

# WHITE PAPERS

## INNOVATIVE PROCESSING SOLUTIONS



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## PROCESS SOLUTIONS FOR ADDING GLUTEN-FREE TO YOUR PRODUCT MIX MIX ADDING GLUTEN-FREE PRODUCTS: TIPS FOR PREVENTING CROSS-CONTAMINATION

scene, retrofitting an existing plant to incorporate this allergen into the current product mix can be challenging. Here

### PROCESSING

\_\_\_\_\_—Process engineers can often evaluate and provide recommendations to reconfigure existing production areas to include a dedicated allergen line. Ideally, each line should also have its own HVAC and/or refrigeration system to effectively control airflow between areas. A full separation of lines will allow other lines

\_\_\_\_\_—Dry-mixing and dry-blending areas should be housed separately. Airflow should be

\_\_\_\_\_—Non-allergenic products should be scheduled first followed by allergen products. A scheduling matrix can help minimize clean-in-place (CIP) and changeover time between batches.

### STORAGE

\_\_\_\_\_—Room modifications may be made to create separate storage areas for allergen

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## CLEANING

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include an effective CIP system that will sanitize and flush the lines during changeover.

### 2. Detergents with varying pH levels

needs based on the allergens processed and recommend specific cleaning solutions that will be most effective in

## CONTROLS

Hazard Analysis and Critical Control Points Plan (HACCP) —Allergen control should be included as part of the plant's HACCP plan. Assess the plant's allergen and develop a detailed plan for addressing those risks. Conduct internal

## MANAGING MULTIPLE SKUS TO MEET CUSTOMER DEMANDS

specialty ingredients and preparations (such as non-GMO, Kosher, and gluten-free), flexible packaging, and

with a medium grind. Another customer wants a different blend in a dark roast with a fine grind. You can do the math

As a result, food producers often find themselves saddled with too many different products, or SKUs, all in an effort to appease customers. Too many SKUs can drag down profits with frequent changeovers that drive up production costs and decrease throughput. Here are ways to manage multiple SKUs:

## SALES

2. Detail the process for adding additional SKUs to your product mix. Can a sales representative create a new SKU,

## ANALYZE SKUS OFTEN

1. Conduct an asset optimization study. Assess how your plant's assets are being utilized, or underutilized, based on capacity and profit margin.
2. Is there an opportunity to combine two similar SKUs while satisfying customer demands? Can you eliminate a SKU?
3. Determine your most / least profitable SKUs and set a threshold for eliminating those that may be dragging down profits.

## PRODUCTION SCHEDULING

1. Incorporate production scheduling into your plan and review it frequently. Can you process extra runs of the same SKU?
2. Consider putting freezes on your production schedule for one or two days to avoid any last-minute customer orders.

## REDUCE CHANGEOVERS

1. Fewer SKUs mean fewer changeovers. Conduct a manufacturing analysis to determine...
    - Single-serve or tray packs.
    - Case size consolidation, on line printing and label application.
- Consumer and retailer demand for specialty products will continue to increase. Maintaining your company's strategic integrity and profits, while continuing to meet customers' needs, requires a balance in sales and production.

## ELIMINATING NOXIOUS PLANT ODORS THROUGH INCINERATION: A CASE STUDY

(EPA) Clean Air Act was created to reduce emissions of hazardous and odorous air pollutants and outlines specific Manufacturing Practices (GMP) program.

client recently approached Stellar seeking assistance in developing a cost-effective and efficient method to burn off

## OTHER TECHNIQUES INCLUDE:

\_\_\_\_\_—Roof-mounted air scrubbers can filter the outbound air before releasing it into the atmosphere. Air scrubbers can be expensive and require maintenance and frequent filter replacements.

\_\_\_\_\_—Modifying the quantity and / or cooking time of products can reduce the concentration of fumes

### Chemical scrubbing

Each method of managing odors has unique benefits and costs. It is important to work with a food processing

## AUTOMATE THESE THREE PROCESSES TO INCREASE THROUGHPUT

managers are recognizing the benefits of automating previously manual processes to increase production and

Although the upfront costs can be a deterrent, there are three areas where automation can definitely increase

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sheets sent to the operator at the HMI. The operator can then set the equipment according to the weights and ingredients specified in the recipe. As ingredients are added, load cells (electronic weigh scales) on the cook kettles

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