



Russell Finex provides integrated fully enclosed sieving solution and increases product throughput by 300% for Natulab

Russell Compact Airswept Sieve™ improves productivity and reduces production downtime for Brazilian pharmaceutical company in a brand new production line



Founded in 2000 in the state of Bahia, Natulab is the 10th largest pharmaceutical company in Brazil and the top company in the country to manufacture herbal medicines. It is also the 5th largest manufacturer of over the counter medicines, and has grown rapidly in recent years in the market as the demand for pharmaceutical products has grown.

To meet this rise in demand, Natulab sought to build a new production line at its plant in Brazil, one which required a fully enclosed screening solution which could be integrated into a vacuum conveying line. Its overall aim was to find equipment that could safely screen pharmaceutical ingredients, and eliminate oversize contamination, lumps, and foreign bodies from the product.

Having previously used a vibrating sieve which required frequent mesh screen replacement due to poor sieving



performance, Natulab sought a more efficient solution to improve throughput rates and reduce production downtime caused by continual machine stoppages.

After consultation with expert Russell Finex sales engineers, the [Russell Compact Airswept Sieve™](#) was recommended as the ideal solution. Installed at the start of this new production line at Natulab, the ingredients pass through to the sieve via a vacuum conveying system. Whilst the good product passes through, the waste and oversize product is removed through a discharge outlet on the sieve.

“The Russell Compact Airswept Sieve is the perfect piece of equipment for us. It made our production process faster and more efficient.”

Angelito de Jesus, Maintenance Supervisor at Natulab

Improving production downtime and throughput

Installation of the Russell Compact Airswept Sieve™ resulted in significant increase in the throughput rate of pharmaceutical ingredients, with a flow rate of 1200kg per hour, meeting the rate required by the production line. Prior to this only 300kg/hr was able to be sieved and the entire process used to take around 40 minutes. With the Russell Compact Airswept Sieve™ now in place, **the entire process is 50% faster and 300% more productive**, taking 20 minutes and sieving between 1000-1200kg/hr, vastly reducing production time and increasing production output.

Maintenance Supervisor at Nautlab, Angelito de Jesus said: “The Russell Compact Airswept Sieve is the perfect piece of equipment for us. It made our **production process faster and more efficient**, and because of its vibratory mechanism, provided us **with even better performance than any previous machine.**”



With industry-proven technology, the Russell Compact Airswept Sieve™ integrates [Russell Compact Sieve® technology](#) with industry standard vacuum conveying lines, allowing for powders to be checked-screened safely and securely in one dust-free operation. This screening machine is designed with safety screening in mind, minimizing risk of product inhalation by operators and ensuring that installation is quick and easy with minimal space required.

“After 3 years of using this equipment, we’ve never had any issues. We chose the Russell Compact Airswept Sieve as it was the most efficient and reliable unit compared to other options on the market”

Angelito de Jesus, Maintenance Supervisor at Natulab

With a range of sizes and options available, the Russell Compact Airswept Sieve™ can be installed in any pneumatic conveying line for check-screening materials. The unit removes any unwanted oversize contamination efficiently and in a fully enclosed continuous operation. Not only does it improve production capacity by up to four times compared to standard conveying sieves, but its easy to clean and strip down design keeps production downtime to a minimum - ideal for pharmaceutical powder screening.




About Russell Finex

Established in 1934, Russell Finex has over 85 years of experience as a global leader in filtration, sieving, and separation technology. Supplying a range of innovative, high-quality solutions to the pharmaceutical industry, customers can be assured to have their exact processing requirements met. To find out more about the variety of options available and the range of industries served, [contact an experienced Russell Finex sales engineer](#) today.



Figure 1. The installation of the Russell Compact Airswept Sieve™

Advantages of the Russell Compact Airswept Sieve™:

-  **Improves production capacity** - increases it by up to 4 times compared to standard vacuum conveying sieves
-  **Reduces downtime** - with an easy-to-clean and strip down design that limits cleaning time
-  **Ensures operator safety** - dust-tight operation minimizes the risk of product inhalation