

A strategic advantage that lasts and lasts

Toshiba Corporation's 15-year relationship with a screening vendor is still paying dividends including doubling production capacity, increasing yield and uptime enabling aggressive expansion into new markets assistance.

As Toshiba Corporation was appraising the North American office equipment market in the early 90's, a new piece of machinery was purchased for R&D trials. Little did Toshiba know that the vibratory Compact Screener purchased to eliminate over-sized particles in raw materials would still be active in production 15 years later, or that as the world's sixth largest electronics equipment company they'd win more than 150 industry awards and product recommendations.

When Toshiba America Business Solutions (TABS), an independent operating company of Toshiba Corp., began successfully using the Compact Screener in its toner products division after the R&D trials, it decided to order another unit as demand for new digital toners began to pick up.

"The old box screeners we were using didn't work for the digital toners," says Becky Pitz, a Senior Process Engineer in TABS Toner Products Division. "With the move to digital toners, we needed production equipment that could quickly and consistently screen smaller particle sizes with minimal down-time."

"Despite the focus on the latest digital hardware, toner is what ends up on any printed hardcopy," adds Pitz. "Whether it's an annual report, key sales proposal, or your daughter's wedding photo, you've got to get the toner right to ensure crisp, clear copy. A crucial part of getting the toner right is screening for any foreign or oversize particles that could cause gaps, smudges, or uneven toner flow."

To meet demand while increasing both rate and yield at the required quality, TABS bought a second high-capacity, 36-inch Vibrasonic Compact Screener from Russell Finex of Pineville, NC. Russell Finex has a long history of addressing industrial needs and extensive experience working with customers to determine the appropriate use of screening and filtering equipment to meet specific requirements.



- Increased productivity and reduced labor costs with simple dis-assembly and cleaning
- Compact design fits easily into existing installations and areas of limited head room.
- Mesh blinding eliminated with the Russell Vibrasonic system

At TABS request, trial tests were done to ensure the successful use of the vibratory Compact Screener with digital toners. They worked with TABS to change a gasket material to make it more suitable for use with digital toners

A few years later, TABS added a third Compact Screener to keep up with continuing demand for digital toner. Unlike some screeners which have commercial hardware such as nuts and springs exposed to the material being screened, Pitz appreciates that the Russell Finex units do not, which eliminates the risk of hardware vibrating loose to enter the product stream.

Screening efficiency is enhanced with the Russell VibraSonic system using a combination of ultrasonics and conventional vibration. By using an acoustically developed transducer, an ultrasonic frequency is applied directly to the screener mesh to break down surface tension, effectively making the stainless steel wires friction free. This eliminates mesh blinding and enables users to maintain product consistency without needing to stop the machine to clean the mesh. It also improves screening precision, reduces downtime and provides longer screen life.

Since the units are crevice-free and entirely constructed from polished stainless steel including stands, all surfaces are also easily cleanable. Their simple design makes them easy to strip down and clean without tools, which further simplifies maintenance and enhances production uptime.

Recently, TABS faced rapidly expanding demand for digital color toner, brought about by the popularity of digital multi-function printers in businesses and offices. The color toners not only had to be screened for smaller particle sizes, but also had a sticky consistency that made material handling and processing more difficult.

Once again at TABS request, Russell Finex did trial tests at their facility to ensure the successful use of the Compact Screeners with the new digital color toners. They also made generator circuit board adjustments that allowed TABS to automate the remote operation of their screeners as part of a Toshiba company directive.

TABS bought three more Russell Finex vibratory Compact Screeners, bringing their total to six. "By responding so quickly to our needs, Russell Finex helps us respond to the marketplace," says Pitz. "That's key in a market as competitive as ours."

As TABS toner production continues to grow, Pitz values the Compact Screeners ability to fit into tight spaces not achievable by larger, less efficient models. This can be particularly helpful in areas with limited headroom or when fitting into existing production space.

"Compared to our previous screeners, we've doubled capacity in half the space," says Pitz. "Not only that, but we've significantly increased yield while maintaining quality and minimizing maintenance. The units last and last -- we're still using our original 15-year old screener in mass production."

"Our relationship with Russell Finex is a strategic advantage, especially in our current growth mode," concludes Pitz, who cites the naming of TABS among CIO 100's top 100 "bold" companies in 2005 and top "agile" companies in 2004 as an indication of more good things to come.

For over 70 years Russell Finex has manufactured and supplied screeners, filters, and separators to improve product quality, enhance productivity, safeguard worker health, and ensure powders and liquids are contamination-free. Their unique, vibratory Compact Screeners are a breakthrough improvement over conventional screeners where reliability, cleaning efficiency, and headroom or room size are issues.

Throughout the world, Russell Finex serves a variety of industries with applications including pharmaceuticals, food, chemicals, adhesives, plastisols, paint, coatings, metal powders and ceramics.



Russell Finex Ltd. UK
Tel: +44 (0) 20 8818 2000
e-mail: sales@russellfinex.com

Russell Finex N.V. Belgium
Tel: +32 (0) 15 27 59 19
e-mail: info@russellfinex.be

Russell Finex Inc. USA
Tel: +1 704 588 9808
e-mail: sales@russellfinexinc.com