

Clipper Teas achieve business continuity and quality control objectives with new sieving systems

Russell Finex supply Clipper Teas with two Compact 3in1 Sieves™ to improve screening capacity and ensure business continuity is maintained

Established in 1984, Clipper Teas is one of the fastest growing hot beverage brands in the UK, delivering 24% value growth year on year.

As a leading manufacturer of green, white and black teas, Clipper was the first Fair-trade tea company in the UK and the first to introduce green tea to the mainstream market.

Clipper proudly state their ethos of being, 'Natural, Fair & Delicious'; on all their packaging and in their advertising, this mean they use only the purest ingredients to supply the highest quality tea and that all Clipper products are ethically sourced.

Tea is one of the most widely consumed drinks throughout the World. In recognition of the scale of the opportunity, Clipper is consistently innovative and now has one of the widest ranges of teas available, with over 200 SKU's from Sleep Easy and Detox Infusions to Earl Grey and Assam Speciality blends to the Everyday cuppa. On average, Clipper Teas produce 7000–8000 kgs of tea per day, and with handling and blending critical to the production of high quality tea, Clipper are continuously looking for ways to enhance their product quality.

Clipper initially used one loading system to transfer bags of raw material weighing 75 kilos onto a bucket elevator. The tea was then processed through a reciprocating screen to remove any contamination, and then fed into two cone blenders.

Having one loading system proved to be problematic, as production was halted if the system required cleaning or maintenance, compromising business continuity. In addition, the reciprocating screen was difficult to dismantle and clean, requiring three people to handle it, this resulted in production downtime and increased labour costs. Furthermore, the screen could not be visually inspected, without dismantling the unit, contributing to further inefficiencies.

"It became clear that in order to efficiently meet demands, the process would need to be reviewed, not only to main-



Figure 1. One of the Compact 3in1 Sieves™ installed at Clipper Teas

- Enables visual inspection of the tea as it is being screened to remove contamination
- Quick change screens
- Enables continual production

tain business continuity but also to improve the screening process", says Steve Norris, Engineering and Maintenance Manager.

With this in mind, the company decided to search for a new loading and screening system wherein the key search criteria included ease of changing screens and the ability to visually monitor the tea as it is screened.

Investment in a system, which would enable two identical production lines to ensure production would not be disrupted during maintenance, was also incorporated. This has allowed Clipper to expand and increase capacity at busy periods.

Having worked with Russell Finex previously, Steve approached them for a solution. Although an in-line sieve was initially being sought, following a test on four different teas, it was determined that the Russell Compact 3in1 Sieve™ would be the most appropriate machine, as it met both Clipper's loading and screening requirements.

Two large 900mm diameter sieves were incorporated, due to the oversized nature of the bags being tipped into them. Designed for check screening ingredients through low-level bag emptying, the Russell Compact 3in1 Sieve™ is easy to assemble and disassemble and enables screens to be changed quickly and efficiently.

"The two Compact 3in1 sieves have enabled screening capacity to be doubled, allowing for greater flexibility, improved screening and therefore a reduction in waste and labour costs", says Steve.

With the new machines in place, Clipper Teas have been able to enhance their quality control procedures, ensuring that every box of tea that leaves the warehouse is of the highest quality.

Steve concludes, "As the business continues to grow, Clipper Teas are dedicated to innovation and providing their customers with the highest quality products available".

Russell Finex has over 75 years of experience manufacturing and supplying separators, screeners and filters to enhance productivity and ensure product quality. The company serves a variety of industries in over 100 countries with applications that include adhesives, ceramics, chemicals, colours, enamels, explosives, food, inks, latex, metal powders, paint, paper coatings, pharmaceuticals, plastisols, powder coating, and waste oils.



Figure 2. Two Compact 3in1 Sieves™ installed in two identical production lines



Figure 3. The Compact 3in1 Sieve™ bag tipping station used to load 75 kilo bags of tea