

'We Are the Inventors of Liquid Glass Coatings for Mobile Phones': Bernd Zimmermann, Co-Founder of **CCM GmbH**

The Liquid Glass technology is a multi-award winning technology which allows the end-user to protect both industrial and domestic surfaces with ultra-thin super durable coating of invisible, easy to clean, glass. The technology is highly versatile as it finds its application in various industries, including food, automobile, medical, industrial, aviation, marine and more. Headquartered in Overath near Cologne / Germany, CCM GmbH has been involved with the development and marketing of Liquid Glass technology since 2006 and as a result it offers unrivalled experience in the supply, packaging and worldwide distribution of this technology. The company offers a very wide base for coating technologies that allows them to coat almost every surface with SiO2 coatings ranging from 100nm to 20 microns. "We consider every new project as a measure of success," said Bernd Zimmermann, Co-Founder of CCM GmbH.

Today, SiO2, the core component of CCM's technology portfolio is commonly used in products such as toothpaste, ketchup, and beer; however its greatest value in the food industry is when it is used within Liquid Glass as a surface coating. Surfaces which are coated with SiO2 offer anti-sticking, easy clean, stain proofing and biostatic characteristics. SiO2 coatings have already been evaluated by leading food manufacturers. SiO2 coatings are ideal for protecting cars and motorcycles. Also, alloy wheels become easy to clean and blemish free, as brake dust does not burn into the coating. Exterior body work and fuel tanks

become protected by a glossy, easy to clean and abrasion resistant coating. But being at the forefront of Liquid Glass technology, CCM is doing much more.

In a brief interview, Bernd Zimmermann, told us about CCM GmbH's innovations in the Liquid Glass technology segment. He also talked about the company's newly published catalogue and much more. Read for the excerpts from the interview.

Tell us about your journey of Liquid Glass innovation.

We are the inventors of Liquid Glass coatings for mobile phones. We started this project 11 years ago and it became a worldwide success. The technology is marketed in over 80 countries. Japan is the latest country to add to this listing. In short, phone screens which are protected with our coating become 30% harder and are significantly more resistant to scratching and damage from impact. In addition the surface becomes easy-to-clean and biostatic (bacteria find the surface to be "inhospitable" and die).

How can product development services benefit both customer and company?

We at CCM, are specialized in the development of private label products and we have already helped more than 600 companies to develop own brand variants of our technologies. Our export rate is 95% and so we understand the dynamics of product development in markets throughout worldwide. We support our customers

from the product concept phase through to the creation of the final product. We have developed this skill package over the last 15 years.

It is quite difficult to achieve success in every product that is developed. How do you overcome failures?

We have of course also experienced the scenario when a technology which we have developed has not been immediately accepted. In most instances, we feel it was not the wrong product but the wrong time for the product/technology. We have experience in developing products which were ignored for many years and yet these products have become very successful some years later. A perfect example is our anti-pathogen coating for mobile devices. It was promoted to the NHS some years ago and was ignored. It is now a significant technology. Luckily, in our sector the dynamic is far from static and we always have several new projects either in development or ready for market. We always say: "If 51% are successful, we are happy." But, in fact, our success ratio is far higher; so, it is reasonable to say that "failure is difficult to measure but we accept that some projects will be considered as failures... until in 5 years from now they become highly sought after."

How do you understand the needs of the market to make a reality-based solution?

We normally visit a lot of exhibitions worldwide in order to "get a feel" for the market and in addition, we also organize seminars for our partners

Founders' Corner

CCM was founded in 2006 by Bernd Zimmermann and Heiner

Perk. Prior to this, both worked in the chemical business as Sales Directors for a chemical factory. After they realized the potential of Liquid Glass Coatings they decided to concentrate exclusively on SiO2 coatings and founded the company to address this need. Neil McClelland joined later as the Technical Director and these are the three individuals behind the success story of CCM, which is a mid-sized company, but a "hidden champion" in the field.

and potential customers. We are also invited to participate in "Technology Innovation" events, where we are able to share ideas and solve problems with our colleagues within this space. Above all we are pragmatists.

How do you establish a goal before starting a new product development/production?

The simple answer is: By observing and listening to the market. If we get more than three times the same type of inquiry from customers or new companies, we know that we have to check the potential market more carefully in order to address the requests. Sometimes, we find that the market is responding to a story about a new coating technology which is based completely on false claims but sometimes we find that a new technology has been developed. It is our job to provide an alternative coating which surpasses the performance characteristics of this new technology. Sometimes, this is not possible but we have a success rate of approximately 80% which is gratifying. In addition, we follow the developments in the mobile phone sector in order to be up to date. A perfect example is our development of a coating for flexible mobile phone screens. We are not sure if these screens will become the

must have technology in the next years but we have had to develop coatings to protect these screens. We are constantly learning and upgrading.

Do you have any new services ready to be launched?

We have just published our new catalogue with several interesting new developments, such as Liquid Glass coatings for stone and marble, long-term disinfection for mobile phones (for up to 10 days), long-term disinfection for hands (for 2 hours) and the first sneaker coating in our technology which can be washed 10 times in a washing machine. We have also developed a stunning new technology in association with a University (not based in Europe) which we will launch in late 2021.

What does the future hold for your company and its customers?

We believe that our portfolio of Liquid Glass products is still not close to being fully maximized (let us say 5% of the potential is being addressed). So, there is a huge potential worldwide for our customers and for CCM. Most people still feel that this is a "new market," but in fact we have already been active in this technology





sector for over 15 years. Our team has learned a lot in this period. We have of course made mistakes but hopefully we do not repeat the mistakes.

There is a very high innovation rate and amazing things will come in the next years such as super hydrophobic coatings for buildings. solar panel, cars and industrial uses. For example, buildings which stay dry (do not absorb moisture into walls or roofs) gain from increased thermal efficiency. The "old" technologies would cause the buildings to sweat, but SiO2 coatings are breathable and invisible, yet keep the buildings completely dry. We are also involved in agricultural, aviation, fabrics, healthcare and solar projects. In addition, we are very close to finishing the development of an anti-microbial Liquid Glass coating which can be active for years.

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