

HAFFMANS CPM® STEAM FILTERS

HOCHWALD

CASE STUDY



FAST FACTS

Production location

Hochwald Foods, Bolsward, Netherlands

Filter types used

CPM® steam filters, type PDF 6006 and PDF 8206

Application

Culinary steam quality in the production lines

Benefits

- Highest filtration efficiency and security
- Less waste and lower Total Cost of Ownership
- Easy monitoring of filter and system performance



“STEAM IS A VALUABLE AND VERSATILE ASSET, ASSUMING YOU KNOW WHAT YOU’RE DOING”

Highest production standards are a given to milk and dairy producer Hochwald. In the company’s Bolsward plant, CPM steam filters have been providing particle-free process steam for many years.

“The filters perform so well that I cannot really recall any issue with them,” said Mari Soeters, Technical Manager.

Hochwald Foods has eight production locations in Germany and one in the Netherlands. Hochwald started as a butter factory in the German Rhineland-Palatinate town of Thalfang, where it is still headquartered. Producing quality foods from raw milk has remained the core business. Today, Hochwald is one of Germany’s largest milk processors, producing a wide range of products: evaporated, condensed and powdered milk, flavored ultra heat treated (UHT) and fresh milk, dairy spreads, cheese, and desserts.

Culinary steam

Apart from a dairy plant, the Bolsward location also has a tin can factory, producing cans for several Hochwald products. “Short and sharp bursts of steam are used in the canning process for cream, ice coffee drinks and condensed milk,” Soeters said. “The steam expels air and with it oxygen. It prevents oxidation of both the product and can; and when it cools down, it helps to create a vacuum. The steam also protects the filling cylinders from crusty deposits formed by crystallizing sugar. Any steam that comes into contact with the product has to be what we call ‘culinary steam’, free of any unwanted particles. That’s why we use the CPM filter systems.”

Piping challenges

With temperatures above 120 °C/248 °F steam will ensure sterility. However, in food production bacteria are not the only concern. Traditional steam pipe networks are

constructed of black steel, leaving all kinds of particles from condensate, boiler-scale, and corrosion to roam freely through the system. Extensions of the network are notorious for creating new problems. In many industries there is a mistaken belief that stainless steel piping will solve these, but the welding process actually adds more challenges in the shape of burrs, spatter and slag deposits.

“At Hochwald we are determined to exclude any risks,” Soeters said. “Steam is a valuable and versatile asset in many industries, assuming you know what you’re doing. We keep a close guard on our water and steam quality, and we use food-grade lubricants, even in places where it’s not strictly necessary, just as a precaution. Better safe than sorry.”

“We pass every audit”

The hygiene demands at Hochwald have evolved into a maintenance management system that secures total quality control. “We pass every audit with flying colors,” Soeters said. “The CPM steam filters are replaced regularly, depending on their place in the system, and we always have a good look at the filter membranes’ condition. There is no better way to tell the state of your systems than to check your filters.”

A great advantage of the revolutionary CPM filter design, compared with the traditional sintered filter cartridges, is that only the filter membranes need to be replaced as a wear part. This allows for both significant cost savings and certainty about the actual condition of the filter. “The unit of stainless steel disk segments is taken apart to either replace or clean the membranes,” Soeters said. “The actual condition of the membrane is openly on display. After cleaning, the filter can be put back together, ready for the next maintenance round.”