

Russell Finex helps Finlay's produce a greener cup of tea

Established over 250 years ago, Finlay's are a leading UK manufacturer of decaffeinated and speciality teas. After coming under pressure from local water authorities to reduce BOD levels (Biological Oxygen Demand) in the waste water discharged from their decaffeination process, Finlay's turned to sieving and filtration specialist Russell Finex.

Biological Oxygen Demand (BOD) is a measure of the level of oxygen required to decompose waste in a given quantity of water. The more waste present in water, the higher the BOD level as higher quantities of waste will demand larger quantities of oxygen for break-down. This in turn reduces the amount of oxygen available to aquatic life and can endanger various types of plants and animals. With a large percentage of fine solids in their waste water, Finlay's urgently needed a screening solution to reduce oversize contamination to help bring BOD levels down.

Finlay's were also seeking a machine that would reduce maintenance costs and improve the health and safety of their operators. As well, the new unit needed to be operator friendly so it could be easily installed and cleaned with minimal disruption to the firm's manufacturing process.

After considering several units, Finlay's decided to draw on Russell Finex's expertise and trial a Liquid Solid Separator at their fully equipped testing facilities. With over 70 years experience in fine mesh separation technology, Russell Finex was particularly well-suited to help Finlay's achieve their goals. After successful onsite and offsite tests, Finlay's realised this new state-of-the-art Liquid Solid Separator was exactly the solution they were looking for.

The centrifugal action of the Liquid Solid Separator removes many potential contaminants including leaf tea and tea fines from the water being discharged into the local sewage system. By catching this oversize contamination before it is released, Finlay's has significantly reduced the chance of incurring penalty fines from local water authorities. Their waste product is more environmentally friendly and hence results in lower BOD levels. Malcom Eade, Plant Manager, comments on the environmental impact of the unit, "Removing a larger percentage of solids from our



The Liquid Solid Separator in use at the Finlay's plant

- Improves the quality of waste water by removing oversize contaminants
- Lowers BOD levels and results in a cleaner process
- Safeguards the health and safety of operators

waste water has allowed Finlay's to contribute to a cleaner environment as well as reduce our costs for disposing waste to local landfills. By minimising penalty fines for high BOD levels, we are confident we will see a return on investment within six months of installation, improving our profitability".

Finlay's are also experiencing another 'green' benefit from the installation. They can now re-use waste water and pump it back into their manufacturing process, minimising the use of additional town water for their decaffeination process. Eade observes, "Due to the Liquid Solid Separator, we are recycling water which is better for the environment, and we also foresee a significant reduction in water charges".

The machine also safeguards the health and safety of operators. Before the sieve was installed, operators were manually cleaning interceptor tanks where waste water and entrained debris would deposit from the manufacturing process. This manual cleaning was a very dirty and time consuming task. The Liquid Solid Separator automatically removes the bulk of unwanted solids and operators can now spend their time more efficiently in other areas. Labour and maintenance costs are also drastically reduced as a result.

With its simple design, the Liquid Solid Separator fits easily into Finlay's manufacturing process. Engineers at the company were able to install the machine without the help of an outside contractor. This minimised downtime and allowed Finlay's to start contributing to a greener environment immediately.

"With reduced waste disposal costs and greater production uptime, the Liquid Solid Separator is playing an integral role in helping Finlay's remain the UK's leading manufacturers of decaffeinated and specialty teas" concludes Eade.

For over 70 years, Russell Finex has manufactured and supplied innovative sieving and filtration equipment to improve product quality, enhance productivity, safeguard worker health, and ensure powders and liquids are contamination-free. Throughout the world, Russell Finex serves a variety of industries with applications including foods, pharmaceuticals, chemicals, adhesives, plastisols, paint, coatings, metal powders and ceramics.



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