

# CASE STUDY

## Another smooth spread for Goodman Fielder



**Goodman Fielder Commercial produces some of New Zealand's most popular butter, oils and margarine spreads. So when they wanted a superior concrete re-surfacing finish at their East Tamaki manufacturing plant, they called on the team at Topcoat Specialists.**

### The challenge

The Meadow Lea site in Auckland's East Tamaki is one of 22 production sites operated by Goodman Fielder. About 60% of the fats and oils refined at the site are supplied to industrial customers, and the plant also manufactures consumer spreads and oils, including popular household brands Olivani, Tararua and Chefade.

The TopCoat team were asked by Goodman Fielder to advise on the concrete floor under an outdoor tank storage area of approx 200m sq; which required upgrading to comply with MAF requirements.

Steve Cripps, Goodman Fielder's site maintenance team leader, explains the heavy-duty demands on the concrete: "The area houses nine storage tanks, varying in size up to 50,000-litres. These tanks are constantly in use, and the floor needs to be able to withstand 90-degree hot water, steam and oil."

The existing floor was 20 years old, and had deteriorated considerably. The challenge for Topcoat was to clean and repair the floor to exacting standards - without causing any disruption to Goodman Fielder's continuing production schedule.

CLIENT:  
**Goodman Fielder Commercial**

LOCATION:  
East Tamaki, South Auckland

FLOORING TEAM:  
Topcoat Specialist Coatings Ltd

PRODUCTS:  
BASF UCRETE® DP9  
BASF Concresive Epoxy Mortar  
DensiProof



topcoat specialist coatings limited





### The solution

The solution was UCRETE® DP, a unique heavy-duty polyurethane resin technology, supplied by chemical company BASF New Zealand Ltd. UCRETE® DP is specifically developed for the food and beverage, pharmaceutical and chemical industries; and is used in many such facilities worldwide.

The product offers outstanding resistance to aggressive chemicals and heavy impact, and is designed to withstand temperatures ranging from -40 degrees up to 120 degrees Celsius.

According to Mark Ambridge, General Manager of Topcoat Specialists, UCRETE® DP was the obvious choice for the job.

*"This product is designed to withstand regular and routine discharges of boiling water, hot oils and fats. It's also resistant to chemicals, including the organic acids involved in processing milk and dairy products."*

### The task

Once on site at Goodman Fielder, the first step for Topcoat was to thoroughly clean and de-grease the existing concrete. This was a 5-step process taking ten days, which involved two rounds of thorough steam cleaning processes and grinding; as well as purging in-ground oil contaminants with a product called DensiProof.

There was also delaminated broken concrete on the bund floor that had deteriorated after continual fat and hot water contamination. These areas were cut out and replaced with a BASF Concrecive Epoxy Mortar. Prior to the main application, an adhesive test area was completed to ensure the surface was clean and sound.

Then it was all systems go to lay the Ucrete DP9. One of the challenges of the job was that it was not an open area, and the Ucrete had to be finished neatly around the tank plinths. To ensure a quality finish, the Topcoat team fitted steel channels in order to create neat edges around the existing drains.

As it was a heavy-duty use area, the maximum thickness of Ucrete was selected. The UCRETE® DP system can be installed at thicknesses of 4mm, 6mm or 9mm; depending on the service conditions.

*"For this project we used a 9mm topping in the critical areas around the*

*tanks, then a 6mm on the rest of the floor," says Mark Ambridge. "We also applied a K1.5 aggregate non-slip for safety requirements."*

The non-slip surface was a critical requirement, adds Steve Cripps, as the fat produced on the Goodman Fielder's site can be a safety hazard.

### The benefits

Another major benefit of UCRETE® DP is the speed with which it can be applied. As Mark Ambridge explains, this can be hugely advantageous for high-capacity manufacturing facilities.

*"The floor's short curing time means the area can be opened to foot traffic after only 8 hours, which can make a massive difference in projects like this, where the client wants to avoid any disruption to production."*

This was certainly an advantage for the Goodman Fielder project, as the tank area had to remain in use. *"The Topcoat team had to work around our production,"* says Steve Cripps.

*"We had to keep the heating on the tanks, and keep the boiler going for other areas. This mean the floor was still getting wet - but the Topcoat guys would just deal with it and give the surface another clean and dry."*

### Superior service

Goodman Fielder already had an established relationship with Topcoat, and Steve Cripps says they were confident the work would be of a high standard.

*"We were very happy with the work they'd done for us previously, and their pricing was good."* The can-do attitude of the Topcoat team was also appreciated in what could have been a difficult job.

*"Nothing was a problem for them,"* says Steve Cripps. *"Some suppliers will come to you with a list of issues - but Topcoat just gets on with it. They work around any problems, and come up with solutions themselves."*

And the finished result? Steve Cripps says the new surface is a vast improvement on what they had previously. *"It's much easier to keep clean - we just hose it down and the oil just washes away with the hot water. We've now got a floor that's purpose-designed for our industry, and that meets all industry standards."*