





Ensure your reputation and win more business

The Russell Eco Self-Cleaning Filter® is ideal for high capacity filtration of liquids. It improves the quality of your liquids and ensures your reputation, therefore winning you more business.



Safeguards your reputation

- The Russell Eco Self-Cleaning Filter® ensures the quality of your liquids by eliminating any oversized contamination.
- Total containment of your product prevents any airborne or other contamination from the local environment polluting your product.

Protects your operators & environment

- Totally enclosed filtration protects your operators from hazardous products, fumes and spillage. It also ensures that your production area stays clean.
- The re-usable filter element removes the need to handle and dispose of messy bags or cartridges.

Increases your productivity

- Higher capacities are achieved through the continuously cleaned filter element.
- Cleaning between batches is quick and easy without the need for tools. This means minimal disruption during product changeovers and significant savings in labor and downtime.

Reduces maintenance costs

The re-usable filter element removes the need to replace and dispose of bags or cartridges. This reduces labor and running costs as well as eliminating landfill charges.



Click here for www.russellfinexinc.com

Ensure your product purity

Improve your productivity

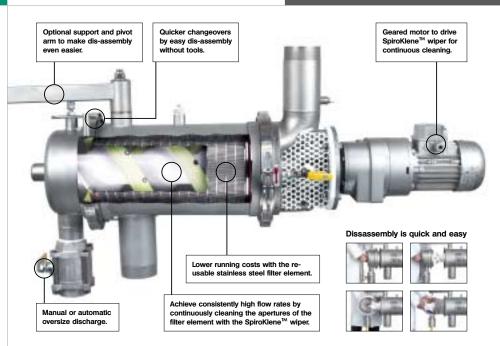
The Russell Eco Self-Cleaning Filter® accurately removes oversize impurities from all types of liquids and pastes. The unique SpiroKlene™ system continuously cleans the surface of the filter element and ensures optimum filtration efficiency. This allows for high and consistent flows, which are ideal for filling operations and continuous production lines.

The Russell filter gives you higher production rates compared to other filtration methods, as there are no production stoppages to change filter bags or cartridges.

The range of filters is designed for ease of operation and maintenance. They are simple to dis-assemble and clean without tools, allowing for fast and efficient product line changeovers, therefore increasing productivity. The units fit neatly into existing production lines, providing considerable filtration capacity without requiring excessive space.



Russell Eco Self-Cleaning Filters® aid quality control procedures for filtering liquid chocolate at Walls Ice Cream.



Click here for www.russellfinexinc.com

Safeguard your reputation & win more business

Protect your operators and environment

The totally enclosed Russell filters eliminate the risk of any contamination entering your product and prevent environmental pollution from fumes or spillage.

The re-usable filter element eliminates the costs and environmental implications associated with bags and cartridges - e.g. mess in your production area, ongoing replacement & disposal costs. It also safeguards the health of your operators by reducing their exposure to the product.

We recognize the importance of controlling waste; the savings to be achieved by minimizing product loss during manufacture and the control of what is finally released into the sewage system.

Explosion proof and flameproof units are available including ATEX certification in Europe if required.



EXTRACTION China Clay Minerals

Calcium Carbonate

OTHER LIQUIDS

Waste Oil

At Russell Finex we are committed to working closely with customers around the world, supplying solutions to your problems and keeping up to date with changes in legislation that affect your industry.

Over the last 70 vears we have solved the filtration

problems of almost every type of manufacturing company in the world and often provided customized solutions.

Improve your process further with the following standard options tailored to meet your needs



A range of 8 models with a choice of installation to suit your application needs

Jacketed unit

Heating jacket maintains a high product temperature, e.g. in chocolate processing.

■ Mobile unit

The self-contained trolley mounted filtration system is ideal for multiple filling lines or where quick product changes are required to minimize downtime.

High temperature unit Capable of handling liquids such as cooking oils

High temperature unit and resins up to 250°C/480°F.

Some of the industries Russell has helped:

INKS Offset Cold set Flexographic Lithographic

Dairy

COATINGS Adhesives

Wood coatings Gel coats

Gloss Emulsion

CERAMICS Glaze

Water Treatment Effluent Starch Clay Slip

■ Wedge Wire microscreen

Increases filtration capacity and offers longer screen life due to the robust design.

Defined hole microscreen

Provides more accurate filtration than standard screens - the reliable choice when product quality must be beyond criticism.

■ Defined hole supported microscreen

Suitable for continuous, high volume filtration where higher running pressures may be required.

A choice of filter elements are available to meet the specific demands of your industry



Wedge Wire

microscreen

microscreen



Defined hole



Defined hole supported microscreen

Easy installation...whatever your process

1 In-line design

This unit is easy to fit into existing pipework without the need for a specialist pipe fitter.

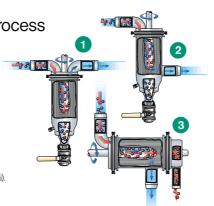
2 On-line design

Operates on a unique flow-through principle, which eliminates any dead spots giving you high volume, continuous production.

3 Horizontal On-line design

Strip-down and cleaning time is reduced further. It is even easier to fit into production lines where headroom is limited.

The filters are designed to operate at pressures up to 15 bar (220 psi).



Remove operator involvement with the Russell Filter Management System[™]

The system continuously monitors the filtration process enabling the filter to be efficently run without operator involvement which means reduced labor costs and increased productivity.

- Completely automates your liquid filtration process.
- Improves safety by eliminating operator contact with potentially hazardous products.



- Instantly save money the system dramatically reduces good product loss
- Reduce labor costs no manual supervision is needed.
- Easily retrofits to all types of filter.

Russell Finex

Improving your product quality and your reputation





Eco Filter® Range

Filtration of liquids & high viscosity pastes

- Improves your product quality by eliminating contamination
- Increases your productivity with easy clean and tool-free maintenance
- Safeguards your operator health and the environment

The Eco Filter® Range safeguards the quality of your liquids by eliminating oversized contamination. The totally enclosed system ensures that no harmful fumes or liquids affect your operators or environment and no contamination enters your product. The filter achieves consistently high flow rates with the unique SpiroKlene™ System which continuously cleans a reusable filter element. Strip down and cleaning between batches is quick and easy without the need for tools.



Options:

- Filter elements
 - Wedge Wire high capacity slotted screens
 - Microscreens defined holes for accurate filtration
- Heating jacket to maintain product temperature
- High temperature versions for filtration of products up to 250°C (480°F)
- Filter Management System For full control and monitoring of the filtration process
- Mobile units, with trolley and pump

Models:

200, 400, 500, 600, 800 & 900 Series

Typical Applications						
Material	Aperture size	Сар	acity	Model		
	μ m	kg/hr	lbs/hr			
Liquid chocolate	400	10000	22000	EF803J		
Emulsion paint	100	35000	77000	EF502		
High temp. phenolic resins	400	16500	36500	EF803DJ		
Plastisol based coating	150	6000	13200	EF603		
Offset ink	50	3000	6600	EF803D		

Rotary Range

Powder safety screening & liquid solid separation

- Improves your product quality by eliminating contamination
- Increases your productivity with high capacities
- Reduces your downtime with easy clean and tool-free disassembly

These enclosed, high capacity in-line separators use a rotating impeller to create a centrifugal action necessary for the efficient passage and separation of wet or dry products through a cylindrical mesh. The flexing action of the mesh gives it a self-cleaning effect to maximize capacity.

- Options:
- Fixed or variable speed
- Spray cleaning systems (liquid applications)
- Variable incline angle to control dryness of solids discharge for liquid applications
- Models:
- Turbo, Liquid/Solid Separator & Fines Saver

Typical Applications

Material (liquids)	Apert	ure size	Сар	acity	Model
	μ m	Approx mesh count	ltrs/hr	us gal/hr	
Curds and whey	40	400	42000	11100	Fines Saver
Wash water	100	150	100000	26000	LSS
Wool scour	125	125	20000	5300	LSS
Material (powder)	μ m	Approx mesh count	kg/hr	lbs/hr	Model
Maize starch	950	20	7000	15400	Turbo
Milk powder	1000	18	3000	6600	Turbo



Click here for www.russellfinex.com

Thousands of machines...

Click here for www.russellfinexinc.com

Compact® Range

Safety screening of powders & liquid slurries

- Improves your product purity by eliminating contamination
- Increases your production by utilizing an in-line design
- Reduces your downtime with easy strip down and clean without the need for tools
- Improves your operator safety by eliminating harmful dust & fumes

The range of Compact Sieves is ideal for the high capacity safety screening of your powders and liquid slurries, especially where space is restricted. All oversized contamination is removed from your product, giving total peace of mind. Operation and cleaning are quick and easy, making these machines perfect for all processing industries



- 3in1 Sieving Station for easy bag emptying and check screening of raw materials
- Airswept Sieve for use in vacuum conveying lines
- Magnetic Separator for removal of sub-mesh size ferrous contamination
- Vibrasonic® Mesh Deblinding System or screen cleaning discs

Models:

Compact 250, 400, 600, 900, 1200 & 1500



Typical Applications

Material	Apert	ure size	Сара	acity	Model
	μ m	Approx mesh count	kg/hr	lbs/hr	
Salt	2000	10	70000	154000	C900
Leaded glaze	112	140	8000	18000	C1200
Flour	850	20	18000	40000	C900
Iron powder	315	50	60000	132000	C900
Pharmaceutical powder	630	32	1000	2200	C600

Vibrasonic® Range

Enables the screening of difficult powders



- Increases your production rates by eliminating mesh blockage and reducing downtime for cleaning
- Improves your product quality by allowing screening on finer meshes
- Reduces your costs by lengthening the mesh life

The patented Vibrasonic® Deblinding System improves product quality further by allowing accurate separation down to $20\mu m$. The system applies an ultrasonic frequency directly to the separator mesh, effectively making the stainless steel wires friction free. Without surface tension there is no mesh blinding, giving increased capacities and consistent product quality. This system has been designed with the flexibility to be retrofitted into any new or existing vibrating separator/screener.

Options: Explosion proof approval to CENELEC, FM and ATEX

■ Profibus D.P. interface

■ Pharmaceutical version

Models: ■ RF40, Vibrasonic* 2000, Vibrasonic Spiroscreen™

1	Typical Applications							
N	laterial	Aperture size		Capacity without Vibrasonics		Capacity with Vibrasonics		
		μ m	Approx mesh count	kg/hr	lbs/hr	kg/hr	lbs/hr	
Е	namel frit	100	150	Blocks instantly	Blocks instantly	400	900	
S	older	38	400	5	11	350	800	
Α	luminium oxide	40	400	30	65	900	2000	
N	lagnesium stearate	315	50	Blocks instantly	Blocks instantly	250	550	
To	oner powder	140	120	270	600	1300	2900	

Hundreds of applications...

Click here for www.russellfinexinc.com

■ Improves your product quality through accurate particle size separation

Increases your productivity with higher capacities

■ Improves your operator health and safety by lowering noise levels

The new Finex Separator is a major advance in sieving and separation technology. Large improvements in capacity, accuracy, noise levels and upgradeability are achieved over spring suspension separators.

These high performance separators offer a cost effective solution to virtually any requirement, including sizing, scalping, safety screening, dewatering, grading or product recovery.

Options: ■ Up to 4 mesh screens to obtain 5 fractions

> ■ Vibrasonic® Mesh Deblinding System or screen cleaning discs

Models: ■ Finex Separator 30", 40", 48", 60"

Typical Applications

Material	Apert	ure size	Сара	Model	
	μ m	Approx mesh count	kg/hr	lbs/hr	
Iron powders	200	88	4000	8800	48"
Solder powders	42	325	1200	2650	48"
Toner powder	42	325	100	220	30"
Lactose	200	88	2500	5500	60"
Powder paint	140	120	600	1300	40"

Finex Separator™ Range

Separation of powders & liquid slurries



Finex Range

Safety screening & grading of powders & liquids



- Purifies your products by eliminating contamination
- Increases your productivity with high capacities
- Reduces your downtime with easy strip down and clean without the need for tools

These machines are capable of simple safety screening as well as accurate grading of your powders or granules. They can be used in continuous manufacturing processes as well as off-line production and bagging stations. High speed versions are available for screening difficult powders and high viscosity liquids. Quick release hand operated clamps enable fast screen changes and easy clean down.

■ Magnetic separator - for removal of sub-mesh size ferrous contamination Options:

■ Vibrasonic®Mesh Deblinding System or screen cleaning discs

■ Direct filling from machine using paint tap

Models: ■ Finex 22, 36 & 48

Typical Applications							
Material (liquids)	Aper	Aperture size Capacity			Model		
	μ m	Approx mesh count	ltrs/hr	US gal/hr			
PVA	45	400	8600	2300	F22		
Liquid chocolate	400	40	8000	2100	F36		
Plastisol	250	74	2000	520	F22		
Material (powder)	μ m	Approx mesh count	kg/hr	lbs/hr	Model		
Paracetamol	900	20	1000	2200	F22		
Powder coating	125	125	800	1750	F48		

Russell Finex

Leaders in fine mesh separation

Russell Finex....

Assures the quality of your products Safeguards your reputation Helps you win more business

Russell Finex assures and enhances the reputation of companies in almost every process industry throughout the world. We achieve this by manufacturing and supplying sieves, separators, filters and vibrasonic mesh deblinding systems to improve your product quality and ensure your powders and liquids are free from contamination.

Our screening and filtration equipment will also improve your productivity and safeguard the health of your operators and environment.

If your business is in adhesives, ceramics, chemicals, colors, enamels, explosives, food, inks, latex, metal powders, paint, paper coatings, pharmaceuticals, plastisols, powder coating, waste oils, or any other powders or liquidsthen contact Russell Finex to improve the quality of your products and increase your business.



Finex Range



Finex Separator™ Range



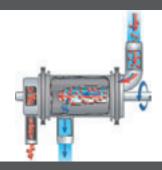
Rotary Range



Compact® Range



Vibrasonic® Range



Eco Filter® Range

Customer trust... a Russell must

Russell Finex are committed to working with customers to solve problems and often supply customised solutions in order to do this. We also provide machines for evaluation either at your site or one of our purpose built Test and Research Units. This ensures peace of mind before you purchase.

With offices in the UK, USA and Belgium and a network of dedicated agents covering the whole world, we offer

first class support wherever you are. Our excellent aftermarket network ensures that all your service and spare part requirements are fulfilled and your production lines are always running.

Russell Finex have 70 years of experience in over 100 countries. Contact us today to find out how we can improve your business.

Russell Finex

The following are a few of our satisfied customers

ЗМ

Abbot Laboratories

Adchemo

ADM

Akzo Nobel

Allied Bakeries

Allied Mills

Amec

Ameron International

Amvlum Apotex APV

Armstrong World Industries

Astra Zeneca

Aventis

Avon Cosmetics

B.A.S.F.

B.P. Chemicals

Bayer Boart

Boehringer Ingelheim

Boots Plc

Bristol Myers Squibb British Nuclear Fuels

Cadbury Schweppes

Cargill Chisso Chloride

Ciba Speciality Chemicals

Clariant Coates

Colgate-Palmolive

Courtaulds Cray Valley Dai Nippon

Daihan Paint & Ink Co.

Daimler Chrysler

Danone Degussa

Dow Chemical

Dupont E. Merck

Eastman Kodak

Eli Lilly Engelhard Estee Lauder Faulding Ferrero Ferro

Fluor Ford Motor Foster Wheeler

Fuji Kogyo General Electric General Foods General Mills

General Motors Glanbia

Glaxo Smithkline

H.J. Heinz

Harlow Chemicals

Hempel Henkel Herberts Hoechst ICI

Imerys

Imperial Tobacco

International Paper Johnson Matthey

Jotun

Kawasaki Heavy Metals

Kelloggs Kemira

Kennametal Kerry Foods

Kodak

Konica Supplies Kraft Foods Kvaerner L'Oreal Leaf

Lever Faberge

Marley

Mars

Master Foods Max Factor McCains Foods

McVities Meiji

Merck Sharp & Dohme

Michelin

Mitsubishi Chemicals

Mitsui Mining Monsanto Morinaga Nabisco

Nashua Corporation National Starch

Nestlé

Nordson Corporation

Novartis Orkla Pfizer **Philips** Pilkington Porcelanosa **PPG** Industries Proctor & Gamble **Quaker Oats**

Quest International Raisio Chemicals

Reckitt & Colman

Reichold **RHM**

Rhone Poulenc

Roche

Rohm & Haas **Royal Doulton** Saint Gobain

Sandvik Sara Lee

Schering-Plough

Shell

Sherwin Williams Showa Denko Sigma Coatings

Solvay

Sun Chemicals Synthomer Tikkurila

Toshiba Chemicals

Total

Toyo Aluminium Tovo Ink Treibacher Unicef

Unilever Union Carbide

Valspar

Van Den Bergh Foods Ltd

W.R. Grace Warner Lambert Wattyl Paints Whitbread Whitford Plastics

Wrigleys Wyeth Xerox

Yamanaka Chemical



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



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 Email: info@russellfinex.be



Russell Finex Inc. Pineville, N.C. USA.

Russell Finex Inc.

625 Eagleton Downs Drive, Tel: +1 704 588 <u>98</u>08

Fax: +1 704 588 0738 Email: sales@russellfinexinc.com





No more messy bag changes...



Are you fed up with the problems associated with bag filters?

High Cost

- Changing bags is labor intensive and time consuming.
- Stocking bags is expensive
- Disposing of bags is expensive
- Good product lost when changing bags

Poor Product Quality

Bags have non uniform apertures

Health and Safety

- Your operators are exposed to hazardous materials
- Disposing bags is damaging to the environment

Process Interruptions

- Bags give uneven flow rates as they block up
- Frequent line stoppages due to continuous bag changes



Please turn over to see for how much better it can be...

The Russell Self Cleaning Eco Filter

The Russell Self Cleaning Eco Filter® gives you a continuously cleaned, reusable screen element with positive oversize removal.

Low Cost

- Automated process
- No disposable bags or cartridges
- No disposal costs

Total Product Quality

 Defined filter screen apertures remove all oversize contamination

Health and Safety

- · Totally enclosed
- · No product exposure to operator

No Process Interruptions

- Continuously cleaned filter element
- · No bags to block up and remove
- Increased capacity

Call **Russell Finex** today to discover how the versatile Russell Self Cleaning Eco Filter can solve your processing problems and save you time and money.

Russell Finex

North & South America Tel: +1 704 588 9808

Email: sales@russellfinexinc.com

Central Europe

Tel: +32 (0) 15 27 59 19
Email: info@russellfinex.be
UK & rest of the World
Tel: +44 (0) 20 8818 2000
Email: sales@russellfinex.com







Powder Coating Users

Get rid of contamination from your oversize powder with the new Russell Finex Powder Coating Recovery Screener

Save Product & Maintain Quality

- •Reclaim over 98% of your good powder
- Screen down to 100 mesh
- •Improve finish on final product
- Oversize removed with no product loss



Why risk gun blockage when you can bring your recovered powder up to specification with this unique Screener?

Increase Efficiency

- •Faster color change
- No tools required for strip down
- •Strip down in less than 1 minute

Minimum Maintenance

- Standard electric motor
- Off the shelf spares service
- Stainless steel contact parts

Maximize Productivity

- Reduce blockage on Spray Guns
- •Up to 20 guns on single unit
- •Recycle product previously wasted

Compact and Quiet

- Small size and fully mobile
- Operates at less than 65dBA
- Use off line, within a powder kitchen, or after a cyclone

Russell Finex Inc 625 Eagleton Downs Drive Pineville, NC 28134 704-588-9808 fx704-588-0738 sales@russellfinexinc.com www.russellfinex.com Contact us today to discover how the Screener can save you time and money!



Worldwide Leaders in Fine Mesh Separation