
CASE STUDY

Food & Beverage Applications

The Cricketfilter® helps Niche Cocoa decrease downtime while improving product quality

THE AMAFILTER® TEAM WORKED CLOSELY WITH NICHE COCOA TO PROVIDE A FILTRATION SOLUTION THAT WOULD STREAMLINE PRODUCTION WHILE DELIVERING THEIR BEST QUALITY PRODUCT YET.



Food & Beverage Applications

BACKGROUND

Niche Cocoa produces high quality semi-finished cocoa products and confectionery for supply to the worldwide chocolate, ice cream and bakery industries.

Semi-finished products include natural and deodorized cocoa butter, specialized cocoa liquor, and natural and alkalized cocoa powder. In confectioneries, Niche Cocoa is a bean-to-bar producer of refined chocolate, chocolate drinks, and spreads.

THE CHALLENGE

Cocoa butter typically contains around 0.5% cocoa mass after pressing which needs to be removed in order to meet Niche Cocoa standards for clear cocoa butter. The company was using filter presses with paper sheets to filter the crude cocoa butter which proved to be labour intensive due to the necessity of frequent filter changes and the nature of the semi-open filter system.

Niche Cocoa wanted a more streamline and hygienic process which would also allow them to produce a higher quality cocoa butter for their customers.

THE SOLUTION

Having reviewed the existing process, the Amafilter® expert team advised Niche Cocoa to install the Amafilter® Cricketfilter® 1400C-50/2000-90, a stainless steel automated system mounted in a galvanized steel frame, complete with piping, instrumentation and a control panel with programmed PLC and HMI.

The Cricketfilter® is a one-step filtration system which is perfectly suited to cocoa filtration as the Cricketfilter® cloths were designed and developed to meet the specific requirements of cocoa butter filtration.

Once delivered on site, an Amafilter® expert assisted in the commissioning of the installation of the Cricketfilter® and the remote software control system at the Niche Cocoa plant.

THE RESULTS

With the Cricketfilter® skid mounted automated system with remote panels fully installed, the Niche Cocoa plant began producing clear cocoa butter only three days after installation. The system no longer required frequent and sometimes complex changes, allowing for continuous and clean production.

Installing the Cricketfilter® enabled Niche Cocoa to produce the highest possible cocoa butter quality, reduce maintenance interventions and importantly promote a safer working environment.

Due to significant improvements Niche Cocoa have experienced with the installation of the Cricketfilter®, the company decided to purchase a second Cricketfilter® skid mounted automated system to further extend capacity at the plant.

The Niche Cocoa plant manager, Lloyd Ashiley, commented:

“ We were really pleased with Amafilter®’s advise to install a fully automated Cricketfilter® on a complete skid mounted system. Their assistance during the commissioning of the system was essential in ensuring our operation began producing as quickly and effectively as possible. We are extremely pleased with the results of this new installation as our product quality has improved, whilst maintenance interventions have reduced, leading to lower costs and a safer working environment. ”

Customer:
Niche Cocoa
Industry:
Food & Beverages
Segment:
Cocoa processing
Application:
Cocoa butter filtration
Product:
Cricketfilter®

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.
- High filtrate quality.
- Easy to clean.
- Low maintenance.
- Suitable for a wide range of applications.
- Filter cloths of various pore sizes and materials available.



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