CASE STUDY Flour Perfection: How AZO Elevated Quality Control for a Pretzel Manufacturer



#### Introduction (Problem)

In the heart of the pretzel-making industry, where precision and quality reign supreme, a well-known pretzel manufacturer faced a unique challenge. Seeking to enhance the quality of their final product, they reached out to AZO for a solution. In this article, we'll delve into the fascinating journey of how AZO addressed the needs of this pretzel manufacturer, delivering a transformative solution that revolutionized their quality control process.

## The Company and Its Industry

Our story unfolds within the realm of a renowned pretzel manufacturer, an expert in crafting the crispy, salty delights loved by snack enthusiasts worldwide. This manufacturer had a clear goal: to elevate the quality of their pretzels by ensuring the utmost purity and consistency of their flour supply. Flour, being the essential ingredient in pretzel production, needed to be carefully screened and prepared before entering production silos. The goal was to eliminate any unwanted contaminants, oversized materials, or irregularities that could affect the final product's quality.

# The Challenge: Flour Purity and Quality Control

The challenge at hand was to develop a system that could meticulously prepare all incoming flour before it was transferred into the production silos. This comprehensive preparation process involved several critical steps. First, the flour had to pass over magnets to remove any magnetic contaminants. Next, it needed to pass over a screen to detect oversized materials, bugs, or contaminants. Finally, the prepared flour was to be entoleted, a process that disinfests the flour of eggs and larval flour beetles in quarantined silos. Additionally, if the flour was determined to be substandard at any point, the system needed to have the capability to transfer the load back into a truck for disposal. The goal was to ensure out-of-spec flour couldn't make it into the process.

## **The Process Evaluation**

To tackle this complex challenge, AZO engaged in a detailed process evaluation. The required process steps were carefully designed into a process flow diagram, which was then thoroughly reviewed with the customer before being quoted.



#### Material Assessment Studies and Site Visits

A site visit to the customer's facility was a critical step in the design process. This allowed AZO to assess the existing setup, review the proposed design, and determine the optimal location for the new installation.

### **Engineering Considerations and Unique Circumstances**

The design process was meticulous, taking into account various engineering considerations. This included evaluating transfer rates, pressure losses through the various components, and site-specific considerations. A unique challenge involved accommodating NFPA (National Fire Protection Association) vents on the new silos, which added an extra layer of complexity to the project.

#### AZO as Project Manager

While AZO provided installation support for the project, there were delays due to supply chain issues, a common challenge faced by many during the time of COVID-19. Despite these setbacks, AZO remained committed to delivering a successful solution.

## **The Transformative Results**

The implementation of AZO's solution brought about a significant transformation in the pretzel manufacturer's quality control process. By meticulously preparing incoming flour and verifying its quality, the manufacturer could minimize potential quality issues in the final production process. This quality assurance not only enhanced the consistency and purity of their flour but also had a direct positive impact on the overall quality of their pretzels.

In conclusion, this collaboration between AZO and the pretzel manufacturing industry showcases the power of innovation and problem-solving. By addressing the unique challenges associated with flour quality control, they have set new standards for product excellence and consumer satisfaction. While the name of the pretzel manufacturer remains undisclosed, their success story with AZO stands as a testament to the possibilities that emerge when industry leaders join forces to achieve excellence.

