

# Creating objectives to improve hygiene monitoring

**M**anufacturing wholesome, healthy food can be compared to sporting achievement. You plan, you select, you train and then you enter the arena. You must start extremely well, with only the best, safest ingredients, and then every move made must be perfect. One misstep, one underperformance and the prize of the best, safest product will slip from your grasp. In sport the big opportunities come once a year or every four years. In food manufacturing you have to perform day after day.

Over recent years, food safety testing technology has been honed to the point where food manufacturers can almost instantly ensure that their production teams do not trip up in their manufacturing processes.

Critical Control Point monitoring has become a way of life in the Good Manufacturing Practices of today's safe food processing.

Modern technologies, like ATP (adenosine triphosphate) hygiene monitoring systems, provide real-time testing results that can alert food manufacturers that hygiene concerns in their facilities may be compromising the safety and quality of their food products.

## Advances in technology

In 2012, advancements in the ATP systems, and the software available to record, monitor and manage the testing process, have made the technology even more effective and easier to use.



The good tennis players can accurately serve the ball time after time – the difference between them and the great players is how they then manage the game. A good rapid hygiene unit will give you a quick pass or fail result, but what the best systems will do is to enable you to use the technology to adapt your cleanliness monitoring objectives to improve your hygiene processes and monitoring every step along the way of the production process.

One of the most important elements of an ATP sanitation monitoring program is the establishment of your thresholds for pass, marginal and fail results. In general these thresholds should be ambitious but attainable with a high quality cleaning regime.

They should be unique to your situation

given the people, equipment, cleaning chemicals, cleaning procedures and product that you produce within your facility. There is no single, universal threshold appropriate for every situation.

To use laboratory based testing methods that require time and highly trained personnel is like using a talented football goal scorer as a goalkeeper. The skilled accredited laboratory staff can then focus on other areas such as testing ingredients and finished product.

The ATP hygiene monitoring system can then be focused on the task of preventing own goals by providing the rapid information before, during and post cleaning. Having hygiene objectives in place also provides other benefits.

## Hygiene objectives

Creating objectives allows your hygiene operatives to see that they are a key part of your company's overall target of providing only the highest quality products, and requires them to take ownership of the quality of cleaning they perform. The process also allows you to see improvements in your hygiene monitoring that can take place once you are setting targets for your plant.

Without any objectives in place, how can food producers ensure that their cleanliness targets are being met? How can a company's auditing body see that it is being rigorous in its cleaning?

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Hygiene monitoring objectives can be different. A shellfish harvester and a flour miller will face widely differing challenges in their food production operations and will therefore set different objectives. In each food production environment, the objectives can be set as broad or narrow as necessary to fit that regime.

In principle, hygiene monitoring objectives can be customised to cover the specific needs of a food production environment. Some manufacturers may choose to set objectives to verify the effectiveness of quick clean downs at the end of a production run.

Others may also include objectives for verifying the efficacy of thorough hygiene efforts that involve the disassembly of production equipment at the end of a shift.

In general, objectives involve verification of the effectiveness of the cleaning that has been performed, both to protect the safety and quality of the subsequent production runs, and as a teaching tool to improve the effectiveness of subsequent cleaning efforts.

Once hygiene monitoring objectives have been created, the latest advancements in software available for use with the latest ATP hygiene monitoring systems can help ensure the objectives are being met.

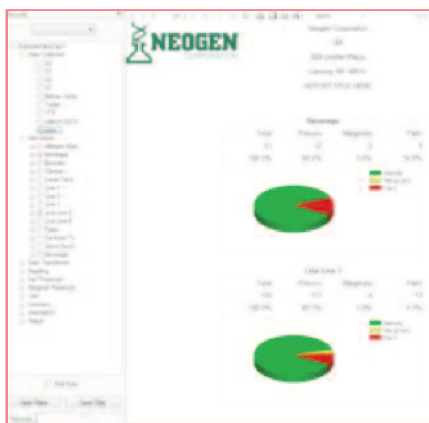
For example, Neogen's AccuPoint 2 offers the following software advancements:

- Instant recognition of the reader when connected and automatic synchronisation informs the user of data contained.
- Intuitive and extremely easy to use – a 20 minute training programme is usually all that is required.
- Easy-to-create test plans and easy to add users.
- Click-by-click filtering – no difficult filter management system.
- Objective creator to aid improvement of a company's hygiene monitoring programme.
- Allows the creation of customised reports with user company logos.
- Results can be exported to Microsoft Excel or Word, or as a PDF document.
- Accumulated results can be graphed in summary or trend format to easily interpret the data.

There are a number of important attributes and characteristics to look for when choosing an ATP hygiene monitoring system. The unit must be robust, handheld and simple to use in a food production environment. For example, AccuPoint has one toggle stick to control all parameters. All you have to do is place the sampler in the unit and shut its door. It is that simple.

Samplers used with the ATP system must be fit for the specific purpose intended. Many samplers based on traditional swabs, the type intended to gently clean the inner ear, are not completely suitable for rigorous surface swabbing of food production surfaces and equipment.

The AccuPoint sampler is patented and designed to cover a greater surface area to provide consistent results and breakdown



**Neogen's AccuPoint 2 software helps ensure hygiene monitoring objectives are met.**

biofilms. The system's software package also must be easy to use with respect to creating test plans, trending results and downloading information. AccuPoint's new software is designed with this in mind with its intuitive nature.

Beyond the equipment and its accompany-

ing software, companies seeking to purchase an ATP hygiene monitoring system should also consider the level of support it can expect to receive from the system's supplier.

For example, Neogen Europe will provide a complete training package for a company's hygiene manager and operatives that includes an introduction to ATP, using ATP as a tool for hygiene management, how to sample correctly, how to use the instrument, how to create test plans, how to trend the data, how to utilise the software with regard to trending, report building and creating objectives.

They will also provide on-site assistance with setting up a system, maintaining your system and servicing. They can also offer remote connection to solve any issues that may arise, and calibrate your instrument on an annual basis. Quality suppliers of food safety testing systems should view customer support after the purchase of the system as even more important as selling the system in the first place. ■

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## CASE STUDY: Meat processor discovers a new generation of rapid hygiene

The old generations of ATP instruments were large, expensive and offered no data handling systems. Perhaps the large original investment has encouraged some users to make the most of what they have.

However, it was still a major surprise when visiting a meat processing company in the North of England to find a very antiquated bench-top style ATP instrument still in operation in their laboratory.

Further enquiries revealed that this instrument could never leave the laboratory as it was too cumbersome and, as a consequence, they had to take swabs to the factory, sample and then return to the laboratory for analysis.

This could lead to mistakes with recording the correct result at the correct test point as they would have to mark each swab and then return to the laboratory to analyse before discovering the result.

The results would then have to be communicated back to the correct location to trigger a re-clean and retest. Any errors in recording and communication would result in a clean area being unnecessarily re-cleaned and a unclean area remaining contaminated when processing restarted.

Even if the right sample was correctly tested and communicated they were losing time on the factory floor and this delay was causing problems between the hygiene/cleaning team and machine operators.

It was apparent that the commissioning of a hand held test system would solve

several problems and provide additional benefits. In-situ testing at the point of clean would give immediate results and an immediate re-start or re-clean decision. The saving in time would save money. The certainty of linking result to location would prevent wasteful re-cleaning and reduce the threat of restarting production at a contaminated location.

In addition, it would provide an automatic electronic method of recording their data and reporting their results to managers and customers. The company operates as a meat cutting and packing plant for a major supermarket and any reports were being laboriously hand recorded and produced. The old system that they were using was also either not capable of trending or they had not been shown how to use it or was too difficult to understand.

Once this situation was clarified with the laboratory manager it was apparent that the Neogen AccuPoint system would offer immense benefits and savings and a month's trial was agreed with the technical and hygiene managers.

Following the trial set-up the unit was an immediate success with the QA's. The instant results meant there was no down time. The laboratory manager was also really impressed with the downloading of results with the ability to trend and filter results that she could email to her customer if necessary. Before the trial was even completed the company had decided to commit to the AccuPoint system. ■