



Nanotech Enabled Transparent Functional Coatings are in the Market Place

Interview of GXC Coatings – a German leading supplier of transparent nano coatings for lighting components and automotive applications

Abstract:

GXC Coatings GmbH is a German nano coating company providing permanent, transparent anti-fog, anti-scratch and easy-to-clean nano coating technology and products for optics and safety applications in the automobile, motor cycle, safety, metrology and medical device applications. Founded in 2000, the business strategy of GXC is to develop and manufacture new materials for industrial customers and to create lasting B-to-B business relationships. In addition, GXC offers highly automatised toll coating services on various plastics, glass and metal to customers around the globe using its fully automatic coating line for 2D and 3D parts.

We interviewed Mr Florian Haacke, the chairman of GXC Coatings (<http://www.gxc-coatings.com>) at Hannover Messe (http://www.hannovermesse.de/homepage_e) (See Figure 1-A). GXC, founded in June 2000, is one of the leading suppliers of nano-coating materials to increase the functionality of transparent materials. It develops, manufactures and applies functional coatings based on nanotechnology to glass, polymer and metal substrates. GXC technology is based on a superior sol-gel synthesis method, a highly intertwined, hydrophilic matrix, with a spontaneous and very long-lasting water-spreading effect, and coupled with thermal/UV curing and hardening of the nanostructures. Thanks to the nanostructures inside the matrix and their unique sol-gel coating process technology, the coating layer with 1 μm thickness has high transparency and long stability. The key features of their coating products are anti-fog/mist, anti-scratch, easy-to-clean and combinations thereof.

GXC focuses on optics and safety applications in the automobile, motor cycle, safety helmet, metrology and medical sector. Their first product launched was anti-fog surface coating to avoid condensations on the inner surfaces of automotive head lamps. As shown in Figure 1-B, the lower part of the lamps coated with GXC hydrophilic transparent film shows obvious anti-fog property, in contrast to the upper part without this coating. Currently GXC anti-fog nano coating materials have been used for street lights, visor of helmets and rear lamps in the automobiles (see Figure 1-C). Following the launch of anti-fog coating products, anti-scratch and easy-to-clean coating products are also produced by GXC and mainly targeted for the applications in automobile industries. The automobile industry in Germany is one of the largest employers in the country. It has world leading automotive companies such as Volkswagen (VW), Audi (owned by the Volkswagen Group), BMW and so on. Technology innovation for improving the functionality in automotive parts and materials is undoubtedly welcome and easy to be adopted. GXC prioritizes its development of functional materials to suit the need of the

automobile industry. Providing water, dirt repellent and anti-scratch nano coating technology to the automobile industries, GXC has established its position in the supply chain of automotive industry.

GXC Coatings materials are suited for transparent materials including glass, polycarbonate, plexiglas (PMMA) and polysulfone products all over the world. In order to protect its proprietary nano coating technology and guarantee the highest quality of their coating products, GXC provides coating services for plastics, glass and metals in their state of the art in-house automatic coating lines.



Figure 1. A) NanoGlobe was interviewing Mr. Haacke, the chairman of GXC Coatings GmbH at Hannover Messe; B) Contrast demo of the anti-fog nano coatings; C) helmet and racing car visors coated with GXC anti-fog nano coating layers.