How To Lower The Cost Of Ownership For Product Inspection While Improving Quality

The cost of compliance with the Food Safety Modernization Act (FSMA) is the topic of discussion in board rooms and budget meetings across the nation. Focusing on the prevention of foodborne illnesses, FSMA's goal is to get ahead of the contamination or adulteration in an attempt to avoid the costly public recalls, garner consumer trust and dispel the negative perception of the FDA and our nation's food supply. It makes perfect sense to be proactive.

What will FSMA mean to you?

FSMA's implementation basically amends the Federal Food and Drug Cosmetic Act and increases the FDA's regulatory powers. This increased authority is expected to identify more food safety hazards and result in higher levels of FDA enforcement and corporate liability. A FSMA advisory, authored by Sarah Roller, Attorney at Law with the firm Kelley, Drye and Warren, based in Washington D.C., suggests that the FDA's authority will not be limited to those who willfully choose to avoid compliance. She says, "The FSMA raises important liability issues for responsible companies with a solid track record concerning FDA compliance and food safety assurance." To paraphrase, 'if you think it can't happen to you … think again.'

Cost vs. Risk

If your company has *never* experienced a recall, you are obviously doing something right … or everything right. If, however, your facility *has* experienced a recall, you are fully aware of the financial burden and detriment to your brand that can occur as a result. Regular reassessment of product inspection

technology (including its age and any costs related to operation, maintenance, retrofitting, upgrading, or replacement) is essential for optimal performance and improved production. In fact, reassessment may be necessary for your facility's compliance with the FSMA. These facts must be considered when assessing cost vs. risk:

- The average cost of a food recall is estimated to be about $10 million
- Only 48 percent of companies are capable of implementing a food recall within hours
- Metal fragments in food, even if meeting the FDA guidelines, can cause serious injury
- Approximately 25 percent of recalls are due to foreign bodies in product
- The most common foreign bodies are: metal, glass, plastic, and bone
- About 6 percent of reported foreign bodies result in injury
- The pediatric age group is most at risk for foreign body ingestion and injury
- FDA's guidance documents are actually the FDA's bible

The question you need to assess for your facility is, "Is the cost of upgrading, retrofitting or replacing your product inspection systems worth what it could cost if you don't?"

HARPC Now

Manufacturers have had years to get ready for complete FSMA implementation. Though it has taken a considerable amount of time, the FDA's process is nearing completion. Some rules are already being enforced by the Food Safety and Inspection Service (FSIS), while others are being tweaked prior to final publication. The FSMA — the entire package — will soon be a reality. The Preventive Controls Rule defines a "small business" as one with 500 or fewer employees, while a "very small business" is defined as one that has less than $1 million in sales of *human* food. These two groups will either have modified requirements as to the time allowed for compliance or will be exempt if conducting what are considered low-risk processing activities, under the Preventive Controls Rule, which includes compliance with Hazard Analysis and Risk-based Preventive Controls (HARPC). It is possible that some businesses will be required to comply with the Produce Rule, but not with Preventive Controls Rule, based upon the FDA's definition of small and very small businesses in that rule. The majority of facilities, however,

will be required to be FSMA compliant within one year of the rule's effectiveness.

First things first; if your facility is required to register, it must be done between Oct. 1 and Dec. 31, 2014, regardless if you are a new business or have registered earlier in the year. Once registered, the FSMA's Preventive Controls rule requires every registered food facility to have a written food safety plan in place. Except in the instance of poultry slaughter, every establishment's product safety plan must also include comprehensive Hazard Analysis and Critical Control Points (HACCP) plans. The full text of the law pertaining to prevention also includes Current Good Manufacturing Practices (cGMPs) and HARPC. More succinctly called Preventive Controls for Human Foods, these rules provide for both microbial and foreign matter product adulteration. The purpose of HACCP in the identification and monitoring of foreign materials is to realistically assess potential hazards that could, if not addressed, cause illness or injury. Therefore, logically, by assessing your production line and looking at it from a 'HACCP' point of view, you will be able to more accurately identify those areas that could pose a risk to your company's brand and, ultimately, its bottom line.

Product Inspection — Upgrade, Retrofit, or Replace?

It's pretty safe to say that almost all food processors have asked, or are asking, those questions right now. The answer will not be the same for everyone and may very well depend upon what your decision is regarding cost versus risk. Some things to consider are the costs associated with each of the following concerns when thinking in terms of upgrading, retrofitting, or replacing existing processing equipment:

Sensitivity settings for foreign material detection equipment has changed, as have the upper and lower size limits for what the FDA has defined as "hard and sharp objects." However, it really doesn't matter what the FDA regulatory language is regarding a foreign material in the product you produce. Foreign material of any kind is considered an adulterant, regardless of the size, and distributing a food that is known to be adulterated is a violation of the Federal Food, Drug and Cosmetic Act (FD&C Act).

Detector wiring can often be a disaster waiting to happen. Many facilities have added equipment for which the original building was not designed. Cords are run where they are not meant to be; new outlets are installed, extension cords are utilized, and old wiring has not been replaced. These electrical matters can cause overloaded circuits, leading to equipment damage, employee accidents, and possibly fire. Some electrical situations cause inadvertent disconnections or short connections, leading to detector failure, with the glitch often going undiscovered until customers start calling to complain.

Greater flexibility and optimized performance are possible with each upgrade, retrofitting, or replacement option. Your job is to determine the level

of flexibility and optimized performance you wish to obtain when researching the costs of upgrading or retrofitting versus replacement. When making this decision, also consider the electrical issues that may arise from making this decision, as well as your current maintenance costs and energy consumption. One other thing that impacts production greatly is the response provided by the detector company when repair or maintenance is required. Consider the warranty period on parts and repair, as well as the response time.

Data collection and recordkeeping are FSMA hot buttons. The FSIS is already writing violations for improper or inadequate paperwork. This, in and of itself, is an exceptional reason to look at replacing old and outdated equipment with machines that seamlessly keep the records while processing your product.

PackExpo could have been the ideal time to explore your options. If you were unable to attend personally, the roll-out of new products and innovative technology can be examined after the fact. Material Process Equipment (MPE) and Magnetic Products, Inc.®, (MPI), is rolling out its new Hi-Q Intelligent Inspection line at PackExpo this year. Keith Rhodes, President of MPE/MPI was very excited to introduce the new Hi-Q line:

Hi-Q MD is a complete metal detector range compatible with free fall, conveyor, and pipeline systems.

Hi-Q CW is a dynamic check-weigher system capable of handling a wide range of products from small, high speed products to heavy-weight, full case and bag systems.

Hi-Q CB is a combination metal detector and check-weigher with product-specific calibrated reject options.

Hi-Q XR is the complete line of X-ray inspection systems customized to handle packaged goods, pumped products, and bulk flow goods. The line includes single and dual beam systems to accommodate upright containers and specialized pin bone detection systems.

When asked why customers should consider or choose MPI's Hi-Q line, Rhodes responded, "The Hi-Q line was designed to optimize production while being extremely competitively priced. We manufactured the line utilizing international components, making in-the-field-maintenance more economical and able to be completed in the shortest amount of time." Rhodes went on to explain that MPI will be able to meet or exceed its customer requirements with much shorter delivery times. And with the full clean room product testing facility in Highland, MI, the company can respond very quickly to customer needs.

For more information on reducing your costs of product inspection while improving production and safety, contact MPI at (800) 544-5930. You can also check out more information on the Hi-Q Product Inspection line at: www.hiq-pi.com.

About MPI

Based in Metro-Detroit Michigan, MPI designs, manufactures and services magnets, material handling and electronic inspection systems. MPI products are designed to be complete metal and foreign contamination control solutions for the food production and related industries. MPI's equipment and service programs help its customers minimize downtime and protect brand integrity through offering safe and reliable equipment.

MPI leads the industry by continuously engineering inventive products, advancing customer education through significant investments in research and development, and proactive product training. All MPI equipment is backed by its best in class service programs, customer service team, and support team. MPI interacts closely with its customers and expands its offerings to meet the changes of a dynamic and ever changing marketplace.

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