

TRENDS DEEP DIVE:
Spotlight on performance fabrics and fabric trends

Issue 1

A brief overview of fabric trends - More design trends and construction techniques to follow in the next report





Hello and welcome

We would like to invite you to the first issue of our **TRENDS report** - a quick insight into the main direction of fabrics.

Research is as important as design, which is why we like to be aware of the latest developments and issues within the industry. As we consider these, our understanding of what solutions are available to us when designing is enhanced.

Our focus on future developments constantly grows. We continuously look for creative ideas and challenge what is possible in the industry through new discoveries.

We hope this will give you a better understanding of the industry and help you with your future projects.

Enjoy the read,

Murray's Design team



Ana Dieaconu
Head of Design & Development



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Designer



Eco-responsibility in performance fabrics

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Myth or reality?

WHAT ARE PERFORMANCE FABRICS?

Performance fabrics is a term used to refer to fabrics that have mechanical or chemical technology built in them (for example - high stretch recovery, easy to clean, water repellent & breathable).

They are known to be associated with comfort and innovation and this has been possible with the use of synthetically engineered fabrics. The reason for using synthetic and not natural fibres is that they make it easier to model the material and make it more performant and resistant to all conditions and stressors.

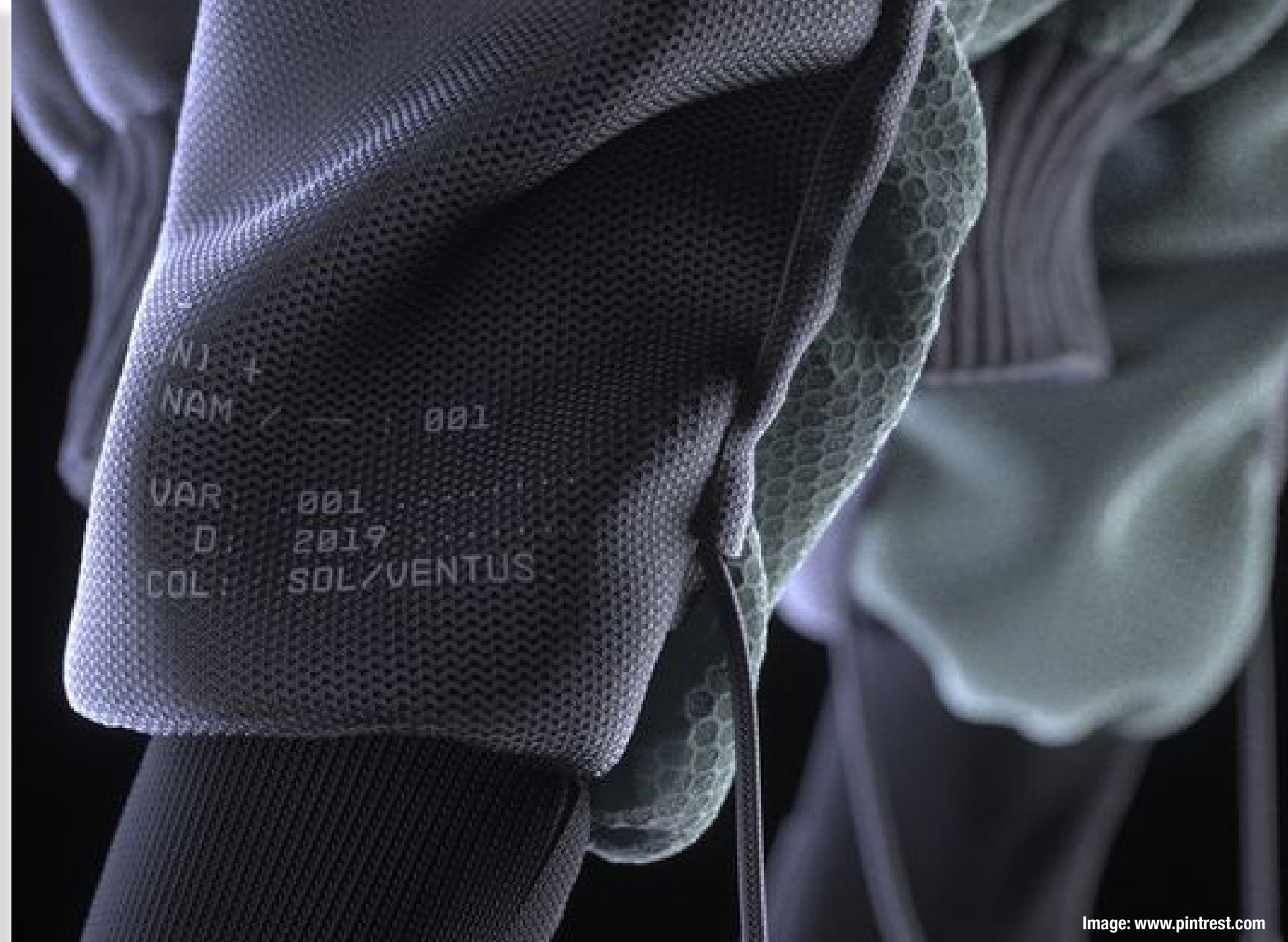
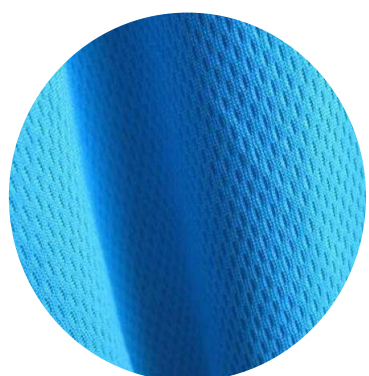


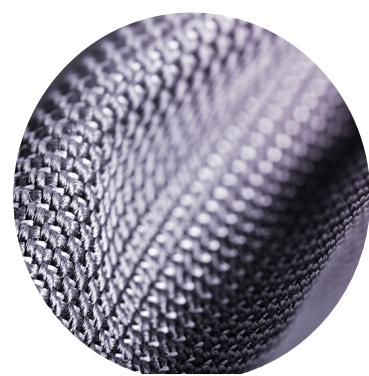
Image: www.pinterest.com

EXAMPLES OF PERFORMANCE FABRICS:



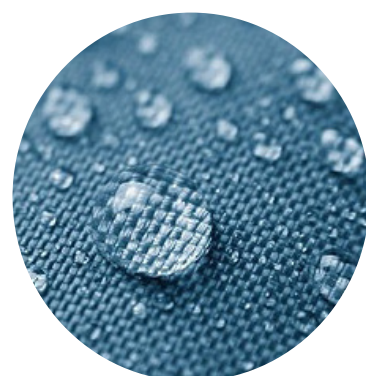
POLYESTER

Can be temperature regulating



POLYAMIDE

Lightweight and flexible



POLYURTHANE

Water repellent



ELASTANE

Excellent stretch to create movement and comfort

A NOT SO FUNCTIONAL SIDE OF PERFORMANCE FABRICS

But the downside of this is the source of such fabrics are fossil fuel (petrochemicals) based. Another downside to these fabrics is also the fact that they are not easily recyclable and take hundreds of years to degrade and tear.

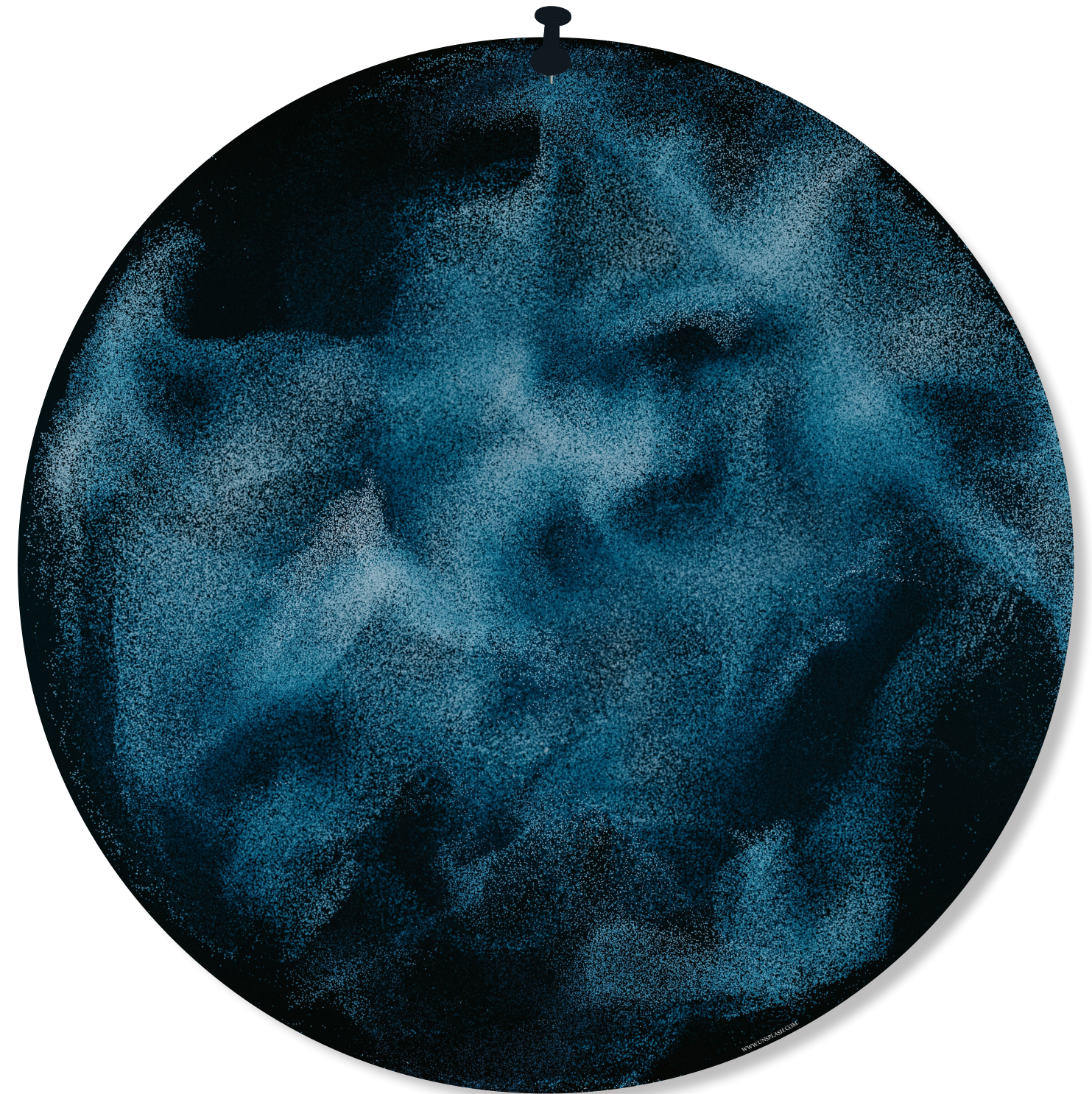
So, how does this fit into a world that is running away from fossil fuels? How do we recycle fabrics that don't want to be recycled?

When thinking of synthetic fabrics and the impact on the environment, we must look beyond the surface. We must investigate the micro particles.

WHAT ARE MICRO PARTICLES?

Micro particles are fragments of textile, that break away from the cloth with use and washing causing pollution both in the air (particles breakaway and float in the air) and water (in the wash). Although it is a known problem, there still is a lot of work to do by the Microfibre Consortium to determine the exact impact of various fibres and types of threads in order to determine a robust solution.

Adding to the challenge are finishes applied to garments (waterproof, antibacterial, antiperspirant & fireproof for example). The Detox Fashion campaign is aiming to eliminate 11 families of risky substances used in sportswear. The structure of these substances ('forever chemicals') cannot breakdown after use or when released into the environment, which again, contributes to polluting our planet. Some PFC's (perfluorinated compound) have been studied and proven to have toxic effects (liver toxicity, development changes & immune system alterations for example).



MICRO PARTICLES

SO, WHAT CAN BE DONE ?

01 SUPERVISING CHEMISTRY

- Product development will require respecting even stricter specifications when working with chemical products
- This also includes wastewater process
- **Certifications:** RCS (Recycled Claim Standard - min level of 5% recycled sources), GRS (Global Recycled Standard- min of 20% recycled materials)
- Waterless practices (reduce water consumption)
- Traceability (identify the history throughout the supply chain - from source to finished product)

02 USE LONGEVITY TO OUR ADVANTAGE

- Use products for longer to make the most out of them
- Use rental and repair services for garments to extend longevity of garments

03 STRONGER GREEN INDUSTRY STANDARDS

- Using more raw materials and bio sourced components (starch & glucose for example) and other naturally renewable sources to replace petrochemicals
- Biodegradable and compostable materials

04 CROSS FUNCTION FABRICS

- Manipulate fabric consistencies (dense, fine, flexible, rigid) to become interchangeable (knits to be more stable and woven to be more flexible) to allow them to be used for new product types and still maintain comfort

05 RECYCLING

a. Mechanical recycling

- Most popular (5 Rs: Refuse, Reduce, Reuse, Recycle, Return to the earth)
- Obtained fibre is blended with virgin material to balance off the effects
- This form of recycling limits the dyeing possibilities, helping with water waste challenges
- Importance of textile-to-textile recycling (in order to create a garment loop where the main source is still a textile, not PET bottle or external elements)

b. Chemical recycling

- Heat, pressure, and chemical solvents are used to achieve a reduced CO2 with a zero to low impact on water, air and the environment

06 LABELLING

- Organic material: not 100% organic fabric, but fabric that contains 50% or more natural material
- Recycled material: not 100% recycled fabric, but fabric that contains 30% or more recycled fabric in the composition

HOW ABOUT RAW MATERIALS? ARE THEY A SOLUTION?

Cotton is known to be the intruder of the sustainability scene. Although it is a raw material, it uses an extensive amount of water, which creates other issues that are still linked to sustainability.

So why does cotton require so much water?

Before the seeds are sown, the fields are heavily irrigated to set the foundation and prepare the soil. When the cotton blooms, this needs to be watered regularly. If there isn't enough rainfall during the year or in that specific area, water from other sources needs to be used to stabilise the growth of the cotton and this can cause an impact elsewhere that require water to be used for different, more impactful purposes.

Cotton: From Field to Fabric



Harvested

Cotton is harvested in many regions, this is mostly done by hand. Today's cotton harvesters can pick over **86,000kg** of seed cotton a day



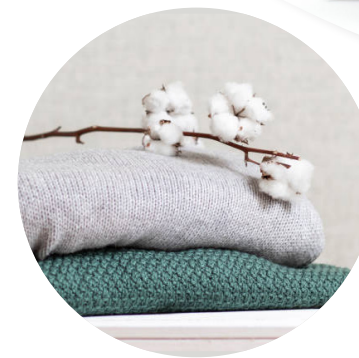
Ginning

The cotton goes through a cotton gin. This generates the cotton fibres from their seeds



Spinning

Bales of cotton fibres are sold to spinning mills. The fibres will get spun into yarn



Fabric

At the end of the process, the yarn will either be woven or knitted into fabric.



FOOD WASTE - A PROMISING SOLUTION FOR THE FUTURE

A new trend is exploring agricultural waste to use as a base for fabric making in apparel. Originally grown to be eaten, bananas, pineapples, oranges and grapes pose as good competitors for raw fabrics (cotton & wool for example). The industry is currently analysing the feasibility of using food waste as a part of a new solution in the sustainability arena. These are called neo-materials.

Fact

“1kg
of fruit can
generate up to
1.5kg
of agricultural
waste”



www.pangaia.com

What is Panagia?

Panagia is a company that is leading such innovation. New technology is emerging such as Frutfiber™ (extracts from banana and pineapple mixed with bamboo Lyocell), and this translates in finishes as well, like Pprmint™ (peppermint extract oil used as antibacterial and anti-odour finish).

The innovation also translates to tanning solutions. Vegetable tanning ingredients derived from grape mills or beer brewing residues are used to act as colourants.

FABRIC TRENDS

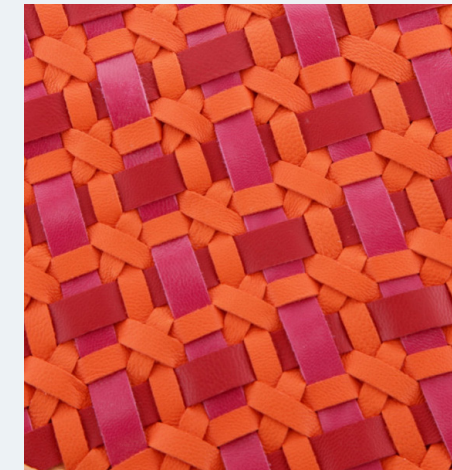
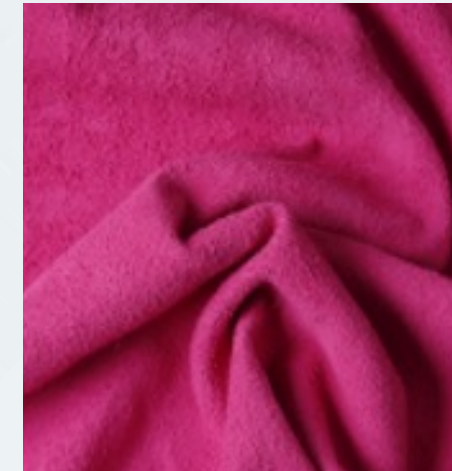
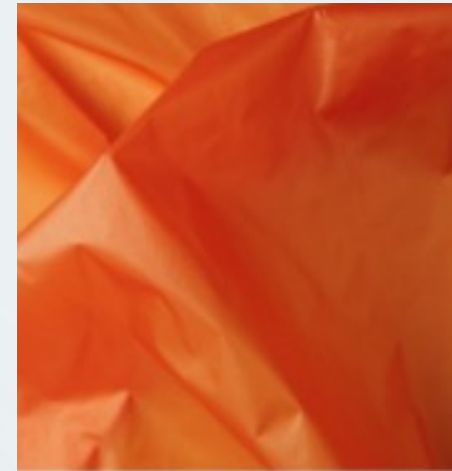
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Elevated simplicity or scarce resource?





SIMPLICITY - Textures



Elevated simplicity or scarce resource

With so much going on in the world and coming out of a pandemic, the fabric trend this year is moving towards **simplicity**.

Due to world issues being so, let's say, tiring for so long the economic crash & COVID being the main culprits, this season's fabrics are all about minimalism and simplicity.

Innovation is pushed towards invisible structures, discreet textures with a feel of richness in the overall effect. It's all about a light feel with a functional touch: light fabric weight, with an opaque and high resistance composition.

Texture is also obtained by using raw materials such as jute or linen. For the synthetic fabrics, jacquard, or an embossing effect (tactile relief) is used to add an interesting finish to a simple fabric. Open knits and transparency create the same textured, flowy effect.

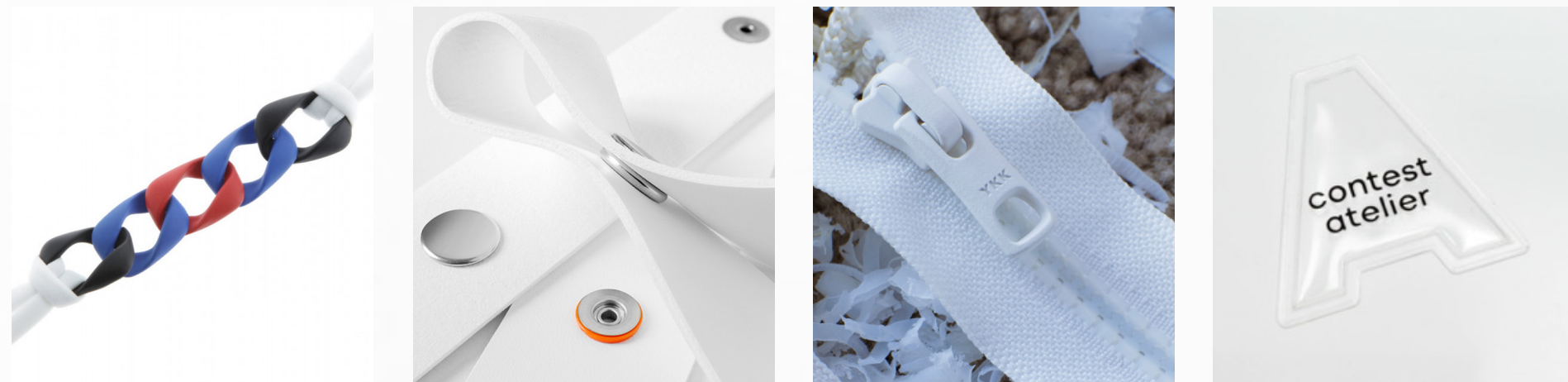


SIMPLICITY - Finishes

The simplicity trend is translated in finishes as well: matt textures are predominant and they are aligned with the minimalistic trend as they are subtle, lack gloss or sheen and don't draw a lot of attention as shiny textures would. Matt is aligned with the idea of a clean, neat, fresh canvas. A fresh start, humble and hopeful for a promising brighter future. Components such as buckles and buttons follow the trend and are using transparent materials to make them as discreet as possible.



When it comes to developing these fabrics into garments, the same direction is followed – simple, but intriguing lines (high impact simplicity). In terms of accessories, the focus is on lightweight but high-tech finesse.



EMBROIDERY

Embroidery follows the same delicate lines and the star material to embroider on this year is linen. The techniques are elaborate and refined, invoking a vintage look of the past.



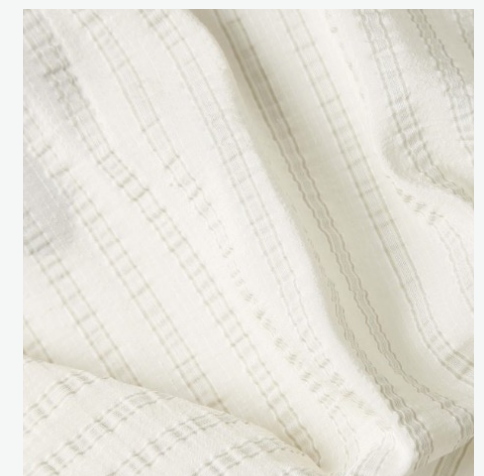
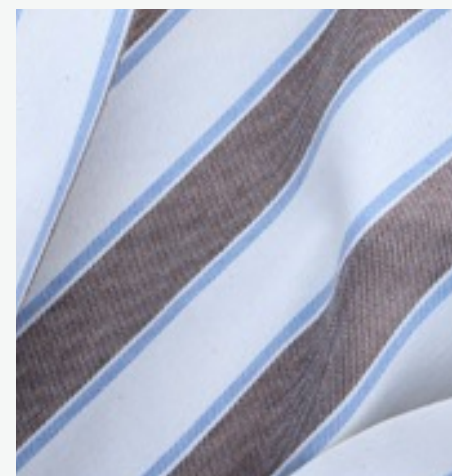


SHIRTING - Trends

GENDER NEUTRAL STRIPES



SOFT AND SHEER STRIPES



TRADITIONAL LINEN - Trend

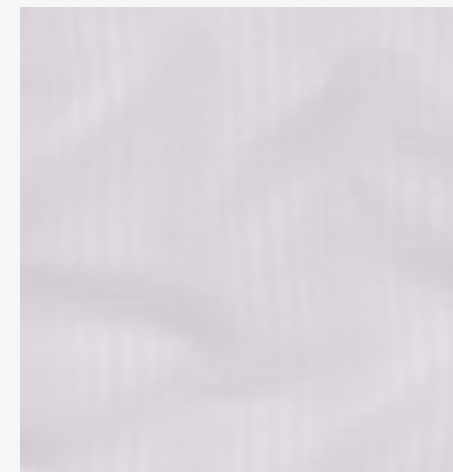
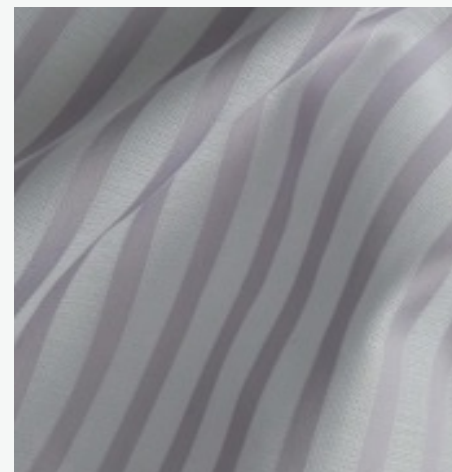
The sheer, airy lines are translated also in the use of more bast fibres. They require little irrigation and few pesticides, therefore brimming with high sustainable value. Refined linens are increasingly being used as traditional linen tends to have a scratchy, itchy feel on the skin, as well as popularity surrounding



Hemp

Nettle

IMPERIAL WHITE



CASUAL WEAR - Trends

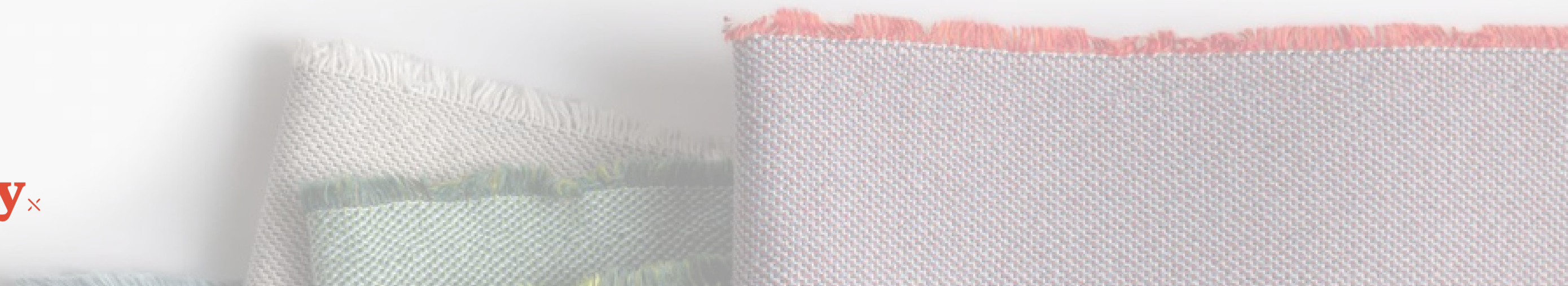
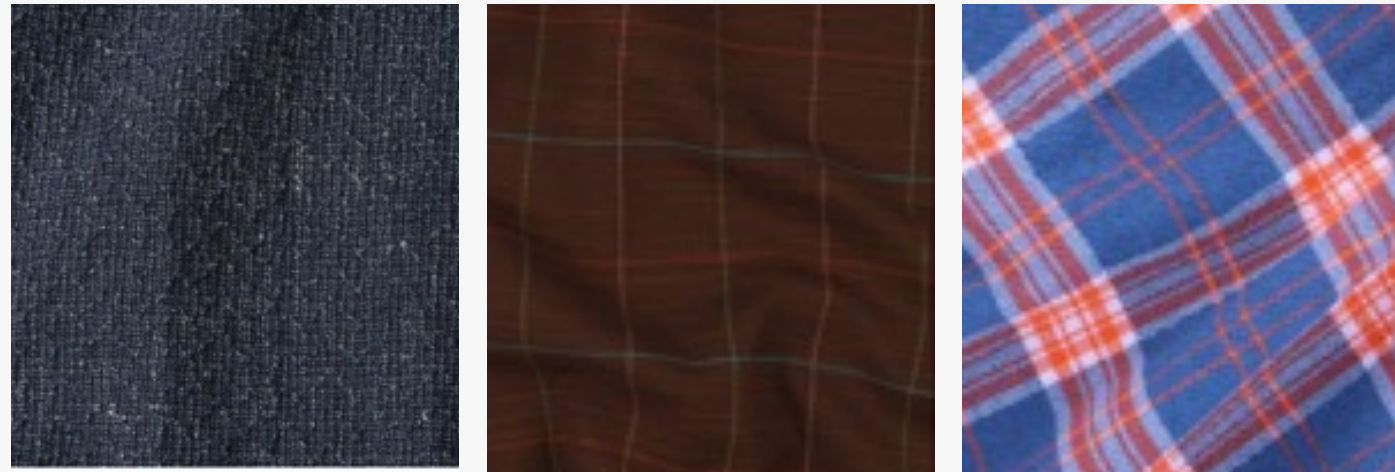
CHIC WORKWEAR – simple and clean finishes

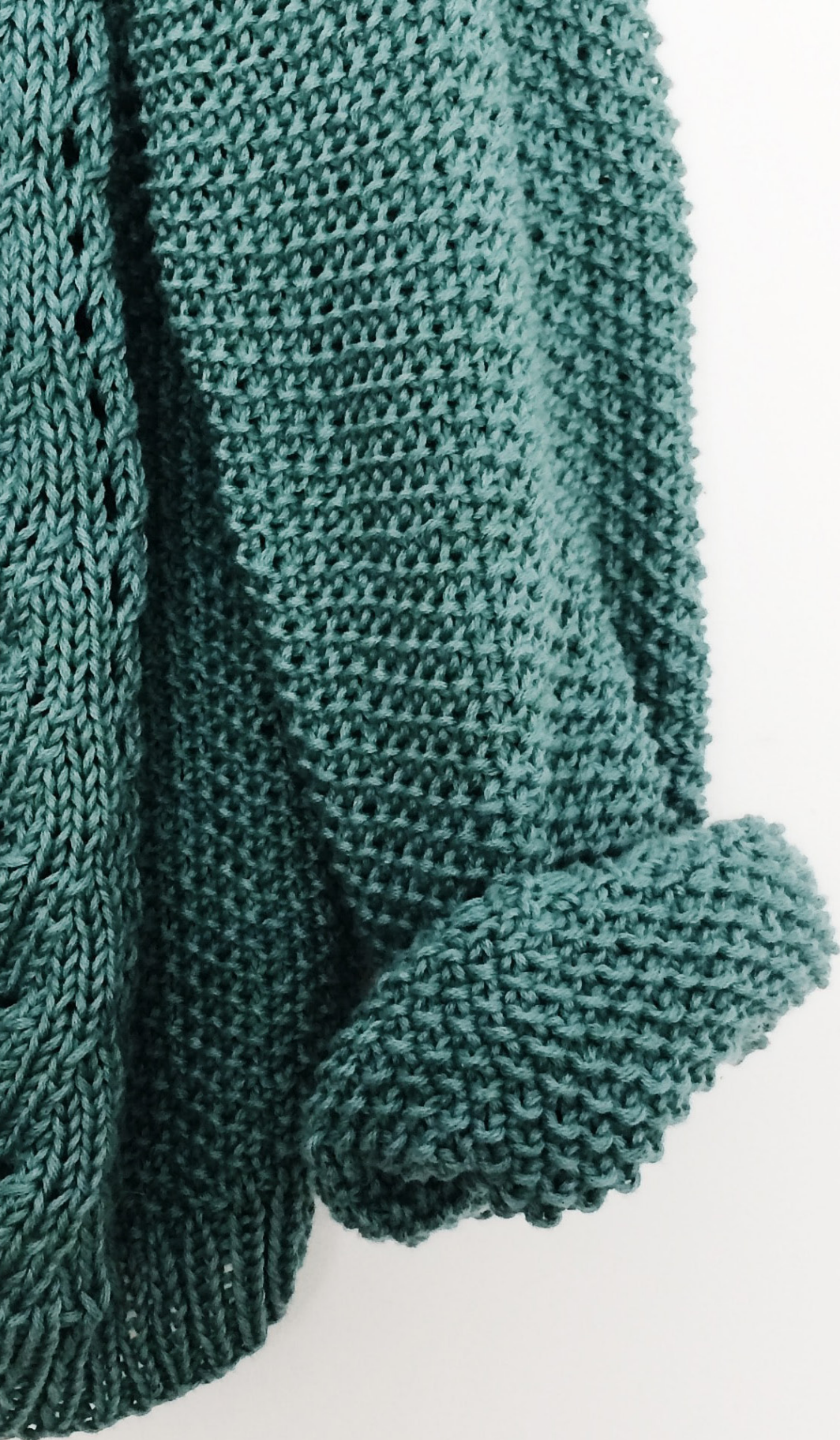


BOLD STRIPES



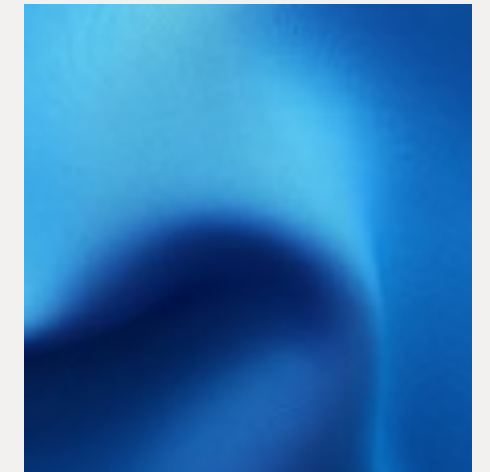
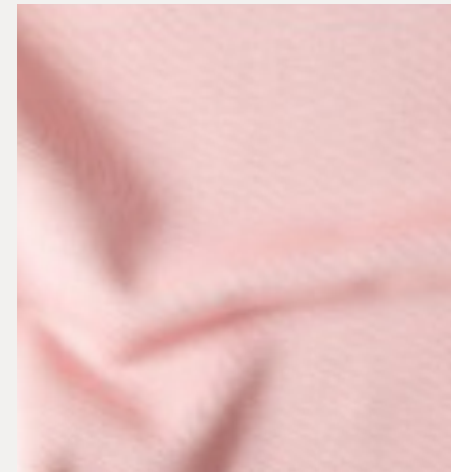
TEXTURE IRREGULARITIES



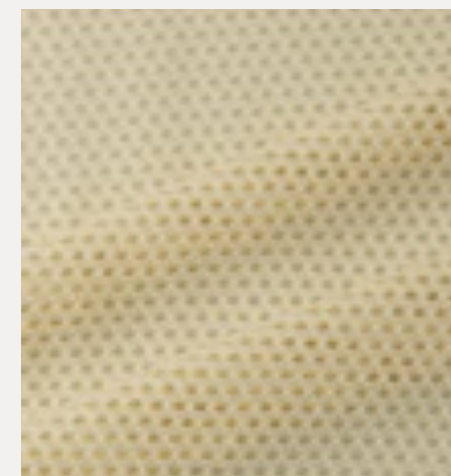


KNIT - Trends

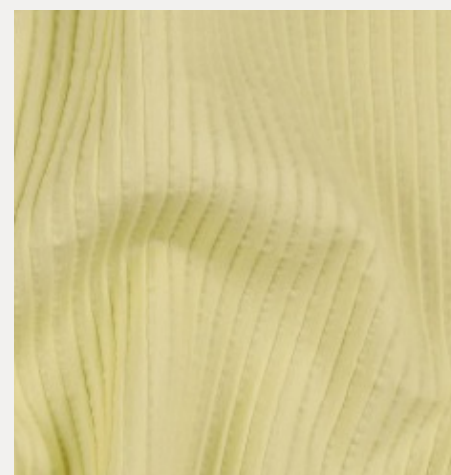
FLUIDITY - SMOOTH, FLOWY



OPEN STRUCTURES



DENSER STRUCTURES



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work smarter

Any questions? We'd love to hear from you
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Bibliography

Research

www.premierevision.com

<https://pangaia.com/pages/organic-cotton>

Images

www.google.co.uk/images

www.pinterest.co.uk

www.unsplash.com

<https://www.luumtextiles.com/collections>