

RUSSELL FINEX

Global Sieving & Filtration Specialists



Replacing a metal detector with a compact vibratory sieve from Russell Finex allows Brazilian coffee refiner Realcafé to filter more contaminants from its production process, improving quality and reducing costs.



Realcafé Solúvel do Brasil, is part of Grupo Tristão, one of the coffee industry's largest producers. The Brazilian company manufactures high-grade refined coffee for use in soluble, roasted and ground coffee lines. Its products are used by consumer brands in their vacuum-sealed pods and instantmix coffee sachets.

Realcafé produces 10,000 tons of coffee every year; enough for 1.25 billion cups. To ensure that its coffee meets consumer expectations, Realcafé employs rigorous process controls. Its quality management system is certified to ISO 9001 and its products carry the prestigious APIC Purity Seal, the Brazilian coffee industry's guarantee of purity.



The production process starts with freshly-harvested coffee berries. The red arabica and robusta berries are hulled by Realcafé to remove the fruit and the green beans are polished to remove chaff, a by-product which can be detrimental to taste. The coffee beans are then cleaned and graded ready for roasting.

Prior to its investment in Russell Finex technology, Realcafé had used a metal detector to remove physical contaminants from the production line. However, whilst the metal detector could detect metallic contaminants, including machine swarf, it did not filter out non-metallic contaminants, such as plastic, rubber and stone.

"We chose the Russell Compact Sieve because it allowed us to install a vibratory sieve without making structural changes to the production line."

Carlos Eduardo Martinelli, Maintenance Manager, Realcafé Solúvel do Brasil

A recommendation from another coffee producer prompted Realcafé to investigate industrial sieve technology. Realcafé was looking for an automated sieve that would enable it to remove all oversized contaminants from its production line. The sieve would need to handle large production volumes, whilst taking up minimal space.

Following a detailed evaluation, Realcafé selected a Russell Compact Sieve®. The vibratory sieve stood out from the competition. Offering better productivity than models twice its size, its compact design enabled Realcafé to install a high-capacity sieve without making costly structural changes to its production line.



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The Russell Compact Sieve® is smaller than conventional sieving machines. Its low profile meant that it required less headroom and could be installed at a height that would make it easier to inspect and maintain. Its rubber suspension also promised to reduce noise levels, improving the production environment.



Installed in place of the metal detector, the Russell Compact Sieve® takes up less than 2 m² of floorspace. The vibratory action allows Realcafé to remove a wider variety of contaminants from the production process, including metallic and non-metallic materials; significantly improving the purity and quality of its product lines.

"Now, thanks to the Russell Compact Sieve, we can guarantee that our product is free of any metallic and non-metallic contaminants."

Carlos Eduardo Martinelli, Maintenance Manager, Realcafé Solúvel do Brasil

With the sieve continuously rejecting contaminants, Realcafé also benefited from a reduction in waste. The metal detector had required purging on a monthly basis, with some 40 kg of product (5,000 cups) going to waste at each inspection. The Russell Compact Sieve® only requires a quick visual inspection and there is now zero waste.

What is more, because Russell Finex's solution reliably removes ALL oversized contaminants, Realcafé no longer needs to constantly monitor production quality. Eliminating the need for ongoing visual checks has allowed Realcafé to reallocate resource, reducing its production costs.

Indeed, the Russell Compact Sieve® has proved to be a shrewd investment. With the compact vibratory sieve helping Realcafé to improve quality, optimize space, eliminate waste, reduce downtime and reallocate resource, Realcafé is enjoying a significant ongoing return on the investment costs.

Advantages of the Russell Compact Sieve:

- Improve quality Eliminate oversized material from powders and liquids.
- Increase capacity Higher throughput than conventional vibrating screens.
- **Save space** Compact solution fits within existing installations.

Established in 1934, Russell Finex designs and builds separation machines for an international market and supplies to over 140 countries. With its head office in the U.K. and subsidiaries in Belgium, the U.S.A., India and China, the company has a truly global presence, enabling a comprehensive approach to customer service and after sales support.

