



# Ucrete Food & Beverage UK Project References



## Master Builders Solutions

The Master Builders Solutions brand brings all of our expertise together to create chemical solutions for new construction, maintenance, repair and renovation of structures. Master Builders Solutions is built on the experience gained from more than a century in the construction industry. The know-how and experience of a global community of construction experts form the core of Master Builders Solutions.

We combine the right elements from our portfolio to solve your specific construction challenges. We collaborate across areas of expertise and regions and draw on the experience gained from countless construction projects worldwide. We leverage global technologies, as well as our in-depth knowledge of local building needs, to develop innovations that help make you more successful and drive sustainable construction.

The comprehensive portfolio under the Master Builders Solutions brand encompasses concrete admixtures, cement additives, solutions for underground construction, waterproofing solutions, sealants, concrete repair & protection solutions, performance grouts, performance flooring solutions and solutions for on- and offshore wind energy.

### Our comprehensive portfolio

- Concrete admixtures
- Cement additives
- Chemical solutions for underground construction
- Waterproofing solutions
- Sealants
- Concrete repair and protection solutions
- Performance grouts
- Wind turbine grouts
- Performance flooring solutions



## Floors for Your Specific Requirements

Ucrete industrial flooring is a range of robust floor finishes produced using the unique Ucrete heavy duty polyurethane resin binder system. Correctly specified, Ucrete will give you many years of service even in very aggressive industrial and process environments. The purpose of this brochure is to help you choose the right floor. First consider your requirements.

### Rapid installation

We appreciate that it is not always easy to close production lines, so many of our systems can be installed in weekend or even overnight application windows. By minimising downtime, we cut the cost of upgrading to a Ucrete floor. Ucrete UD200, for example, can be put back into service after only 5 hours at 10 °C.

### Non-tainting

Ucrete flooring systems are non-tainting even during application, making them the safe choice for weekend and maintenance work. Your local Master Builders Solutions expert will be pleased to advise you.

### Temperature resistance

The first requirement to be assessed when selecting your Ucrete floor is the in-service temperature requirements. This determines the thickness of the floor needed, which may limit the number of appropriate finishes.

### HACCP Certified

All Ucrete flooring systems are interdependent approved, "food safe," products by HACCP international.

### Slip resistance

Your choice of floor finish is then one of aesthetics and surface profile. The most appropriate surface texture for any particular application will depend on the nature of any spillage to be encountered, the type of work undertaken in the area and the standards of housekeeping and cleaning to be maintained.

### Chemical resistance

All Ucrete floors have the same chemical resistance characteristics. So in this regard all Ucrete floors are equally suitable

### Antistatic

To protect sensitive electronic devices or minimize explosion risks, a range of antistatic floors are available as detailed on page 16.

### Mechanical resistance

In areas where heavy mechanical impact and intense hard wheeled traffic is expected thicker systems with larger aggregate should be used.

### A bespoke solution

The wide range of Ucrete flooring systems allows you to tailor your floor to meet your specific needs, so achieving the best and most cost effective flooring solution. We will work with you to help you select the best floor for your facility. Please contact your local Master Builders Solutions expert for guidance: <https://www.master-builders-solutions.com/en-gb/products/ucrete>

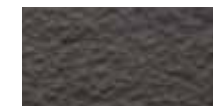
Cream



Green



Green/Brown



Red



Grey



Blue



Yellow



Orange



All Ucrete systems are available in these eight standard colors. Colors shown are approximate, actual color will vary with product grade and site conditions. Ucrete resins yellow under ultraviolet light.

For further information and product samples, please contact your local Master Builders Solutions expert.







# Arla Foods, Leeds

Flooring solution for dairy production area

## The background

Arla is one of Europe's largest dairy companies, sourcing 8.3 billion litres of milk a year. In the UK, it processes 2 billion litres of milk annually and is a leading supplier to the country's main retailers. Arla's development team was created to move its Leeds dairy from its existing site near the city centre to Arla Foods' new Greenfield site, on the outskirts of Leeds. This was completed in three separate phases.

## The challenge

The construction was phased over several years, however when it came to the installation of the floors a fast-track solution was required due to the nature of the commissioning programme. The floors had to withstand the cumulative corrosive effect of lactic acid from milk in addition to leaning products used in a thorough cleaning regime.

A slip resistant finish was essential in all areas with most being continuously wet. An antistatic finish was also required for the powder mixing and chemicals storage areas where there was a need to protect the employees who were at risk of handling explosive materials.

## Our solution

Ucrete UD200 was installed onto early age concrete (7 days old) without the need for special primers. Ucrete UD200 was trafficable by foot after 16 hours allowing early access for subsequent trades. Using Ucrete UD200 assisted all parties in meeting a tight building programme.

## The customer's benefit

- Ucrete UD200 flooring's combination of durability, speed of cure and ease of cleaning with temperature resistance up to 150°C are a unique offering meeting the demands of this project
- Ucrete flooring solutions met the short timescale for application and the client's requirement for a slip resistant floor finish with the same cleanability as stainless steel
- Tried and tested flooring systems with a proven track record within the dairy industry
- Ucrete is a trusted and proven flooring solution as in the past ten years over 50,000m<sup>2</sup> of Ucrete has been installed on Arla sites in the UK. To date in excess of 150,000m<sup>2</sup> of various grades of Ucrete has been installed in all of Arla facilities throughout Europe

## Projects facts at a glance

- Ucrete was specified due to high performance against lactic acid in addition to offering a slip resistant finish
- Ucrete was applied to early age concrete without the need for special primers
- Foot trafficable after 16 hours allowing early access for subsequent trades
- At around half the cost of a hexagonal-tiled flooring finish, Ucrete has proved to be a durable and cost-effective solution

## Project

Arla Foods

## Location

Leeds

## Owner

Arla Foods UK

## Designer/Architect/Specifier

Food & Beverage

## Applicator/Contractor

Ancorite

## Market sector

Dairy

## Products used

Ucrete UD200

Ucrete UD200SR

Ucrete DP10AS

## Sales contact

Akeel.Ahmed@mbcc-group.com







# Carlsberg, Northampton

Flooring solution for new bottling hall

## The background

Carlsberg decided to move its bottling hall and another major site in Leeds in order to as part of its Carlsberg Cube project in Northampton. The existing car park for employees and visitors was based underneath the bottling hall on the Northampton site.

## The challenge

The challenge was to protect employees when working in the bottling hall as well as pedestrians and vehicles in the car park beneath. There are numerous hazards inherent in bottling halls, including chemical attack of finishes and the increased risk of slip from wet environments.

## Our solution

After consultation with Alan Jefferies, the lead project manager from Arup in Birmingham, we protected the 450mm concrete slab with the MasterSeal M860, a puncture proof, seamless, elastomeric, chemically resistant, polyurethane membrane.

This was followed by polymer modified screed to falls (BS8204) incorporating MasterTop 570SBR to reduce loading mass.

The floor was then installed using Ucrete UD200, a product which is slip and temperature resistant, and chemically impervious to the operating conditions of the project. The seamless finish allowed no ingress of product, cleaning chemicals or effluent to pass through the floor or the slab. The MasterSeal M860 provided secondary protection for both peace of mind and mitigation if any movement were to occur.

## Benefits to the customer

- Maximised use of space on-site to solve two problems and eliminate need to purchase more land
- Full Master Builders Solutions system applied throughout, from membrane to topping, assuring compatibility and availability of technical support throughout
- Two chemical resistant coatings used to ensure that if the Ucrete UD200 moved, the secondary containment, MasterSeal M860 would contain any leaks

## Projects facts at a glance

- Designed by Arup, main contractor was Caddick Construction and flooring contractor was Ancorite
- Full system designed by Master Builders Solutions to ensure chemical containment, reduced loading mass and still maintain chemical, temperature and slip resistance of flooring

## Project

New Bottling Hall

## Location

Bridge Street, Northampton

## Designer/Architect/Specifier

Arup

## Main Contractor

Caddick Construction

## Flooring Contractor

Ancorite

## Market sector

Food and Beverage

## Products used

MasterTop 570SBR

MasterSeal M860

Ucrete UD200

Ucrete RG

MasterSeal CR460

## Sales contact

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# Coca Cola, Wakefield

Flooring solution for new bottling line

## The background

The Coca Cola Enterprises plant at Wakefield is the largest soft drinks plant by volume in Europe, manufacturing and distributing over 100 million cases per annum of well recognized brands of carbonated drink. With an area spanning 16 football pitches, the correct flooring solution for a high throughput, continuously operational production plant was of vital importance. Any shut down for maintenance carries extremely high costs for the operator, so specifying a long term, low maintenance flooring solution was crucial.

## The challenge

Coca Cola required a flooring solution for their canning and bottling lines that conformed with the strict hygiene requirements in the beverage industry. More than this they required the floor to be hard wearing, impact, slip and chemically resistant, as well as remaining aesthetically pleasing throughout its life. Soft drinks are well known to have a number of components that can be very aggressive to flooring finishes, particularly sugars and citric acid. The cumulative affect of these chemicals can quickly shorten the life cycle of inferior flooring materials.

## Our solution

Master Builders Solutions supplied, 6mm Ucrete DP10, with a light stable, fast curing MasterSeal TC681 topcoat after numerous in situ site samples were installed. The Ucrete solution allowed for the required hygiene, chemical, impact and slip resistance drivers to be met in addition to providing a UV light stable aesthetic installation finish for the 1350m<sup>2</sup> installation.

## Benefits to the customer

- Highly chemical and slip resistant flooring system throughout 1,350m<sup>2</sup> job to minimize risk of employee injury and reduce possibility of maintenance that would be costly to production
- Fast track application possible due to competent Ucrete Licensed Applicators and fast cure MasterSeal TC681 for early access onto the floor

## Projects facts at a glance

- Ucrete DP10 with MasterSeal TC681 installed to 1,350m<sup>2</sup> of floor in bottling halls
- Chemical resistance, slip resistance, cleanability and aesthetic properties all maintained across the area

## Project

Coca Cola, new bottling line

## Location

Wakefield, West Yorkshire

## Designer/Architect/Specifier

Faithful and Gould/Atkins

## Main contractor

Clegg FP

## Flooring Contractor

Kemtile

## Market sector

Food & Beverage

## Products used

Ucrete DP10 at 6mm with MasterSeal TC681 top coat

## Sales contact

Akeel.Ahmed@mbcc-group.com







## Cranswick Foods, Hull

### Fast-cure flooring solution for butchery area

#### The background

Cranswick Foods supplied fresh and processed food to the UK food retail, food manufacturing and food service sectors, focusing on high-quality fresh pork, gourmet sausages, premium cooked meats, traditional air-dried bacon, charcuterie and sandwiches. This flooring refurbishment project in the butchery area of Cranswick Foods' Hull facility involved the removal of existing finishes, drying the slab, mechanically preparing it, priming with Ucrete PSC and then overlaying with 9mm of Ucrete UD200.

#### The challenge

The pressure was on as the butchery area had a very short window of time for the refurbishment work to take place. All activity needed to be carried out within approximately 14 hours, from Saturday at 5pm until 7am the following morning: this entailed flooring removal, preparation of existing slab and the installation of 180m<sup>2</sup> of Ucrete UD200 for a fast return to traffic.

#### Our solution

Flooring contractor GRF knew the site and working conditions very well, having established a good relationship with Cranswick Foods' engineering manager. After discussions with the Master Builders Solutions representative involved, GRF was confident that it could remove any existing finishes using its own equipment, then dry and prepare the butchery area before installing the Ucrete PSC and Ucrete UD200 fast flooring system at 9mm.

With a 14-hour window GRF was able to remove the existing floor in around three hours, dry and then prime the concrete slab with Ucrete PSC then allow to cure for three hours. Once the primer had cured, GRF team then applied Ucrete UD200 within two hours and allowed it to cure for six hours at approximately 10°C. Cranswick Foods' cleaning crew was able to return to the butchery area and commence cleaning in time for production to resume.

#### Benefits to the customer

- Cranswick Foods' engineering manager was very pleased as he had an excellent working relationship with GRF, coupled with a belief in the superior performance of Ucrete flooring materials
- Recognising that there was a problem in the butchery area, Cranswick Foods did not have the time to close one of its vital production areas – the system specified allowed the area to be returned to service without impacting on production
- A fast-curing system with all the performance benefits of Ucrete applied by a skilled and knowledgeable applicator was the perfect solution.

#### Projects facts at a glance

- Production had to remain uninterrupted
- 700m<sup>2</sup> of Ucrete UD200 installed
- Area was returned to service within a 14-hour window

#### Project

Cranswick Foods

#### Location

Hull

#### Owner/s

Cranswick Foods

#### Applicator/Contractor

Grimbsy Resin Flooring

#### Market sector

Food & Beverage

#### Products used

Ucrete PSC  
Ucrete UD200

#### Sales contact

Akeel.Ahmed@mbcc-group.com







# Hall & Woodhouse Brewery, Dorset

Flooring solution for upgrade of existing brewery

## The background

The Hall & Woodhouse Brewery was founded in 1777 by Charles Hall in Blandford Forum, Dorset. It is a family-owned brewery and operates over 230 public houses stretching from Bristol to Exeter and London to Brighton in the South of England under the trading name of Badger Brewery.

## The challenge

The upgrading of the Hall & Woodhouse brewery was an exciting project and the first new brewery the company has built since 1899. The new £5million brewhouse was designed to produce 12 beers with room for future growth. As such, it required a safe, non-tainting, heavy duty flooring system with excellent heat, chemical and impact resistance.

## Our solution

The floor surfaces chosen for the project were Ucrete HPQ heavy duty polyurethane coloured quartz screed and Ucrete UD200 heavy duty polyurethane screed.

The Ucrete materials were chosen due to their high chemical, abrasion and slip resistance properties, whilst the thermal resistance (80°C at 6mm and 120°C at 9mm) made them an ideal solution for the harsh environment of a brewery.

The first phase completed by Licensed Ucrete Applicator Ancorite, which applied in excess of 1,500m<sup>2</sup> of Ucrete HPQ and UD200, whilst in the second phase a further 1,800m<sup>2</sup> of Ucrete UD200 was laid by Polydeck Resins, another Licensed Ucrete Applicator.

Ucrete hygienic floors provide ideal floor finishes for many industries, particularly in the food, beverage, chemical and pharmaceutical sectors. They offer a uniform and seamless flooring system that creates a safe and attractive working environment. Dense and impervious, Ucrete surfaces retain their integrity at temperatures of up to 130°C, and have been proven to meet the most stringent hygiene and cleanliness requirements where a long lasting robust floor is crucial. For employee safety, a wide range of slip resistant profiles are available.

## Benefits to the customer

- Licensed contractors for quality assurance
- Tried and tested flooring systems with a track record
- Systems ideal for harsh environments

## Projects facts at a glance

- Ucrete HPQ and Ucrete UD200 flooring systems
- High chemical, slip and thermal resistance essential
- Heavy duty polyurethane screed throughout

## Project

Hall and Woodhouse Brewery

## Location

Blandford, Dorset

## Owner/s

Hall & Woodhouse Brewery

## Applicator/Contractor

Ancorite, Polydeck Resins

## Market sector

Food & Beverage

## Products used

Ucrete HPQ

Ucrete UD200

## Sales contact

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## Hygrade Foods, Wiltshire

Flooring solution for a new meat processing facility

### The background

Hygrade Foods is a supplier of meat products to food supermarket chain Waitrose. Master Builders Solutions supplied 3,000m<sup>2</sup> of resin floors to its new facility, installed by flooring contractor Datum Polydec, including 2,000m<sup>2</sup> of Ucrete UD200SR, installed in the manufacturing facility, and 600m<sup>2</sup> of MasterTop 1272, installed in the engineering workshops.

Hygrade Foods is part of the Tulip International group, which has approximately 18 sites in the UK, including a site at King's Lynn, where approximately 8,000m<sup>2</sup> of Ucrete UD200 was installed.

### The challenge

The requirement was for a hygienic, chemical- and slip-resistant floor screed in the process areas and a durable, impact-resistant floor finish in the engineering workshops. A bright, attractive floor finish which would be soft underfoot and easy to clean was needed for the corridors.

### Our solution

Master Builders Solutions recommended the use of Ucrete UD200SR heavy duty polyurethane screed, installed at 6-9mm thickness; its profiled finish minimizes slips and accidents in the workplace. Ucrete UD200SR is impervious, can be cleaned to the same standard as stainless steel and will resist damage by cleaning and process chemicals.

MasterTop 1272 is a 1mm, high-gloss, light-reflective, non-solvented Epoxy Self Smoothing Finish which will resist oils, greases and impact (ideal for engineering workshops). MasterTop 1272 reduces noise and enables the surface to be easily cleaned.

MasterTop 1326 was used in the corridors to provide a soft underfoot finish which was easy to clean. MasterTop 1326 is a comfortable, decorative, polyurethane-based flooring system with a UV light-resistant smooth surface. The system is highly elastic and combines impact sound insulation properties with the maximum level of comfort underfoot.

### Benefits to the customer

- Seamless finishes with low cleaning and maintenance costs, combined with durable, aesthetic and cost effective solutions
- The client's expectations were met in all instances as Master Builders Solutions was able to supply products that met specific criteria in the three floor zones
- The floors were installed to a high standard, with unique designs created by Jeanet Hönig to provide individuality in the corridors and development kitchens

### Projects facts at a glance

- Ucrete UD200SR is impervious and can, can be cleaned to the same standard as stainless steel
- MasterTop 1272 reduces noise and enables the surface to be easily cleaned
- MasterTop 1326 Art Floor is a comfortable, decorative, polyurethane-based flooring system with a UV light-resistant smooth surface

### Project

Hygrade Foods

### Location

Wiltshire, United Kingdom

### Owner/s

Tulip International

### Applicator/Contractor

Datum Polydec/Pearce Construction

### Designer/Architect/Specifier

Ian Pamplan Associates

### Market sector

Food processing

### Products used

Ucrete UD200SR  
MasterTop 1272  
MasterTop 1326

### Sales contact

mike.wells@mbcc-group.com







## Kanes Foods, Evesham

Flooring solution for a new build fresh food factory

### The background

Kanes Foods are a leading fresh food manufacturer, priding themselves on providing outstanding, quality produce to the UK market from their £30 million eco factory in Evesham. Their engineers have had a long relationship with Ucrete, and the high quality product has provided them with many years of dependable low maintenance service. Ucrete was, and remains a trusted partner for Kanes Foods and the wider food and beverage industry.

### The challenge

Kanes Foods required a number of functional and durable finishes that also fitted the look of their modern, sleek new build eco factory. Keeping the ergonomic requirements of their staff in mind, they also wanted a more comfortable, aesthetic finish for communal areas, such as changing rooms and corridors, whilst keeping an industrial, hard wearing, resilient floor in their factories that would take wear, regular cleaning and traffic.

### Our solution

To provide the best environment for both food processing and non-processing areas, two different flooring types were chosen. Ucrete UD200 was specified for the food processing areas. Ucrete UD200 is ideally suited to these areas as it is slip resistant, very hard wearing and as cleanable as stainless steel, vital for high care food processing plants like Kanes Foods.

MasterTop 1325 was specified for the communal areas. MasterTop 1325 was chosen due to its enhanced ergonomics, decorative hard wearing and easy to clean finish. It was ideally suited for foot traffic, and coupled with its be crack-bridging properties allowed seamless application to new build areas.

### Benefits to the customer

- Ucrete system ideal for food processing environments in terms of both food and personnel safety
- High slip resistance and ease of cleaning maintained throughout
- Rapid installation due to competent, licensed contractors
- HACCP certified products used
- Trusted brand materials, with full technical after-sales support available
- MasterTop 1325 provides a comfortable, aesthetic finish for communal areas

### Projects facts at a glance

- Multimillion pound new build eco factory for salad and fresh produce processing
- New flooring system required for whole new build project, including comfort floors for changing rooms and corridors, and industrial flooring for processing areas.
- Both floors required to be long lasting, durable and appropriate for their environment, Ucrete to be slip resistant, highly chemical resistant and hygienic throughout its life, MasterTop to be durable, comfortable underfoot and easily cleanable

### Project

Kanes Foods

### Location

Evesham, United Kingdom

### Applicator/Contractor

Lasercroft

### Market sector

Food processing

### Products used

Ucrete UD200  
MasterTop 1325

### Sales contact

mike.wells@mbcc-group.com







## Magor Brewery, Newport

Flooring solution for brewery - still in service after 40 years

### The background

Built in 1979, Magor Brewery is the largest AB InBev brewery in the UK covering 50 acres of land in Monmouthshire, Wales. From here, global brands of beer are produced on a round-the-clock production schedule, meaning that in one day two million bottles, 1.8 million cans and thirteen thousand kegs can be produced

### The challenge

An intense production schedule and strict hygiene requirements means that any flooring solution needs to be hard wearing, long lasting, hygienically cleanable and able to withstand not only spilt product but also cleaning products throughout its life. Due to the high volume production schedule, the cost to AB InBev to shut down production for floor repairs or renovations would be huge. Commented the site's Project Engineer Bill Longland: *"The kegging hall is running three shifts a day filling up to 1000 kegs per hour. You can see how congested with machinery the whole plant is, and can imagine the huge cost in lost production and logistics that a full refurbishment of this floor would entail."*

### Our solution

2,000m<sup>2</sup> of Ucrete UD200 was installed in 1984 in the kegging hall. Ucrete UD200 is well known to be very long lasting and hard wearing, and this floor is still in use today, over 40 years on. It is chemically resistant to common chemicals in the brewing industry, including beer, sugar and high dose cleaning chemicals as well as impact resistant, withstanding kegs falling on the floor for over 40 years. It also remains as cleanable as stainless steel throughout its life, vital with ever changing regulation. To this day Magor brewery still install Ucrete on new installations throughout the factory.

### Benefits to the customer

- Ucrete UD200 still operational over 40 years on from initial install
- Slip resistance is retained due to durable aggregates used in the floor
- Ucrete has remained hygienically cleanable, chemically resistant and impact resistant

### Projects facts at a glance

- Intense production at world brewery meant that a hard wearing, long lasting floor was vital for Magor Brewery to reduce maintenance stoppages and costs
- Original installation completed over 40 years ago with the kegging hall and other newer areas completed in Ucrete
- Ucrete regularly takes discharges of hot water, beer spillages, cleaning chemicals and impact from kegs and is still in operational condition

### Project

Magor Brewery

### Location

Newport, Wales

### Owner

AB InBev

### Applicator/Contractor

Kemtile

### Market sector

Food & Beverage

### Products used

Ucrete UD200  
Ucrete UD200SR

### Sales contact

mike.wells@mbcc-group.com







# Saucy Fish Company, Grimsby

Fast-cure flooring solution for fish processing area

## The background

The Saucy Fish Co. operates a very busy fish processing and added-value product line. The client had an existing concrete slab which was smooth and, in parts, breaking up. A food-grade slip resistant floor was needed which would not contaminate the surrounding production environment with any odour.

## The challenge

The first phase of 200m<sup>2</sup> involved production ceasing at 4pm on a Saturday, with clean down taking until 8pm. The area was to be back in production at 6am on Sunday. The environment was still wet and the window to lay onto damp concrete was 10 hours.

## Our solution

Grimsby Resin Flooring arrived and set up their mixing station; they also tented off and secured an enclosed environment so that no dust would escape and used mechanical preparation equipment fitted with vacuums to extract the dust. They surface-dried the area and then applied the Ucrete PFS at a temperature between 8-10°C, which had cured after four hours. They then applied 9mm of UD200 fast flooring and this cured in less than five hours.

## Benefits to the customer

- Master Builders Solutions met a small window of opportunity for application and the client's requirement for an slip resistant floor finish with the same cleanability as stainless steel
- The Ucrete floor was applied to a damp substrate directly with no issues regarding the relative humidity moisture content of the slab and no requirement for a surface damp-proof membrane
- The client's floor was prepared, primed, laid and back in service within a 10-hour period with no issues or effect on the surrounding production
- Seachill's Engineering Manager, was very pleased with Grimsby Resin Flooring and Master Builders Solutions Ucrete fast flooring solution as he recognised there had been a problem with this floor area for a while but had not realised there was a solution available to him on the market that met his time constraints
- As a result, Seachill planned to programme in the remaining areas in the production facility to be installed in the same way

## Projects facts at a glance

- Fast-cure system installed within a 10-hour window
- Cleanability and slip resistant finish achieved
- Application to a damp substrate without a surface DPM
- Grimsby Resin Flooring applied up to 2500m<sup>2</sup> of flooring

## Project

The Saucy Fish Company

## Location

Grimsby

## Owner/s

Seachill/The Saucy Fish Co.

## Applicator/Contractor

Grimsby Resin Flooring

## Designer/Architect/Specifier

Seachill / Grimsby Resin Flooring

## Market sector

Food & Beverage

## Products used

Ucrete UD200

Ucrete PFS

MasterSeal CR 460

## Sales contact

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## The Village Bakery, Wrexham

Flooring solution for production area expansion

### The background

The family-owned and managed Village Bakery craft bakery based in Wrexham produces an award-winning range of fresh bread and rolls, pies and morning goods. Due to increased demand, Village Bakery wanted to extend its production capacity and an extension was commissioned to meet the higher volume production requirements

### The challenge

The extension to the production facility was designed as a fast track project. The increased capacity was to meet the growing demands on the bakery to supply major retail customers with a variety of products including crumpets and pancakes. The requirement was for a high-quality floor finish that was hygienic, cleanable and slip resistant, even in known problematic bakery areas.

### Our solution

Following on from previous successful applications undertaken at the three existing Village Bakery sites in Wrexham, over 2,000m<sup>2</sup> of Ucrete UD200 was applied throughout the new extension. Ucrete UD200 met requirements for a slip resistant coating that is as cleanable as stainless steel and HACCP certified for use in food production environments.

### Benefits to the customer

- Ucrete UD200 met the client's requirement for a slip resistant floor finish with the same cleanability as stainless steel
- Tried and tested flooring systems with a proven track record within the bakery industry
- The client's floor was prepared, primed, laid and completed within a tight construction schedule with no disruption to the existing 24/7 production schedule

### Projects facts at a glance

- Project completed to schedule and within budget
- No disruption to existing production
- Hygienic, slip resistant floor finishes achieved
- Ucrete flooring was able to accommodate complicated detailing, including drains

### Project

The Village Bakery

### Location

Wrexham, North Wales

### Applicator/Contractor

Kemtile Ltd

### Designer/Architect/Specifier

Village Bakery

### Market sector

Food & Beverage

### Products used

Ucrete UD200

### Sales contact

Akeel.Ahmed@mbcc-group.com







# Tomlinson Dairies, Wrexham

Flooring solution for dairy production area

## The background

Founded in 1983, Tomlinsons Dairies started out as a doorstep delivery milk service. Its reputation for quality and service led to an increase in demand and, as a result, it built a dedicated dairy next to its farm.

Now producing over 25 million litres of fresh milk a year and supplying over 300 outlets across Wales, the Midlands and the North West of England, the dairy needed an increase in its production capacity. This led to the company investing in a brand new dairy with Master Builders Solutions being asked to provide suitable flooring solutions.

## The challenge

During operation, dairies are usually wet and slippery and products are very susceptible to tainting. As such, the new dairy required a safe, non-tainting, heavy duty flooring system with excellent heat, chemical and impact resistance.

The need to bring the new facility into production as soon as possible meant that the project had a very tight construction schedule.

## Our solution

Over 5,000m<sup>2</sup> of Ucrete UD200 was applied, with Ucrete RG also applied to the skirting. Following the successful installation in the main production areas, Master Builders Solutions were asked to return to provide a similar flooring solution in the new yogurt production facility.

## Benefits to the customer

- Master Builders Solutions and Kemtile met the short timescale for application and the client's requirement for a slip resistant floor finish with the same cleanability as stainless steel
- Tried and tested flooring systems with a proven track record within the dairy industry
- Ucrete UD200 flooring's combination of durability, speed of cure and ease of cleaning with temperature resistance up to 150°C are a unique offering meeting the demands of this project

## Projects facts at a glance

- Fast-cure system installed within a 10-hour window
- Cleanability and slip resistant finish achieved
- High chemical and slip resistance were key factors in Ucrete's specification at Tomlinsons Dairies

## Project

Tomlinson Dairies

## Location

Wrexham, North Wales

## Owner

Tomlinson Dairies

## Applicator/Contractor

Kemtile Ltd

## Designer/Architect/Specifier

Tomlinsons Dairies

## Market sector

Food & Beverage

## Products used

Ucrete UD200

## Sales contact

Akeel.Ahmed@mbcc-group.com







## Sustainability

Ucrete industrial flooring solutions contribute to sustainability in many respects throughout their life cycle.

Building and maintaining any kind of structure means facing a key sustainability challenge: the consumption of natural resources. The longevity of Ucrete floors, with many 20 - 30 year old floors still in service, helps to save resources. What could be more wasteful of raw materials, time and energy than ripping up and throwing away a floor after five to ten years?

The contribution of Ucrete floors to climate protection and saving of energy is also demonstrated by independent environmental impact assessment:



BMG Engineering, based in Zurich, undertook such an assessment of Ucrete industrial flooring. They also looked at a scenario of a large commercial kitchen, as in a prison or a hospital, and compared a Ucrete UD200 specification against a typical tiled floor specification that traditionally might be used for this application. The results are quite compelling; square meter for square meter an equivalent tiled floor was found to have 50% higher Cumulative Energy Demand, 70% higher Global Warming Potential, 200% higher Ozone Depletion Potential and 50% higher Water use than a 9mm thick Ucrete UD200 floor. Clearly, Ucrete offers significant benefits for the environment.

Another important element of sustainable construction is protecting the health of both flooring applicators and users of buildings. Ucrete floors contribute to that as they are non-solvented, non-tainting and provide low levels of emissions to the air, again confirmed by external experts:



We are becoming increasingly aware of the importance of clean air. Emissions impacting air quality are controlled by a variety of national regulations and voluntary standards. The Indoor Air Comfort Gold certification from Eurofins combines the most stringent specifications from all relevant European regulations and voluntary labels, including the auditing of production and quality control

to ensure auditing of production and quality control to ensure that Ucrete meets all product emissions requirements. All Ucrete grades give very low emissions and conform to all the emissions requirements for indoor flooring systems in Europe, including AgBB in Germany, M1 in Finland and Afsset in France. Ucrete has been measured at A+, the lowest French emissions rating. This demonstrates that Ucrete is an extremely clean product without any volatile compounds that might taint foodstuffs or affect the well-being of personnel.

Systems to evaluate the sustainability of a building are becoming more and more important in the construction industry, and confirm the contribution of Ucrete floors to sustainable construction.



The Leadership in Energy & Environmental Design Green Building Rating System LEED® provides a process to verify that a project was designed and built in a sustainable manner. It covers performance in key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. With regard to materials selection a series of credits are made to encourage the use of more sustainable and environmentally friendly materials. A Product Information Statement for LEED® New Construction (NC) Version 3.0 Credit Documentation is available for all Ucrete flooring products and systems.

In daily use, Ucrete floors help our customers in many industries to meet their sustainability needs, for example in handling chemicals safely in the chemical and pharmaceutical industries. By protecting concrete from aggressive and noxious chemicals, Ucrete contributes to containing chemicals reliably and preventing them from escaping into the environment. Another aspect of sustainability in industrial operations is occupational safety, where the slip resistant properties of Ucrete floors can help to avoid accidents and injuries caused by slipping and falling.



## A Clear Choice

When factory owners, architects and engineers who specified and installed Ucrete in the 1970s and 1980s find that their floor is still in service well into the 21st century, you can understand why they want to specify Ucrete again. But you don't need to have used Ucrete in the past to be convinced of its performance. You want to make sure you specify the correct floor, excluding any inferior materials which may lead to floor failure and all the cost which that entails in lost production and management time.

### Tell us your needs!

Discussing your floor with your local Ucrete expert from Master Builders Solutions will help define the right product for you, with the right appearance and slip resistance, the right thickness to meet your temperature requirements, and the robustness to provide a long lived solution. Guidance on the design and detailing of the substrate is also available to help ensure you get the best floor possible. Having specified the correct grade of Ucrete for your application, there are a number of key performance criteria that ensure that a Ucrete floor will meet your requirements for years to come. A draft performance specification for a floor in the food industry is given on the right, which can be adapted to meet the specific requirements of the project.

For further information please contact your local Master Builders Solutions expert.

### Typical performance specification for Ucrete flooring

The floor topping materials shall be a pre-packed 4 component non-solvented self-compacting mortar based upon a HD polyurethane cement resin binder system with minimum resin content of 18.5%, equating to 5.7 kg of total liquid components with 24.8 kg of aggregates and powders. The primer system must be based upon the same Heavy Duty polyurethane technology as the mortar.

To ensure reliability during application the system must be substrate moisture tolerant and able to be applied directly to 7 day old concrete without the need for special primers.

To conform to European requirements for non-porosity the floor shall exhibit zero absorption when tested to CP. BM2/67/2.

To ensure food product quality the chosen flooring material shall be non-tainting from the end of mixing as confirmed by certification of sensory evaluation from a recognized food industry body giving a non-taint result. The material shall be non-solvented and meet AgBB standards for indoor air quality certified by independent testing and factory audit.

To ensure long term performance in the anticipated environment the flooring product shall exhibit resistance under continuous immersion conditions to the chemicals to be encountered. For milk list 30% Lactic Acid, for oils and fats list 100% Oleic Acid at 60°C, for fruit list 50% Citric Acid, for sauces and vinegar list 50% Acetic Acid, for CIP areas list 50% Sodium Hydroxide at 60°C).

To ensure long life in high traffic areas the floor shall meet AR0.5 standard when tested by the BCA wear tester to EN13892 part 4.

To ensure hygiene standards the floor finish shall demonstrate cleanability comparable to stainless steel confirmed by Independent testing. The material manufacturer shall demonstrate a proven track record in similar industrial environments of more than 20 years.





# Master Builders Solutions for the Construction Industry

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Complete solutions for air entrained concrete

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Solutions for concrete strengthening

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Solutions for the manufactured concrete product industry

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Low viscosity for high performance concrete

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Solutions for formwork treatment and surface improvement

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Advanced rheology control for concrete

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Solutions for hydrophobization, anti-efflorescence and surface protection

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Solutions for extraordinary workability retention

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## **Master X-Seed**

Advanced accelerator solutions for concrete

## **Ucrete**

Flooring solutions for harsh environments



## QUANTIFIED SUSTAINABLE BENEFITS ADVANCED CHEMISTRY BY MASTER BUILDERS SOLUTIONS

**Let the numbers do the talking:** We have portrayed some of our most eco-efficient product solutions for concrete and precast production, construction, civil engineering, and flooring.

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