

The Problem

In December 2019 we were contacted by a microbiologist from a major Bakery, who we had met during her previous employment in a cooked meat plant where we had resolved a Listeria problem (Airsteril Technology has full laboratory testing on Listeria).

The problem the client had was a mould that affected the dough on Gluten Free bread that contaminated the yeast and made the bread taste sour, described as like "pear drops". The Bakery plant was extremely clean and very modern so it was clear there was no simple solution that had been overlooked. They had used all traditional cleaning methods, even improving on an already rigorous cleaning regime, but the issue persisted. This was of serious concern, all products are tested prior to packing and if any "contamination" was identified, the complete batch would be disposed of, meaning large amounts of finished products were currently being scrapped at huge cost to the Bakery.

History

When consulted, the Environmental Agency said they could offer no solution as mould was naturally present in the environment. Microbiologists had traced and identified the mould concerned as *Pichia anomala*. Whilst this specific mould had not previously been raised as a concern, AIRsteril had been laboratory tested against *Aspergillus Fumigatus* (a serious problem in the waste industry), as well as resolving mould contamination issues on various sites.

Proof of Efficacy

Consulting with specialist microbiologists, we were advised that there should be no issue with our technology resolving the issue, but without a full installation, only a specific laboratory test could confirm. We discussed with the Bakery who authorised full independent laboratory testing to be conducted to categorically prove efficacy.

Testing was performed by ALS Laboratories in Rotherham, the *Pichia anomala* was sourced from the Public Health England Library to enable testing to take place. The test chamber results were conclusive, 83% surface reduction within twenty-four hours and beyond detectable levels by day two.

On site Results

Next a full survey of the Bakery plant was conducted, recording the areas of most significant concern, and providing unit recommendations. Our Ultimate range products were selected as the correct choice for this plant as they are designed for a food processing environment with full water resistance and food grade lamps.

The client ordered units and a week after installation they performed on-site tests to confirm the *Pichia anomala* problem was now completely under control. The client has now installed our technology in all areas of five separate Bakery plants where there is the slightest possibility of any contamination, they have had no further issues and are content the problem has been eradicated.

Follow up

Following the positive results within the main areas of their plants, the client chose to install AIRsteril products in many other areas including canteens washrooms and offices to provide the best possible protection for their staff.

