

CASE STUDY

Perfecting Film Quality: How AZO Enhanced Consistency in the Safety Glass Industry



● Introduction (Problem)

In the realm of safety glass manufacturing, precision is not just a goal; it's an absolute necessity. Imagine a company, let's call them the "Glass Film Innovators," that produces plastic film applied to glass to create safety glass. Their challenge? Ensuring the highest quality film, even when receiving materials from different suppliers with slight variations. This is where AZO stepped in to revolutionize their process. In this article, we'll explore the fascinating journey of how AZO addressed the unique needs of the "Glass Film Innovators."

● The Company and Its Industry

Our story revolves around a pioneering company that specializes in producing plastic film applied to glass, a crucial component in safety glass manufacturing. Their mission is to create the highest quality film possible, and they understand that consistency in their raw materials is key to achieving this goal. This industry relies heavily on poly applications, and any variations in the materials received from different suppliers can affect the quality of the final product.

● The Challenge: Achieving Material Consistency

The primary challenge faced by the "Glass Film Innovators" was the need to store more than one truckload of material in a silo while ensuring thorough mixing. They sought a solution to blend the material together within the silo to mitigate any potential variations in the raw materials received from different suppliers. These variations could jeopardize the consistent quality of the film they produced.

● The Process Evaluation

In collaboration with AZO, the decision was made to implement a blending silo to address this challenge. The search for an appropriate blending silo, both domestically and abroad, began. However, the challenge lay in finding a supplier capable of producing a silo of the required size.

● **Material Assessment Studies and the Quest for the Perfect Silo**

Since the aim was to find a custom-produced silo, no trials were conducted. However, existing silo designs suitable for this application were explored. The search led them to a specialized silo produced in Germany, ideally suited to their needs. The silo was sourced and shipped to the customer's site in North Carolina.

● **Engineering Considerations and the No-Moving-Parts Requirement**

During the design process, the customer had a specific request: they wanted a silo with no moving parts. This ruled out silos with turning mixing screws, necessitating a unique approach to the solution.

● **AZO as the Installation Supervisor**

AZO played a vital role in the project by providing installation supervision, ensuring that the solution was implemented effectively and met the customer's requirements.

● **The Transformative Results**

Following the successful implementation of AZO's solution, the "Glass Film Innovators" have enjoyed five years of consistent, high-quality film production. The silo's blending capabilities have ensured that any variations in raw materials are thoroughly mixed, eliminating the risk of inconsistent film quality from the extruder. This achievement has significantly enhanced their efficiency and output while maintaining the integrity of their final product.

In conclusion, the collaboration between AZO and the safety glass industry exemplifies the power of innovation and problem-solving. By addressing the unique challenge of material consistency in their silo system, they have set new standards for quality and reliability in the production of safety glass film. While the name of the "Glass Film Innovators" remains undisclosed, their success story with AZO stands as a testament to the remarkable results that can be achieved when industry leaders come together to solve unique challenges.