



Explosion Risk Reduction (Construction Additives)

Health and safety is paramount for global chemicals manufacturer AkzoNobel at its Elotex plant in Geleen, the Netherlands, but the construction additives produced at this plant involve fine, abrasive powders which were proving hard to contain. The resultant dust leakage posed a real explosion risk. After installing a BFM® fitting system on their sifter, AkzoNobel were so impressed with its performance they are gradually replacing all of their connectors with BFM®.



BEFORE



AFTER

The Challenge:

Fine, abrasive powders, combined with a pneumatic conveying system, meant that even small tears or gaps in the traditional clamped flexible connectors at the plant caused dust leakage.

The hose-clamp seals did not perform well under pressure, and with 25 different fittings, manual error with installing the existing clamp & hose connectors to the incorrect length also added to the leakage problems.

The real risk of explosion in the plant meant that AkzoNobel were keen to find a fitting that would provide a durable, sealed system and also allow them to standardize their fittings across the plant.

The Solution:

After an initial trial BFM® fitting system was installed in the most challenging position on the sifter, the seal was so superior that AkzoNobel are now replacing all 25 flexible connectors with BFM® fitting. There is no longer dust leaking into the plant, and this has significantly reduced the risk of explosion.

As the connectors are replaced, the pipes and spigots are being adjusted to standardize the sizes, helping to reduce the inventory and multiple suppliers.

Replacement is also now fast and easy with no possibility of incorrect installation.

The Benefits:



EXPLOSION: The sealed system created by the BFM® fitting has removed the dust leakage in the air, significantly reducing the risk of explosion.



INSTALLATION: Fitting the new BFM® connector is so simple that there can no longer be incorrect installation problems.



STANDARDIZATION: The pipes are all being adjusted as the BFM®s are installed to standardize the connector sizes, reducing inventory issues.



DOWNTIME: Replacement time has been drastically reduced.

“After seeing it I was immediately convinced. In all its simplicity, it is extremely effective. We assembled a BFM® fitting alongside an existing one so everyone could see the difference. After a few months it was clear: the BFM® fitting sealed perfectly and remained transparent. We are very happy with the BFM® fitting..” - Hub Knoren, Maintenance Engineering Technician, AkzoNobel Elotes, Geleen (Case Study courtesy of BFM® Distributor Insolids BV, The Netherlands)