

Dust Reduction (Sugar)



A global sugar company in the UK had virtually given up on solving the problem of dust leaks in their rotary sifter room, where they had been using convoluted rubber connectors. The connectors only lasted an average of 5 days, and cleaning and plant maintenance was a constant challenge. Since installing the BFM® fitting system, however, dust has been reduced by 100% and the Chief Engineer of the company said that “you could hold a board meeting in the rotary sifter room now - it is spotless!”



The Challenge:

The customer needed to reduce the considerable dust being generated in the rotary sifter room to both make their factory a hygienic operating environment and to reduce the very real risk of secondary explosion from sugar dust. They also wanted to significantly reduce the amount of production down-time spent replacing the rubber connectors that had an extremely short life (5 days on average).

The Solution:

A coned flow-correction ring was installed on the rotary sifter to help reduce abrasion on the connector by directing sugar away from the fitting. A standard length BFM® Seeflex fitting was used with an increased diameter to accommodate for the sifter throw. In addition to the much cleaner, dust free environment, the connector life has been increased from 5 days to 9 months - a substantial saving in downtime and maintenance.

The Benefits:



DOWNTIME: Replacement, plant maintenance and cleaning times reduced by several hundred hours per year.



HYGIENE: Improved food safety with the BFM® fittings 3A compliance and no hose clips, tools or small parts to fall into the sugar.



HEALTH & SAFETY: The improved overall dust-free environment and reduced explosion risk makes the entire working area safer for staff.



EXPLOSION RESISTANT: The removal of dust and the antistatic properties of the BFM® Seeflex fitting helped reduce the risk of secondary explosion.

“If we hadn’t managed to solve the main source of the dust leak so effectively with the BFM® fitting, we would never have been able to identify other leaks occurring in the plant. The sifter room had been a weak point in the factory, but now when key customers inspect the plant, it passes with flying colours.” - Chief Engineer