Low Energy Size Reduction Milling Systems

- Easy to operate
- Low maintenance
- High energy efficiency
- No metal to metal contact
- Easily adaptable
- Low heat, dust and noise
The latest Uni-Mill 'Cone-mill' sieving granulator offers proven size reduction technology to a broad spectrum of industries. The stainless steel construction of the Uni-Mill makes it an ideal machine for pharmaceutical, food and chemical process applications.

The Uni-Mill system is versatile and simple to operate. Screen changes are fast and easy to implement to suit changes in production requirements.

**Pharmaceutical Applications**

The Uni-Mill, 'conical screen' or 'cone mill' is thoroughly proven in pharmaceutical manufacture as an ideal way to grind pharmaceutical powders requiring even particle distribution.

Typical applications are de-lumping of material collected from a fluid bed drier prior to compression and for the re-grinding of tablets that are out of specification.

**Chemical Applications**

The Uni-Mill is ideal for chemical industry applications such as de-lumping of chemical powder, fine grinding of dyes, de-lumping of detergent particles and product reclaim such as re-processing chemical or detergent tablets.

The Uni-Mill provides consistent results where a milled and granulated product with a regular bulk density is required.

**Food Processing**

Conical screen milling has improved hundreds of applications that exist within food processing applications. Low heat generation makes the Uni-Mill ideal for grinding heat sensitive products.

Suitable uses are; grinding plain and cream-filled biscuits for reclaim, dispersion of powder-mixes, grinding herbs and spices and bread-crumbing.

**Uni-Mill Advantages**

- Easy To Operate / Low Maintenance / High Energy Efficiency / Adapts Easily To Other Products
- Low Heat, Dust & Noise Generation / No Metal To Metal Contact In The Milling Zone
Control Powder Quality In Just One Process!

**Dry Milling**
Reduce coarse, lumpy material to a smaller, uniform particle size.

**Dispersion And Dry Mixing**
Thorough mixing of lumpy powders and powder mixes, even friable material.

**Controlled Grinding**
Reduction of oversize material with a minimum generation of ‘fines’ to a specific particle size.

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**Uni-Mill Features**
- Compact size
- Fast screen changes
- Easy clean GMP design
- Static or mobile support frames
- Hand feed, continuous feed and vacuum feed.
- All stainless steel construction. AISI 304 or AISI 316L contact parts available.

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**Uni-Mill Operation**
Unprocessed material is loaded into the product inlet of the Uni-Mill by hand, gravity-feed or vacuum transfer. The material then passes into the milling chamber where a rotating impeller forces the unprocessed material through stationery cone-shaped screen by a vortex action.

The material is instantly reduced in size as it passes through the holes in the screen. By changing a combination of screen, impeller-shape and speed, the finished milled particle size can be carefully controlled. Most importantly for pharmaceutical and food production there is no metal to metal contact between the impeller and screen.
Mill Screen Manufacture

An extensive range of replacement screens are available manufactured in our own factory using advanced manufacturing methods and finishes. The vast majority of popular screen types are reproduced by CAD CAM using photo-etching technology ensuring high accuracy without distortion and guaranteed 100% repeatability. For highly abrasive applications, hardened stainless steel screens can be supplied which have a unique patented surface treatment, which outperforms conventional hard-chroming processes.