

# VIBRASONIC MESH DEBLINDING SYSTEM ACHIEVES

## ATEX CERTIFICATION

The first ultrasonic mesh deblinding system to achieve ATEX Directive certification for Zone 20 and Zone 0 has been introduced by separation and filtration specialists Russell Finex Limited, of Feltham, Middlesex. This allows difficult to sieve powders to be screened effectively and safely.

On March 1st, 1996 the European Community adopted a Directive on equipment and protective systems intended for use in potentially explosive atmosphere (94/9/EC). 'Atmospheres Explosibles' is more commonly referred to as the ATEX Directive.

### ELIMINATION OF EXPLOSION RISK

The ATEX Directive's primary function is to eliminate the possibility of explosions. It applies to electrical and mechanical equipment intended for use in potentially explosive atmospheres.

The Directive affects all industries including food, metal powders, powder paint, pharmaceutical powders, chemicals and any other industry involving powders, dusts and vapours. The Russell Vibrasonic probe is certified for group II, category 1, gases and dusts and explosion protection is to E Ex d m IIC T4.

### ELIMINATION OF SCREEN BLINDING

The Vibrasonic system 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.

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.

### TOTAL PEACE OF MIND

When an electrical component is continuously in contact with powder and dust during sieving there is a potential hazard of an explosion.

The new Zone 20 transducer and cable are totally enclosed eliminating the possibility of any explosion and to avoid the possibility of ignition of a hazardous atmosphere. This system gives the user complete peace of mind and meets essential health and safety requirements. The probe can be retrofitted to any existing Russell Vibrasonic system.



● **ATEX Approved Mesh Deblinding System**

● **Improve capacities and mesh life**

### DIRECTIVE DATE: JULY 2003

By July 2003 all new equipment purchased for installation and use, in a potentially explosive atmosphere must comply to the requirements of the ATEX Directive.

Russell Finex were awarded the ATEX Directive certification in August 2001.

For more information on the ATEX Directive visit [www.dti.gov.uk/strd/atex](http://www.dti.gov.uk/strd/atex).