

Constant flow sampler

static

Main Characteristics :

Static is the last generation of constant flow sampler, designed to meet the requirements of **NF X43-050** standard for TEMA (Transmission Electron Microscopy Analysis) of asbestos fibers.

Its completely new conception brings incomparable performances :

- Constant flow sampling without pulsations from 2 to 12l/min.
- Large autonomy. Up to 80h at 7l/min with C.A.Th.I.A. head.
- 5" touchscreen with improved user experience.
- Exhaustive reports and continuous data acquisition.
- Data download on USB stick.
- Improved QA/QC management.
- Tightened, light and silent.
- External fan control.

Main specifications :

➤ Flow control

- Flow range from 2 to 12l/min.
- Ambient pressure and temperature measurement for real ambient flow determination and regulation.
- High pressure drop compensation.
- Linear and pulsation free flow.
- Differential pressure flow meter for real time and precise flow and sampled volume measurement.



➤ Ergonomy

- Watertight (IP 65) and solid case.
- External case and internal panel with touchscreen decontaminable by water, to enable access to control screen on polluted site.
- Storage location under case cover for tubing.
- Weight : 10.3kg
- Silent (< 50dB)

➤ Battery autonomy

- 80 hours (at 7l/min with C.A.Th.I.A head) thanks to 24V internal battery.
- Possibility to make 3x8h cycles on 72h.
- Battery level on instrument display.

➤ New software and HMI

- 5" color touch screen for easy and pleasant use.
- Two sampling menus to combine easy of use and large use options :
 - Quick sampling menu for fast and simple sampling.
 - Cycled sampling to program an infinity of sampling sequences.
- Large and clear displays with all data available during sampling.
- Extended user menus for interface customizing (site library, date & time, language, normalization pressure and temperature, flow mode...).

➤ Data management

- Complete sampling reports edition.
- Continuous data recording with settable frequency.
- Data download on USB stick in .csv files.
- Large internal memory (8Go).

➤ QA/QC

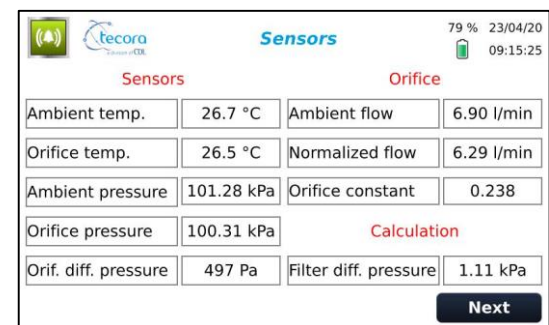
- Simple leak test with test report edition.
- Integrated tests for every sensor and flowrate with tests reports edition.
- 5 points calibration routine for every sensor and flowmeter.



Quick sampling programming



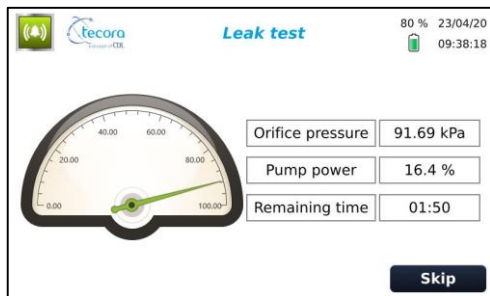
Sampling main view



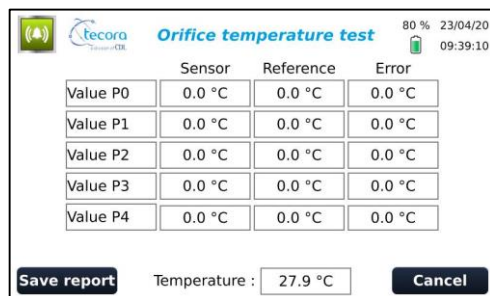
Sensors view during sampling



Trends view during sampling



Leak test



Orifice temperature test



Tripod mounting

Flow measurement

Type	Differential pressure sensor
Flowrate range	3-15l/min
Resolution	0.01l/min
Accuracy	Better than 2%

Absolute pressure (ambient and internal)

Range	0-103.4kPa absolute
Accuracy	Better than +/-0.1kPa
Resolution	0.01kPa

Differential pressure sensor

Range	0- 6900 Pa
Accuracy	Better than +/-2Pa
Resolution	1 Pa

Temperature sensors (ambient and internal)

Type of sensor	PT100
Range	-20 to 80°C
Accuracy	+/-0.2°C
Resolution	0.1°C

Battery

Type	24V Li-Ion
Autonomie à 7l/min avec tête C.A.Th.I.A	40 Ah battery: > 80h 20Ah battery: around 40h
Charging time	< 24h

General specifications

Suction pump	Membrane pump 16l/min
Suction gas filter	Built in glass fiber
Communication port	USB
Working condition	-10 at +40°C / 0 at 95°C RH
Storage condition	-10 at +50°C / 0 at 95°C RH, non-condensed
Weight and dimensions	10.3kg, 417 x 221 x 334 mm
Interface	5" touchscreen
Data storage	8 Go Internal data storage
Protection	IP65

Technical specifications may change without previous warning

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Fans for Static pump

The use of fans to keep asbestos fibres in suspension is requested by X43-050. CDL-Tecora proposes two systems controlled by static pump to comply with these requirements.

Both systems are controlled by Static pump and are active only when sampling is performed.

24V controlled fan

This fan is plugged directly on fan control output of Static pump.



Fan powered by Static pump

Main characteristics	
Diameter	40cm (16")
Movement	Oscillating
Speed	3 speed levels
Dimensions	430x300x560 mm
Weight	1,9 kg
Static pump autonomy With 40 Ah battery	>36h of sampling for static pump with fan and CATHIA head at 7l/min

Power supply for external fan

This element supplies 230V power to use any commercial fan and is controlled by Static pump to get the maximum autonomy.



External battery for 230V fans

Main characteristics	
Battery	24V Li-Ion, 40Ah
Protection	IP65
Weight	5 kg
Dimensions	250x275x125 mm
Power plug	230V, 50Hz power with E type power plug

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