



# Case Study

## Bund Screeding and Chemical Bund Lining

### Kerry Foods, Tenbury Wells



## The Project

After years of leaks and spills from Acidic Effluent Bund from the steel tanks which blended the yoghurts made on site. The concrete wall and base surrounding the manufacturing equipment had eroded and started to come away from the floor which meant that gaps were left in between, making it a hazard if a bigger spill was to occur leading to contamination outside the Bund.

## The Solution

To avoid future hazards and potential leaks and spills escaping the bund. Adler & Allan undertook a full site survey and recommended that the site floor and walls within the bund should have high performance screed. Due to the size of the bund, the cost of spraying the entire bund with A600 would have been very costly, so our team advised simply using a high performance screed to the eroded floor and wall, giving an even flat surface and then applying the lining system around the sides of the bund to create a wall to floor seal.

An Adler & Allan team were dispatched to site where they firstly carried out a three stage wash using bleach and acid to ensure all surfaces were uncontaminated to prepare the surface for lining. The team then prepared the substrate using technical drawings to establish and set out levels accordingly. The bund surfaces were treated with primer and screeding to walls and base carried out. Rallithane was applied to all angles and joints to create 45° angles at interface base and wall.

The primer was then applied with a fine grit to ensure a mechanical key for maximum adhesion inside the bund. The team then taped off and covered up Kerry Food assets to avoid any over spray of the polyurea. The polyurea coating system was spray applied, using a north to south, east to west motion to ensure an even build-up of polyurea coating until a 2000 micron coating was achieved. At 2000 microns A600 is 100% waterproof and gives a chemical resistance coating. A gel coat was applied to the A600 Chemical Coating with a heavy broadcast of quartz stone creating external anti-slip surface for Kerry Food engineers to carry out any necessary maintenance in a safe environment within the bund. The polyurea coating comes with a warranty of up to 10 years extending the lifecycle of the asset.



## The Outcome

Once the whole area was sprayed we carried out a validation report which consisted of dielectric testing and hydrostatic water test to ensure that no water could escape from the bund. Both tests were successfully carried out and the lining was found to be secure and the bund fit for purpose. With the new lining intact, the lined bund around the equipment will benefit from elongated life and increased structural integrity for many years to come.