



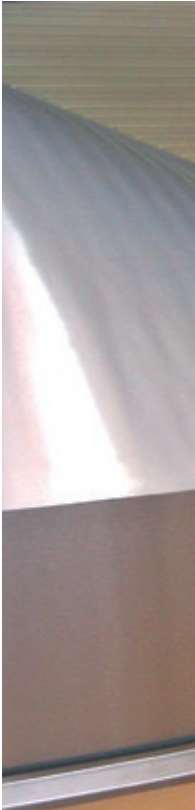
Ucrete

Flooring Solutions
for Breweries





Master Builders Solutions from BASF



The Master Builders Solutions brand brings all of BASF's 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 BASF 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 BASF 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, chemical solutions for underground construction, waterproofing solutions, sealants, concrete repair and protection solutions, performance grouts and performance flooring solutions.



Our reference in Oettingen (Germany):
Oettinger Brauerei GmbH

Working with some of the major companies in the brewing, food and beverage industries, the Master Builders Solutions experts from BASF can provide tailor-made solutions to meet the individual needs of our customers. The resulting range of flooring protection products eliminate downtime associated with shorter lived systems, and our refurbishment products are easy to install and cure quickly, again ensuring minimal operational disruption.



Flooring solutions for the brewing industry

The brewing industry is growing worldwide. Beer, once the working man's "tipple" has experienced a global renaissance with a rapid expansion in specialty brew taverns and boutique breweries. At the same time large multinational brands continue to thrive.

Plant maintenance managers and facilities planners for international brewing giants and craft brewers alike face significant challenges within their brewing and warehousing facilities. Whether selecting construction materials for new buildings or to renovate or repair old ones, the design team and owner should consider the impact of the building's use upon the durability of those products.

Every brewery is subject to many of the same issues – aggressive conditions such as: exposure to acidic materials; exposure to heat and cleaning chemicals; continually wet floors; and high volume forklift movements. These elements combine to form a harsh surrounding for the equipment and structure – one requiring specialized construction products and systems that can withstand this environment.



Ucrete – the solution for harsh environments

The floors within a brewery must be dependable: safe, secure and sanitary. Production downtime in the brewing industry is costly, and thus finding solutions that reduce maintenance are essential. Ucrete, a polyurethane concrete surfacing product, was developed in the 1960's to solve a problem with the floors in chemical plants. This innovative product quickly became the standard for the chemical industries, and by the 1990's further refining of the system had extended its use into many more applications. Globally within the brewery industry, Ucrete is one of the most widely used flooring systems.

Global trends and an expanding world population have created demand for durable flooring solutions in the food and beverage industry. There is a growth in the production of processed foods with the need to extend shelf lives allied with more stringent food safety regulations. Flooring systems for food and beverage plants must now be evaluated based upon their ability to be sterilized to the same degree as stainless steel, to withstand the application of cleaning chemicals, and to cope with the heat and steam of cleaning and production processes. Ideally brewery flooring systems must provide a long service life while being seamless or joint free to ease on-going sterilization. Ucrete flooring contributes to delivering the purity demanded by your brewing process.

Ucrete has similar thermal characteristics to concrete; this results in a product that is unaffected by temperatures that would normally cause delamination and failure in other flooring products. Ucrete is water-based and can safely be applied to damp substrates reducing downtime in repair situations where often the production is a "wet process". Ucrete is biologically inert and non-tainting, which allows production to continue in other areas of the facility during installation. When cured, Ucrete will not support the growth of bacteria. Ucrete can be steam cleaned and can be disinfected to the same level as stainless steel. Chemicals used in the brewing process or in the cleaning and sterilization of facilities will not affect the performance of Ucrete. With floors still in use after more than 20 years Ucrete has proven its durability, and will provide you with the peace of mind that your facility will be able to operate without interruptions caused by flooring failures for many years to come.

Ucrete can be installed in a range of textures and thicknesses to cope with the environmental extremes of a brewery whilst maintaining a slip resistant and safe working surface. With an excellent range offering flexibility of performance the Ucrete system can be "mixed and matched" to ensure the correct performance is achieved and to be resistant to the expected chemical exposure. Depending upon a facility's production processes, the Master Builders Solutions experts will suggest the optimal solution to provide the highest level of health and safety.



Our reference in Magor (United Kingdom):
Magor Brewery

Over 25 years of service

In 1984, the Magor Brewery, a major UK brewer, installed 2,800 m² of Ucrete flooring in their kegging hall. More than 25 years later, the floor is still in service, as you can see in the photographs on pages 5 and 6. The floor takes hot water and chemical spillage under the keg washers as well as the impact from the occasional keg that manages to escape.

They can also provide a range of alternative floor systems for other parts of a facility such as warehouses laboratories or offices. The MasterTop range of polyurethane floors is ideal for areas such as raw materials stores, Quality Assurance/Quality Control laboratories and finished goods storage. Utilizing the latest epoxy technology, BASF chemists have refined the formulations to simplify application, to ensure a long service life and to be able to adjust their slip resistance to the level needed.

In addition to the polyurethane based MasterTop products, Master Builders Solutions from BASF offers a range of cementitious “dry shake” products that are installed at the time of placing

the concrete. They are mineral-based and can include a metallic aggregate when used in extremely abrasive conditions. These products, developed at the beginning of the 20th century, continue to be successfully used in high volume warehousing operations worldwide. The installed floor looks like a well finished concrete floor, but has excellent impact resistance and more than five times the abrasion resistance of a conventional concrete floor, thereby yielding decades of service. By combining these various flooring technologies to deliver specific performance needs, BASF has the tools to provide you with a flooring solution that is ultimately designed to lower your life-cycle cost.



Our reference in Magor (United Kingdom):
Magor Brewery



Solutions beyond flooring for breweries

Not all breweries have had the benefit of Ucrete flooring from inception, but fortunately, when they are significantly damaged or deteriorated, they can be renovated using this system. For renovation projects, Ucrete should be combined with our MasterEmaco fast setting repair mortar products for trafficked areas, the MasterBrace strengthening system and the MasterInject crack injection solutions for fastest return of the facility's original design condition before the application of any new floor. Ucrete can be installed on new concrete after 7 days, reducing the construction time, or on newly repaired concrete (after 1–5 days depending upon system), minimizing production downtime.

Waste collection and treatment is a serious issue in today's urbanized environment where the need to keep rivers and waterways clean is of utmost importance. In many places the need to treat waste on site is even a legal requirement. Here MasterProtect concrete corrosion protection linings and MasterSeal waterproofing solutions are fully capable of securing the waste treatment areas within any brewing facility. Unaffected by flocculation, clarifying and pH control chemicals, these coatings can provide the peace of mind facilities managers demand.

Sustainability

We take the sustainability of our product offer very seriously and commissioned BMG Engineering of Zurich to undertake a cradle to grave environmental impact assessment on a 9 mm Ucrete UD200 floor and compare it to a typical industrial tile specification.

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 9 mm Ucrete UD200 floor. Clearly, Ucrete offers significant benefits for the environment.



Master Builders Solutions from BASF for the Construction Industry

MasterAir

Complete solutions for air entrained concrete

MasterBrace

Solutions for concrete strengthening

MasterCast

Solutions for the manufactured concrete product industry

MasterCem

Solutions for cement manufacture

MasterEase

Low viscosity for high performance concrete

MasterEmaco

Solutions for concrete repair

MasterFinish

Solutions for formwork treatment and surface improvement

MasterFlow

Solutions for precision grouting

MasterFiber

Comprehensive solutions for fiber reinforced concrete

MasterGlenium

Solutions for high performance concrete

MasterInject

Solutions for concrete injection

MasterKure

Solutions for concrete curing

MasterLife

Solutions for enhanced durability

MasterMatrix

Advanced rheology control for concrete

MasterPel

Solutions for water tight concrete

MasterPolyheed

Solutions for mid-range concrete

MasterPozzolith

Solutions for water-reduced concrete

MasterProtect

Solutions for concrete protection

MasterRheobuild

Solutions for high strength concrete

MasterRoc

Solutions for underground construction

MasterSeal

Solutions for waterproofing and sealing

MasterSet

Solutions for set control

MasterSure

Solutions for extraordinary workability retention

MasterTop

Solutions for industrial and commercial floors

Master X-Seed

Advanced accelerator solutions for concrete

Ucrete

Flooring solutions for harsh environments

BASF plc

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