
CASE STUDY

Sugar & Sweeteners Applications

Amafilter[®] improve efficiency and lower production costs with the Versis[®] pressure filter system

FILTRATION GROUP ADOPT THE
PERFECT MIX OF FILTRATION
PRODUCTS TO IMPROVE THE
EFFICIENCY AND REDUCE PRODUCTION
COSTS AT THE CUSTOMER'S LIQUID
SUGAR PROCESS PLANT



Sugar & Sweeteners Applications

VERSIS® PRESSURE LEAF FILTER SYSTEM

IMPROVING EFFICIENCY AND LOWERING PRODUCTION COSTS OF LIQUID SUGAR PROCESSING WITH THE VERSIS® PRESSURE FILTER SYSTEM



THE CHALLENGE

Filtration Group was asked to supply a complete filtration unit which delivered the customer's requirements for sugar cleanliness and met the following specifications:

- Volume flow:** continuous flow of 10 m³/h of liquid sugar
- Operating Pressure:** 4 - 6 bar
- Operating Temperature:** 80 °C
- Food Certification:** According to FDA Regulations

and with the high turnover of production required, the new system had to be installed quickly to ensure the customers' heavy processing schedule was not disrupted.

THE RESULTS

Once the Filtration Group's Versis® pressure filter system was installed, the customer advised that they were pleased with the sugar solution dispensed into their tankers as this more than satisfactorily met their specifications requirements.

They were particularly pleased with the results and commented that the filters not only operated efficiently but reduced operating costs hence providing the company with significant savings.

With the customer fully satisfied with their new Versis filtration system, this has paved the way for Filtration Group and their customer to build a long-term relationship based on mutual cooperation and a strong partnership.

BACKGROUND

The company is one of the leading European sugar manufacturers in the food and beverages industry.

They produce liquid sugar from granulated sugar which is dissolved and processed in a multi-stage process to meet the highest industry requirements for product purity and clarity of liquid sugar production. The liquid sugar is then dispensed under sterilized conditions into tankers.



THE SOLUTION

Filtration Group's product package consisted of products from two of its brands, amafilter® and Global Filter:

- Stage 1 and 2:** Versis® vertical pressure leaf filter system to first remove disturbing impurities and to remove the activated carbon (used for final discoloration).
- Stage 3:** A 25 micron Global Filter Amaflow bag filter to assist with possible breakthrough of solids.
- Stage 4:** A 5 micron Global Filter AmaTech wound filter to achieve product cleanliness.

Filtration Group's team worked closely with the customer and adopted the perfect mix of filtration products that would deliver the customer's processing requirements, for both production efficiency and operational reliability.

Filtration Group's Versis® pressure filter system is a fully automated, hermetically sealed, self-cleaning filter system. It is recognised for its quality and reliability, which made it the perfect system to deliver the customer's requirements for the production of liquid sugar solution to the highest industry standards.



OUR PRODUCT

The Versis® pressure filter system is able to cut processing time and improve efficiency in the extraction of organic oil for our customers due to the inclusion of:

- Double-sided, five-layered filter leaves made from stainless steel
- Individual filter leaf mounting on the central manifold to allow easy removal of any or all filter leaves for maintenance and cleaning
- Low-maintenance pressure leaf filter design, resulting in an economical filtration system
- Pneumatic vibrator to remove cake discharge through a large butterfly valve
- Short regeneration times between filtration cycles

