



Mechanical textile recycling in a new era

19th April 2018

Frankenhuis at Haaksbergen, NL



History

2016

Per January 1st 2016 Hannel de Vries-in't Veld (R) and Tich Vanduren (L) jointly acquire the majority shares of Frankenhuis B.V., Wadinko, a participation company, joins as a minority shareholder.

April 2016 2nd tearing line comes over from Attero - Wilp

August 2016 2 new filter systems are installed



What is our mission?

1. Find new product-market-combinations
2. Working together with partners

With creativity and dedication we want to bring Frankenhuis to the next level. To be able to produce the highest quality of fibres for spinning mills and the nonwoven industry, we will innovate our production lines and adjust our procedures to the highest standards. To come to new products we have to work together!

Our values:

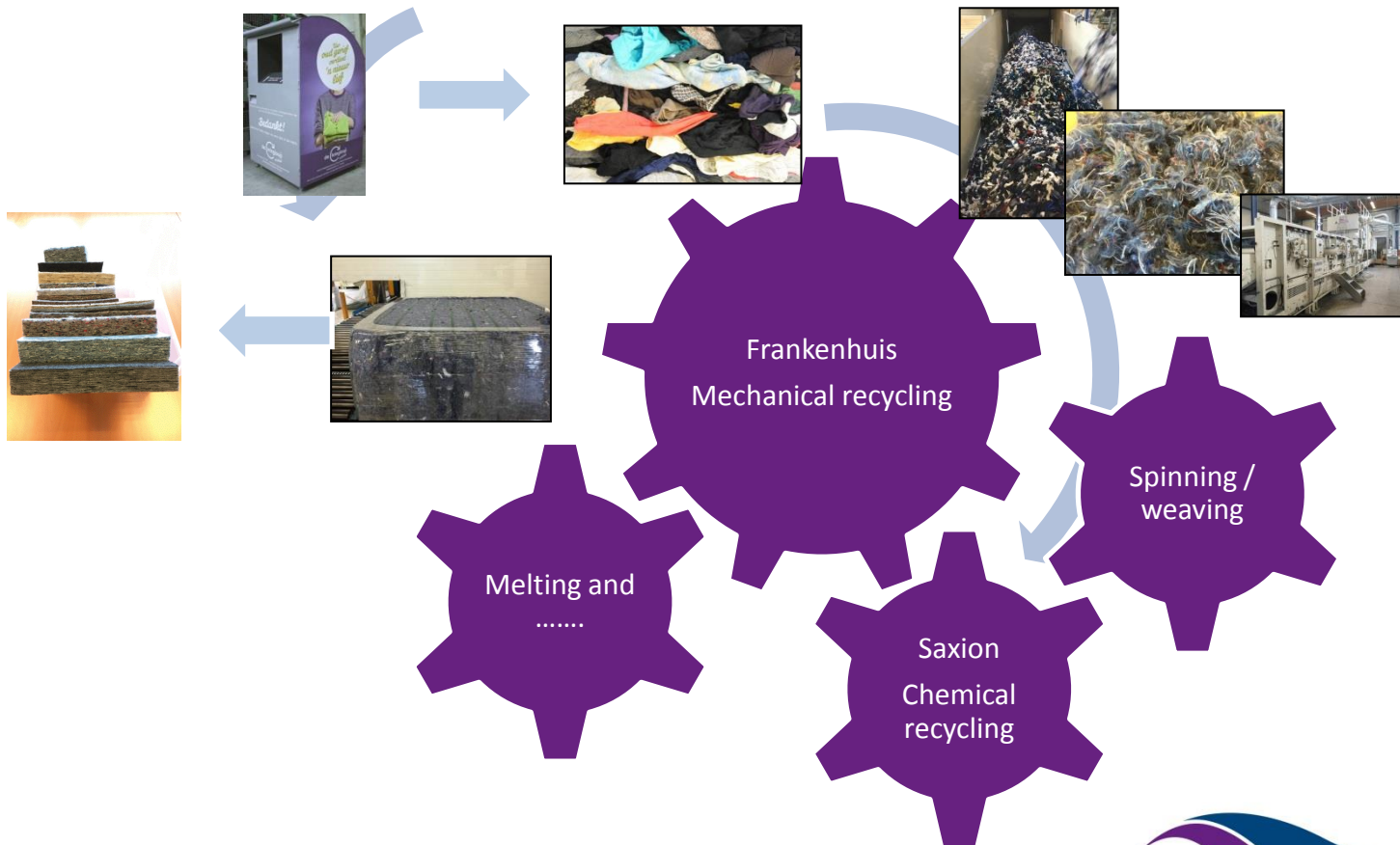
- An **honest** and friendly approach to our business partners
- **Open**, direct and loyal
- A **clean** and **safe** working environment
- Creative and surprisingly clear, unusual, **inspiring** and exceeding expectations
- ... and above all a **fun** place to work!



Frankenhuis closes the circle

From Post consumer clothing we make raw materials for such industries as nonwoven, spinning industries and weaving for various end markets. In our tearing lines at Frankenhuis we are capable to remove zippers and buttons in order to make a clear high quality fibre which can be used as a replacement of virgin raw materials in various industrial processes. At Frankenhuis we truly close the circle of textile recycling!

A transparent and controlled process !



Our incoming materials



Our main incoming materials are post consumer jeans and acrylic knitted ware.

But we also work with Polyester, Viscose, wool, pré consumer matrasses, workclothes
.....



If needed we try out deep sorting to guide our sorting partners to higher value product steams.



Our production process

With 2 production lines Frankenhuis has a capacity to process up to 20.000 ton post consumer clothing into fibres.

The line mainly laid out to tear post consumer jeans has all the needed features to remove buttons, zippers and other impurities from the textile stream. The newly invested filter systems take care of an effective de-dusting step, enabling us to deliver an end product with a minimal dust content.

Line two is a more delicate line on which we process mainly knitted acrylics, wool and cotton steams.



Our products



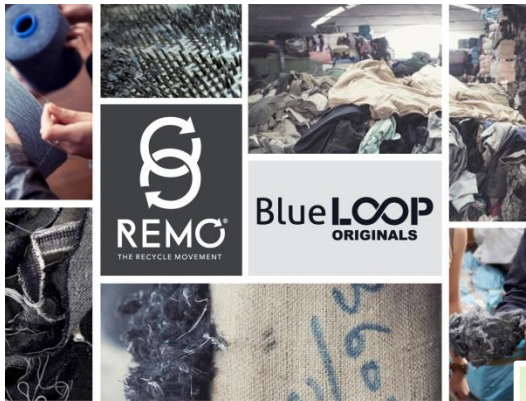
Our end markets

Raw materials for the industrial non-woven industry



Our end markets

Raw materials for the spinning industry : a truly circular example !



From post consumer clothing, to fibres to yarns to clothing

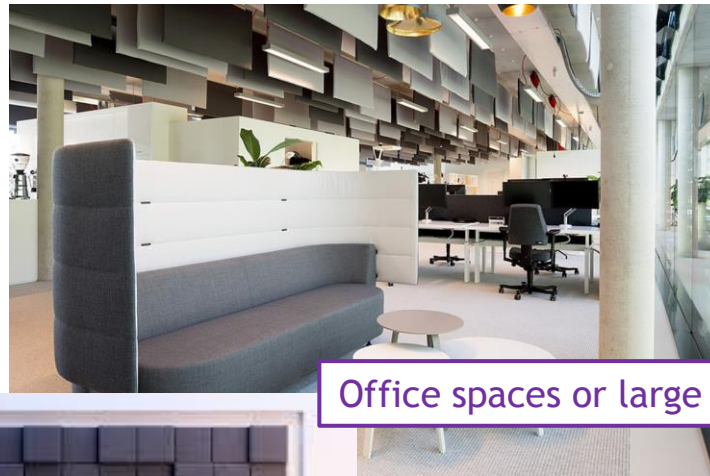


Our end markets

Sound Isolation



Industrial isolation



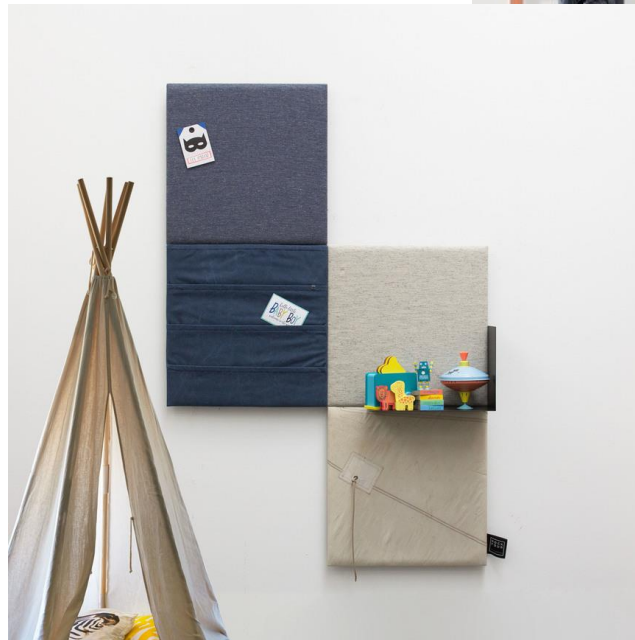
Office spaces or large buildings



Our end markets

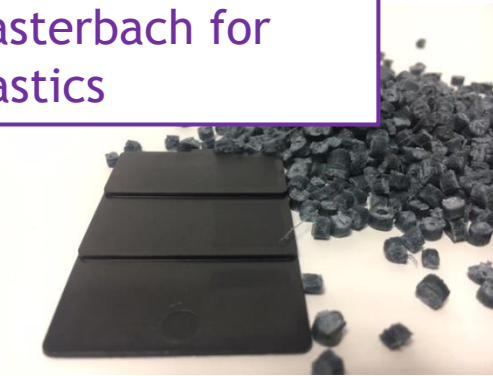


Bulletin boards
and separation
walls



Our new developments

Jeans dust
becomes color
masterbatch for
plastics



Fibers become
reinforcement in plastics

Jeans dust
becomes paper



Our new developments



Disassemble the different layers of multi-norm workwear.

Recycling of Polyester layers

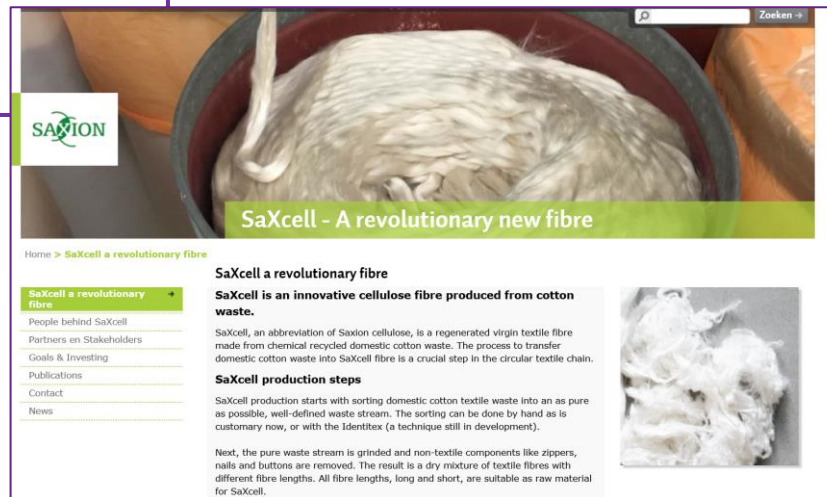


Our new developments

First step in

- cleaning
- shredder

Before chemical recycling of cotton.



The screenshot shows a website page for SaXcell. At the top, there is a large image of a ball of white, fibrous material in a dark container, with the SaXcell logo in the top left corner. Below the image is a green banner with the text "SaXcell - A revolutionary new fibre". Underneath, there is a navigation menu with "Home > SaXcell a revolutionary fibre" and a list of links: "SaXcell a revolutionary fibre", "People behind SaXcell", "Partners en Stakeholders", "Goals & Investing", "Publications", "Contact", and "News". The main content area has the heading "SaXcell a revolutionary fibre" and a sub-heading "SaXcell is an innovative cellulose fibre produced from cotton waste." followed by a paragraph describing the process. To the right, there is a small image of a pile of white, fibrous material. Below the main text, there is a section titled "SaXcell production steps" with a paragraph describing the initial steps of the process.

Home > SaXcell a revolutionary fibre

SaXcell a revolutionary fibre

- People behind SaXcell
- Partners en Stakeholders
- Goals & Investing
- Publications
- Contact
- News

SaXcell a revolutionary fibre

SaXcell is an innovative cellulose fibre produced from cotton waste.

SaXcell, an abbreviation of Saxon cellulose, is a regenerated virgin textile fibre made from chemical recycled domestic cotton waste. The process to transfer domestic cotton waste into SaXcell fibre is a crucial step in the circular textile chain.

SaXcell production steps

SaXcell production starts with sorting domestic cotton textile waste into an as pure as possible, well-defined waste stream. The sorting can be done by hand as is customary now, or with the Identitex (a technique still in development).

Next, the pure waste stream is grinded and non-textile components like zippers, nails and buttons are removed. The result is a dry mixture of textile fibres with different fibre lengths. All fibre lengths, long and short, are suitable as raw material for SaXcell.

Confidential destruction

Frankenhuis THE place for confidential destruction !

A bank robber in your police uniform?

A drugs dealer in your customs uniform?

Or your exclusive brand on marketplace?

You do not want that !



Who makes Frankenhuis a success?



We have a team of 28 enthusiastic fte's
24/5 system working in 3 shifts on 2 lines



Historie

- 1874** Salomon Frankenhuis started the company Frankenhuis in a time the cotton industry was growing in the Twente area , close to the German border.
- 1884** The son of Salomon, Heiman joins the company and at that moment the company S.Frankenhuis & Zoon b.v was founded
- 1935** A new company is set up in the UK : S. Frankenhuis & Son.
In this same period the trading company Holfra is founded in Paris , France. The son of Heiman, Salomon Frankenhuis, joins this company.
- 1978** Salomon finds a successor in his son in law John Bos. He starts a new era of investment and growth at the company in Haaksbergen .
- 1992** After a thorough market investigation, the company Frankenhuis Fleece B.V. is founded in 1992 – they concentrate on the production of nonwovens. At that time the company is lead by Peter Bos, son of John Bos .
- 2012** VAR B.V. (Wilp-Achterhoek) and Frankenhuis B.V. join their recycle activities . Both companies focus on the recycling of textile in order to supply them back as raw material for such markets as nonwoven production and spinning mills . Frankenhuis B.V. continues under the name VARIFrankenhuis B.V.
- 2014** Peter Bos resigns as shareholder and the company becomes a 100% daughter van Attero.
- 2016** Per January 1st 2016 Hannelt de Vries-in't Veld en Tich Vanduren jointly acquire the majority shares of Frankenhuis B.V., Wadinko, a participation company, joins as a minority shareholder.

