The New Finex Separator[®] **Delivers Increased Operating Benefits**

Greater Accuracy Quieter Running Increased Capacity Greater Flexibility Easily Manoeuvrable Improved Separation Optimum Use of Power Cover Maintenance Costs Full Material Control On All Four Screen Decks

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 our customers face in terms of a highly competitive business climate and, the impact legislation and environmental

issues can have on day-to-day operations. In developing the **Finex Separator**, we have utilized

separation technology, to bring our customers an enhanced package of operating benefits



Russell Finex Leaders in Separation Technology

Full Technical Support and Spares Service To Keep Your Lines Running

When you install a **Finex Separator**, you get a great deal more than a highly effective means of screening and separating a wide range of wet and dry materials. We are committed to giving our customers a fast, responsive and reliable support service that helps to keep production lines running. This means full technical 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 65 years experience of providing solutions in more than 100 countries. In the USA and continental Europe, we have operated through subsidiary companies for over 30 years. We are committed to understanding and meeting the specific needs of our customers by means of close collaboration, design innovation and the provision of facilities for testing their 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 at Your Disposal.



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ISO 9002 Approved. ANSI/ASQC Q92-1994 Upgrade to the New Finex Separator for Wet or Dry Materials





Quieter Running Enhanced Control Increased Capacity Superbly Engineered Greater Separation Efficiency

Russell Proven Technology - made even more effective through our 65 years of widespread application experience

Worldwide Leaders in Fine Mesh Separation



Building on Russell Proven Separation Technology

Drawing on over 65 years experience of identifying and solving processing problems for customers around the world, we have applied our expertise to Russell proven technology and produced the Finex Separator. This separator offers you new standards of operating performance and reliability at a truly competitive price.

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.

Precision engineering using our state of the art machining centers, ensures that the rest of the components of the vibrator housing can be easily assembled by hand and thoroughly tested to meet our exacting standards.

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

as a standard option in 60 cycle territories, the **Finex** Separator with an operating speed of 1800 rpm. The design of the vibrator assembly also contributes to reduced operating costs, as expenditure will generally relate to such items as the eventual replacement of our long life bearings.

The standard motor is effectively isolated within the base of the unit from any transmitted vibration, but should the occasion arise when a replacement is required, then this can easily be done and at a fraction of the cost of a vibratory motor.



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.

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.

Adapting to New

Regulations 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.

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.

Versatile and Flexible, the Finex Separator[®] **Offers You High Performance Screening and Separation**

Wet or Dry Materials

Russell's advanced technology and widespread experience can fulfil your most demanding requirements. Sizing, scalping, check screening, dewatering and product recovery, whatever your specific needs, Russell can provide a cost-effective solution.

Multi-Decking

Depending on classification requirements, up to four screen surfaces can be mounted on one separator, providing up to five predetermined 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.

Ease of Operation and Maintenance

The **Finex Separator** has been designed for ease of operation; 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 and match the specific application needs of our customers.

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

Metallurgy
Pharmaceuticals
Cosmetics
Other Powders
Other Liquids

To obtain further information including case studies. visit us at our web site www.russellfinex.com



Material Flow



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.

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.

FINEX SES

Full Research and Testing Facilities

In our 65 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.

