FOOTWEAR TECHNOLOGY: BASF

Because "nothing in the footwear industry stands still", BASF has decided the time is right to invest in a network of footwear-focused facilities in different parts of the world. It will use these centres to work closely with brands to develop new materials for use in shoe production.

BASF makes major investment in footwear

Performance materials company BASF has announced a series of new investments that it believes will strengthen its presence in the footwear industry. It has opened new footwear development centres in Thailand and the US, announced a new footwear innovation centre in Taiwan, which will open in 2020, and expanded its existing footwear development centre in Italy.

Bringing together a team of process engineers, footwear specialists and technicians, coupled with new technologies and machinery, BASF said these centres will serve as "a global platform to formulate and test new material innovations, refine processes and evaluate concepts in large-scale production environments".

The new US centre is in Wyandotte, Michigan, and consists of a 185 square-metre lab that is fully equipped with machinery for developing outsole, midsole and unit sole materials. The company believes the work it will carry out at this centre will help designers "bring their visions to life" and increase speed to market for new shoe collections by improving the testing regime for new materials and by producing prototypes more quickly using polyurethane direct injection moulding.

Constant change in the world of footwear is what prompted BASF to announce recent investment in specialist shoe-focused facilities in Thailand, Taiwan, the US and Italy.

Images: BASF

"With over 40 years of rich experience in the footwear materials segment, we are proud of our innovations," says Andy Postlethwaite, BASF's senior vice-president for performance materials in Asia Pacific. He mentions developments such as Infinergy, the expanded thermoplastic polyurethane (E-TPU) material the company brought to market in 2013. He also references high-rebound PU midsoles and new thermoplastic polyurethane grades, which he says have "transformed the footwear landscape". It is clear the company believes its new footwear-focused investments will help it maintain these efforts to help the shoe production industry press ahead.

Across the world

His colleague, Muhammad Rashid Minhas, who is responsible for strategy for consumer industries at BASF's performance materials division, emphasises that the company's decisions regarding its investments in Thailand, the US and Italy will reflect the global nature of the footwear sector. He explains that these countries are among the global shoe industry's hotspots, adding that "a lot of exciting innovation" takes place in each of these geographies.

"We can offer big brands like Reebok, Brooks, Under Armour close support in the US," Mr Minhas explains, "and, in northern Italy, we are also well positioned at the heart of European footwear. We are also ready to work with brands and their suppliers close to their production hubs in Thailand, Taiwan and China. Nothing in the footwear industry stands still and our customers want the best support, no matter where in the world they are." He points out that good connections among the different footwear-focused facilities will allow the company to work with brands on development of new materials or new shoe collections in the US, for example, and, almost immediately after those conversations have concluded, sit down with the brands' production experts in Asia to discuss the best way of putting the new ideas into practice.

Long-term and short-term focus

Each of the new centres will have its own role. The one in Taiwan, for example, has the word "innovation" in its name for a clear reason. The footwear innovation centre there will focus on long-term development of new materials and on working with customers from the very beginning of the development cycle. Mr Minhas says: "Taiwan has always been a hotbed for textile and footwear innovation. There is a whole ecosystem of specialised companies there that we have great relationships with. It is a place to create new ideas and trial them quickly and to bring people together from different parts of the industry." At the footwear development centres, on the other hand, the emphasis will be on providing a fast and efficient service, solving customer problems and providing technical support.

Efficient testing and rapid prototyping will be among the services on offer to shoe brands at the new footwear centres.

Recyclability

In addition to the PU and TPU developments that highlighted, Mr Minhas says he expects "exciting results" when BASF combines these materials with the engineering plastics in which, he claims, the company is also strong. Nevertheless, he ensures that TPU will continue to make up the largest part of the company's footwear business. There are innovations here, too, such as Freeflex, a fibre spun from its Elastollan TPU. Mr Minhas says fabrics made using Freeflex offer softness, comfort, good fit, durability and shape retention. It uses no organic solvents and can, therefore, meet stringent volatile organic compound standards.

Recyclable footwear materials are certain to be part of the focus at the new footwear centres. BASF had a role in the development of the FutureCraft Loop, the shoes that adidas has said will be "made to be remade" and Mr Minhas confirms that "full recyclability" in footwear is an important goal for the company. He mentions "a bold, new project featuring recyclable materials" that it will launch at the A+A fair in Düsseldorf in November.