

# CASE STUDY: Oxoid Dry-Bags Save Time in Bulk Preparation and Dispensing of Media

As the world's leading supplier of broiler breeding stock, product quality is a stringent requirement for Cobb-Vantress. The Laboratory Services department performs a variety of routine microbiological tests to ensure the prime condition and health of flocks. Robin Jarquin, Microbiology Laboratory Manager at the company's main laboratory in Siloam Springs, Arkansas, USA, explains how Oxoid Dry-Bags have helped in the testing of environmental samples.

"Cobb-Vantress is a primary poultry breeding company with facilities on three continents and distributors in 30 countries around the world," Robin explains. "Our products are used in almost every country with a significant poultry industry. We have a considerable market share in the US and a strong presence in other regions around the globe.

"As the world's leading supplier of broiler breeding stock, the health and welfare of our chickens is crucial to our business. It is in this area that the Laboratory Services department plays a crucial role. We perform a variety of routine tests on all of our flocks, in order to guarantee the disease-free status of our product. This allows us to export breeding stock to many countries and to keep a high quality product in the market."

Environmental monitoring in the buildings where the birds are housed and processed is an important element of the Company's overall quality assurance programme. Large numbers of environmental samples are inoculated into Buffered Peptone Water as a pre-enrichment step. In the past, bulk quantities of Buffered Peptone Water were prepared manually, which was labour intensive and time consuming. Now, however, the laboratory has adopted the Oxoid Dry-Bag format.



Oxoid Dry-Bags are lightweight, transparent plastic bags containing pre-weighed, irradiated, dehydrated media and include a special system for filter-sterilising water. All that is required is the addition of water and the medium is ready for use.

Oxoid Dry-Bags eliminate the need for glassware, which reduces hazards in the laboratory and removes the need for washing and sterilisation. Water is simply added through the special filter and the bag is ready to use in just minutes. Each bag makes 20 litres of medium or diluent, sufficient for 88 aliquots of 225ml, which can be dispensed easily through the outlet tube. Once empty, the bag can be disposed of with normal laboratory waste.

"Before we started using Dry-Bags, we used to spend a significant amount of time in preparing, autoclaving and dispensing Buffered Peptone Water," Robin comments. "We had to make some adjustments to the way we worked in order to change to the Dry-Bag format, but they were definitely worthwhile.

"One of the things we did to make the system work was to install an instant water heater so we could pre-warm the deionised water to 42°C before we fill the bag and dispense the product. We also obtained several sets of quick connect/disconnect tubing in order to change tubing quickly, if necessary. All this, put together with a good peristaltic pump and hand dispenser, made our process of inoculating the broth with environmental samples significantly faster and more accurate. It has also helped to improve the process, aseptically.

"The system is easy to use once you have all the components in place and you get a good work flow," Robin continues. "It takes a little bit of time to introduce people to the system but, once they have used it, I don't think they will want to go back to manual preparation and dispensing of Buffered Peptone Water.



▼ O P E N ▼



▼ F I L L ▼



D I S P E N S E

"I see a lot of future use of the Dry-Bag format at Cobb-Vantress," Robin concludes, "particularly in media such as tetrastate broth, or other broths that require routine dispensing in large volumes."

Oxoid Dry-Bags are available for a range of enrichment media and diluents. Supplied in compact boxes of 10 bags, they are easy to transport, providing ultimate convenience in the laboratory but taking up much less space than fully-prepared media products or media preparation facilities.