

Tritium



Carbon



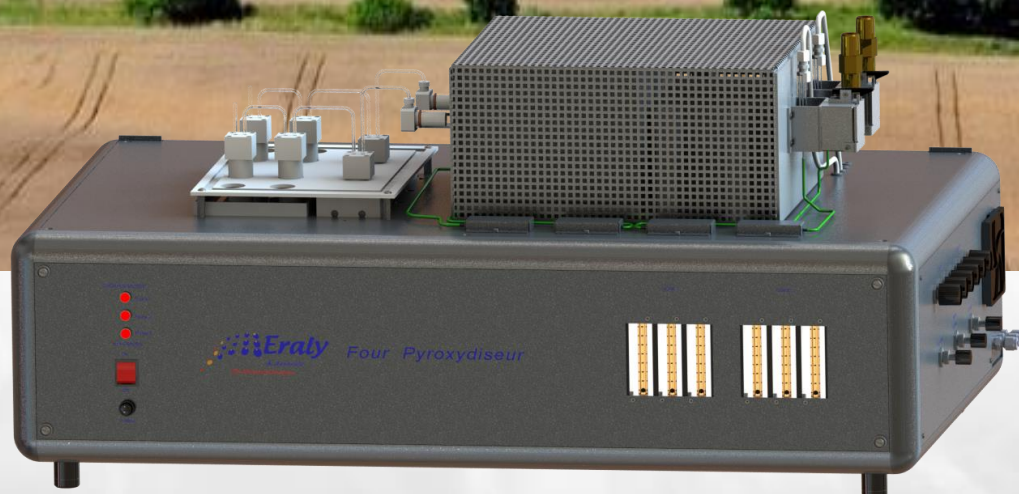
Chlorine



PYROXYDIZER

FURNACE

"Tri-Fours"



Device with:

- 1 line
 - 2 lines
 - 3 lines
- of combustion**

 **Eraly**
& Associés
The Elemental Analysis

EXTRACTION OF TRITIUM AND CARBON 14:

Pyroxydizer is a reliable and robust pyro-combustion equipment used for the extraction of Tritium (^3H) and Carbone 14 (^{14}C). It is used for the preparation of a wide variety of samples such as: Soils, sediments, solvents, water, algae, leaves, fish, cement, concrete, plastics, food, insects

WHY CHOOSE THE PYROXYDIZER?

It is the only device in the market that can burn small quantities of samples (up to 5 cm³) and also very large quantities (up to 250 cm³).

It is managed by software (French / English) and has a pyrolysis zone and a combustion zone.

It is the most compact and reliable - it can be customized

It allows programming and recording of temperature sequences for each type of sample.

With an integrated cooling system, it allows the bottle traps to be cooled down to -15 °C

It is equipped with an hourly / daily timer to put in standby or to automatically start the device, the ovens, the gases.....

ADVANTAGES OF THE PYROXYDIZER:

One, two or three combustion lines (independent or dependent)

It allows combustion and trapping of Tritium and Carbon 14, simultaneously or individually.

Negligible memory effects for ^3H and ^{14}C radionuclides.

A high security ensured by valve and also by the Software through alarms (gas, temperature, cooling system ...).

A wide range of sample sizes (5 to 250 cm³ of dry matter).

Combustion efficiency over 97% for ^3H and ^{14}C .

Efficient and fast, up to 7 samples per day per working tube (per combustion line), depending on the program).

TECHNICAL CHARACTERISTICS:

Some technical features can be customized.

| | |
|---------------------|---|
| Dimensions : | |
| Standard Apparatus | 3 working tubes (L .D. H = 80 cm x 52 cm x 40 cm) |
| Consumption | |
| Gas | Oxygen and Inert Gas (Argon or Helium), |
| Electrical | 230 V – 50 Hz (ou 110 V – 60 Hz, on request) |
| Power | 1200 W, in single phase / 3 x 800 W in Triple-phase |
| Operation | |
| Software MIPO 5 | Programmation heating / cooling; alarms..... |

THE DESIGN THAT ADAPTS TO YOUR ENVIRONMENT:

The Pyroxydizer furnace can be configured and adapted to the space available in your laboratory. This configuration is done by the separation of the electronic interface (which contains all the controls) and the combustion system.

This makes it possible to install the furnace part in a glove compartment for example and to deport the electronic part in an independent box that can be placed on or under a bench.



The Pyroxydizer Furnace can be configured and used for the mineralization of liquid, solid, gas samples for purposes other than the extraction of Tritium and Carbon.

operation diagram:

Combustion system with cooling and trapping of Tritium + Carbon trapping 14.

Our device has a special tube that allows to adjust the catalyst on the hottest part of the furnace. This tube also makes it possible to replace the catalyst very easily and very quickly.

