



**bamigo**

**BAMBOO:**  
THE TEXTILE OF THE  
FUTURE

**EVERYTHING YOU NEED TO KNOW ABOUT BAMBOO**

# THE MOST INTERESTING AND VALUABLE INFORMATION ABOUT **BAMBOO CLOTHING**

Struggling to imagine how strong bamboo stems are used to make such wonderfully soft clothing? Bamboo is a unique textile product that comes with a number of striking properties. They're properties that have a positive impact on **your comfort**, and also on global environmental concerns such as water scarcity, deforestation, soil erosion, greenhouse gases and the current nitrogen crisis.

Despite the increasing popularity of bamboo textiles, the majority of consumers are still unaware of **the benefits provided by bamboo**. This has motivated us to develop this e-book dedicated to this unique textile product. We're happy to be able to share what we know about the properties of bamboo to help you make a conscious choice between bamboo and other textiles.

# IN THIS E-BOOK, YOU'LL FIND OUT:

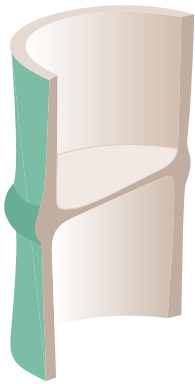
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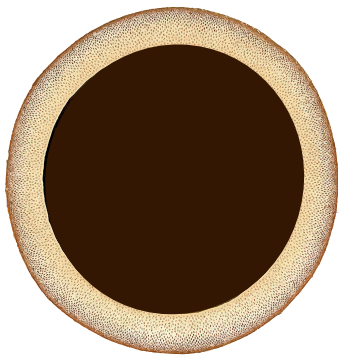
# 1 WHAT DOES BAMBOO CONSIST OF?

As most people have, perhaps you've always thought that bamboo is a type of wood. While bamboo may be hard and have impressively strength, it's important to remember that it's a species of grass. Like any plant, bamboo has roots. Unlike other plants, however, the bamboo stem has a characteristic round shape and hollow structure.



## A UNIQUE PLANT

Here you can see the inside of a bamboo stem, otherwise known as a bamboo shoot. In addition to its **unique shape**, the trunk has transverse bulkheads at irregular intervals in the cavity, which are visible as outer ridges. These transverse bulkheads are permeable to water and air. The cells in the wall of the bamboo stem consist of 50% lignin, 40% cellulose fibres and 10% vascular bundles.



## BAMBOO FIBRES

Let's take a closer look at the cellulose fibres that are used to produce bamboo clothing. In the longitudinal direction of the trunk wall, bamboo consists of these unique cellulose fibres. They are strong and play an essential role in determining the trunk's **compressive strength**. Compressive strength is the degree to which a material can withstand compressive forces without warping. This is comparable to the reinforcement of concrete.

In the cross-section displayed to the left, the increasing number of fibre bundles towards the inner edge of the trunk is clearly visible.

(Source image: Bambusa.)

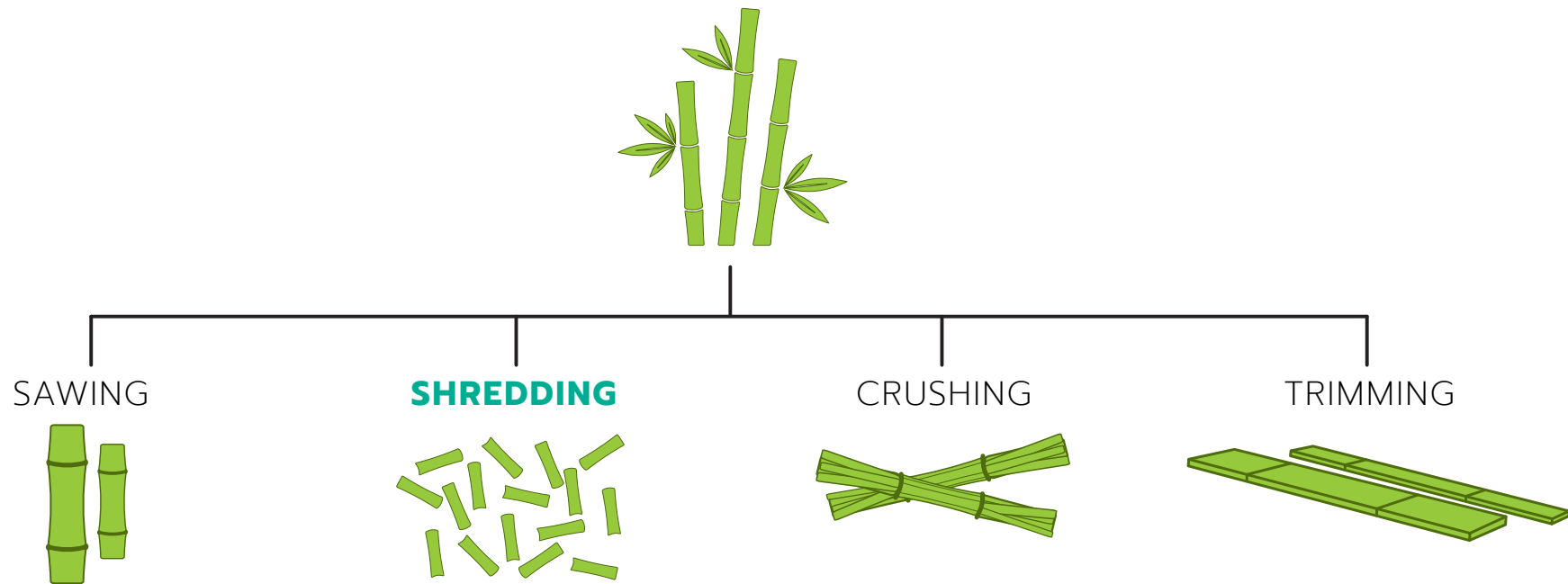
## NATURAL MATERIAL

The hollow shape of the bamboo trunk is 1.9 times more efficient as a building material as the rectangular cross-section of a wooden beam. This leads to material savings. Combined with the strong fibres, this makes bamboo an **exceptionally suitable building material**. One of Mother Nature's most brilliant inventions!

## PROCESSING TECHNIQUES

Not surprisingly, bamboo is frequently used in the construction of products and buildings. The use of bamboo is more evident in some products than others. A bamboo raft, for example, clearly demonstrates the materials used, while bamboo clothing leaves more to the imagination. This is to do with the fact that there are several **techniques available for the processing of bamboo**. Each of the four processing techniques is illustrated below.

### BAMBOO PROCESSING TECHNIQUES



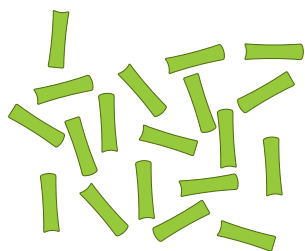
# 2 FROM BAMBOO STEM TO SOFT CLOTHING

Now that we've unravelled the inner workings of the bamboo plant and established that we use the shredding technique to process our bamboo, It's time to look at how we turn these tiny bamboo particles into wonderfully soft clothing. It's a complex process, but we've done our best to make it as clear as possible using a visual step-by-step guide.



## HARVEST

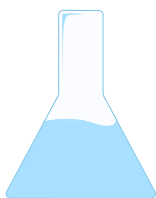
Our bamboo is harvested in China from the plantations of certified suppliers. Only the shoots are harvested. The bamboo plants' roots remain in the ground So that after the harvest, the shoots begin to grow again. As the plant grows so rapidly, we can **harvest** bamboo for use in our clothing up to 6 times a year.



## SHREDDING

After harvesting, the bamboo stems are **shredded** into tiny chips. This is done using larger rotary cutting machines. Bamboo fibres are small elements of the bamboo stem. These fibres are eventually used to produce bamboo clothing.





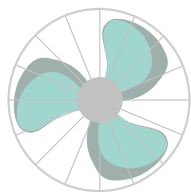
## VISCOSE PROCESS

These bamboo chips are then boiled in a bath of sodium hydroxide and carbon disulphide. Techniques are continuously improving, and waste materials are now reused to ensure they do not contaminate the environment. These techniques are not yet perfect, but developments continue at a rapid pace. This process results in a mushy mass known as bamboo pulp.



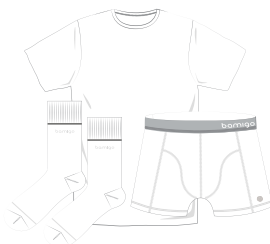
## YARNS

After a few days, the cooled bamboo pulp is pressed through small holes in a sulphuric acid bath, where it hardens and forms fine threads. These threads are used to spin **bamboo yarns** of varying thickness.



## WASHING, BLEACHING AND DRYING

Now that we've processed the bamboo, it is called **bamboo viscose**. These bamboo viscose yarns are washed, bleached and dried – these are the final steps before the yarn is woven into soft bamboo clothing.



## MAKING **BAMBOO CLOTHING**

After washing, bleaching and drying, the bamboo yarn is combined with other materials such as cotton yarn. This careful fusion of threads reinforces the fabric. The result is the most **comfortable clothing** in which bamboo is by far the most important component. In the next chapter, we explain how to minimise the impact of cotton use.

## DID YOU KNOW?

MOST BAMBOO SPECIES GROW BETWEEN  
**5 AND 20 CENTIMETRES EACH DAY.**

THE WORLD RECORD FOR THE 'FASTEST GROWING PLANT' IS 91 CENTIMETRES IN A SINGLE DAY.  
IT'S NO SURPRISE THAT THIS RECORD IS HELD BY A BAMBOO SPECIES: BAMBUSA OLDHAMII.

THERE ARE SPECIES OF BAMBOO THAT ARE MORE THAN  
**30 METRES HIGH** AND 20 CENTIMETRES IN DIAMETER.

BAMBOO SHOOTS AUTOMATICALLY REACH THEIR MAXIMUM DIAMETER AS THEY GROW  
FROM THE GROUND. THEY DON'T GET THICKER WITH AGE, LIKE TREES DO.




BAMBOO CAN GROW ON **PLANTATIONS** AS WELL AS IN FORESTS.  
OUR BAMBOO IS ONLY HARVESTED FROM THE PLANTATIONS OF CERTIFIED SUPPLIERS.






# 3 BAMBOO VS COTTON

Most of the clothes we wear are made of cotton – and cotton is far from being environmentally friendly. Thankfully, there's a solution to that problem: bamboo! Why have we chosen to use bamboo in our clothing, though? We've listed the differences between bamboo and cotton that show why bamboo is such a good choice.

## BAMBOO:

-  Bamboo needs nothing more than sunlight and rainwater to grow. There is no need for artificial watering.
-  No pesticides, insecticides or fertiliser are required to grow bamboo.
-  After cutting, the fast-growing plant continues to grow new shoots, as its roots remain in the ground. Approximately 10 times more bamboo can be produced per square metre than can be produced using cotton plants.

## COTTON:

-  Cotton is the water guzzler amongst textiles! On average, 8,000 litres of water are needed to grow a single kilogram of cotton.
-  Additionally, cotton is responsible for no less than 11% of all pesticides and 25% of all insecticides used in the world.
-  The soil cotton plants are grown in becomes so exhausted during cultivation that artificial fertiliser is required to revive it enough to enable continued cotton production.

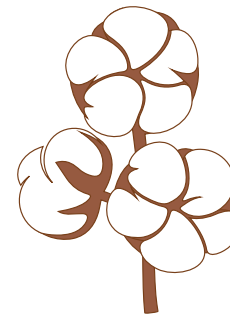
In short, bamboo is better for the environment than cotton in many ways. Not only is the plant itself more sustainable, but also the way it is grown and cultivated ensures that it is an **environmentally friendly alternative** to cotton.

## ORGANIC COTTON

Nevertheless, cotton is also incorporated into our products. That sounds contradictory, so we'll explain. Cotton fibres have a property that bamboo fibres do not possess: the coarse cotton fibres provide sturdiness and structure in clothing. In the next chapter, you can read about the advantages of bamboo fibre.



Bamboo fibres have a round and smooth structure.



Cotton fibres have a coarse and rough structure.

Fortunately, there is a solution to reduce the environmental impact of cotton cultivation: **organic cotton**. The difference between organic and regular cotton cannot be identified by the naked eye. The difference lies in the production process. The production of organic cotton uses techniques and materials with a low environmental impact. Organic cotton, for example, is grown without the use of pesticides or artificial fertiliser and is spun without the addition of chemicals. We remain committed to producing cotton in our products as sustainably as possible.

# 4 THE ADVANTAGES OF BAMBOO CLOTHING

Not only is bamboo less harmful to the environment than cotton, when used in clothing, it also offers many advantages that cotton does not or advantages in which the effect is more noticeable than with cotton.

We wouldn't dream of depriving you of these benefits.



## WONDERFULLY SOFT:

Another great advantage is the unparalleled softness of bamboo textiles and the **excellent comfort** offered. The smooth structure of the bamboo fibre is the secret behind this fantastic property.



## EXTENDED FRESHNESS:

Fabrics made using bamboo offer excellent ventilation thanks to the microscopic holes in bamboo fibres. This is why bamboo keeps you feeling **fresh and dry significantly longer**. Bamboo also has a structure that repels moisture, meaning it wicks away moisture quickly.



## EXCELLENT HEAT REGULATION:

Bamboo fabrics also have several insulating properties that influence **heat exchange**. In warm weather, bamboo fabrics feel fresh while also providing added protection against the chill of a cold day.



# 5 A SUSTAINABLE WORLD

We now know that bamboo is a sustainable alternative to cotton, but there's more: bamboo helps reduce global environmental concerns. We want to bring to light what we are doing for a cleaner world with the help of bamboo.



## WE SAVE **WATER**

Unlike cotton, bamboo grows without the need for artificial watering. Given global water scarcity, it is crucial to take this into consideration.



## WE FIGHT SOIL **EROSION**

Soil erosion is a process of wear caused by wind and running water, which leads to infertile soil. Bamboo roots contribute to rich, fertile soil. When harvesting bamboo shoots, the roots remain in the ground. These roots grip the soil, which prevents soil erosion and ensures that life above ground continues to blossom.



## WE USE AVAILABLE **LAND EFFICIENTLY**

In addition to the fact that the roots remain in the ground when the shoots are felled, bamboo grows tremendously quickly. These aspects have a huge impact on land-use efficiency. Per square metre, we can produce around 10 times more bamboo than cotton. This reduces the impact of the deforestation crisis.







## WE ABSORB **HARMFUL SUBSTANCES**

Each hectare of bamboo forest absorbs approximately 1,000 tonnes of CO2 per year. A bamboo forest absorbs, on average, five times as much CO2 as an equally large forest of trees. Bamboo also features a high nitrogen uptake. This means that bamboo purifies the air and has a positive impact on the greenhouse gas effect and the current nitrogen crisis.



## WE ARE KIND TO THE **GIANT PANDA**

Bamboo is often mentioned in the same breath as the panda. This is logical, as pandas eat bamboo. However, our products are made of Moso, a bamboo species not consumed by pandas. We also grow our bamboo on plantations, to ensure we do not impact the habitat of this endangered species.



## WE ARE **ECONOMICAL** WITH OUR **FABRIC**

We design our clothing ourselves and therefore also have an influence on how sparingly we use our fabric. Only after finding the simplest form will we manufacture the products. Our suppliers make as many garments as possible from a single piece of fabric to prevent the unnecessary disposal of leftover fabric and keep waste to a minimum.



## WE ARE **CERTIFIED** TO THE BONE

We only work with certified suppliers who are proven to be environmentally conscious. Employment conditions are of equal importance. On the next page, you'll find an overview of all certifications.

CHOOSE BAMIGO TO CONTRIBUTE TO A  
**HEALTHIER ENVIRONMENT!**



## **CERTIFICERINGEN:**

### **GLOBAL ORGANIC TEXTILE STANDARD (GOTS)**

An international label that guarantees that the production of organic cotton is carried out in an environmentally and socially responsible manner. For example, no harmful or carcinogenic substances can be used in production.

### **ORGANIC CONTENT STANDARD (OCS)**

This label is used to indicate that products contain sufficient organic material in the final product. The benchmark monitors the route taken by the raw materials from source to product: processing, production, packaging, labelling, trade and distribution.

### **OEKO-TEX STANDARD 100**

A global certification system for products that come into contact with the skin. The more intensive the contact with the skin, the stricter the anti-allergen requirements. If clothing bears the Oeko-Tex quality mark, it does not contain any harmful substances. Clothing with this label is therefore better for your skin and better for your health!

### **BUSINESS SOCIAL COMPLIANCE INITIATIVE (BSCI)**

The aim of this initiative is to improve working conditions. This includes a ban on forced and child labour, along with safe working conditions. Our suppliers have been rated A, which is referred to as 'very good'.

### **FOREST STEWARDSHIP COUNCIL (FSC)**

The council is an international organisation dedicated to conservation and responsible forest management worldwide. FSC products are managed according to FSC guidelines. People and animals dependent on the forest benefit from this.



## DID YOU KNOW?

BAMBOO CAN GROW AT **GREAT HEIGHTS**.

AMAZINGLY, BAMBOO GROWS IN THE HIMALAYAS AT AN ALTITUDE OF 4 KILOMETRES.

ON AVERAGE, BAMBOO **ABSORBS 5X MORE CO<sub>2</sub>** THAN AN EQUAL NUMBER OF TREES.

BY ABSORBING CO<sub>2</sub> FROM THE AIR, BAMBOO HELPS COMBAT THE IMPACT OF GREENHOUSE GASES.

BAMBOO IS **STRONGER THAN WOOD** AND CAN BEND FURTHER WITHOUT BREAKING.

BAMBOO HAS A HIGHER FLEXIBILITY PER MASS DENSITY THAN WOOD.



# 6 OUR PRODUCTS

Bamigo makes every man feel comfortable, confident and successful. This is due to the benefits that men experience when wearing our high-quality clothing. The most important component in our clothing is bamboo, but Bamigo is about more than just bamboo.



Our underwear is wonderfully soft and offer the perfect fit.

[VIEW UNDERWEAR](#)



Our T-shirts have extra length and optimal stretch.

[VIEW T-SHIRTS](#)



Our socks have a reinforced heel and toe and provide extended freshness.

[VIEW SOCKS](#)



The comfortable homewear completes the full relaxation experience.

[VIEW HOMEWEAR](#)