



CASE STUDY

Optimizing Spice Processing with ISL Cone Valve IBCs





Modifications and maintenance operations can now be conducted in mere minutes, allowing for complete disassembly, thorough cleaning, and reassembly with remarkable efficiency. Since its installation in In July 2002, there was no need to order a replacement liner, demonstrating the long-term effectiveness of our solution.

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CLIENT

The client, a prominent manufacturer specializing in spices and flavorings, operates facilities across Holland, Germany, the United Kingdom, and Canada. Their production process involves grinding, blending, and packaging raw spices into a diverse array of containers, ranging from bulk bags to smaller packets.





With our collective expertise and innovative approach, we aim to address the specific challenges and requirements of handling bulk solids in a manner that is efficient, reliable, and tailored to the needs of each industry.



Currently, the client employs batch processing utilizing conventional stainless-steel Intermediate Bulk Containers (IBCs) alongside a competitor's cone valve to manage the transfer of ground spices between various processing stages.

A significant challenge they face is the aggressive nature of vegetable oils released from the spices during the milling process, which leads to rapid degradation of the elastomers used in their equipment. This degradation has been visually documented, highlighting severe wear at the competitor's discharge station.

The client aims to minimize maintenance downtime associated with repairing this damage, a process that typically requires a full day to complete. Furthermore, they wish to avoid replacing or modifying their existing fleet of 200 IBCs, necessitating a solution that integrates seamlessly with their current setup.



Initially proposing a standard ISL Technologies "Upgrade" station, we took a deeper look into the client's specific challenges. It became evident that the hygiene cover on the existing discharge station remains continuously immersed in product, which is where the deterioration initiates.

To address this issue effectively, we recommended modifying the ISL Technologies upgrade station by incorporating a funnel that directs the product toward the center of the discharge chute. This adjustment significantly reduces the exposure of elastomers to product contact, limiting it to only minimal dusting. Notably, this enhanced feature is already standard on ISL Technologies Cone Valve IBCs.



Why ISL Technologies

With 30+ years of expertise, ISL Technologies delivers tailored, performance-driven solutions for complex powder processing challenges across diverse industries, embracing every problem with custom engineering and a commitment to reliability.



Your Challenges are Our Challenges

ISL Technologies's IBC systems reduce cross-contamination and allergens by blending incontainer, eliminating clean-downs, minimizing downtime, enhancing safety, and enabling flexible, cost-effective batch production with any recipe at any time.

How Can We Help?

ISL Technologies's unique Cone Valve IBC technology protects blends during processing and transfer, ensuring consistent quality, optimized flow, and maximum efficiency—delivering trusted, proven solutions that satisfy clients every time.









