
CASE STUDY

Food & Beverage Applications

Amafilter® improve throughput and reduce maintenance interventions by up to 45% with the Cricketfilter® System

THE AMAFILTER® TEAM WORKED CLOSELY WITH A COCOA BUTTER PRODUCER TO FIND A SOLUTION THAT WOULD REDUCE REPLACEMENT PARTS, LOWER MAINTENANCE COSTS AND IMPROVE PRODUCT QUALITY.



amafilter
Filtration Group®



Customer:
 Cocoa butter manufacturer
 Industry:
 Food & Beverages
 Application:
 Cocoa butter filtration
 Product:
 Cricketfilter®

THE CHALLENGE

The customer needed to improve their cocoa butter filtration process as the existing filtration system required daily interventions. The existing filters operated with paper filters which had to be replaced during every shift change. This led to frequent replacement of consumable spare parts and costly change overs, leading to increased downtime and loss of productivity.

The customer wanted to achieve a more streamline process, improve hygiene and increase productivity.

The customer process improvement team asked Amafilter® to review their filtration process and provide a solution that would resolve their problems and meet their filtration objectives.

THE SOLUTION

Having reviewed the existing filtration system, the Amafilter® expert team advised the company that in order to achieve their objectives, the solution would be to install three Amafilter® Cricketfilters® 1000. The Cricketfilter® is a stainless steel one-step fully automated filtration system which is perfectly suited to cocoa butter filtration as the Cricketfilter® cloths were designed and developed to meet the specific requirements of cocoa butter filtration.

Three Cricketfilters® were installed at the plant, two in one production process area and a third one in a second production process areas.

THE RESULTS

The company appointed Amafilter® to supply and commission three Cricketfilters® for the filtration of their cocoa butter.

With the installation of the Cricketfilter®, the company no longer had to carry out maintenance interventions during every shift to replace parts. They were now only replacing filter cloths every 6 to 9 months, reducing their maintenance interventions by around 45%.

Installing the Cricketfilter® enabled the cocoa butter plant to:

- Reduce maintenance interventions.
- Significantly lower their expenditure on replacement parts.
- Produce the highest possible cocoa butter quality they could achieve.
- Avoid unnecessary product handling which can lead to contamination. Maintaining high levels of hygiene is vital in food processing and the highest possible standards must be up-held to produce a healthy and safe product for consumption and protect the brand's equity.
- Less maintenance leads to improved safety as less operator interventions are required, contributing to the plant's high safety standards.

In over 20 years since their installation, the Cricketfilters® have not required any significant costly improvements or repairs and have operated effectively and efficiently throughout this period. As the Cricketfilters® proved to be a highly reliable product, with low maintenance interventions and significant safety benefits, the customer purchased a fourth Cricketfilter® when they expanded their plant in order to increase productivity.

OUR PRODUCT

The Cricketfilter® features and benefits:

- Up to 40% larger filtration area than traditional pulse tube filter systems.
- Large filtration area within a small footprint.
- Hermetically closed system and can be fully automated.
- Suitable for direct cloth filtration or precoat/body-aid filtration.
- High filtrate quality.
- The Cricketfilter® is simple to clean. It uses air or gas pulses for cleaning the elements section by section, without requiring a vibrator.
- Low maintenance.
- Suitable for a wide range of applications.
- The Cricketfilter® can be used with filter cloths of various pore sizes and materials. This reduces and at times eliminates the amount of extrapre-coating needed.



The company Maintenance Manager commented:

“ The Cricketfilter® has proved to be a highly reliable system, requiring little maintenance whilst delivering high product quality and improved safety for our team. After over 20 years of operation, the Cricketfilter® still performs spectacularly and with the assistance and advise of the Amafilter® team whenever required, we are sure we can continue operating efficiently for years to come.

