

Schoeller Technologies presents smart solutions

With its domicile in Switzerland, Schoeller Technologies AG is a globally active licensing company for innovative textile technologies. It furthers the development of new pioneering textile technologies through the deployment of international and interdisciplinary R&D teams and holds the intellectual property rights (patents and trademarks). Besides its allocation of technology and trademark licenses, the company organizes the world-wide availability together with selected distribution partners. In addition, Schoeller Technologies AG distributes technology products and supports licensees in technical matters, as well as in marketing and sales.

New applications and tests for NanoSphere®

NanoSphere® technology uses nanotechnology to produce a durable protective function similar to certain plants in nature. Many leaves of plants stay clean because dirt cannot adhere to their finely structured surfaces and are easily washed off in rain.

A similar structure is transferred to textile surfaces by means of the new people and planet friendly C6-fluorocarbon based nanotechnology. Water, oil and dirt residues rinse off easily.

NanoSphere® was developed in Switzerland in accordance to the criteria of the bluesign® standard, the world's most stringent production standard for Environment, Health and Safety specifications (EHS).

During Techtex facts & figures on NanoSphere® performance and many new products as well as application ideas are shown at the Schoeller Technologies AG booth C11 at hall 3.1.

According to Schoeller, the time is just right to make positive decisions for the future. The Nano-Sphere®, a PFOA and PFOS free* durable, stain and water repellent textile finish is easy on the planet. In addition to its high functionality, self-cleaning properties and environmentally advanced components, NanoSphere® shows an extraordinary resilience.

Among many other rigorous evaluations, NanoSphere® was tested in accordance with the AATCC test method 79. After 30,000 abrasion cycles, the water and oil repelling function of NanoSphere® proved to be at the top level while a comparable, conventional textile finish dropped practically to zero level after exposure to 5,000 cycles.

Another feature of NanoSphere®'s longevity is evident in the Bundesmann rain test. After 10 minutes of constant exposure to rain with a simulated 100 litres of water on a 1m² fabric sample, NanoSphere® still displays a value of 4 (maximum = 6), while a conventional product achieved only a level of 1. This means even products like ribbons with a NanoSphere®-finish soak up less water in rainy conditions. (*below limit of detection)

Outfitted with such promising sensibilities, NanoSphere® goes beyond the garment sector to conquer new markets like, home textiles, commercial textiles, luggage, pet industry and harness and ribbon Markets.

coldblack® - a great performance for protective wear

Laboratory tests on a sweating torso have proven that a black coldblack® polo shirt displayed a temperature increase of the torso which is approx. 5°C (9 °F) lower than that of the non-treated black shirt when exposed to simulated sunlight (infrared lamp).

Tests with simulated sweating activity have confirmed that the wearer of a coldblack® shirt only perspires about half as much as the wearer of a conventional black shirt in order to compensate for the increase in skin temperature. In addition to the sports and sportswear market, coldblack® is ideal for the workwear sector.

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coldblack® is being used by exclusive garments partners like BMW Motorrad, Bogner, Fechheimer, Hein Gericke, Held, HUGO BOSS and Mammüt as well as by companies like Gaenslen & Völter. New applications can include areas such as awnings, sun shade sails or tents.

Textiles with 3XDRY®

Textiles with 3XDRY® finish repel water and dirt from the outside (hydrophobic) and absorb moisture from the inside (hydrophilic). Clothing with 3XDRY® keeps the body dryer, prevents perspiration stains and produces a cooling effect. 3XDRY® is a time tested and well known successful textile treatment. Now, to be showcased for the first time at Techtex, Schoeller presents a new vice-versa application for 3XDRY®. The hydrophilic performance is used for bed linens to transport body humidity away from the body, such as into the pillowcase where it is spread and can dry. Due to the hydrophobic performance on the inside of



the pillowcase, sweat cannot penetrate to the pillow. The result: a calmer, better night's sleep for those who tend to sweat.

3XDRY® for functional textiles

When physically working hard the muscles generate warmth and heat the body. To cool the body down, one sweats and sweat that remains on the body evaporates. Due to this "natural cooling system", the body is protected from over heating.

Many functional garments worn close to the body may take away sweat very fast, too fast as the latest research shows; and then the "natural human cooling system" cannot work appropriately. The 3XDRY® advanced moisture management system quickly transports sweat on a large scale into the middle of the garment.

Only from there it starts evaporating, creating a comfortable cooling effect. Thus the natural cooling mechanism of the body is supported and optimized. Sweat evaporation is enhanced, the body cooled and the body temperature remains stable, even during hard work.

The feelgood technology of 3XDRY® was discovered for workwear applications and continues to grow in popularity after it was proven so successful for sports and sportswear due to its ability to enhance the body's natural functions in such a comfortable manner.

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Courtesy:Schoeller Technologies AG ◆