

Case Story
Lancashire, UK

Feeding Success: How GA Petfoods is Making The World's Freshest Kibble with Alfa Laval

In the heart of the picturesque Lancashire countryside lies GA Petfoods, a family-owned manufacturer that can lay claim to making the finest pet food in the world. Originally a family farm, a chance experiment in the 90s with some leftover wheat and an extruder saw the creation of its first meal, representing the first step into the rapidly growing pet food market.



Today, the company supplies private-label pet food to hundreds of partners across the globe. However, unlike contemporary manufacturers, GA engineers its recipes to the exact requirements of each individual partner, and uses cutting-edge techniques to offer industry-high levels of fresh meat and fish within its products.

Scott Morley, Head of Design at GA Petfoods, elaborated on the drivers behind this transition: "Traditionally, most pet food manufacturers would buy in dry-rendered meat meal and use this as the basis for their pet food. While this is cost-effective, it naturally raises concerns about the quality and freshness of the end product.

"Gone are the days where you'd just get your dog an off-the-shelf kibble and call it a day. Owners are now more concerned than ever about what their pets are eating, meaning that they are opting for premium products that are fresher and more nutritious. This is a key reason why we are continually striving to push the boundaries of fresh material inclusion for our products."

GA Petfoods sources all of its ingredients locally from trusted farms and fisheries across the UK – from Scottish salmon to Aberdeen Angus beef. These are then transported to GA's manufacturing site at Plocks Farm in temperature-controlled vehicles, ensuring all ingredients arrive fresh. All batches are sampled for quality in the site's on-site laboratories before being released for production, with attention to criteria such as protein content, moisture levels, and salmonella.

Once being cleared for release, the batch is transported to the meat kitchen, and is transferred into a pre-emulsifier by way of a conveyor belt. The mixture is then gently pumped into six cooking vessels, where it is cooked at a precise 82°C to protect the proteins within the meat.

It is at this point in the process that GA identified an opportunity to enhance the quality of its products even further. By separating the oil content from the cooked meat slurry, GA could precisely measure the oil, fat, and water content of the end product, allowing for total control over recipes. However, this wouldn't be



possible without a range of high-end evaporators, separators, and thermal dryers, which is where the GA R&D team turned to Alfa Laval.

"When it comes to separation systems, Alfa Laval is widely regarded as the gold standard, so we looked no further than them when we wanted to upgrade our process line."

– Alex Tebay, Product Innovation and Process Development Manager at GA Petfoods

"Whatever challenge we approach them with, they have risen to. The dual focuses of our R&D are maximising both fresh meat content and process efficiency, and through close collaboration and discussion of our objectives, they have helped us to achieve exactly that. We have been working with them for over a decade now, and we haven't looked back."

After cooking, the meat slurry is fed into an Alfa Laval OilPlus decanter, separating the oil content and allowing it to be pumped for further purification, before the meat slurry is fed through the Alfa Laval AlfaFlash plate flash evaporator. This reduces the moisture content, while concentrating the meat and protein within the mixture. Finally, the slurry is ready for extrusion, with the evaporation process taking the water content from approximately 90% down to 50%, dramatically enhancing process efficiency.

Meanwhile, the oil is pumped into an Alfa Laval high-speed separator that acts as an oil purifier, enhancing the quality even further. The end product is a human-grade oil that can be used to coat the finished kibble, resulting in maximum palatability for pets.

Through this process, GA manufactures hundreds of unique premium recipes for private-label partners all across the world, with each and every one offering exceptional levels of fresh meat content and high-quality protein.

Dan Tasker, Account Manager for Alfa Laval's Food & Water Division, believes that GA's production process is something that other pet food manufacturers can learn from: "At first, what GA is doing looks revolutionary, but it's actually rather simple – using the same proven evaporation and separation techniques that we see in the human food industry to enhance the quality of its products.

"With this, GA has really raised the bar in terms of the industry standard, and more and more pet owners are catching on too – they simply won't accept an inferior product anymore. A lot of other pet food manufacturers should be looking at GA and evaluating how they can enhance their own processes, and when they get there, we'll be here to help."



Contact Alfa Laval

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