



Covid-19 Air Sampling Equipment



Presented by:

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Sensidyne's Equipment and Media

- ⦿ Sensidyne has a wide variety of sample pumps that can be used for sampling virus.
- ⦿ Selection of the pump should be based on methodology and media utilized.
- ⦿ Some sampling is conducted using size selective devices such as cyclones and impactors.
- ⦿ All sampling devices must be calibrated to ensure flow rates and sample volume are accurate.

GilAir Plus

The ultimate air sampling pump delivering enhanced performance, greater versatility, and superior design and comfort.

- Widest flow range capability and no flow rate gaps
- Constant flow 20 cc/min – 5100 cc/min
- Constant pressure 1 cc/min to 5000 cc/min
- Simultaneous filter cassette and sorbent tube sampling
- Internal flow control eliminating external low flow or constant pressure adaptors
- Continuous measurement display, and data-logging of backpressure (sample loading on media)
- Back pressure capability now 40" H₂O from 20cc/min to 2000cc/min, meeting ISO13137
- Small, light weight & quiet
- Constant Flow & Multi-Flow
- No adapter for low flow conversion
- Menu Driven
- Multi-Language Capability
- Programmable
- Data Log and STP Models Available
- PC Interface Upload/Download
- Optional SmartCal Automatic Calibration
- Optional Bluetooth Enabled with Motion Detection



Gilian 5000

- ⦿ Constant flow: 1000-5000 cc/min
- ⦿ Low flow: 20-750 cc/min
- ⦿ High backpressure capability up to 70" H2O
- ⦿ Memory free NiMH battery
- ⦿ Programmable functionality
 - Four stage program with repeat cycling
 - Allows scheduled sampling or intermittent duty cycles
 - Programmable delayed start
- ⦿ Digital live flow display
- ⦿ En1232 Compliant
- ⦿ Intuitive operation with lock out
- ⦿ Intrinsically safe certified



Gilian 10i

- ⦿ Constant flow: 4-10 LPM
- ⦿ High backpressure capability to 50" H₂O
- ⦿ Memory free NiMH battery
- ⦿ Programmable functionality
 - Four stage program with repeat cycling
 - Allows scheduled sampling or intermittent duty cycles
 - Programmable delayed start
- ⦿ Digital live flow display
- ⦿ Intuitive operation with lock out
- ⦿ Intrinsically safe certified



Gilian 12 High Flow Sampling Pump

- ⦿ Flow Rates from 4 – 12 LPM
- ⦿ Extreme Backpressure Capability to 67" H₂O @ 4LPM
- ⦿ Ideal for Sampling Trains Creating High Backpressure Across the Entire Sampling Period
 - Standard Test Method for Measurement of Respirable Crystalline Silica in Workplace Air by Infrared Spectrometry

Note – This model is not intrinsically Safe



Gilian AirCon-2

- ⦿ Constant flow: 2-30 LPM
- ⦿ DC or AC Powered (Stackable Battery Pack)
- ⦿ Fully programmable for custom and unattended sampling
- ⦿ Touchpad & LCD display
- ⦿ Instant fault function
- ⦿ Instant pressure check
- ⦿ Charges battery while in AC operation



Sampling Strategies – Personnel Monitoring

➤ Choosing the right Cyclone

Medium Flow Rate GK 2.69



GK 2.69 Cyclone can be used for respirable or thoracic sampling.

The GK 2.69 respirable dust cyclone operates at 4.2 LPM to follow the US-ACGIH respirable dust size distribution curve with 50% cut at 4 microns. It can also be used at 1.6 LPM to follow convention for thoracic dust sampling with a 50% cut at 10 microns. It also uses 37 mm, 5 micron, PVC, 3-piece NIOSH style cassettes. An alternate version using 25mm cassettes is also available. The Gilian 10i sampling pump is recommended for respirable sampling. The GilAir Plus and Gilian 5000 pump models are recommended for thoracic sampling.



Calibrating Flow Rates for Cyclones

➤ Flow Rates and Calibration

- ❖ Setting the correct flow rates are crucial in performing size selective particle sampling (Cyclones and Impactors). Deviations from the appropriate flow rates will cause the sample to misrepresent the concentration (High or Low).
- ❖ Post-Cal is used to obtain the final flow rate and to verify that the flow rate stayed within +/- 5% of the set flow. If it is outside the 5%, do not rely on the sample to be accurate.



Gilibrator[®] 3

The New Standard in Calibration Devices

- ❖ Primary air flow calibrator by NIOSH definition
- ❖ ISO/IEC 17025 Calibrated and NIST Traceable
- ❖ *Fast and easy-to-use dry calibrator with expandability*
- ❖ *Constant low backpressure to device being calibrated*
- ❖ *Multiple flow cells with a common base*
- ❖ Gilian Connect[®] compatible for data retrieval, record keeping, and statistical analysis of data



Gilibrator[®] 3

Highly Accurate Primary Dry Cell Calibrator

SENSIDYNE[®]
Industrial Health & Safety Instrumentation

- ❖ STABFLOW™ Provides Constant Backpressure for Stable Calibration
- ❖ Patent Pending Pulse-Free Valve Technology Maintains Flow Integrity
- ❖ Modular Design Adds Convenience and Saves Cost
- ❖ Accurate Within 1% of Reading
- ❖ Bright Touch Screen Color Display

Gilibrator[®] 3
with **STABFLOW™**



THANK YOU

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