

Do textiles need to travel around the world three times, before we can wear them?

With their idea of breathing new life into worn-out truck tarpaulins and making them into weatherproof, one-of-a-kind bags for individualists in the big city jungle, the graphic designers, Daniel and Markus Freitag, truly reflected the spirit of the times in 1993 and have written an impressive success story since then. In our interview, they talk about why they have both also been supplying textile products since 2014 and what Hohenstein exactly does with these fabrics.

How do bag manufacturers come up with the idea of producing textiles?

Actually, for the same reason why we started producing messenger bags from truck tarpaulins - our own requirements. In 1993, there were no appropriate bags for us to transport our designs on a bicycle, keeping them safe and dry. So, we spontaneously made some ourselves. Robust, long-lasting and sustainable. Can used items be utilised purposefully in a different context? What does a product need to look like, so that it doesn't leave anything harmful at the end of its lifecycle? We have always been dealing with such questions. And when we were searching for new workwear for our employees and understood how the global textile industry handles resources, the environment and its workers in some cases, it quickly became clear that we would prefer to take the matter of clothing into our own hands.

What does ideal clothing look like for you?

We asked ourselves: It must also be possible without wasting resources, endless transport routes and excessive use of chemicals? The textiles should be manufactured at fair conditions nearby and be suitable for wearing in the factory, as well as for having a beer after work. Once they have been worn out, it should be possible to throw them on the compost, where they can biodegrade without any residues, with a clear conscience.



Daniel and Markus Freitag, Freitag Fabrics.
Photo credit: Roland Tännler.

How were you able to reduce these high demands to a single common denominator?

In order to meet these requirements, we went back to the beginning of the natural development chain: to the fibre. To be able to guarantee the biodegradability of our textiles, once they have been worn out, we searched for natural and renewable resources, which are available in our latitudes. So, the choice fell on the cultivated plants, linen and hemp, which thrive magnificently along the Atlantic coast, do not require much water and fertilisers and textile fibres have already been gained from their raffia for a long time. For lighter fabrics, Modal is also used - this is obtained from local beech trees in Austria. In Lombardy, we found a weaving mill, which is able to produce our trouser fabric according to our own ideas, and our garments are ready-made in Poland. Overall, it took five years from the original idea until we were able to deliver the first completed garments - including a strict test of the shirts and trousers in our own factory and numerous self-wearing tests.

In which way did Hohenstein help you with the product development?

During the development of F-ABRIC, we conducted our own composting tests on our factory roof garden. When it then came to the product launch, we searched for an institution,



Female-Shorts Stellar-Blue, Freitag Fabrik. ©Oliver Nanzig

which could competently and independently provide evidence that our textiles are 100% biodegradable after unscrewing the metal buttons and the soil is not polluted with harmful substances after their decomposition. The experts of the Hohenstein Group offered a customised tool for our requirements, with its standardised soil-burying tests to determine the biodegradation.

And how long do your textiles need until they decompose into soil again?

The tests in Hohenstein concluded that our textiles are almost completely decomposed after six months. They passed the eco-toxicological tests that were conducted. As our products are

What does a product need to look like, so that it doesn't leave anything harmful at the end of its lifecycle?

made of natural fibres, the Hohenstein experts recommended a soil-burying test to us under open land conditions. Burying in a laboratory would also have been conceivable, but it was important to us for the natural climate change over half a year to flow into the investigations.

Are you satisfied with the test result?

Yes, as we worked towards completely degradable and non-harmful textiles right from the start, we naturally also anticipated this good result. But we did not think that the decomposition process would be so quick. So far, there has not been any recognised international standard for the degradability of textiles, therefore, the biodegradation tests in Hohenstein can be an important instrument for textile companies, when it comes to scrutinising the last step of the product cycle.

www.hohenstein.de



Biodegradation process. ©Hohenstein.