

## **RUSSELL FINEX**

## **Global Sieving & Filtration specialists**

Mondelez International reduces product wastage within the Cha-Cha process line by 20% with the installation of a Self-Cleaning Russell Eco Filter®

Russell Finex helps Mondelez International to improve their production process by recovering caramel, a high viscosity product to be filtered at a high temperature.

Mondelēz International, one of the largest companies in the cookie and biscuit industry, sought to optimize the production process of one of its well-known brands and looked to existing sieving and filtration supplier Russell Finex to provide a solution. The company initially operating under the name LU joined Kraft Foods in 2007 and is now known as Mondelēz.

One of the company's factories in Herentals, Belgium has been in operation since 1960 and produces brands such as Pims, Prince, TUC and Cha-Cha. The Cha-Cha chocolate bar has been around for 50 years and is a thin crunchy wafer covered with caramel and Belgian chocolate, one of the most well known chocolate bars in Belgium. The company experienced product wastage with the manufacturing of this chocolate bar, and wanted to improve production efficiencies. Having already been supplied seven Russell Compact Sieves® for the check screening of flour, the company counted on Russell Finex's expertise to solve this new filtration problem.

The production process begins with baking a thin crispy wafer and coating it with caramel. The wafer is then laid to rest for 24 hours. After this, several wafers are pressed together, cut to size and covered with chocolate. When the wafer is covered with caramel, wafer crumbs get into the excess caramel, making it non re-usable. Hence, caramel is wasted at this point of the production process. Alex Pardon, Continuous Improvement Facilitator at Mondelēz International, explains: "We sought a solution to recover the wasted caramel in order to reduce the product loss and improve the production process. We required a machine which could filter a high viscosity paste, at a high temperature in order to keep the caramel in liquid form for it to be reclaimed for reuse."



Figure 1. Self-Cleaning Russell Eco Filter® installed at the Mondelez production site in Herentals, Belgium



High temperature filtration has resulted in a 20% reduction in product loss



Greater reclaim has helped to improve the waste disposal process



Significant cost savings with reusable stainless steel filter element

Russell Finex offered to test their Self-Cleaning Russell Eco Filter® at the Mondelēz site. The results of the tests were very positive with the filter keeping the high viscose caramel in a liquid state by filtering at a temperature of 35°C. The unit separated the wafer crumbs from the caramel. The results of the tests were positive, and the Mondelēz group then needed to ensure that the taste of the chocolate bar met their quality standards. A special taste test found no difference in quality between a bar





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with or without the reclaimed caramel and as a result Mondelēz decided to install one Self-Cleaning Russell Eco Filter®.

The installation of the Self-Cleaning Russell Eco Filter® resulted in a 20% reduction in product loss and improved the waste disposal process. Pardon explains: "Before the filter was installed the product needed to be manually disposed of by employees. This routine has now become unnecessary. The filter also provided further benefits. Due to its unique self-cleaning SpiroKlene™ wiper system and replaceable stainless steel filter element, there is minimal operator involvement and no need to replace filter elements, resulting in substantial cost savings. The unit is also easy to strip down and clean, reducing production downtime.

Pardon concludes: "The Self-Cleaning Russell Eco Filter® is not only able to filter high viscosity pastes whilst keeping the product in a liquid state, but is also easy to maintain. With the added benefit of not needing to replace the filter media, this has been the filter we have been searching for. We would certainly recommend the Russell Eco Filter to producers of high viscosity liquids".

For over 75 years Russell Finex have manufactured and supplied filters, sieves and separators to improve product quality, enhance productivity, safeguard worker health, and ensure liquids and powders are contamination-free. Throughout the world, Russell Finex serve a variety of industries with applications including food, pharmaceuticals, chemicals, adhesives, plastisols, paint, coatings, metal powders and ceramics.

Find out more about filtering caramel or visit our website for more information www.russellfinex.com

