

## M.B. Sugars and Pharmaceuticals Ltd maximizes throughput and improves the quality of its sucrose powders with the installation of the Finex Ultima.

### Leading pharmaceutical manufacturer achieves higher throughput and improved product quality with a Russell Finex vibro screen fitted with ultrasonics

M.B. Sugars & Pharmaceuticals Ltd, also known as M.B., is a leading manufacturer and exporter of sucrose, producing a large range of specialty sugar products, including double-refined sugar, sugar cubes, light brown sugar, and candy sugar as some examples.

M.B. Sugar is the only company to be registered under USDMF and hold USFDA, kosher and halal certifications. The company also produces sugars which conform to IP, BP, EP USP and JP standards, fulfilling the needs of the customers' specific requirements and ensuring a focus on quality.

Rushabh A. Lodha, Chemical Engineer at M.B., said, "Our customer list includes all major pharmaceutical companies in India and abroad, in addition to various premium hotel chains, bakeries, hospitals, and other institutions. We are committed to achieving the highest standards of quality and service, so it is imperative for us to obtain the best products to offer to our customers".

The production of M.B.'s sucrose powders begins by melting raw sugar to form a syrup. This syrup is filtered to remove impurities, and then undergoes a crystallization process. The crystallized sugar is then dried and cooled into sucrose crystals or powder, before the product is graded. Grading sucrose is an important stage of production, as it ensures the correct sizing of particles before packaging. For the expansion of its plant in Malegaon Nashik, India, M.B. sought a high-capacity industrial separator to optimize the grading of sucrose powders.

With 85 years of experience in providing high-quality separation solutions to food and pharmaceutical companies, Russell Finex has the knowledge and expertise to meet the specific needs of its customers. Whilst M.B. originally approached a local manufacturer of vibratory separation equipment, they were recommended Russell Finex as a high-quality, reliable alternative. Subsequently, the Finex Ultima™ with Vibrasonic® Deblinding System was offered as the recommended solution.

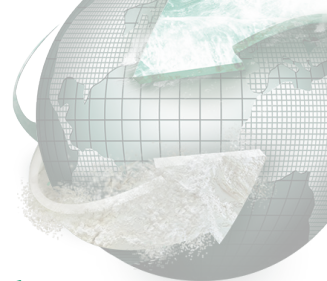
The Finex Ultima™ is a high-performance vibro screen



**Figure 1.** The Finex Ultima™ installed at the M.B. Sugar & Pharmaceuticals Ltd plant

- Increases production rates up to 50% more compared to traditional vibro separators
- High capacity, accurate screening on up to 5 fractions in one operation
- Increases screening capacity and accuracy to improve product quality and productivity

designed to improve grading efficiency and product quality. This industrial vibro screen is a popular option for food and pharmaceutical manufacturers due to its hygienic open-frame design. This enables easy cleaning, assembly and disassembly without the need for extra tools. Its innovative design also means that the unit delivers large improvements in sieving accuracy and throughput rates compared with traditional separators.



The Vibrasonic® Deblinding System is a versatile sieving upgrade, enhancing the sieving of fine powders and liquid slurries down to 20 microns. Russell Finex supplies an ultrasonic system suitable for this high temperature environment which can cause blocking of the mesh as sugar crystals melt to the screen. Russell Finex's innovative system averts these issues, allowing for a clear mesh, optimizing sieving efficiency, and increasing production rates.

To prove the superiority of its equipment, Russell Finex offered a product trial at M.B.'s production facility. Following a satisfactory onsite trial of 15 days, M.B. took the decision to purchase the 30" Finex Ultima™ and the Vibrasonic® Deblinding System. Lodha continued, "We were impressed with the performance of the Russell Finex machine. After conducting the onsite trial, we realized that the 30-inch unit would help us to achieve our desired throughput rates and improve the quality of our final sucrose powders."

A magnetic separator was also installed within the discharge outlet to remove ferrous contamination from the product, as well as an arrestor – also known as a diverter - to ensure that the sieved material is quickly removed from the discharge chute. Additionally, a gated plate was added to the sieve deck to allow the material optimal time on the mesh, increasing sieving efficiency, and reducing loss of good product.

Lodha concluded, "The Finex Ultima machine exceeded our expectations. We are now achieving the desired throughput with a high-quality product. The unit is operator-friendly and is quick and easy to disassemble and clean."

Established since 1934, Russell Finex has manufactured and supplied vibro screens, vibro sifters, ultrasonic deblinding systems, and self-cleaning filters to global manufacturers from a variety of industries. This range of separation solutions improves product quality, enhances productivity, safeguards operator health and ensures liquids and powders are contamination-free.