



*The Tatua Co-operative Dairy Company is one of New Zealand's most enduring success stories. A group of settlers formed a dairy company close to 100 years ago, and managed to survive through two World Wars and a great depression.*

So when the modern-day Tatua needed a new floor for their purpose-built production facility, it was only fitting they would choose a solution that's built to last.

Topcoat Specialist Coatings Ltd provided them with a purpose-built flooring solution called UCRETE® DP, which is used in dairying facilities around the world.

### About Tatua

The Tatua Co-operative Dairy Company was formed in 1913 by a group of enterprising farmers. Today it is co-operatively owned by 111 shareholder farmers, who supply milk from their farms located within 12 kilometres of the manufacturing site.

About 190 million litres of milk is processed at Tatua per year. From this raw milk, Tatua manufactures a wide range of consumer, food service and ingredient products. More than 90% of product is exported around the world, with a strong focus on Japan and the Asia Pacific region.

The head office and manufacturing facility is located at Tatuani, near Morrinsville - in the heart of New Zealand's richest dairy pastures.

**CLIENT:**  
**Tatua Dairy Co-operative**

**LOCATION:**  
Tatuani, Waikato

**SCOPE:**  
1200m<sup>2</sup> new processing area

**ARCHITECTS:**  
Stiles and Hooker

**MAIN CONTRACTORS:**  
Livingstone builders

**FLOORING TEAM:**  
Topcoat Specialist Coatings Ltd

**PRODUCTS:**  
BASF UCRETE® DP6  
BASF Concessive Epoxy Mortar  
BASF Sonolastic Ultra sealant



Tatuani manufacturing site

## The Project

To meet growing demand for its products, in 2010 Tatua completed a purpose-built facility for the processing of its consumer food products.

The new 1200m<sup>2</sup> specialty Foods Hall facility is where they produce lines of value-add products such as ice-cream mixes, cream products, sauces and desserts.

This facility houses an end-to-end production line – from formulating and mixing the ingredients, to packaging.

To meet its food safety and export standards, Tatua is proactive about quality control and risk management during manufacture and packaging of all its products. Their manufacturing facilities are also subject to regular monitoring and control procedures.

*“The new flooring had to be compatible with our industry,”* explains Jack van Lankveld, Tatua’s Engineering Services Manager.

*“We wanted a cost-effective but long term solution – flooring that’s capable of coping with our processes, as well as looking good and performing well.”*

## 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°C to 120°C.

According to Mark Ambridge, General Manager of Topcoat Specialist Coatings, UCRETE® DP is purpose-designed for industries such as dairying.

*“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.”*

UCRETE® has long been used by Arla, one of Europe’s biggest dairy companies, in its dairy factories throughout the United Kingdom.

## The Benefits

The new facility was designed by Stiles & Hooker, a leading architectural and engineering practice based in the Waikato. One of the firm’s specialisations is designing buildings and facilities for the food industry.

Bryce Weal, Engineering Director of Stiles & Hooker, says a product like UCRETE® is suitable for a range of food industry applications – from the processing of fruit, meat, or dairy; to specialty processes such as bread-making.

*“One of the benefits of UCRETE® is that it contains a high resin content, which means it can withstand the rigorous cleaning and hygiene regimes used in these industries,”* he says. *“It is also hardwearing, and resistant to chemicals and heat.”*

Overseas laboratory tests carried out on UCRETE® have shown the flooring achieves the same level of cleanliness as stainless steel, with more than 99.9% of bacteria being killed.\*

\*International Food Hygiene – Volume 11, Number 7

The UCRETE® DP system can be installed at thicknesses of 4mm, 6mm or 9mm; depending on the service conditions. For Tatua’s facility, the medium thickness of 6mm was selected.

The non-slip surface was an important health and safety requirement, according to Jack van Lankveld.

*“We struck a balance between good adhesion for a safe working surface, but not too gritty that it would be difficult to clean. We clean this floor by waterblasting or scrubbing.”*

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 where the client wants to avoid any disruption to production.”*

This was certainly an advantage for the Tatua project.

*“Using this product allowed us to shorten our construction timeframe – which is a big benefit,”* says Jack van Lankveld.

*“Our Foods Hall facility is operational 12 months of the year, as it is not directly tied to milk supply.”*



## Superior Service

Although Tatua had not worked with Topcoat Specialist Coatings previously, they were familiar with Topcoat’s work. As part of the contracting process, Jack van Lankveld visited other sites where UCRETE® had been successfully used. This included Goodman Fielder’s Meadow Lea site, and Life Health Foods’ manufacturing plant in Auckland.

*“There was very good feedback from those companies,”* says Jack. *“From that we gained the level of confidence to engage Topcoat and the products they recommend.”*

The can-do attitude of the Topcoat team was also appreciated by Tatua management.

*“When Topcoat came on site, nothing was a bother to them. We found them very professional and good to work with.”*

Having an ongoing partnership is important to Tatua, as the company has a policy of using preferred suppliers.

*“We place a lot of emphasis on working with suppliers that we can build an ongoing relationship with,”* says Jack.

*“Level of service is important to us – that the people we’re working with have an ownership of their projects, and a long-term commitment to making it work.”*