

## **Geelen Counterflow introduces the Continuous Dryer MkIII** Energy-saving drying concept that delivers improved drying performance

In extruded product manufacture, the dryer is both the main consumer of energy and a crucial quality factor. Geelen Counterflow has completely redesigned its Continuous Dryer to satisfy the requirements of companies that want to produce high-quality extruded products efficiently and at the lowest operational cost.

### **Counterflow technology delivers energy savings of at least 20%**

The Continuous Dryer MkIII from Geelen Counterflow dries extruded products in the feed and food industry by passing hot air through one or two layers of product. In Geelen's system, wet product from the extruder is continuously added to the top of the product beds. At the same time, dried product at the bottom of the product bed is discharged in small quantities to the next drying stage or to the hopper. Geelen has developed a sophisticated automatic control system for drying the individual recipes according to product-specific process parameters such as air volume, air temperature and residence time. The Continuous Dryer MkIII from Geelen dries extruded products with great uniformity. The drying is very homogeneous, resulting in a guaranteed moisture uniformity of +/- 0.5%.

Non-saturated air is recycled. Only a small volume - the fully saturated air - is exhausted. The refined counterflow heat exchange design makes the Continuous Dryer MkIII from Geelen at least 20% more energy-efficient than the best alternative in the industry.

### **More homogeneous product quality during start-up and shut-down**

Optimum distribution of the product in the dryer is one of the most important factors for achieving a homogeneous drying result. Consequently, the product distribution system has been completely redesigned in Geelen's new Continuous Dryer MkIII. The upgraded control system now automatically keeps the product bed at the right height for each product. The new product distributor, which flexibly follows the movement of each product layer, plays an important role here. The ability to control the residence time during production process start-up and shut-down is a further innovation. This eliminates product clumping and inconsistent product quality at the beginning and end of the production process. Finally, the improved airflow results in more homogeneous air distribution. This improves the drying result, making it possible to achieve a product uniformity +/- 0.5%. The new Continuous Dryer MkIII from Geelen is equipped with a number of features which improve hygiene, convenience and speed when cleaning. For example, the discharge system is more accessible. The interior now features easily cleanable walls and smooth curves in areas where dirt and product residue can accumulate.

### **Long-term product quality, efficiency and safety**

The new Continuous Dryer MkIII is suitable for energy-efficient drying of extruded products across a capacity range from 1 to 10 tonnes per hour. Geelen Counterflow has its own R&D Department where all its products are designed and developed. Geelen's dryers are designed in a way that minimises the number of moving parts. The stainless steel bodies are double-walled, with fireproof insulation material in between the walls. Geelen's dryers are sold with a 10-year service contract as standard to keep product quality, efficiency and safety at a high level. More information about the redesigned Continuous Dryer MkIII is available from [www.geelencounterflow.com](http://www.geelencounterflow.com).

*Geelen Counterflow is the inventor of the Counterflow Cooler and Counterflow Dryer and global market leader in this segment, with equipment operating in more than 100 countries. Geelen is committed to achieving the highest food safety standards, best energy efficiency and lowest Total Cost of Ownership. The company strives to minimise its environmental footprint. Geelen Counterflow is based in Haelen in the Netherlands, and has service and sales offices in Europe, North and South America and Asia. For more information, contact Yvonne Eysbouts by phone: +31 475 592315 or e-mail : [yvonne.eysbouts@geelencounterflow.com](mailto:yvonne.eysbouts@geelencounterflow.com)*