



F&J Specialty Products, Inc.

The Nucleus of Quality Air Monitoring Programs

PRESS RELEASE

New Advances in Air Sampling and Air Flow Calibration Instruments

F&J SPECIALTY PRODUCTS, INC. (F&J) has enhanced the usefulness of its "Digital Flowmeter" air sampling systems. F&J has implemented hardware and software modifications that enable a user to select either the reporting of (1) internationally recognized reference temperature (T) and pressure (P) conditions for gas volume values or (2) flow and volume values at local ambient conditions of barometric pressure and temperature.

The benefit of this feature to the air sampling specialist is to enable compliance with regulatory agency reporting requirements, and/or to be able to always report air monitoring volume data at a consistent set of temperature and pressure conditions. It is not important that every organization select the same set of internationally recognized T and P conditions for reporting air sampling gas volumes. The important criterion is to consistently report the air sampling volumes within any given organization to the same set of T and P conditions. This ensures comparability of data between sample stations during the same sampling period and comparability of data throughout the entire year for every system in the network.

Those endusers who are required to report, or decide to report air sample volumes at ambient conditions, now have an automatic method of doing so. Now, it is not necessary to average ambient temperature and barometric pressure data for the sampling period utilizing third party data. Nor, is it necessary to correct flow data measured at the flow sensor after upstream pressure drops due to filter media, dust loading or restrictions in the air circuitry flow path.

The F&J digital flowmeter systems also provide an RS232 data communications port, which enables a user to collect and record the actual air sampling data, plus the corrected flow rate and volume totalization calculations. The corrected flow rate and volume determinations are made by the microprocessor on a once per second frequency. Data output from the RS232 communications port is operator selectable at once per second, once per minute, once per six minutes or once per hour.

The air monitoring specialist can purchase an optional data storage device manufactured by F&J, or can use a PC type of device to capture the RS232 data string.

The air monitoring professionals who operate unattended and/or remote monitoring stations will benefit most from the data collection features of the F&J digital flowmeter systems. A record of the data on one of the above operator selected frequencies can fill in the gaps very nicely between the start of the sample and the termination of the sample.

The F&J digital systems resolve the traditional problem of averaging two rotameter readings seven days apart for an air sample event of one week duration. This calculation is generally not representative of the average flow rate during the sample period. The flowmeter reading does not measure flow at ambient conditions. It generally measures flow rate at the outlet of the rotameter, which is downstream of the filter media and the pressure drops encountered due to the filter media and the air circuitry pathway of the air sampling system upstream of the flowmeter. The absolute pressure of the air at the rotameter is always different and a lower value than the local barometric pressure.

The F&J digital flowmeter air sampling systems are feature-rich, easy to operate, reliable, accurate and AFFORDABLE.

Air flow calibrators capable of displaying ambient flow rates, or reference condition flow rates, are currently available from F&J for use with the new digital flowmeter systems.

Click on the Technical Information tab on the Home page of the F&J web site located at www.fjspecialty.com for information on various air sampling topics of interest.

F&J welcomes inquiries on general topics of interest to the air sampling community.