



# HOSOKAWA MICRON LTD

AUTUMN 2013



## Tiny machines making a **BIG** impression in:

- Research Institutes • R & D departments
- Foodstuffs • Chemicals
- Pharmaceuticals • Plastics • Ceramics
- Batteries • Nanotechnology

## The Picoline range **One common housing - 9 individual machines**

**M**ini machines for powder and particle processing; each unit is designed to locate into a common housing or platform making it easy to interchange machines for different processes.

Capable of processing very small quantities from 1 gram up to several hundred grams the series includes nine function modules for fine milling, classifying or mixing powders and suspensions and for wet milling and dispersing suspensions. Derived from established products from Hosokawa transfer to volume production is straight forward, reliable and problem free.



The Picoline range is totally transposable and can all be fitted into the same compact operating housing or platform suitable for bench top or installation and use in a fume cupboard or compact isolator. The ergonomic design is made from brushed stainless steel for quick and easy cleaning. The system is controlled by means of a touch

panel with a microprocessor housed within the platform.

Operating data, settings, system flowcharts and trends can all be displayed and transmitted to external devices such as printers, LIMS systems and USB memory sticks.

The range includes **Picoplex** based on the UPZ impact mill, **Picozirk** an impact classifier mill, **Picosplit** which is an ultrafine air classifier, **Picojet** based upon the well know AFG opposed jet mill with integral classifier for ultrafine grinding, **Piconizer** a spiral jet mill, **Picocross** a pin mill, **Picoliq** a wet agitated media mill, **Picobond** a high energy mixer, and **Picomix** a high performance batch mixer for dry powders.

## Exhibiting in 2013/14

Hosokawa Micron Limited will be taking part in a number of exhibitions and promotional events and invite you to visit them to discuss the latest developments in these specialist fields of application:

**30th September – 2nd October**  
**POWTECH 2014**  
Nuremberg, Germany

**VISIT US AT**

**lab** INNOVATIONS  
NEC, Birmingham  
6 & 7 November 2013

**Visit us on Stand V7**

**November 6-7th 2013**  
Lab Innovations  
NEC, Birmingham

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# Simply A Better Downflow Booth

- Affordable
- OELs <1µg/m<sup>3</sup>
- Easy installation
- Quiet operation

**A** new design of Downflow Booth from Hosokawa Micron that retains the high levels of containment and personnel protection you would expect from a more expensive booth but at a price that won't break the bank – making it ideal for those companies seeking multiple downflow booths or those using downflow containment facilities for the first time.

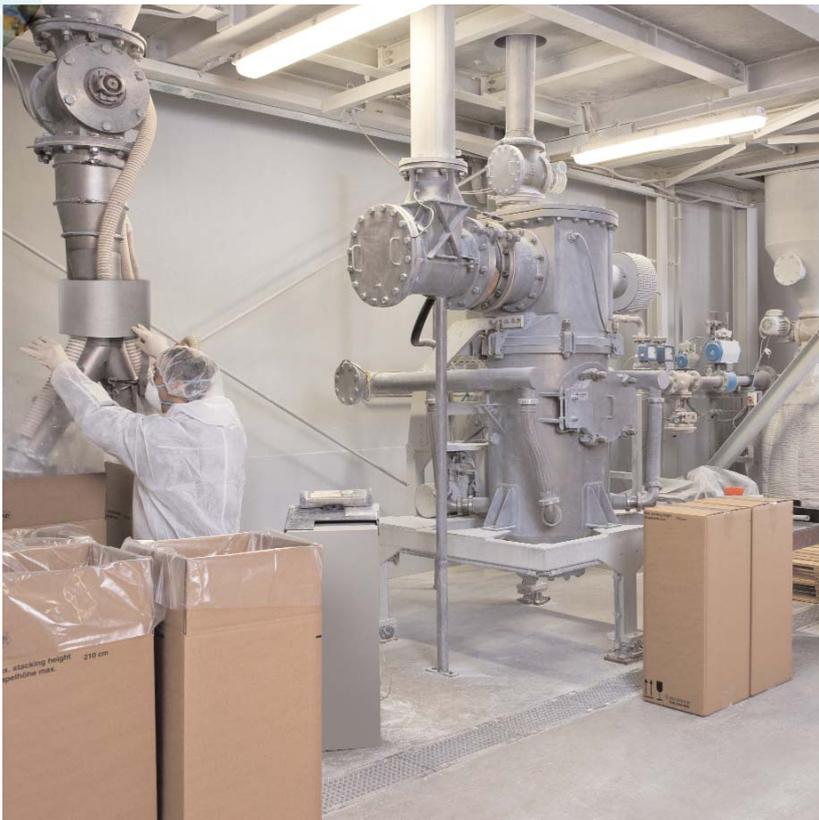


With its front opening, retractable door the booth is suitable for storage as well as multiple dispensing activities.

Designed for ease of installation and flexibility of operation, the new Downflow Booth is 'plug and play', requiring no complicated installation or qualified personnel to undertake the wiring work. By utilising EC plug fan design and technology, air handling efficiencies have been achieved alongside easily adjustable fan speed control that allows for efficient air handling within the working environment.

## Extended Toll Processing Capability

**A**n extended Toll Processing service is now available from Hosokawa Micron Powders, utilising Hosokawa Micron group company production facilities in UK, Germany and Netherlands. We can now offer the most diverse range of powder processing technologies on the market whether to meet your requirements for unique one-off projects or regular, repeat processing activities – all supported by a network of powder and particle processing expertise that is on hand to create further competitive advantages for your business.



### The Hosokawa Micron Advantage

- Access to more than 20 individual processing suites
- Comprehensive in-house analytical and test facility support
- Separate chemical and food (BRC accredited) suites
- Pack-off, warehousing and logistics support
- Extensive processing know-how of Hosokawa's engineers

**Choosing the right Toll Processing partner can make all the difference to your business. Be sure to choose Hosokawa Micron Powders.**

**NEW**

# 3 in 1 Drymeister-H for Grinding, Classifying & Drying in One Compact Unit



Combining intensive dispersion with high performance classification the Drymeister-H delivers stable product quality, particle size and moisture content speedily and with high energy efficiency. It is suitable for drying slurries, solutions, wet powder and pasty cake.

- Uses 50-70% less energy than traditional spray or rotary dryers.
- Minimal adhesion of undried product
- More compact size than flash or spray dryers

With options for ceramic faced wear parts and a specially designed screw feeder for cakey material the Drymeister-H has applications across a range of industries with typical uses in the processing of retardants, lithium cobaltite, minerals, foods, detergents, pesticides, surfactants and pigments.

## Asset Management – Optimised

- Heads up on impending equipment failure
- Eradicate unplanned equipment maintenance
- Increase plant availability
- Reduce maintenance and operational costs

Managing key equipment to deliver reliability and efficiency is an essential part of plant performance improvement and can play a large part in increasing production output and reducing operational costs that keep you ahead of the competition - which is why more companies than ever are turning to Hosokawa Micron's Performance Improvement Solutions service to help them maximise Overall Equipment Effectiveness and minimise unplanned maintenance and equipment failure.

Hosokawa's three phase approach to performance improvement (Understand, Monitor, Control) allows companies to select the right modules for their needs. By utilising the Plant Performance Monitoring module and its predictive technologies, Hosokawa Micron's engineers are able to identify individual equipment that might be at risk of impending failure and monitor underperforming machines. Using accumulated data Hosokawa's experienced process engineers can work with your own engineering team to help develop an equipment maintenance strategy and schedule that better protects capital assets and ensures production reliability.





# Analyser for Granules

**T**he Hosokawa Granulyser Type EGT 100/25 is a unique concept laboratory machine designed to provide a standard and repeatable test method to predict strength and behaviour of granules. With the growth of materials in granular form this is increasingly important in product development. By replicating the shear, impact and abrasion forces acting on granules in simulated industrial production plant conditions, granule performance can be studied in detail enabling informed decisions to be taken on further processing steps.

- Compact design
- Highly portable
- Easy cartridge loading/unloading of material
- Easy to dismantle and clean
- Removable parts are dishwasher cleanable

Developed jointly between Hosokawa Micron, Hosokawa Bepex and The Enzyme Dust Consortium.

# Flexible, Multi Purpose Dryer

**T**he Vrieco Nauta Vacuum Dryer is much more than just a vacuum dryer – due to on going developments it is capable of many different processes such as filtration, chemical treatments, sterilisation at high temperature and pressure, and vacuum drying, making it suitable for a broad spectrum of products.

Offering a 50% reduction in processing time that can deliver significant energy savings, the system offers maximum production flexibility with minimal operator intervention.

Process time is reduced not only by mechanical dewatering prior to drying but by subsequently heating the extracted water which is then recirculated back into the dryer - which reduces the process heating time.

Crystallisation can also be carried out in the vacuum dryer where the reactants can be first dissolved and reacted. The efficient mixing within the dryer accelerates dissolution and temperature control. Cooling of the liquid then initiates the crystallisation process. The crystals formed can be dried under vacuum, **all in the one machine**.

Chemical reactions including those where solids react with gases or liquids, can be handled very effectively with the high efficiency of the mixer ensuring an homogenous result in product conversion, while the reaction energy is efficiently removed or supplied by the good heat transfer within the dryer unit.



For further information on anything within this newsletter please visit [www.hosokawa.co.uk](http://www.hosokawa.co.uk)

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