

CIP preventing the risk of cross-contamination in bag filters

Manufacturing facilities today often require the flexibility of making multiple products on a single production line. But with this flexibility comes the risk of cross-contamination. Simatek's SimPulse 3C CIPable bag filter can help you to significantly reduce this risk.

Globally, we see a growing demand for high quality and safe food products. To make the most of this opportunity, the dairy and food ingredients industries have to focus on high productivity while ensuring a low cost of ownership. At the same time, they also have to guarantee a high level of cleanliness – to uphold hygiene and sanitary standards and prevent cross contamination between productions.

The threat of product carry-over and cross-contamination

Fulfilling hygiene and sanitary standards for process equipment with CIP (cleaning in place) can be a challenge. Especially when you have a mix of different materials in the process equipment. E.g. the interface between filter bag fabric and stainless steel tube sheet to be identified as a critical control point (ccp) in a HACCP audit. This is where you risk cross-contamination or product carry-over. If you have a production line that makes fatty or high protein dairy or food products, for example, traces of fat or protein may be carried over when you switch to a production that does not contain these ingredients. Or you could have traces of critical enzymes or proteins from one product being carried over to another product, or caffeine in decaffeinated coffee powder — which may cause an allergic reaction to some people.

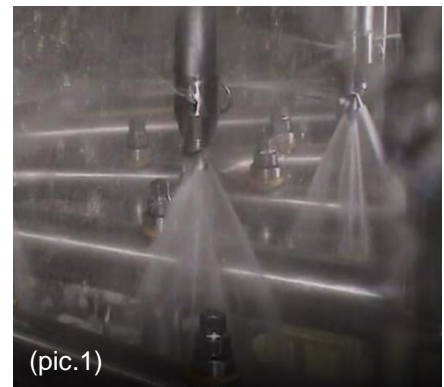
The risk of cross-contamination is not restricted to dairy and food ingredients, though. It is a challenge the pharma industry faces as well.

Simatek's Special Full CIP Wash

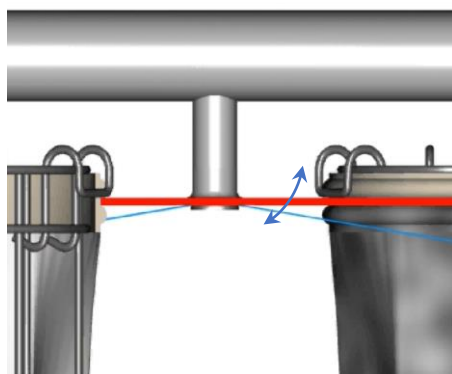
We've developed a solution to address this challenge. Unlike standard bag filter CIP that cleans the filter bags only from the outside, the CIP function of our bag filter and Special Full CIP Wash cleans the filters bags from both inside and outside (pic.1).

It uses a unique CIP recipe and CIP nozzles that are designed to ensure complete CIP in all critical areas. These include the filter bags and the interface between the filter bag and the tube sheet (pic.2) connecting the clean air chamber and the powder side of the bag filter.

Another challenge with CIP is that the filter bags are not sufficiently drained after CIP — this can result in product deposits being left at the



bottom of the filter bags and an extended drying time. Simatek's specially designed bag cages solve this problem by ensuring proper draining of the filter bag.



For powders containing allergens, the special CIP recipe contains an extra wash with special cleaning agents. One of these works to inactivate the allergen during cleaning; another sterilises the bag filter.

If filter bags are not cleaned both from inside and outside, they need to be replaced as a part of the cleaning of the bag filter. In addition to the cost of the new bags, this process increases downtime and cost of the CIP before the next production.

The Simatek SimPulse 3C bag filter with internal bag CIP complies with the EHEDG and USDA standards and carries the 3-A certification (40-04), ensuring that your food powder production line meets the best practices in hygiene and sanitary standards.



Benefit from lower cost of ownership

The advantages of choosing the Simatek SimPulse 3C bag filter are not limited to preventing cross contamination through product carry over.

When you opt for the Simatek SimPulse 3C bag filter, you benefit from lower energy consumption, higher uptime and longer bag life. This helps you save on bag replacement costs and reduces the downtime involved in changing the bags. Combined with the Special Full CIP Wash, it delivers a lower total cost of ownership.

If you would like to discuss how the Simatek SimPulse 3C bag filter and the Special Full CIP Wash can help you tackle the risk of cross contamination, please contact us for more information.

HJN/Simatek OCT-2018