

# SCINTILLATING FLASKS

## ● FOR SPOT MEASUREMENTS OF RADON VOLUMIC ACTIVITY

### □ APPLICATIONS

- Monitoring of work environments
- Ventilation monitoring in underground works
- Prospecting
- Radium 226 analysis in water by emanation



- Combined **Radon** sampling and measuring unit. The scintillation flask allows the sampling of the volume of air to be studied.
- Radon-loaded air sampling is performed due to the partial vacuum previously generated in the flask.
- Zinc sulphide coating converts alpha emissions due to radon into photons.
- The counting of these photons is performed by a photomultiplier associated to a counting chain.
- Accessories:
  - Vacuum pump.
  - Counting chain fitted with a photomultiplier.
  - A needle fitted with a filter.

**FIS 125****CONTAINER**

Pyrex glass externally coated by polyethylene  
Useful volume: 125 cm<sup>3</sup>  
Closed by a rubber stopper (self closing)

**METROLOGICAL FEATURES**

Sensitivity:  $1,35 \cdot 10^{-2}$  event.min<sup>-1</sup> per Bq.m<sup>3</sup>  
Background noise: less than 1 count per minute  
Counting efficiency: 60 %  
Dimensions:  
Height : 115 mm  
Diameter: 62 mm  
Weight: 80 g

**FIS 500****CONTAINER**

Pyrex glass externally coated by polyethylene  
Useful volume: 500 cm<sup>3</sup>  
Closed by a rubber stopper (self closing)

**METROLOGICAL FEATURES**

Sensitivity:  $5,40 \cdot 10^{-2}$  event.min<sup>-1</sup> per Bq.m<sup>3</sup>  
Background noise: less than 1 count per minute  
Counting efficiency: 60 %  
Dimensions:  
Height : 180 mm  
Diameter: 105 mm  
Weight: 210 g

- RINSING UNIT:**
  - combined apparatus used to put under vacuum and rinse the FIS 125 and FIS 500 scintillating flasks.
  - the apparatus is made up of three parts :
    - a positioning cradle,
    - a vacuum pump,
    - a sequencer.
- FLASK NEEDLES** ( see photo on previous page )
- SPARE STOPPERS**  
( see photo on previous page )

