

Severe Product Leakage Resolved Between Silo, Sifter and Conveyor (Soy Powder)



A large agricultural and food production enterprise in China, with over 70 plants throughout the country processing grains and seeds had a major challenge in a soybean powder production line in one of their factories. Clamped connectors installed between a powder silo, sifters and screw conveyor weren't up to the job of containing the product. The company was concerned about the leakage and the potential health and safety risks for their staff, so they engaged local BFM® fitting Distributor, Emborio (Shanghai) Co Ltd, to fix the problem.



The Challenge:

Clamped silicone sleeves were being used in the plant to feed soy powder from a large silo, into rotary sifters and then onto a screw conveyor. The clamped connectors leaked so badly that product constantly spread throughout the production area and the dust in the environment was so severe that staff couldn't enter the room without a mask. This was a serious concern for the health of the plant's staff and the constant presence of dust in the atmosphere represented a potential explosion risk.

Connectors frequently tore, and staff were also spending hours each day cleaning up the powder that leaked continuously from the equipment transitions.

The Solution:

The team at Emborio recommended installing BFM® fitting's Seeflex O40E connectors on both the sifter inlets and outlets. The dramatic difference to the primary screening room was instant.

Since installing the BFM® fittings the whole area is now so much cleaner. There is no longer any product leakage from the flexible connections so no product is lost, and no time is now wasted by staff cleaning spilled powder.

Staff no longer need to wear masks when entering the room and the explosion risk has been drastically reduced. The BFM® fitting connectors are also lasting significantly longer than the previous silicone versions

The Benefits:



HYGIENE: Dust no longer leaks throughout the plant meaning a much cleaner, safer factory environment.



HEALTH & SAFETY: Staff can enter the room without wearing masks now so it is a much healthier workplace.



EXPLOSION: A dramatic reduction in dust in the environment has helped reduce the risk of a combustible dust explosion occurring.



DOWNTIME: Staff no longer need to waste time cleaning up the wasted product in the screening room making the plant overall much more efficient.

"We are really impressed with how much cleaner and more efficient the sieving room is since installing BFM®. Staff are much happier and safer working in the environment and there's no time or money lost cleaning up waste product."

- Production Manager

Case study courtesy of BFM® Distributor Emborio (Shanghai) Co Ltd, China