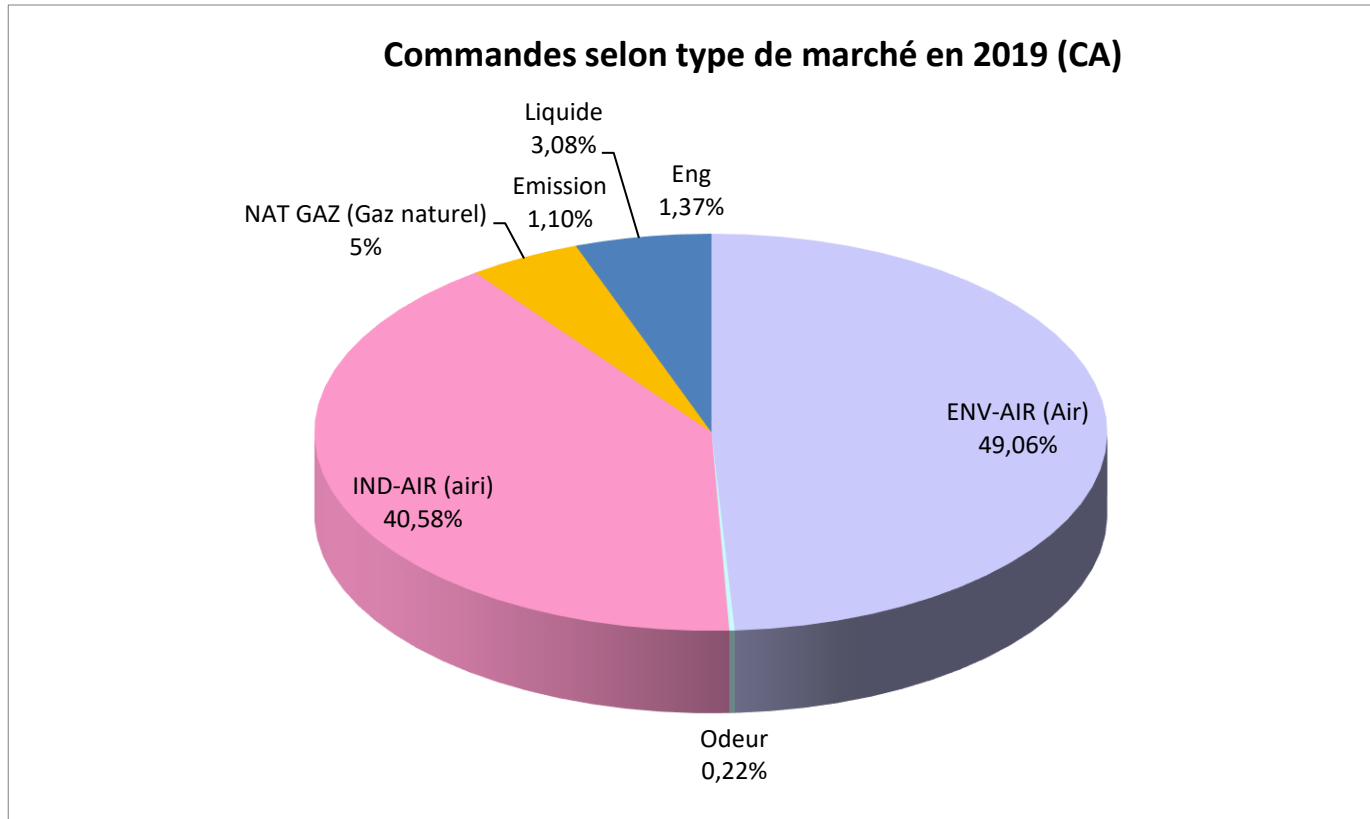
Revenue by geographic area in 2019

CA par secteur géographique 2019



- 2019 has been a diversification of geographical areas
- Europe and US/CA confirm their position of increasing leading market
- Asia is a permanently increasing market

Markets and strategy for instrumentation



Ambient air market remains main market,
Industrial air and natural gas are growing

Markets and strategy

Our main markets

Ambient Air Monitoring (outdoor)

Industrial Air Monitoring (indoor)

Pure gas / Gas Manufacturers

Water Surveillance / Odors

Natural gas / LPG

Markets on development

Emission & CEMS Process



Certificates



Online Gas and Liquid Analyzer Experts

Worldwide recognition with certifications relating to the relevant standards, performed by :



1996



2006



2009



2009



2010-0123

批准部门
Approval authority
批准日期 二〇一〇年一月二十三日
Approval date

2010



0000

2012



2013



2014

- US EPA use Chromatotec solutions (2009) and have selected the company as one of the top 3 of 88 companies working on Ambient market in 2013
- EN 14662-3 (2013): Method to establish the performance criteria for the measurement of Benzene concentration using an automated sampling pump with in-situ gas chromatography.
Laboratory and on-site tests have been passed successfully by the NPL
Benzene and 12 other VOCs have been tested
- **airmotec/Chromatotec® : Unique manufacturer with EN 14662-3**
En 14662-3: compulsory for ambient air monitoring in Europe
- ATEX and IECEx certification



Summary



Online Gas and Liquid Analyzer Experts

More than 2,000 analyzers, gas generators, calibration systems or multiplexers installed around the world

A constant evolution in the market, with improvement of sales and customer services





Thank you for your attention !