

# GRAIN & FEED

*milling technology*

October

2008



- **There is always something new out of Africa**



- **New compounding plant & the development of liquid premixes**



- **Extruded & special products**  
- technology, innovation & developments

## In this issue:

- Effective feed formulation for feedmillers and farmers
- Adding Micro Ingredients to feed and flour
- Technology advances in quality control analysis
- Breakfast cereals  
- *processing to deliver nutrition*

A subscription magazine for the global flour & feed milling industries - first published in 1891

## Digital image processing with 100% compatibility to sieve analysis

**S**ieving with digital image processing? Retsch Technology's Camsizer can do this trick! It provides measurement results with the precision and information of digital image processing which are 100 percent compatible to those of sieve analysis.

The instrument analyses the particle size and shape of dry, pourable materials in a size range 30µm-to-30mm. The Camsizer can be used for almost any sample material whose particle size distribution is determined by sieve analysis.

An increasing number of laboratories have replaced this method by digital image processing which has several advantages:

- higher precision
- better reproducibility

- higher sample throughput
- more information

An important feature of this technique is the exact comparability of the results to those of sieve analysis. With sieve analysis, the particles encounter the mesh openings with different orientations until they pass through an opening which is just big enough. The Camsizer however, can measure particles on the basis of various size definitions such as: length, breadth, diameter of the coextensive circle, etc.

As the Camsizer measures the free-falling particles, projections may occur which lead to different measuring results from those of sieve

analysis. The particle shape determines these differences. The Camsizer software provides the possibility to create fitting algorithms which compensate these differences completely and ensure 100 percent compatibility to sieve analysis results. The operator can create these algorithms in three easy working steps.

### MORE INFORMATION:

Retsch Technology GmbH  
Ute Vedder, Marketing  
Rheinische Strasse 43  
D-42781 Haan  
Germany

Tel: +49 21 295561-155

Fax: +49 21 295561-87

Email: [u.vedder@retschi.com](mailto:u.vedder@retschi.com)

Website: [www.retsch-technology.com](http://www.retsch-technology.com)



## Dinnissen opens Food Design Factory for product development

**D**innissen Process Technology is opening a Food Design Factory: a flexible development unit specially designed for the development of new foodstuffs and new animal and fish feeds.



The Food Design Factory is a fully-functional production line where product developers, nutritionists and technologists can test variations and combinations with widely diverging processing operations.

They can grind, sieve, weigh, mix, dose, dry and even expand, extrude

and vacuum coat under all sorts of conditions. The production line is designed for fast product switches.

Processes can be coupled to one another and ingredients, conditions or processing operations can be varied. It offers an ideal environment to conduct trials and experiments and test production processes without generating high costs.

The Food Design Factory can also serve as a small-scale production location.

New products can be produced during the introduction phase without the need for immediate investment in the production process. This reduces the risk of introducing new products to the market. If the product introduction is successful, a process line can be delivered.

This development factory has a production capacity of 200kg to 800kg per hour.

Henri Michiels, director of Dinnissen Process Technology, says, "We have noticed that there is a great need for innovation within companies. Certainly in a complex network of companies. Our company is

pleased to be involved because innovation and contact with companies who share the same aims is essential for us.

"The Food Design Factory is our way of stimulating innovation in the field of feed and food design. It also enables developments to be made in practice, and much more quickly than would otherwise be the case."

### MORE INFORMATION:

Ingrid van der Sterren  
Dinnissen Process Technology

Tel: +31 6 13518065

Website: [www.dinnissen.nl](http://www.dinnissen.nl)

## Dinnissen introduces new mixer

**D**innissen Process Technology from The Netherlands is launching the latest Pegasus mixer, which can rapidly, homogeneously and carefully mix no less than 15 liquids with powders, grains and granules.

The mixer is quick and easy to clean and is suitable for mixing a wide range of products according to high quality standards and with continuously changing compositions.

Due to the use of accurate

feeders that meticulously register even the smallest quantities of substances to be added, mixing results with a coefficient of variation of three- to five-percent are achievable. The Pegasus mixer is especially suitable for situations in which micro-ingredients are used. The Pegasus mixer delivers very short mixing times.

The mixer is small and compact with large inspection covers, making it quick and easy to clean. The Pegasus mixer can also be cleaned fully automatically, using compressed air combined with hot steam or via vacuum drying.

