



Case Study

BFM® fitting solves Dust and Downtime Issues for Minerals Processor

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Calcium carbonate is used extensively in building industry products, from cement to paint pigments to wallboards. It is a fine, abrasive white powder, making calcium carbonate processing notoriously problematic in terms of dust containment. When one of the largest manufacturers of calcium carbonate in Romania decided that their current clamped flexible sleeves weren't providing effective and efficient equipment connections, they looked to BFM® fitting for the solution.



Before the switch to BFM® fitting, the customer experienced a lot of dust and material loss from their sifters. (Pictures: ©BFM® fitting)

Handling a fine, abrasive Powder

In the initial part of their refining process, after crushing and before milling, the customer was experiencing a lot of dust and material loss from their sifters. The old-style, clamped flexible connectors they used at the inlet and outlets of the sifters constantly leaked, with product spilling out and piling up around the sifters, requiring frequent clean-ups.

The abrasive nature of the calcium carbonate powder also took its toll on the connector material, and they wore out extremely quickly, barely lasting a month at a time.

Time-Consuming Replacement of Connectors

The maintenance team found the replacement of the worn connectors extremely time-consuming because they were all different sizes and types and had to be measured and cut to length. Then, to install the connectors, they were fastened via screwed hose clamps requiring considerable manual adjustment in difficult locations.

The downtime involved in this frequent replacement process and the clean-up of spilled product was becoming extremely costly for the plant.

Switch to BFM® fitting

Local BFM® fitting distributor Rocom recommended installing BFM® fitting's durable Seeflex 040E blue-band connectors on each sifter inlet and outlet. They also suggested standardizing all diameters and connector lengths to be the same for ease of maintenance and inventory control.

To help support a long-term, sustainable approach, the IG (Installation Gap) was accurately adjusted for all the sieves, so now, only one standard-sized connector needs to be held in stock.



The switch to BFM® fitting stopped the leakage of the fine powder.

Zero Downtime in Five Months

This simple change has streamlined inventory control and improved the company's supply chain sustainability. Now, there is always a replacement available at a moment's notice should it be required – although, in the five months since the initial installation, the plant has experienced zero downtime for connector replacement as the initial connectors are still going strong. That's a testament to the strength and durability of the unique BFM® Seeflex 040E urethane material.

"The operators are confident and very comfortable with the extremely easy and safe change-over of the new BFM® connectors," said the plant's maintenance manager. "The fact that no manual adjustments are needed is brilliant - just snap out and snap in – it couldn't be easier!"

Improved Working Environment and Safety

The elimination of excessive downtime for replacements is just one of the advantages experienced by the plant. Although abrasive, the leakage of the fine powder has been stopped thanks to the internal seal of the BFM® fitting snap-fit system and the durability of the Seeflex 040E material.

"We are so impressed with the fact that there are no more leaks and that the BFM® connectors are lasting so well," the maintenance manager said. Even with the movement of the sifters, no product is leaking out of the inlets or outlets, so the factory environment is much cleaner and safer for staff. "The product stays where you want it - inside the process – and overall, the plant is now much cleaner and operates much more efficiently."