

SIMULTANEOUS ANALYZER of SULPHUR & NITROGEN SULUM

AST D5453 / ASTM D6667 / ASTM D 4629 / ASTM D6069 / ASTM D 7183 /
ASTM D 7184 / ISO 20 846 / NF EN 12260 – NF M0759 - Licence TOTAL



PRINCIPLE

Sulfur and/or Nitrogen analysis in one instrument

In liquid, solid or gaseous products, essentially petroleum products, but also organic compounds compatible with the methods (industrial chemical products, rubber, synthetics, and so on).

TECHNICAL CHARACTERISTICS

➤ Detector

- Graphic Liquid Crystal Display (LCD) / - Real-time synoptic flow diagram display
- Programmable measurement ranges / - Linearization of the measure
- Interactive menu driven software with enhanced speed display in 4 languages

➤ Apparatus

MINERALIZATION PART:

- A quartz combustion tube with Teflon output connector
- A combustion furnace at a constant controlled temperature of 1000°C (F2) for oxidation S → SO₂ and / or N → NO

A SO₂ / NO MEASUREMENT PART:

A specific detector of SO₂ by U.V. fluorescence and NO by Chemiluminescence

SIGNAL/ CALCULATION/ STORAGE PROCESSING PART:

An associated computer which manages:

- SO₂ and NO peaks integration / - Calculation of calibration coefficients / - Display of analysis results
- Storage on hard disk / - Automation and alarms

GAS CONTROL PART:

Two gas circuits for Inert Gas and Oxygen, with gas pressure and flow regulators, pressure controllers and flowmeters.

ACCESSOIRES PART:

- A syringe-pusher for automatic injection of liquid specimens at controlled speed,
- A colour printer for analysis and calibration results.

OPTIONS :

- Automatic injector for liquid samples
- Semiautomatic system for sampling and injection of gas in liquid LPG and / or gaseous phase

MINIMUM MAINTENANCE and easy to operate

VIDEO MONITOR : displays SO₂ peak as soon as the test starts

RESULTS (calibration or analysis) are automatically calculated at the end of the test and then printed

CALIBRATION "Monopoint" or Multipoint "(linear regression) mode selection by icon. The detector is linear; it is possible to dispense with the Multipoint calibration.

SWITCH FROM SOLID TO LIQUID MODE : in a few minutes.

APPLICATIONS

Liquid, solid or gaseous products, essentially petroleum products, but also organic compounds compatible with the method (industrial chemical products, rubber, synthetics, and so on.

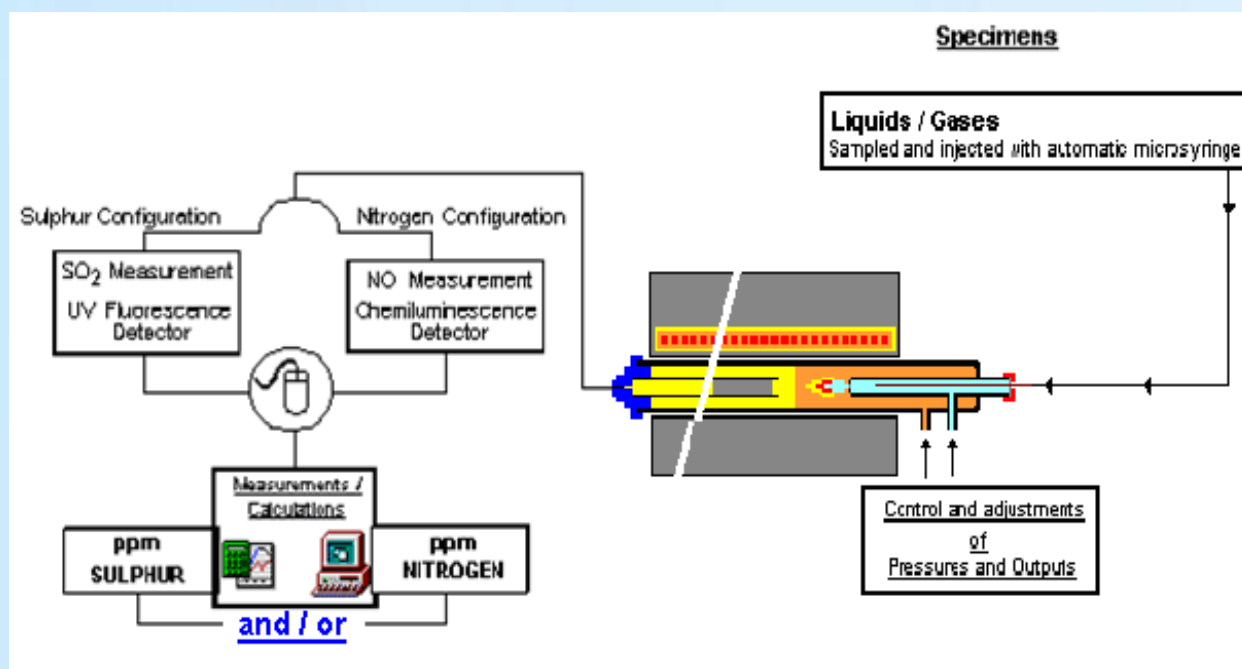
The main advantages of this apparatus are :

- 1) An appreciably lower cost compared to the both equipments additioned,
- 2) The insurance to preserve all the performances of each analyzer.
- 3) The reduction of handling and certainty to save time

TECHNICAL SPECIFICATIONS

DETECTION METHOD		
Sulfur	U.V. Fluorescence	
Nitrogen	Chimiluminescence	
SAMPLE SIZE		
Liquid	20 to 100 µl with syringe	
Gas	1 to 25 ml with syringe 1 to 10ml with Gaz / GPL Sampler	
LPG	10 µl with Gaz /GPL Sampler	
Solid	0.5 to 100 mg with boat	
TYPICAL ANALYSIS TIME		
Liquid and Gas	About 5 minutes	
Solid	5 to 10 minutes (depending upon type and weight of sample)	
SUPPLY		
Inert (Argon or Helium)	99.995% - 3 bar / 150 à 200 ml/min	
Oxygen	99.998% - 3 bar / 200 à 300 ml/min	
Electric	230 V – 50Hz – 1200 W	
ACCURACY		
At 0.5 ppm level	+/- 0,05 ppm	
At 1000 ppm level	+/- 15 ppm	
MEASUREMENT RANGE	DETECTION LIMITS	LOW QUANTIFICATION LIMIT
Sulfur	10 ppb to approximately 10%	20 ppb
Nitrogen	20 ppb to approximately 10%	30 ppb
DIMENSIONS		
Analyzer, Without computer	80 cm x 55 cm x 30 cm (LxHxP) / weight: 35 Kg	

Schematic diagram of Gas circuits

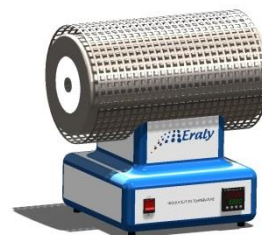


We made also :



Wickbold / Sulfur

ASTM D2784 / ASTM D2785 -
AFNOR M41-009 / ISO 4260 -
IP243 / DIN 51408 NF.EN
24260 / EN41



***Tubular furnace with
temperature controller for
laboratory***



Chlorine Analyzer

AOX - Pox - Eox according to
ISO 9562



Nitrogen Analyzer

ASTM D4629 / ASTM D6069 /
ASTM D5176 / ASTM D7184 /
NF EN 12260 / NF M 07-058



Tri-four pyrolysis for

Tritium, Carbon 14, Chlorine 36,
Iodine 129

ERALY & Associés
4 Rue Georges Besse – Bât I
78330 FONTENAY-LE-FLEURY – France
Tel : +33(0)1 77 04 80 97
Fax : +33(0)1 77 04 80 96
www.eraly.com