



Measurement of natural oils and fats for pet food production

The application

The nutritional excellence of pet food is determined by the quality of the animal and vegetable based ingredients, as well using them in their correct quantities. As a leading producer of dog and cat food, the company Farmina Pet Foods is on a mission: the production of optimal pet foods according to scientifically proven nutritional standards. These standards have been validated through ongoing cooperation with Federico II University in Naples, Italy, as well as via scientific publications in renowned journals such as the British Journal of Nutrition at Cambridge University. To produce their products to the highest standard, the ratio of animal to vegetable fatty acids has to be perfectly balanced.

The accuracy of the raw material quantity plays a decisive role both for the product itself and the cost efficiency of the operation. The animal fats (primarily from chicken and pork) are stored in four tanks, each with a capacity of 30,000 kg.

Process data

Process temperature: Ambient temperature

Process pressure: Atmospheric pressure

Medium: Animal fats

The solution

The inventory stock and the rate of consumption of raw material during production are monitored by means of level measurement with the 80 GHz VEGAPULS 64 radar sensor for liquids. The high dynamic range of this sensor enables exact measurement right down to the last drop of oil in the tank. The antenna system of VEGAPULS 64 can be encapsulated in either PTFE or PEEK material, the surface of which is finished with a fine diamond grinder, making it both antistatic and repellent to contamination.

The advantages

- Significantly reduced maintenance and down time, as regular cleaning of sensor is no longer required
- Continuous, reliable level measurement under widely varying operating conditions
- Exact measurement all the way to the bottom of the tank ensures maximum utilization of available space



VEGAPULS 64