

Streamlining Medication Manufacturing:

An AZO Vital Success Story



● Introduction (Problem)

In today's highly competitive pharmaceutical industry, staying ahead of the game requires not only cutting-edge medications but also optimizing the manufacturing process. One leading global manufacturer of over-the-counter (OTC) consumer medication products embarked on a journey to enhance their production efficiency, and they turned to AZO Vital, a trusted name in materials handling and automation solutions, for assistance. In this article, we'll delve into their unique challenge and how AZO Vital stepped in to provide a solution that promises significant benefits for the pharmaceutical giant.

● The Company and Industry

Our story unfolds within the realm of a major global manufacturer of OTC consumer medication products, a company known for its commitment to innovation and quality. While we won't mention the company's name, its mission to streamline raw materials handling, continuous feeding, and blending processes is a testament to its dedication to excellence. The primary focus is on producing medications containing Naproxen Sodium, combined with various additives, to cater to the healthcare needs of millions.

● The Challenge: Optimizing Raw Materials Handling

The primary issue at hand was the need to revamp the entire raw materials handling process. This included receiving raw materials, unloading them, and transferring them efficiently to feed into a continuous dosing, blending, and tableting process. To address these challenges, our company sought the expertise of AZO Vital.

● The Process Evaluation

To kickstart the project, AZO Vital embarked on two site visits, working as a detective to gather crucial information. These visits allowed for in-depth exploration of potential equipment placement and identification of dimensional constraints within the facility. The initial discussions were somewhat constrained due to confidentiality concerns and the fact that new process trials were still in the development and evaluation phases. However, these site visits paved the way for understanding the customer's desired process, project goals, objectives, and the three primary drivers most important to them.

● **Material Assessment Studies and Lab Work**

Analytical samples were reviewed and tested for general flow characteristics, an essential step in the process of finding the ideal solution.

● **Engineering Considerations**

The design process was no small feat. Multiple iterations of conceptual design sketches were required to meet process throughput requirements and individual raw material feed rates. Challenges included interfacing with downstream equipment provided by another company and dimensional constraints in both footprint and room height.

What made this project truly unique were the spatial challenges. Fitting a raw material handling system into the available space at the factory required meticulous planning and creative problem-solving.

Additionally, the design and interface had to consider the existing process control platform already in use at the facility and controls provided by the continuous process equipment manufacturer.

● **AZO as Project Manager**

Although the installation is yet to take place, AZO Vital will serve as the project manager, offering installation supervision, start and commission support, SAT (Site Acceptance Test) support, and on-site training.

● **The Promising Future**

While the full impact of the AZO Vital solution is yet to be realized, once installed and running alongside the continuous dosing and blending system, the customer is poised to reap immense benefits in terms of process efficiency and the production of OTC oral solid dosage (OSD) medications. Furthermore, this installation will serve as a solid platform to produce several other pharmaceutical products in the future.

In conclusion, this partnership between the unnamed pharmaceutical leader and AZO Vital exemplifies the importance of innovation and collaboration in the pharmaceutical industry. By addressing the unique challenges in raw materials handling and process optimization, they are poised to set new standards in efficiency and product quality, ultimately benefiting healthcare consumers worldwide.