SEAFOOD ANALYSIS

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Food testing labs are constantly challenged with accuratelyanalyzing samples quickly and efficiently all while striving to reducecosts due to market forces. Your commitment to ensuring meat andseafood are safe for consumption, as demand increases, is an uphill battle.

Our commitment to you: to provide a range of solutions across multiple technologies, products, and services that meets or exceedsthe testing needs of food processors. Our solutions offer moreefficiency and increased accuracy and sensitivity for better yields in realtime with minimal trainin.

From instrumentation and software to consumables and reagentsto service and support, we are dedicated to providing you with endto-end solutions that ease your everyday challenges throughput, service, and time to result Because ,of automation when it comes to ensuring the safety and quality of meat andseafood, peace of mind goes a long way – for everybody.

THE PATH TO DETECTING PATHOGENS

Food safety is a concern that extends across the meat and seafood industry and is the foundation to providing delicious, nutritious, and safe product for consumers – it is core to your mission and brand.

To comply with stringent regulations and customer requirements, testing must be done tomanage potential food safety hazards and take corrective actions to actively monitor criticalpoints in the process.

Testing for foodborne pathogens, such as Listeria and Salmonella, is commonly used to screen raw materials, verify the adequacy of process controls, monitor the environment, and release the final product.

Plant operators have important considerations when choosing the right pathogen testing workflows. Most critically, testing methods must meet inclusivity, exclusivity, and robustness requirements to ensure reliability, accuracy, and precision of the method, certified by AOAC or ISO17025. Due to the perishable nature of meat and seafood, total time to results and faster turnaround times save money by reducing expensive inventory holding costs. Another important factor to consider is ease of use, where simple workflows with cost-effective

instrumentation reduce technician time and error risks, while increasing productivity.

TESTING FOR SAFETY

While food testing needs differ by the type of product produced, there are several important factors to consider overall: time to results, precision and accuracy, and efficiency.

Time to results: Because meat and seafood are perishable and attaining results quickly is crucial to the ,have short shelf lives success of your business.

Accuracy and precision: Methods and specific food matrices need to be verified and certified by AOAC (US and ROW) or ISO1610 (EU)

Efficiency: Easy-to-use, cost-effective instrumentation reduces technician time forbetter lab productivity.

WHICH SOLUTION IS RIGHT FOR YOUR LAB?

For testing final product releases:Solus testing kits and Solus One Salmonella instrumentation.

For in-process verification:Solus testing kits and Solus One Salmonella instrumentation.

For environmental monitoring:Solus testing kits, Solus One Listeria and Salmonella instrumentation, and MicroFast products.

ENSURING FOOD SAFETY AND COMPLIANCE

Analyzing chemical contaminants in meat and seafood such as veterinary residues, toxins, andpesticides is crucial to ensure consumer safety and compliance with regulatory limits.

Whether you are screening raw materials or certifying product releases, meat and seafood

companies must verify antibiotic and hormone-free claims and ensure they comply with theregulatory requirements of the country of exportSo why is testing so vital? With today's trends, it's more important than ever to test meat andseafood products before they go to market. These testing drivers include.

The evolution of superbugs or antibiotic-resistant bacteria.

Consumer desire for antibiotic-free foods.

Access to various markets by meeting countries' regulations.

When it comes to meat and seafood analysis, we have a

solution to fit all your testing needs.

FOOD SAFETY ISN'T ALWAYS EASY

When it comes to meat and seafood testing, it can be difficult to With more stringent regulatory .stay on an ever-moving target requirements and maximum residue limits (MRLs), the meatand seafood industry require sensitive testing methods that can

detect low levels of chemicalcontaminants in a wide range of tissue types – both with screening and analytical results.

Whatever your analysis, meat and seafood processors require complete solutions for detectingresidues and contaminants. Our proven solutions – from robust instrumentation, samplepreparation reagents and purification columns, consumables, and service and support – enableyou to complete your testing with confidence.

SUPERIOR TESTING FOR QUALITY FOODS

Meat and seafood producers are challenged with operatingin diverse, complex supply chains that are tightly regulateacross the globe. Processors must ensure nutritional andcompositional quality throughout the entire process.

We provide state-of-the-art testing solutions that analyze rawmeat and seafood, ensure process efficiency, and verify finishedproducts. Our solutions are based on proven technologiesuser-friendly software, and ready-to-use methods.

What's more, our systems are capable of covering thousandsof sample types – so whatever type of meat products youproduce, our solutions can help you reduce costs whileimproving quality.

TESTING FROM START TO FINISH

Screening Ingredients

Rapid, accurate on-site decisionshelp eliminate out-of-specmaterials and calibrateformulations.

Monitor and OptimizeProduction

Precise and reliable measurementsmaximize efficiency and profit.

Verify Finished Product Quality

Consistent final product minimizesquality variations and improvescustomer satisfaction.

OPTIMIZING YOUR PROCESS

As meat and seafood producers and processors, you're faced with nutritional and manufacturing process challenges every daySamples need to be analyzed quickly to determine whether they meet your exact specifications.

Rapid testing is also needed to isolate products by quality for optimal use and to develop consistent products by modifying meat andseafood blends for fat, moisture, ash, protein, and collagen, and more.

Our near-infrared (NIR) analyzers, at-line and in-line, measure in-production samples and help you control the manufacturing With fast, accurate results, adjustments can be made in .process real time to better meet target values. They also improve process variabilityand reduce rework, which optimizes margins.

TECHNOLOGY THAT SUITS ALLYOUR
TESTING NEEDS

PROXIMATES.

MINERALS AND METALS.

VITAMINS, FATTY ACIDS, AND AMINO ACIDS.

RHEOLOGY.

TESTING FOR PROXIMATES:

The DA 7250 system is ideal for determining fat ,moisture, protein, collagen, salt, ash, water activity and more in fish meal, fish, and processed meats inless than 10 seconds.

Our cost-effective DA 6200 NIR analyzes any typeof ground or homogenized meat sample withextreme accuracy. Fat, moisture, protein, and otherparameters can be determined in just 30 seconds.

TESTING FOR MINERALS AND METALS

Our PinAAcle™ AA instrument is rugged, easyto use, and ideal for small operations analyzingindividual elements.

Our Avio ICP-OES system handles complex meatand seafood matrices at a high throughput.

For the most demanding applications – includingspeciation – our NexION ICP-MS instruments areproven to deliver.

TESTING FOR VITAMINS, FATTY ACIDS, AND AMINO ACIDS

The Flexar™ HPLC and Clarus™ GCinstruments can provide amino acidvitamin, and fatty acid profiles ofingredients, to ensure products meetnutritional requirements.

RHEOLOGY TESTING

The Rapid Visco Analyzer measures performanceof a variety of ingredients in meat productsincluding texture-enhancing characteristicslike starches, binders, gels, and stabilizers. Italso verifies that materials meet performancespecifications before they enter production.

ACCURATE ANALYSIS STARTS WITH STEP ONE

Sample preparation is an integral step of meat and seafood analysis. The complexity and diversity of the tissues and ingredients can make testing a challenge, especially at the very beginning of your process. Matrix interferences from lipids, enzymes, proteins, and carbohydrates can impact the accuracy of your analysis – either by immunoassay screening methods or analytical chemistry workflows.

As market consolidation continues and pressure mounts to keep costs low, it’s necessary to rely on efficiency and predictability in yourworkflows. You can count on us and our technology to deliver. Our automation for sample prep, liquid handling, and detection enableslower costs per sample, more traceability, and better reproducibility.

We offer a range of fast, easy, and selective sample preparation and automation solutions for meat and seafood testing workflows.