

# RUSSELL FINEX LEADERS IN SEPARATION TECHNOLOGY

## Full Technical Support and Spares Service to keep your Lines Running

When you specify a Russell Vibrasonic 2000 Mesh Deblinding System, you get a great deal more than a high quality, high throughput piece of machinery manufactured to ISO 9002 standards.

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 Sales Engineers 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 substantial investments in re-meshing services and stockholdings of spare parts to ensure your peace of mind. Russell original parts and meshes represent excellent value for money and allow units to operate trouble-free at optimum levels of performance.

## Full Research and Testing Facilities

In our sixty-five years experience, we have learned the importance of undertaking thorough evaluation of materials and equipment. Machines are made available for extended trials on customer 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 USA. The results of every test are added to a computerised database, which incorporates information gathered by the company since its earliest days. We offer customers confidentiality in regard to specific findings.



Russell Finex Ltd., Feltham, England



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



Russell Finex N.V., Mechelen, Belgium

**NO ONE SIEVES FINER THAN RUSSELL FINEX**



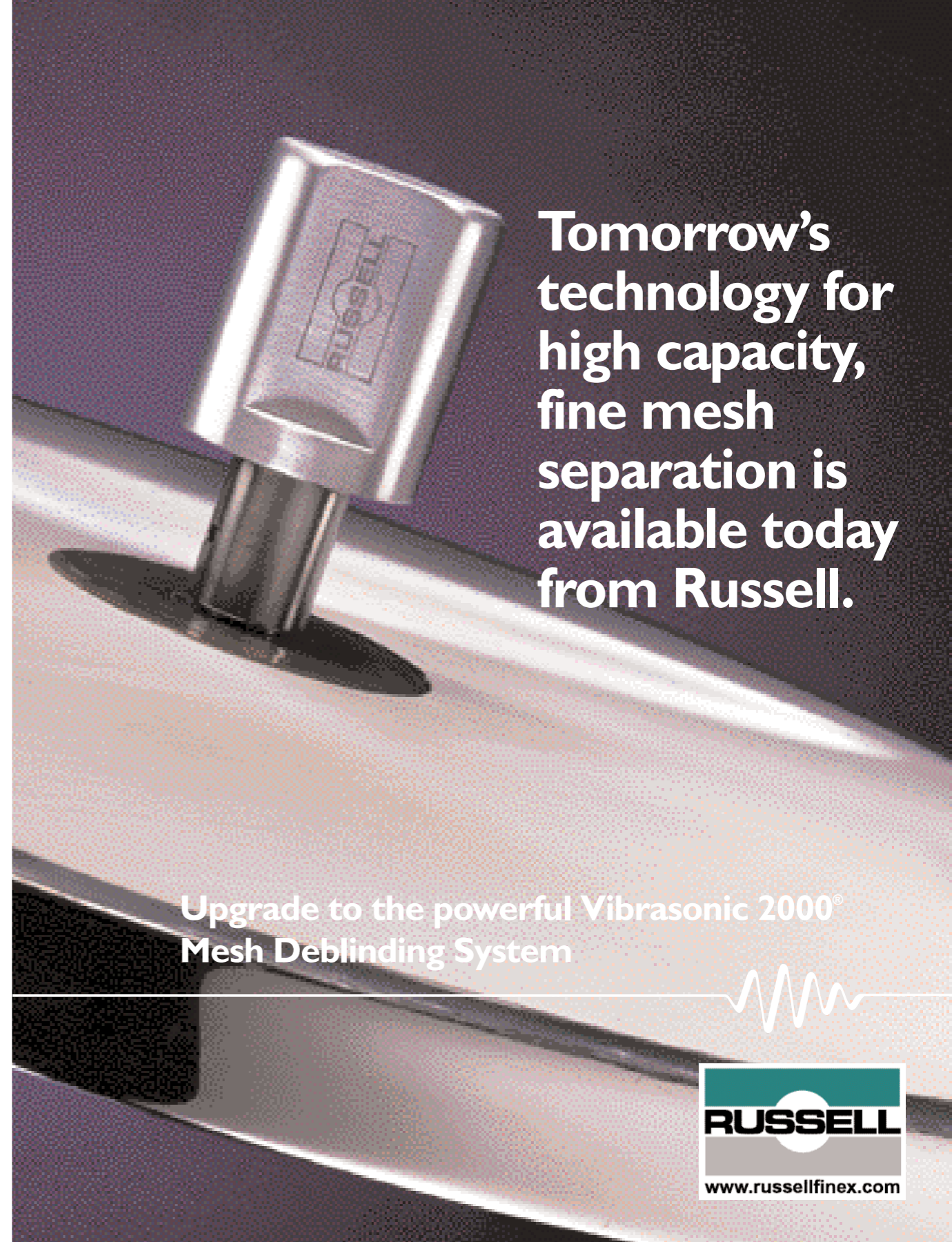
ISO 9002 Approved.  
ANSI/ASQC Q9002-1994

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RF102 03 2000 Specification subject to change.



**Tomorrow's  
technology for  
high capacity,  
fine mesh  
separation is  
available today  
from Russell.**

**Upgrade to the powerful Vibrasonic 2000®  
Mesh Deblinding System**



# The Russell Vibrasonic 2000<sup>®</sup> Mesh Deblinding System offers the power and advanced features to transform productivity.

## Higher Throughput and Consistent Product Quality

During the last twenty-five years, Russell Vibrasonic technology has revolutionised the screening of difficult dry materials for companies around the world.

High speed screening of difficult and sticky powders using screens as fine as 20 microns has become the norm. Screen blinding and clogging has been eliminated, downtime cut dramatically and product specification met consistently. Furthermore, screen life can be increased by more than four-fold.

Now we are set to open up new perspectives and establish new levels of performance with the technologically advanced, yet easy to operate, Russell Vibrasonic 2000 System.

## The Vibrasonic Principle

Russell's R&D team recognised the potential of combining conventional vibration with ultrasonics. Their vision became a reality with the production of the patented Vibrasonic system. An acoustically developed transducer - the Probe - applies an ultrasonic frequency directly to the separator screen via the Velocity Transfer Plate. This breaks down the surface tension, effectively making the stainless steel wires friction free. Without surface tension there is no screen blinding.

## Power By Demand™

The Vibrasonic System works on the Power By Demand (PBD) principle, which solves the problem of uneven loading. Constant feedback from the separator screen, to the Vibrasonic PBD controls, monitors the throughput of material in the system. When there is a heavy loading on the separator screen, PBD increases power, maintaining the amplitude of the ultrasonics to pass materials through quickly and efficiently without blinding.

## More Power to Drive Larger Screens

The powerful Vibrasonic 2000 includes a new highly efficient generator with a capacity to go up to 200 watts, giving greater flexibility in its use on large diameter screens.

## Difficult Light Materials Processed Successfully

Specially developed touch panel controls give you the flexibility to process difficult low density materials with far greater efficiency than has been previously possible.



### FINGER TIP CONTROL AND MONITORING SYSTEM

Operation of the system is by means of a touch panel. The operator selects the type and rate of activity to give the most efficient running condition, depending on the material being processed. Modulation and pulse variations determine intensity and duration of vibration. The screen is responsive to acoustic modulation and a sharp input of extra power will free up a very light powder, preventing build up and clogging of the screen. A pause in activity can allow sufficient time for the material to settle and pass through the screen.

A logic diagram beneath the numeric LED display provides a high degree of operator information on the condition of the system's running and the location of any problems that may occur. If required, the system can be fully integrated into a central PLC control.

## Advanced Features

### Titanium Probe

The fully detachable Vibrasonic Probe incorporates a titanium core to interface with the Velocity Transfer Plate. Being extremely durable, titanium has increased probe life significantly and virtually eliminated wear on contact surfaces.

### Unique Screen and Velocity Transfer Plate

The stainless steel screen frame is of top quality and the screen is fitted with a Velocity Transfer Plate. Each assembly is 100% factory tested for acoustic coupling before shipment.

### Compact PBD Control Unit

State of the art technology has been applied to integrate the generator with the electronic controls circuitry. This enables the use of a compact metal control box conforming to industry standards IP65 and NEMA 4. The Control Unit can be free standing or wall mounted.

## PROVEN BENEFITS

### Finer Screens and Increased Capacity

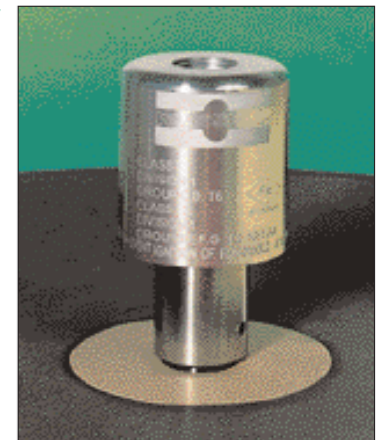
Now you can use screens as fine as 20 microns and increase throughput without the fall-off you get with conventional equipment. At last, you can maintain consistency throughout a production run, without needing to stop to clean the screen. Metal Powders, Electrostatic Powder Paint, Pharmaceuticals, Food, Ceramics and Toner Powder are just some of the industries benefiting from the introduction of this revolutionary technology.

### No Need for Conventional Deblinding Equipment

Freedom from clogged screens means there is no need for scrapers, brushes or rubber balls; you therefore eliminate the contamination they cause as they wear out.

### Longer Mesh Life

The patented Vibrasonic action makes for greatly increased screen life, since there is no harsh abrasive action to impair tension and cause wear.



Options available include (a) a flameproof model (pictured above) certified to EEx d IIB T6 and explosion proof to Class I, Division 1, Group C.D. T6, Class II, Division 1, Groups E.F.G. T6, NEMA 4. (b) a stainless steel cover matched to the quality control standards of the Pharmaceutical Industry.



### POWERFUL AND FLEXIBLE.

Russell's powerful Vibrasonic 2000 technology is versatile in application and can add a new dimension to the performance and scope of separators.

