

# The new Finex Separator® delivers increased operating benefits

## Improves your product quality

More accurate separation of materials into different particle size fractions improves the quality of your final products. This, in turn, safeguards your business.

## Increases your productivity

The Finex Separator provides large improvements in screening capacity over standard separators. Full material control on up to four screen decks gives accurate separation in one pass.

## Reduces noise

The patented rubber suspension ensures quieter operation and therefore improves working conditions in your production area.

## Easily manoeuvrable

The unit can be moved easily and therefore used at multiple locations in your plant.

The range of Finex Separators is designed to improve your final products by removing contamination and/or providing highly accurate separations of materials by particle size. This efficient separation is achieved at a very high capacity and low noise level due to the patented design of the vibrator housing. These units are perfect for separating all types of wet or dry materials.

Find out more at [www.russellfinex.com](http://www.russellfinex.com)



# Russell Finex Leaders in separation technology

## Full technical support and spares service keeps your production lines running

We are committed to giving you a fast, responsive and reliable support service that helps to keep your production lines running. This means full support from our technical representatives and the availability of a complete range of spares off-the-shelf. Fully aware of the operational and competitive pressures you are likely to work under, we have made a substantial investment in stockholdings of spare parts to ensure your peace of mind. Russell standard parts represent excellent value for money and allow units to operate trouble-free at optimum levels of performance. For mesh assemblies, made to order or standard lines, we have our own production facilities, which ensures rapid delivery and extremely competitive pricing.

## Leaders in separation technology

We are worldwide leaders in fine mesh separation technology with over 70 years experience of providing solutions in more than 100 countries. We are committed to understanding and meeting your specific needs by close collaboration, design innovation and the provision of facilities for testing your materials on Russell equipment.



Call us today to find out how the **Finex Separator®** can help solve your processing problems and transform productivity. **All our experience is available to you.**

Find out more at [www.russellfinex.com](http://www.russellfinex.com)



**Russell Finex Ltd.,  
Feltham, England.**

Russell Finex Limited,  
Russell House, Browells Lane,  
Feltham, Middlesex TW13 7EW,  
England.  
Tel: +44 (0) 20 8818 2000  
Fax: +44 (0) 20 8818 2060  
Email: [sales@russellfinex.com](mailto:sales@russellfinex.com)



**Russell Finex N.V.,  
Mechelen, Belgium.**

Russell Finex N.V.,  
Zandvoortstraat 20  
Industriepark Noord C20  
B-2800 Mechelen, Belgium.  
Tel: +32 (0) 15 27 59 19  
Fax: +32 (0) 15 21 93 35  
Email: [info@russellfinex.be](mailto:info@russellfinex.be)



**Russell Finex Inc.,  
Charlotte, N.C., USA.**

Russell Finex Inc.,  
625 Eagleton Downs Drive,  
Pineville,  
North Carolina 28134, U.S.A.  
Tel: +1 704 588 9808  
Fax: +1 704 588 0738  
Email: [sales@russellfinexinc.com](mailto:sales@russellfinexinc.com)



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RF-FS02-01/07 Specification subject to change.

# Upgrade to the new Finex Separator® for wet or dry materials



Improves your product quality  
Increases your productivity  
Reduces noise  
Superbly engineered



Russell proven technology - made even more effective through our 70 years of widespread application experience

Worldwide leaders in fine mesh separation



[www.russellfinex.com](http://www.russellfinex.com)

# Versatile and flexible, the Finex Separator® offers you high performance screening and separation

## Screen wet or dry materials

Sizing, scalping, check screening, dewatering and product recovery, whatever your specific needs, Russell will provide a cost-effective solution.

## Separate up to 5 different size fractions

Up to four screen surfaces can be mounted on one separator, providing up to five predetermined particle size fractions in a single operation.

## Compact design

The **Finex Separator** fits neatly into production lines, providing considerable screening capacity without requiring excessive floor space. The modular nature of the decking contributes to siting flexibility and the optimum use of space. The oversize discharge spouts can be moved around a machine's circumference, allowing freedom in the location of material collection points.

## Easy operation and maintenance

Maintenance is simple to carry out and kept to a minimum. Since the Finex stands on four rubber feet, machines can be moved around a plant quite readily by means of a pallet or forklift truck.



## Range of sizes

The versatile **Finex Separator** is available in a choice of sizes to meet a wide range of capacity requirements

Industries where Russell expertise and equipment are helping customers to increase productivity and achieve consistent product quality.

- Food & beverage
- Metallurgy
- Paints/coatings
- Pharmaceutical
- Waste treatment
- Cosmetics
- Chemical
- Other powders
- Ceramics
- Other liquids

To obtain further information including case studies, visit us at our web site [www.russellfinex.com](http://www.russellfinex.com)

Material flow			
Material flow direction	Advanced angle	Weight position	Typical uses
	0°		Rapid separation of very easily screenable materials.
	40°		Common dry sieving. Giving efficient screening.
	60°		Precise classification of fine powders. Efficient screening of wet materials.
	100°		Dewatering of materials.

The diagram shows typical flow patterns of material over a screen from a central feed. The screening pattern obtained can be controlled and will vary as you adjust the angle by which the lower weight is in advance of the upper weight.

# Building on Russell proven separation technology

The design of the **Finex Separator** reflects our understanding and extensive experience of the requirements of the processing industries. Most importantly, we appreciate the pressures you face in terms of a highly competitive business climate and the impact legislation and environmental issues can have on day-to-day operations. For example, the Finex Separator is fully ATEX certified for use in Europe. In developing the **Finex Separator**, we have utilized Russell's proven, fine mesh separation technology, to bring our customers an enhanced package of operating benefits.

## Vibrator housing optimises use of power

The vibrator housing has been specifically designed to use a high mass machined casting, directly coupled to a standard electric motor. With its out-of-balance weights fitted, the high mass casting operates like a giant flywheel, translating power into the screening area above more effectively than similar separators fitted with vibratory motors. Furthermore, this quality of engineering allows us to offer the **Finex Separator** in 60 cycle territories with an operating speed of 1800 rpm instead of the norm of 1200rpm. This speed increase dramatically improves the performance of the separator.



1

## Patented suspension means quieter running

Rubber suspension mounts make the Finex Separator far quieter in operation than separators fitted with springs. The provision of four rubber feet on the base also contributes to a low noise level, compared to other machines where metal in direct contact with the floor may set up adverse vibrations.

2

## Advanced weight system increases control and capacity

Russell's adjustable weight system creates a more vigorous action, raising screening efficiency. Consistent material flow is now possible over all four decks, giving greater separation accuracy. Capacity is increased to such an extent, you may now obtain in one pass a throughput equivalent to that previously requiring two passes.

3

## Standard motor keeps costs low

The Finex Separator is powered by a standard, off-the-shelf motor, rather than a more expensive vibratory unit. Where necessary, the motor can be replaced quickly and easily to conform to any new flameproof/explosion zone requirements, including ATEX in Europe.

4

## Rubber coupling - yet another aid to low noise levels

The motor is linked to the vibrator housing by a flexible rubber coupling, which is yet another factor in the quiet running of the Finex Separator.

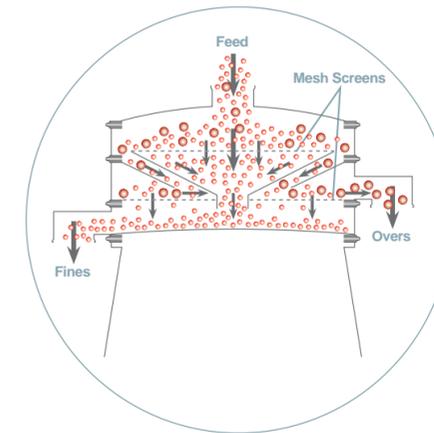
## Mesh deblinding options

### The Russell Vibrasonic® 2000 mesh deblinding system

Russell's Vibrasonic technology has revolutionised the screening of difficult dry materials. High capacity screening of difficult and sticky powders using meshes as fine as 25 microns has become the norm. Mesh blinding has been eliminated, down time cut dramatically and product specification met consistently. Furthermore, mesh life has increased from weeks to months. The Russell Vibrasonic System combines conventional vibration with ultrasonics. An ultrasonic frequency is applied to the separator mesh by an acoustically developed transducer, called the Probe. This breaks down surface tension, effectively making the stainless steel wires friction-free. Without surface tension there is no mesh blinding.

### Conventional deblinding - cleaning discs

The action of the separator enables the cleaning discs to scrape the underside of coarse meshes, freeing any material which has lodged in the mesh apertures.



## Increased capacity at minimal cost with the Russell Cascade System

There is no need to invest in more expensive, larger diameter machines, to obtain higher throughput. The two-phase separation process increases mesh area significantly, compared to a standard separator of the same diameter, raising capacity by up to 70 per cent. The Cascade System is based on two screens of the same mesh size, mounted one above the other, the upper screen being slightly smaller in diameter. Material is fed to the upper screen and either passes through the mesh to be channelled to the discharge spout, or flows over the edge onto the screen below. Particles of the specified size, passing through the lower screen are discharged in the normal manner. Oversize is discharged from the lower screen.

## Full research and testing facilities

In our 70 years experience, we have established the importance of the thorough evaluation of materials and equipment. Machines are made available for extended trials on customers' premises, while facilities for testing under controlled conditions are provided by state-of-the-art Test and Research Units, located at our sites in the UK, Belgium and the USA. Among other things, we evaluate the effects of changing variables such as mesh size, motor speed, degree of vibration and rate of material flow. These can all influence the performance of separation equipment. The results of every test are added to a computerized database, which incorporates information gathered by the company since its earliest days. We offer customers confidentiality in regard to specific findings.

