

Russell Finex helps ESTEVE improve sieving accuracy and product quality at their pilot R&D plant in Barcelona

With the installation of Finex 22™ machines with Vibrasonic® Deblinding Systems, ESTEVE improves the quality of their pharmaceutical formulations

With more than 80 years of experience, ESTEVE is a leading Spanish chemical-pharmaceutical group with a strong worldwide presence. It has several subsidiaries in Europe and the US and production centres in Mexico and China. ESTEVE invests heavily in Research & Development of new formulations, and commercializes medicines and innovative formulations in order to achieve a high level of excellence in the healthcare market.

Pharmaceutical production is carried out in the plant located in Martorelles (Barcelona), a plant that works under GMP with regular audits carried out by the US FDA. It is technically equipped for the most sophisticated production processes. The company has recently upgraded a pilot plant at the Martorelles site to help the scaling up of the R&D processes in order to develop and accurately calibrate their pharmaceutical formulations.

When seeking equipment for the pilot plant, ESTEVE required specialist separation equipment that would improve sieving accuracy and product quality. After consulting with Russell Finex's representatives at an exhibition, Russell Finex analyzed the product characteristics and recommended the Finex 22™ to fulfil the criteria laid out by ESTEVE. After successful trials were conducted, ESTEVE acquired two Finex 22™ machines with Vibrasonic® Deblinding Systems to grade their pharmaceutical granules after they have been processed through a fluid bed dryer.

The Finex 22™ is well known for its ability to accurately grade powders and granules. Being a high capacity screener, it is able to maximize throughput and accuracy of separation, and also minimize downtime as it enables fast screen changes and tool free assembly and disassembly. The machines were supplied in the highest quality stainless steel, and with Russell Finex's specialist polishing techniques, the highest standard mirror polished, crevice free finish was provided.

The Finex 22™, which has remained one of the popular choices in the pharmaceutical industry for the past 30 years, also boasts a number of other benefits, including ease of maneuverability and low maintenance as it is engineered for a long life. In addition, the smoothly controlled application of vibration promotes longer mesh life. The machine has a standard drive motor which is easy to upgrade should further legislation require the machine to operate in an increased safety environment, and has



Figure 1: Russell Finex 22s with Vibrasonic® Deblinding Systems

- Maximizes throughput and accuracy of separation
- Minimized downtime with tool free assembly and disassembly
- Mesh blinding eliminated with Russell Vibrasonic® Deblinding System

relatively low power consumption.

A common problem encountered when screening fine pharmaceutical powders is mesh blinding. With the Vibrasonic® Deblinding System installed, mesh blinding is eliminated ensuring optimum sieving efficiency is upheld. The system combines conventional vibration with ultrasonics, applying an ultrasonic frequency directly to the mesh, breaking down surface tension and effectively making the wires friction free. By keeping the mesh clear this eliminates the need to stop the machine to clean the mesh. This reduces the frequency of mesh breakage as well as ensuring production downtime is kept to a minimum.

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.