

CASE STUDY

Food & Beverage Applications

Amafilter® helps Villapana Spa increase production capacity from 40% to 100% with the RBDC horizontal pressure leaf filter system

THE AMAFILTER® TEAM WORKED ALONGSIDE VILLAPANA SPA TO PROVIDE A FILTRATION SOLUTION THAT INCREASED PLANT EFFICIENCY, MAINTAINED THE QUALITY OF THE PRODUCT AND MADE THE PLANT MORE PROFITABLE.



Food & Beverage Applications

Customer:
Villapana Spa
Industry:
Food & Beverages
Segment:
Winterisation
Application:
Grapeseed oil winterisation
Product:
RBDC Horizontal pressure leaf filter system

BACKGROUND

Villapana Spa is part of the Randi Group which was established over 50 years ago and is a global supplier of tartaric products to the wine sector. The company produces products extracted from residues and by-products of the wine industry which are destined for use in the food, wine, cosmetics and pharmaceutical industries.

THE CHALLENGE

Villapana Spa was experiencing a number of pressing issues with their existing filter systems. Filter changes were a frequent necessity and, being both time and labour intensive, caused consistent efficiency issues within the plant. Two operators were needed to properly clean the elements, a process which was both messy and time-consuming. While the quality of the product did not suffer, this inefficient filtration process consistently created a production bottleneck, causing product output to only reach approximately 40% of the plant's capacity, resulting in a maximum of 3 tonnes production of grapeseed oil each day.

THE SOLUTION

After considering the plant's requirements, Amafilter® recommended the use of their RBDCD 1250/25/17 horizontal pressure leaf filter system for the customer's grapeseed oil application. The filter system would assist in the winterizing process, the final step in the production of grapeseed oil which eliminates the waxes that make the oil cloudy at low temperatures, giving the oil its typical bright green/yellow colour. This step in filtration is crucial to prove the product ready for commercialization.

THE RESULTS

After the commissioning of the RBDC horizontal pressure leaf filter system, Villapana Spa began experiencing noticeable improvements in plant efficiency. With the new horizontal pressure leaf filter system, only one operator is required to clean the filter, reducing operating costs by 50%.

Additionally, production downtime has been reduced due to the quicker and easier servicing of the horizontal pressure leaf filter system. With the combination of lower maintenance costs and less frequent spare parts replacements, profits have increased with savings alone.

Most importantly, the plant is now operating at 100% capacity up from 40%. They are now producing approximately 8 tonnes of oil each day, nearly triple what their output was before. Product quality has remained excellent, and the company has become more profitable since switching to the RBDC horizontal pressure leaf filter system. With the filter's streamlining, Villapana Spa can focus on other areas of improvement to further increase plant capacity while maintaining filter efficiency and quality.

Giovanni Nati, plant manager, commented:

“ At Villapana we had been operating our oil refining for almost a year, and we were struggling to reach the full potential of the plant.

Our bottleneck was clearly the winterizing stage, which was allowing us to produce only about 3 tonnes of grapeseed oil per day.

We contacted Amafilter® because of their expertise in this sector, and immediately after commissioning the new filter we noticed a massive improvement in production yield, just as was promised. We were able to push our production up to 8 tonnes per day, while maintaining high quality in the finished product, which was our aim.

We're very happy with our experience and we recommend Amafilter® products to any company experiencing issues in filtration.”



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