

Personal dust sampler

CIP10

The individual dust sampler CIP 10 has been developed to meet the requirements, rigors and needs of coal mines. Nowadays this small and compact instrument is intended for collection of dust, in order to evaluate the concentrations of silica inhaled by the workers during their work time.

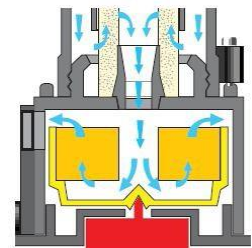
Principe

The air sampling is done by the rotation of a foam, whose cells lead to an aspiration flowrate of 10 l/min, similar to the human respiratory flowrate. Considering the quantities of dust collected through this relatively high flowrate, the weight measurement can be done with a 0.1 mg precision balance. Different quantitative analysis of the collected aerosols can be conducted after rinsing, dissolving or incinerating the rotating foam.



Technical Characteristics

	CIP10-R	CIP10-T	CIP10-I
Fraction sampled	Respirable (PM4)	Thoracic (PM10)	Inhalable (PM100)
Flowrate	10 L/min	7 L/min	10 L/min
Power supply	Internal rechargeable battery		
Battery Life	Up to 26-28 hours		
Weight	300 g		
Dimensions	175 x 70 x 45 mm		



The polyurethane foam creates the airflow and collects the dust

Individual sampler of Microbiological Pollutants

Airborne microbiological pollutants include viruses whose size is smaller than fungi spores which can exceed 200 µm.

They are naturally maintained in air suspension or can be attached to aerosol particles.

CIP 10-M allows to carry out air sampling and capture aero-bio-contaminants in a liquid. Microbiological quality of air can be evaluated thanks to an analysis of trapping liquid by an enumeration or identification technique .

