

Aeration system for Roberts of Port Dinorwic

Food Processing | oct 2017



Roberts of Port Dinorwic, a family-owned prepared-food manufacturer, has introduced a new aeration system to enhance its wastewater process.

Based at a 10-acre site on the banks of the Menai Strait in North Wales, the food production facility has a screen that captures around 95% of its wastewater solids. However, it needed a non-blocking aerator to help further reduce particle size and keep solids in suspension through effective, efficient and economical mixing.

Dylan Roberts, chief engineer at Roberts of Port Dinorwic, takes up the story:

“Landia came highly recommended. In fact, more than half of the tank manufacturers we consulted said that if we wanted the most reliable and long-lasting aerator, it should be Landia.

“The Landia Air Jet runs for between six and seven hours every day and we have had no problems. We sometimes have high levels of fat, which form part of almost a tonne of solids per week, but this has posed no problems for the aerator.”

The company purchased a 146m³ tank which now utilises the externally-mounted 7.5kW Landia Air Jet aerator. The Air Jet comprises one of Landia’s chopper pumps. Designed with an external knife system to stop solids from entering the pump’s casing, the pump is fitted with a venturi nozzle which creates the Air Jet.

Effluent temperatures at Roberts of Port Dinorwic are up to 45°C, with dissolved solids of around 3%. In addition to the Air Jet, wastewater is also processed by a DAF plant and treated with polymer.