

Petfood Industry asked Clextral's Mike Shaw from the extrusion department and Bill Butler for drying/cooling about the latest technology Clextral has to offer petfood producers.

Where do these industry insiders see the future of petfood extrusion heading?

Petfood Industry:

What is the latest extrusion technology from Clextral and how can it be applied to petfoods?

Mike Shaw:

Clextral's latest advances in extrusion technology include superior temperature and shear control, increased cooling efficiency, and advanced screw patterns for maximum processing efficiency. Moreover, Clextral extruders' mechanical devices (gear box) are built to fulfill the high capacity requirements of the petfood industry, while providing robustness, safety, and economical production.

Petfood Industry:

What is the latest drying/cooling technology from Clextral and how can it be applied to petfoods?

Bill Butler:

Clextral's Rotante dryers offer an alternative to traditional belt dryers, and provide optimum drying for sticky or heat-sensitive products. Products are dried in a thin layer, and the dryers provide high drying efficiency and accuracy, for a reduced carbon footprint.

Petfood Industry:

What does Clextral see as the next great advancement in petfood extrusion?

Mike Shaw:

Flexible production lines able to adapt quickly to market changes: this means short start & shut down procedures, quick change die devices, easy cleaning, wide range of temperature manufacturing levels for production of expanded or non-expanded pellets such as treats.

Petfood Industry:

What does Clextral see as the next great advancement in petfood drying and cooling?

Mike Shaw:

Better control of the mass & energy balance, for a reduced carbon footprint.

Petfood Industry:

What method of extrusion does Clextral find to be the most cost effective? What about the most energy saving, sustainable method?

Mike Shaw:

Clextral manufactures twin screw extruders, which are cost effective (also energy saving and sustainable processing tools) for many reasons: New control technologies utilizing advanced

computer controls; New metallurgy to reduce maintenance stops and spare part costs; Fine-tuning of the preconditioning process to maximize processing time and energy requirements.

Petfood Industry:

What method of drying/cooling does Clextral find to be the most cost effective? What about the most energy saving, sustainable method?

Bill Butler:

The cost effectiveness of a dryer depends greatly on three critical factors: Moisture Uniformity, Fines Recovery and Energy Savings. For certain pet food products, Clextral finds the Rotante Dryer to yield maximum savings for our clients. Clextral's Rotante dryers offer an alternative to traditional belt dryers, and provide optimum drying for sticky or heat-sensitive products. Products are dried in a thin layer, and the dryers provide high drying efficiency and accuracy, for a reduced carbon footprint.

Petfood Industry:

Does Clextral hope to see improvements in extrusion technology? If so, what would they like to see change?

Mike Shaw:

It is more than a hope. Clextral is actively working to make our extruders even more flexible, and reduce our customers' production costs (increasing manufacturing throughput and flexibility, reducing stop-times and spare parts requirements), as well as reducing the carbon footprint of our equipment through fine-tuning of the energy sources.

Petfood Industry:

Does Clextral hope to see improvements in drying/cooling technology? If so, what would they like to see change?

Bill Butler:

Again, we are working towards this goal with the same concerns for the environment, with higher drying-cooling efficiency and drying accuracy, aiming to improve the drying economy and reduce the impact on the environment (reduction of energy requirements, reduction of fine emissions)

Petfood Industry:

How does the extrusion process change petfood? What about the drying/cooling process? Are color, shape and texture/flavor components that Clextral takes in to consideration when producing a new extruder/dryer or cooler?

Bill Butler:

Extrusion is a manufacturing technology for processing raw ingredients into petfood. Color, shape, texture/flavor- these are all determined by the ingredients and processing parameters including temperature and shear. Therefore, Clextral places top priority on fine-tuning these processing parameters when designing new equipment.

The drying/cooling process can determine the final product's attributes, and Clextral designs state of the art cooling and control systems to easily manipulate these parameters, combined with robust and efficient degassing devices (when required) to offer the highest flexible production tool while keeping the economy and the environmental aspects as primary concerns.

Clextral offers two fully-equipped research centers (Europe and USA) where customers and process specialists work in close collaboration to create tomorrow's animal feed.

Petfood Industry:

Is there anything else Clextral would like to say about petfood extrusion, drying and/or cooling? What do *Petfood Industry* readers need to know?

Bill Butler:

The user should evaluate a technology from a global standpoint: the new production line must be very flexible, offer long term reliability, economy, lower impact on the environment. Supplier experience, plus services such as process help, service, further possible upgrading, cooperation with the equipment designers, are important aspects to consider too.