BRADY®

Food and Beverage Plant Tour Guide
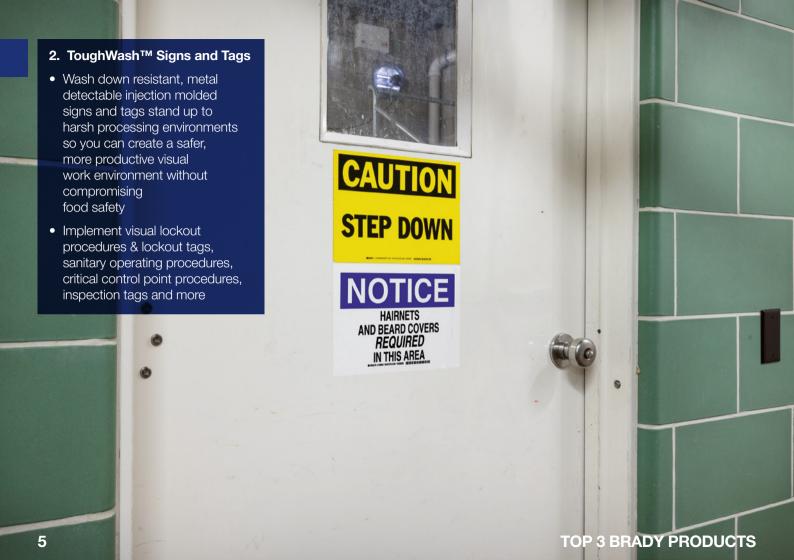
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5 Critical Business Issues

1. **Food Safety Regulatory Compliance:** Food safety is the number one issue facing food processors. Food recalls cost processors millions of dollars and damage brand reputation. Because food safety directly impacts public health, government agencies develop stringent regulations while grocery stores often require food processors to comply with GFSI standards to ensure food safety. To comply with these standards, food processors must develop protocols and ensure implementation. Most protocols live in binders on office shelves. It's critical to bring this information to the processing floor.

2. **Food Safety Sanitation:** Because of the emphasis on food safety, sanitary processing facilities are critical. Therefore, food processors conduct wash downs to sanitize critical areas of their processing facility. Wash downs generally occur every night on third shift and whenever a production line changes over to a new product run. The area that gets washed down and the degree of wash down will vary by type of food. Generally, meat, dairy and seafood plants have the harshest conditions.

3. **Workforce Education:** Safe & efficient food production happens on the processing floor. And the processing floor often creates a challenging and dangerous work environment. Therefore, it's critical to train front-line employees on proper procedures and protocols and then continually reinforce this training. This can be extremely challenging at processors with high turnover, multiple languages spoken or low reading proficiency among front line employees.

4. **Food Quality/Waste Reduction:** Food processors aim to make the highest quality food with the least amount of waste. To enhance quality, processors implement standard operating procedures to ensure consistency. They also implement critical control points such as x-ray or metal detection to ensure food safety. Food that doesn't pass quality and safety standards must be sent back to the beginning of production for necessary re-work.

   Additionally, food processors try to get the highest yield possible. Essentially, if they start with 100 lbs / 45.3kg of ingredients, they'd like to get as close to 100lbs / 45.3kg of finished product as possible. However, inefficiency in the production process can lead to lost yield.

5. **Workplace Safety:** Food processing plants are dangerous places to work. In fact, it is 59% more likely to be injured in a food processing plant compared to average private industry manufacturing. Top contributors to injuries include exertion/ lifting, slips, trips and falls, and getting caught in machinery.

5 CRITICAL BUSINESS ISSUES

Top 3 Brady Products

1. ToughWash™ Labels and Printer Systems

- Wash down resistant, metal detectable labels stand up to harsh processing environments so you can create a safer, more productive visual work environment without compromising food safety

- Identify pinch points, provide machine guard reminders, warn of electrical hazards and call out other safety concerns at the point of concern.

2. ToughWash™ Signs and Tags

- Wash down resistant, metal detectable injection molded signs and tags stand up to harsh processing environments so you can create a safer, more productive visual work environment without compromising food safety

- Implement visual lockout procedures & lockout tags, sanitary operating procedures, critical control point procedures, inspection tags and more

CAUTION

STEP DOWN

NOTICE

HAIRNETS AND BEARD COVERS *REQUIRED* IN THIS AREA

3. Lockout/Tagout Solutions

- Visual lockout procedure writing services, devices, and metal detectable VLOP placards & lockout tags create a best practice solution to ensure workplace safety

- Protect employees who disassemble machines for sanitation and maintenance daily

Access to Plant

- How do you currently alert your drivers to proper procedures for delivery?

- How do you alert drivers to any hygiene practices they should be following for delivery?

- How do you control the access the drivers have within the plant?

Solution

Signage can direct drivers to the appropriate receiving doors (food vs non-food), provide standard operating procedures for delivery and detail hygiene practices that must be followed.

People ID products can be used for temporary badges and access control.

GFSI programs and some governments around the world require food processors to take steps to prevent the intentional adulteration of food through the implementation Food Defense plans. Food defense plans identify potential areas where someone could intentionally contaminate the food supply and then outline risk mitigation steps. This largely stems from concerns related tobio-terrorism within the food supply.

In receiving, truck drivers from outside companies will be delivering food ingredients and food processing supplies. It's important for food processors to identify & verify the driver making the delivery and control their access within the food processing plant.

Receipt & ID

- What do you currently use for visual identification of materials to ensure plant workers know what's in a package, when it was received and when it will expire?

- How do you visually identify allergens?

Solution

Brady printers and labels can be used to set up a color-coded system to create visual identification of materials.

Upon receipt, some companies will use barcodes or RFID integrated into their ERP system to identify and track the flow of materials through storage and into the processing environment. However, many processors still do this manually using visual identification.

It's important to track food ingredients to identify lot numbers, date/time of receipt and presence of allergens in the event of a recall.

GFSI schemes often single out the tracking of allergens. Mislabeled or misidentified allergens are the number one reason for recalls and can have deadly consequences for consumers.

Non-Conforming Products

- How do you identify the proper area for handling non-conforming receivables?

- How do you identify the proper bins for disposal of packaging that might contain contaminants?

Solution

Brady floor markings and signage can be used to create a visual work space that identifies proper storage areas.

As part of GFSI programs, non-conforming products must be identified and held in a separate area for inspection. Non-conforming products could include packages with a high amount of bird droppings on them, ripped packages, expired ingredients, allergens or questionable products.

Furthermore, all packaging of materials (shrink wrap, bands, cardboard) should have a marked area for disposal as the packaging could be carrying contaminants. In some processing plants, plastic receiving pallets will actually be washed and sterilized.

Storage

- How do you identify storage spaces for allergens?

- How do you identify best practices to ensure FIFO ingredient flow?

Solution

Brady floor markings, labels and signage can be used to create a visual work space to help with organization and work flow.

Similar to any warehouse environment, it's important to visually identify appropriate storage areas for all items. Specifically for food, it's essential to identify storage areas for potential allergens, because unidentified allergens are the leading cause of food recalls.

To avoid any cross-contamination, any packages that have been compromised or have expired should not be stored near good ingredients.

Finally, any identification that can be used to assist with work flow to ensure a FIFO process will also prevent expired food from being on the shelf.

Staging

- How do you visually identify appropriate staging areas for ingredients?

- How would a mix-up in ingredients impact your food production?

Solution

Brady floor markings, labels and signage can be used to create a visual work space to help with organization and work flow.

Many processors do not have well-marked staging areas for materials about to go into production. This can cause several issues:

- Pallets and bins dropped in random locations near the processing line can create workplace safety concerns related to slips, trips and falls.

- If the materials are not properly identified, the wrong ingredient could be used in product formulation, causing quality issues, a recall or need for re-work.

PRE-PRODUCTION STAGING

Wash Down and Sanitation

- How do workers know the appropriate procedures for cleaning and sanitizing equipment?

- How do workers know if tools and utensils have been sanitized?

- How would you benefit from having visual procedures for sanitation on each machine?

Solution

ToughWash® signs can be used to provide sanitary operating procedures for each piece of equipment (similar to providing visual lockout procedures).

ToughWash® Tags can be used to identify machine components, tools or utensils that must be removed from the environment for sanitization.

Because of the emphasis on food safety, sanitary processing facilities are critical. Therefore, food processors conduct wash downs to sanitize critical areas of their processing facility. Wash downs generally occur every night on third shift and whenever a production line changes over to a new product run. The area that gets washed down and the degree of wash down will vary by type of food. Generally, meat, dairy and seafood plants have the harshest wash down conditions.

Line Clearance for Sanitation

- How do you currently document your line clearance procedures?

- With the tightening regulations from the FDA and with GFSI, do you feel you will be required to provide a higher level of documentation going forward?

- How would you benefit if you could prove your line clearance using electronic data?

Solution

InspectNTrack™ Software can be used to ensure a complete inspection of sanitation and provide detailed documentation that the line has been appropriately cleared for production.

Before food production can start each morning, food processors must ensure that their production line has been completely sanitized (99.9% free of bacteria). Additionally, processors that use allergens on their food line must also ensure that the sanitation process has removed any allergen residue to eliminate cross-contamination concerns.

To achieve these results, food processors follow a stringent wash down process. At the end of this process, the food processor must check all surfaces using blacklights, swabs for ATP and other laboratory tests to ensure sanitation. The line cannot start until they have clearance for sanitation.

Today, many processors manually document this process with paper and binders.

Line Clearance for Equipment

- How often do you change over the production line?

- How do you verify you have the right equipment on the line for production?

- How do you document maintenance of your critical equipment? Would you benefit from electronic data storage?

Solution

Brady signage can provide standard operating procedures for changeovers and indicate the appropriate equipment for each type of food being processed.

InpsectNTrack can verify that appropriate maintenance has been conducted on all critical equipment.

Prior to beginning production, processors must verify that they have the proper equipment on the production line for the food they are about to produce. This is very important for any processors that run multiple products on the same line and conduct changeovers on the line.

Furthermore, many GFSI programs require processors to keep maintenance records for all critical processing equipment.

Line Clearance for Product

- My understanding is that you need to run a passable product before opening full production. Would standard operating procedures on commissioning a line be of benefit?

Solution

Brady signage can provide standard operating procedures for commissioning a line for full production.

Prior to the start of full production runs, food processors must first run a passable product through the line. Once a final product has been produced that passes inspection, the line can then begin running at full production.

Lockout / Tagout

- Have you ever considered creating visual lockout procedures at the point of lockout?

- Are the lockout tags you use today metal detectable?

Solution

VLOP Writing Services ensure that the LOTO information can be posted in an easy to understand format at the point of lockout.

Metal detectable, wash down resistant placards and tags can be used at the point of lockout without causing food safety concerns.

Like every other manufacturing environment, lockout tagout is a standard practice in food processing.

Unlike every other manufacturing environment, the wash down process occurs every night and requires the sanitation crew to disassemble components, and lockout or tagout equipment as needed.

Safety Signs & Labels

- Do you fully label all the safety hazards in your processing environment?

- How do the labels you use stand up to the wash down process?

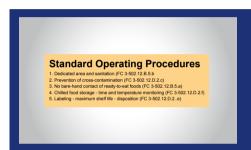- Are your labels metal detectable?

Solution

Metal detectable wash down resistant signs and labels can be used to alert employees of safety hazards, without causing food safety concerns.

Food processing environments pose a number of safety hazards that should be identified with appropriate signage. Because of the hazards in food processing, it's 59% more likely to be injured in food processing than the average private manufacturing plant in America. Some of these hazards include pinch points, sharp knives, wet and slippery floors, heavy/repetitive lifting and confined spaces.

In a recent survey of 300 food processors, more than 40% indicated they had not marked all safety hazards.

Standard Operating Procedures

- How do you communicate operating procedures to your employees on the line?

- How does turnover affect your ability to ensure operating procedures are being followed?

- How would operating procedures at the point of work create efficiencies for you?

Standard Operating Procedures

1. Dedicated area and sanitation (FC 3-502.12.B.5.b
2. Prevention of cross-contamination (FC 3-502.12.D.2.c)
3. No bare-hand contact of ready-to-eat foods (FC 3-502.12.B.5.a)
4. Chilled food storage - time and temperature monitoring (FC 3-502.12.D.2.f)
5. Labeling - maximum shelf life - disposition (FC 3-502.12.D.2..e)

Solution

Metal detectable wash down resistant signs and labels can be used to alert employees of standard operating procedures, without causing food safety concerns.

Placing standard operating procedures along the processing line can help to ensure workers follow protocol, making them more efficient and increasing the chances of safe food production. This is especially important due to the varying education levels, spoken languages and frequent turnover of food processors.

Product re-work can account for significant costs and loss of time. If a product doesn't pass final inspection due to improper processing, it will need to be re-worked through the line.

Some food processors will change over production lines. Having changeover procedures at the point of operation can ensure a smooth transition that allows the line to be commissioned for food production more quickly.

Critical Control Point

- Do you have any signage indicating your Critical Control Points (CCPs) throughout the plant?

- Would highlighting your CCPs create awareness among your employees as to the importance of your CCPs?

Solution

Metal detectable, wash down resistant signs and labels can be used to alert employees of critical control points, without causing food safety concerns.

Almost all government agencies and GFSI programs require food processors to implement HACCP plans. Essentially, they must identify all potential hazards to food safety and then identify the critical control point that will eliminate that risk. Examples of critical control points could be an oven that cooks chicken to 170°F/ 76.6°C or an x-ray detection system or metal detection system at the end of a food line.

To be compliant with the regulations, each employee operating machinery at a critical control point must be able to communicate the appropriate information related to the control point to an inspector.   The food processor must be able to prove they have validated the machine is achieving the control point and verify that tht tests have happened over time.

Critical Equipment Maintenance

- How do you currently document your equipment maintenance?

- Are you confident the maintenance has been taking place? Can you prove it?

Solution

InspectNTrack™ Software can ensure the timely maintenance and documentation for critical equipment.

GFSI requires that any machine on the critical equipment list must have documented maintenance records to ensure it's in compliance.

Pipe Marking

- Do you have any concerns with the performance of your pipe markers?

- Would you use more pipe marking if you felt there were better solutions available?

Solution

Pipe markers provide clear and reliable visual markings of pipe contents and direction of flow.

Food processors may have pipes to transport liquids. All of these pipes should be identified with the direction of flow. One very common occurrence should be the marking of potable water.

Additionally, food processors often use Ammonia to cool areas of the plant. These pipes must be properly identified.

Line Clearance for Sanitation

- How do you currently document your line clearance procedures?

- With the tightening regulations from the FDA and with GFSI, do you think you will need a higher level of documentation going forward?

- How would you benefit if you could prove your line clearance using electronic data?

Solution

InspectNTrack™ Software can be used to ensure a complete inspection of sanitation and provide detailed documentation that the line has been appropriately cleared for production.

Similar to the production line, packaging lines must be completely sanitized (99.9% free of bacteria) prior to beginning packaging each morning. To achieve these results, food processors follow a stringent wash down process.

At the end of this process, the food processor must check all surfaces using blacklights, swabs for ATP and other laboratory tests to ensure sanitation. The line cannot start until they have line clearance for sanitation.

Line Clearance for Equipment & Supplies

- How often do you change over the packaging line?

- How do you verify you have the right equipment and labels on the line for packaging?

Standard Operating Procedures
1. Dedicated area and sanitation (FC 3-502.12.B.5.b
2. Prevention of cross-contamination (FC 3-502.12.D.2.c)
3. No bare-hand contact of ready-to-eat foods (FC 3-502.12.B.5.a)
4. Chilled food storage - time and temperature monitoring (FC 3-502.12.D.2.f)
5. Labeling - maximum shelf life - disposition (FC 3-502.12.D.2..e)

Solution

Brady signage can be used to place standard operating procedures at the point of packaging, creating an efficient and thorough line changeover.

Brady floor marking and labels can be used to better identify the appropriate packaging materials to avoid mix-ups.

Similar to the production line, packaging lines must be inspected to ensure the appropriate equipment and supplies are available for packaging the specific product being produced that day.

Most important is ensuring that the correct packaging labels are on the line. Mislabeled allergens and ingredients are one of the biggest reasons for recalls. Often, this is because the wrong label was applied to the product.

Storage

- How do you currently identify proper storage areas in your warehouse for finished product?

- Do you post instructions in your warehouse to ensure a FIFO product flow?

Solution

Brady floor markings, labels and signage can be used to create a visual work space to help with organization and work flow.

Similar to any warehouse environment, it's important to visually identify appropriate storage areas for all items.

To avoid sending out bad product, any packages that have been compromised or have expired should not be stored near good product.

Finally, any identification that can be used to assist with work flow to ensure a FIFO process will also prevent expired food from being on the shelf.

Bulk Food - Load Out

- How do you ensure a sanitary environment inside your load out area?

Solution

Brady signage can be used to indicate proper clothing for a sanitized load out area and standard operating procedures for load out to ensure food safety.

Some processors have a "load out" area where food is shipped in bulk (truck or container loads). Because the food has the potential for exposure to contaminants when it is transported into the bulk container, the load out area must be highly sanitized.

General Plant Needs

Shadow Boards

Because of concerns with sanitation and cross-contamination, food processing plants like to have separate tools and equipment for each area of their processing plant. In order to keep track of the tools, they will often color code them and use shadow boards to organize them in the appropriate areas of the plant.

Pipe Markers

Although pipe markers were mentioned as part of the production floor, you will find the need for pipe markers throughout the processing plant. Whether it's to identify ammonia pipes or potable water, it's critical to know what's in each pipe.

GHS

Because of the chemicals used within the wash down environment, you will likely find a need for GHS identification. Be sure to ask how they handle GHS needs today.

GENERAL PLANT NEEDS

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