

STREAMLINING HACCP MONITORING

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One of the main concerns involved with HACCP planning is ensuring that proper monitoring is conducted and that proper records are kept. As technology has changed and improved, better cost effective methods of doing monitoring have become available. Traditional manual monitoring, [Thermometers](#), [Chart Recorders](#), etc. are time consuming and do not lend themselves to efficient analysis of the data collected. Let Scigiene save you money and improve your monitoring program.

Ideal monitoring system will be:

- 1) Easy to use
- 2) Cost effective
- 3) Eliminate human error
- 4) Eliminate instrumentation errors
- 5) Easy to validate and certify
- 6) Easy to incorporate into HACCP data management systems



- 1) Easy to use can be defined many ways, but in the simplest definition it will mean something that can be used with little or no operator training. In many ways, [Pocket Thermometers](#) and [Chart Recorders](#) suffice here, as they are usually easy to read and operate. However, if we look past this initial simplicity we can see that these devices are typically inefficient and the paperwork. Costs required by these technologies usually outweigh automated data collection systems. What can be simpler than having data collected automatically?



- 2) Cost effective is relative. While companies will readily spend money for process monitoring and control systems, systems for Q.A. and HACCP too often get the backburner. This is a simple factor of economics, because the payback for a process system can be readily shown in increased profits. Systems for QA and HACCP are typically looked upon as a cost center that are conducted with minimal cost. When all the costs associated with manual systems (thermometers, charts, etc.) are tallied a basic [Data logging](#) or [Wireless Monitoring System](#) will offer very fast paybacks. In addition, the extra data collected can be used to improve process efficiency and identify problems that lead to product waste, and other inefficiencies. The advantage of this approach is that systems can be used to conduct HACCP/Quality Assurance monitoring and process monitoring thereby streamlining plant monitoring processes. The same data can now be used for both QA and process savings, thereby making HACCP planning a profit center!



- 3) Eliminating human error is actually quite simple. You simply remove the human factors that create errors. Each time a manual reading is taken, there are multiple potentials for error.
 - A) Operator misreads instrument,
 - B) Operator copies data down incorrectly,
 - C) Data is transcribed incorrectly because writing was illegible or because of a simple keystroke error.
 - D) Fudge factor. E.g., Reading is just out of range and operator is sure the instrument is out, so the reading is adjusted to read in range, or even worse, the operator feels it is a waste of time and just writes in a number because they are always the same!

By automating monitoring using [Data loggers](#) or [Wireless Systems](#) the readings are taken automatically, no one misreads the data, no one forgets and no one fudges the data. As a bonus, data can be collected into encrypted databases that can be printed or better yet electronically filed. Once electronically filed, the data can be used for ACCURATE statistical analysis or HACCP reporting. Also, systems can be used for automated alarming. Why count on operators to alert you to problems sometimes hours late. With [Wireless Systems](#) simple alarming of each Critical Control Point can be done in order to head off problems

before they have even occurred. By being proactive instead of reactive, we can eliminate problems and streamline management. It's safer and cheaper and that is the ultimate goal of HACCP!

- 4) Instrument Errors do occur. Many older charts or even wired monitoring systems give data that cannot be counted on. [Dial thermometers](#) can go widely out of range just being dropped. [Chart Recorders](#) can read incorrectly if the pens (very delicate) are bent. Wired systems are fine if installed properly and maintained, but too frequently wiring is prone to interference, power surges, brownouts etc. [Data loggers](#) and [Wireless Systems](#) due to the very portable nature of them are easy to replace and /or be taken to the lab for calibration or testing. In addition, as we can customize the sensors, durability and ease of installation can be improved. This simplifies and speeds up the time cycle for installations repairs and calibrations. Scigiene offers calibration/exchange programs, where by certified sensors are sent in advance each year. This is far more accurate than on site calibrations, because our calibration lab is 10x as accurate as onsite.
- 5) Validation and Certification. Many systems require outside technicians to come in to repair or certify and while this is a nice 3rd party audit, it also means that suspect readings may not be corrected for months. As mentioned portable systems allow easy removal and replacement by QA personnel for in house testing. If required, instruments can be sent out for repairs or certification thereby reducing time and expenses.
- 6) Incorporation into existing or new HACCP monitoring systems and software. Manual systems require paper work; paperwork means time and time is valuable. Therefore, with all this extra data available and paper work required for HACCP, you need to find ways to streamline the data collection, analysis and the reporting process. If this is done efficiently, you can analyze your data easier, become proactive and be better able to monitor the effectiveness of your HACCP plans. For example, you can rely less on scanning pages and pages of charts of raw data and basic reports for trends and/or problems. Instead, you can program software to collect and filter the data you have collected. Then based on specific criteria specified by you generate CCP, maintenance and exception reports. Automatic reports can be generated daily (or at whatever interval you choose) based on your CCP's. Although these reports will never replace the need for a qualified manager or technician to review data, they can help identify trends, and other actual and potential problems in order to streamline the analysis process. This will help you focus on SOLUTIONS instead of data. Additionally, as new software packages are developed data can be linked to these packages automatically, and the potential for improvement only increases.



As a result, automated [Wireless Monitoring Systems](#), when properly implemented systems for HACCP monitoring can improve your processes, quality control, save money and streamline your monitoring process all at the same time. New products are being released continually to add to this simple to use monitoring system. So, if you are not sure about our systems and how we can help, please give us a call at any time at 416-261-4865 or send us an e-mail at: quotes@scigiene.com and we will be happy to assist you.



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