



PRESS RELEASE

AMSilk Announces Strategic Partnership with Gruschwitz to develop High-Performance Products using Biosteel® fiber

Planegg, 27. April 2017 – AMSilk GmbH, the world’s first industrial supplier of synthetic silk biopolymers, today announced a new strategic partnership with the leading yarn producer Gruschwitz Textilwerke AG. This partnership strengthens the companies’ already existing 3-year cooperation, and enables further innovation in the field of high-performance yarns.

“We are very pleased to bring our longstanding cooperation with Gruschwitz to the next level by entering into a strategic partnership,” said AMSilk CEO Jens Klein. “From the very beginning we have been impressed by the Gruschwitz’s competence, reliability, creativity and motivation, and are excited to work more closely on exciting new innovations.”

“For Gruschwitz, the cooperation with AMSilk is an excellent addition to our activities in the high-tech area,” said Ditmar Schultschik, CEO of Gruschwitz Textilwerke AG. “AMSilk is a young, dynamic company with a great product. For us it was challenging and at the same time fascinating to develop the necessary manufacturing process for the Biosteel® yarns and to be able to accompany AMSilk’s market entry.”

Biosteel® fiber: Revolution of yarn production

After years of research and development and more than 200,000 engineering hours, AMSilk in 2013 became the first company worldwide to successfully produce synthetic silk fibers using a patented and reproducible biotechnological process. This breakthrough yielded Biosteel® fabric, the first high-performance bionic fiber with true environmental integrity. Compared to traditional fibers, Biosteel® fiber offers superior performance properties: it is extremely tough, lightweight (offering weight reductions of 30% compared to common fibers), anti-allergenic, highly breathable and moisture wicking.

Biosteel® material is already being used across the apparel industries.



Strong partners

AMSilk first began working with Gruschwitz Textilwerke AG in 2014 in order to continue developing and commercializing Biosteel® fibers. Gruschwitz's proven expertise in the field of synthetic high-performance yarns, combined with its tradition of innovation that's persisted for over 200 years, make it an ideal partner. Among Gruschwitz's notable recent innovations are a special coating technology used for extremely resilient offshore ropes made of DSM Dyneema® and very sophisticated yarns for Johnson & Johnson, a global player in medical textiles.

In 2015, the joint research and development activities of AMSilk and Gruschwitz yielded a technological innovation: instead of relying on specialized knitting machines to process Biosteel® fiber, the companies were able to process the silk biopolymers on conventional knitting machines. The result was the first textile fabric made of biotechnologically produced synthetic silk fibers – a revolution in the textile industry. This technology proved the basis for AMSilk's partnership with adidas, first announced in November 2016, for the production of highperformance sports shoes made of Biosteel® fiber.

Ongoing Biosteel® development

The aim of the strategic partnership between AMSilk and Gruschwitz is to develop further innovative yarn products based on Biosteel® fiber, with a special focus on products for premium markets. In addition to collaborating on the yarn structure itself, the two companies will cooperate more closely in the area of fiber finishing. Biosteel® yarns may, for example, be refined by coatings and PFCfree finishings as well as optimized for the specific field of application.

“As a well established and interactive team, AMSilk and Gruschwitz will develop future-oriented products for the textile, automotive and aviation industries,” said Severin Bertsch, Head of Fiber Business, AMSilk. “All our products are developed in accordance with our mission of ‘bridging opposites’ – of combining high-performance with environmental integrity. The new adidas running shoe made from Biosteel® fiber is an example of this, as it combines breakthrough high performance with 100 % biodegradability.”



About Biosteel®

The Biosteel® fiber is the first high-performance bionic fiber with true environmental integrity. A next-generation silk biopolymer, it takes inspiration from biological spider silk, a material that's stronger than steel and as flexible as rubber. Manufactured by AMSilk, the leading global producer of silk biopolymers, the material is produced at an industrial scale through a patented, animal-free process that relies on bacterial fermentation and is powered by renewable resources.

Already used in premium innovation footwear, Biosteel® fabrics are strong and lightweight performance material designed to add value to products spanning the automotive, fashion, home/interior and apparel industries.

About Gruschwitz

Gruschwitz Textilwerke AG, which in 2016 celebrated its 200-year anniversary, is a mid-sized company, which as a supplier to the processing industry has specialized in the development, production and sales of technical threads and yarns. The innovative yarn specialist based in Southwest Germany processes natural fibers and almost all chemical and high-performance fibers available worldwide on state-of-the-art twisting, winding and braiding machines. Due to their efficient single-thread coating lines, Gruschwitz is able to provide additional functionalization of the yarns. With customer-optimized combination of materials and manufacturing processes Gruschwitz successfully accompanies its customers in the field of automotive, medicine and industry from the idea to the finish product.

www.amsilk.com

About AMSilk

AMSilk GmbH is the world's first industrial supplier of synthetic silk biopolymers and has its headquarters in Planegg near Munich, Germany. Sustainably produced using a patented biotechnological process, AMSilk high performance biopolymers have the unique functional properties of the natural product they are based on. The organic high-performance material can be used in multiple ways, including in medical or technical products as well as cosmetic ingredients. AMSilk high-performance biopolymers give everyday products unique



properties. Among other things, the polymers are biocompatible, breathable and especially robust.

AMSilk high-performance biopolymers are distributed in the form of Silkbeads (microparticles), Silkgel (hydrogel) or Biosteel® (fibers). They are currently used in coatings for medical technology products, in the textile industry and as an ingredient in personal care products.

www.amsilk.com www.biosteel-fiber.com

For further information please contact:

AMSilk GmbH

Anja Mayer

Tel: +49 (0)89 57 95 393-0

E-mail: pr@amsilk.com

Gruschwitz Textilwerke AG

Juan Serrano-Mannsfeld

Tel: +49 (0)7561 9098-560

E-mail: juan.serrano-mannsfeld@gruschwitz.com

www.gruschwitz.com

Kirchhoff Consult AG

Anja Ben Lekhal

Tel: +49 (0)40 60 91 86-55

E-mail: anja.benlekhal@kirchhoff.de