



SENSUS

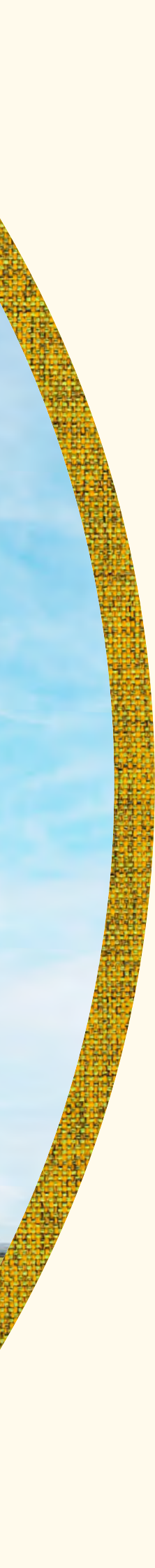
GEBRÜDERMUNZERT

UPCYCLING of
POST-CONSUMER
PLASTIC BOTTLES into
PREMIUM TEXTILES



*Paths
are
made
by
walking.*

Franz Kafka



EMBRACING TRADITIONS THAT ARE NOT AT ALL OUTDATED

Sustainability, environmental awareness, responsibility towards the next generation – these keywords surround us every day. They not only induce the inner need to contribute, but also imply that a lot is already being done. Is that really always the case? Are those advertising slogans actually sincere and when are the commercial notions we encounter only framed with alleged sustainability?

The key is to question the given information in order to approach a subject with mindfulness and in its entirety.

For Gebrüder Munzert, an efficient industrial production does not stand in the way of environmentally conscious behavior and has been emphatically embraced ever since the company's foundation in 1925.

ERNEWLIFE

WE TAKE A TOUGH STANCE

The continuous enhancement of our vision, to combine industrial reproducibility with sustainable manufacturing processes, manifests itself in a comprehensive company's philosophy: with reason, foresight and sensible decisions we aim towards an exclusively sustainable product portfolio.

SENSUS textiles accomplish exactly that! Without greenwashing, they provide reliable answers to the question: **how can home textiles be reinvented to preserve resources?**

With ~~the~~ NEWLIFE we've created a wide range of products that impress by their superior performance properties in combination with an authentic well-being for all senses.

STRIVING AMBITION MEETS TEXTILE PASSION

However, our designers strive for much more. The creative minds around design director Hannes Neubert wanted to settle for nothing less than the notorious "Jack of all trades".

The idea of sustainability does not limit our design department but even inspires their creativity further.

NEWLIFE - yarns in all their diversity are a creative component for those new product developments. Our designers form future-minded collections from the elaborate liaison of timeless design with recycled fibers and durable qualities.



For me, there are no mental boundaries when I design. First, a textile vision evolves in my mind, then the techniques for its implementation emerge from it.

Hannes Neubert, Design Director

Natural surroundings:

Nature in all its facets is always a creative source for our designers. Sometimes you can hear Gründal the frog croaking from the company's own fire-water pond to the design studio. Maybe he inspired our design team to make some fabrics from the **NEWLIFE** - collection even sound absorbing.





LIKE A PHOENIX FROM THE ASHES - SORRY WE MEANT: AVOIDING TRASHES

Join us in the quest for a sustainable paradigm shift that focuses on purposeful recycling.

The starting point for the yarn production is post-consumer PET material, which has already had a life in the form of plastic bottles.

In an upcycling process, yarns are then being produced that are just as durable as newly generated polyester but with lesser environmental impact.

In the next step we use the upcycled **ENEWLIFE** - yarn to create the strikingly beautiful jacquard fabrics from our SENSUS line.

Thanks to their purity, the fabrics themselves can easily be recycled again after their live-span to continue their journey recirculating into yet another recycling process. We call it the Phoenix Effect.



CREATION PROCESS OF THE ~~NEW~~LIFE - FIBER

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Collection

Used PET bottles are being collected and sorted in the Piemont area (Italy), and separated according to their type. Due to the short transport routes and the use of existing polyester, fewer processing steps are necessary in the advancing production stages, which saves energy, water and CO₂ emissions.



Grinding

The bottles are cleaned, shredded and reduced to flakes. In contrast to conventional manufacturing processes, a polymer granulate is created in a solely mechanical process, which is the base for spinning yarns afterwards.



Subsequent processing

The resulting **ENEWLIFE** - yarns are certified according to the Global Recycle Standard as well as Ökotex Standard 100 (product class 1) and are manufactured into the finest **ENEWLIFE** - textiles at our home base in Marlesreuth. The finished fabrics also comply to Ökotex Standard 100 in product class 1.



Extrusion

The polymer is converted into filaments and then textured. During this phase, a flame-retardant component is also embedded into the yarn. In contrast to ecologically questionable flame-resistant top treatments, the flame retardancy of **ENEWLIFE** - yarns is inherent and therefore permanent.






Melting

In the next step, the flakes are melted. Usually a certain percentage of virgin polyester is added in order to keep the yarn stable. Our **ENEWLIFE** - yarns are perfectly durable without this resource-binding admixture and are made out of 100 % recycled raw material.

MAKING AN EFFORTLESSLY CONTRIBUTION

The impressive resource saving this inventive yarn manufacturing process provides, is being illustrated by a study from the **ICEA** (Institute for Ethical and Environmental Certification) using the criteria of the **Life Cycle Assessment (LCA)** and considering ISO 14040 and 14044.



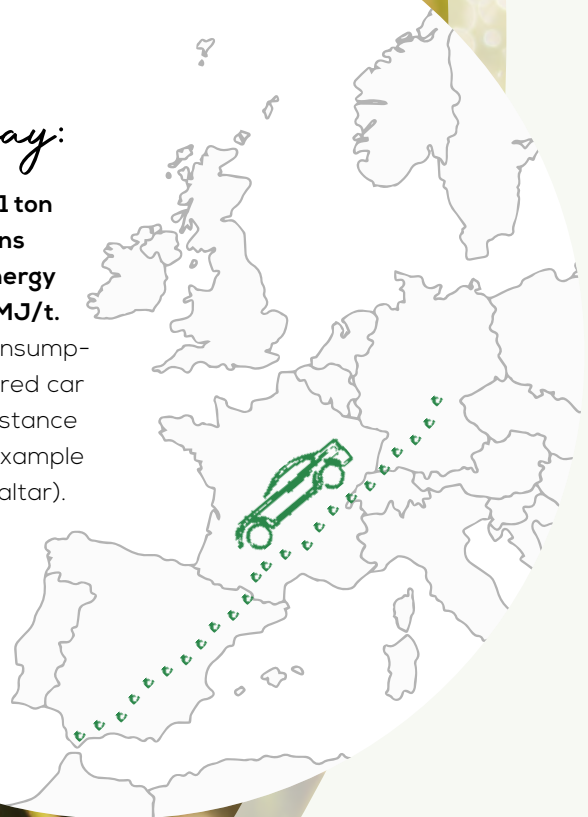
	NEWLIFE	Virgin PET fibre	SAVING
 Consumption of energy resources	50,6 MJ	127,2 MJ	- 60%
 Global warming potential	3,88 kg CO ² eq	5,7 kg CO ² eq	- 32%
 Water consumption*	3,26 l	60 l	- 94%

* Water consumption is referred to the production of 1 kg of recycled polymer, and is compared with the data of 1 kg of virgin PET taken from "Eco-profiles and EPD of the European Plastics Manufacturers - Polyethylene Terephthalate (PET) Bottlegrade, Plastics Europe 2011"

By the way:

the production of **1 ton**
of **NEWLIFE - Yarns**
guarantees the energy
saving of **76.600 MJ/t.**

This equals the consumption a diesel powered car requires for the distance of 2.667 km (for example from Naila to Gibraltar).



HOW ABOUT SOME MORE BENEFITS?

- **Certified, solely mechanical upcycling process** from the bottle to the fiber
- **Inherently flame-retardant ~~to~~ NEWLIFE - yarn made from 100% recycled PET bottles**
- **No need of adding virgin polyester** during the production process to stabilize the yarn
- **Extreme high durability**
- **Use of thermal or mechanical finishes only**
- **Dimensionally stable fabrics that are washable and easy to clean**
- **Intelligent fabric constructions with added benefits such as acoustic values and IMO certification**
- **Independently lab tested**



The use of recycled materials may cause an increased color deviation and affects the hand from lot to lot. Please therefore only process the fabrics according to lots.

DID YOU KNOW?

24 PET bottles are
upcycled in 1 meter of
NEWLIFE - Core Emotion



MIX AND MATCH

However, a considered and transparent recycling process in the yarn does not make for an authentic SENSUS textile. For us, the brand values: **technically outstanding, sensory pleasant and ecologically valuable** are the clear focus of every new product development.

So, in regards of passionate design, the broad range of exciting **NEWLIFE - looks** does not want for anything:

- **Sophisticated plain structures in a wide variety of colors**
- The use of an unique **melange yarn** creates a refined yet natural look
- **Soft chenille constructions and small scaled jacquard designs** complement the ever-evolving product range
- The collections are **perfectly color coordinated and easy to combine**

Just take a look at our digital color cards to determine what your favorite **NEWLIFE - fabric** has to offer in terms of inner values and outer beauty.





SANITIZE AS YOU PLEASE, OVER AND OVER AGAIN

The fabrics from our ~~€~~NEWLIFE - collection are dimensionally stable and washable.

But what if water, steam and suction power are not enough to achieve the desired degree of cleanliness?

With powerful cleaners, you can also get rid of microorganisms such as germs and bacteria without hesitation:

Hypochlorite bleach fastness according to DIN EN 20105-N01	rating 4-5
Fastness to organic solvents according to DIN EN ISO 105-X05 petroleum / petroleum ether / per-tetrachlorethylene	grade 5
Disinfectant resistance ISO 4628-1 (2016-01) and ISO 4628-2 (2016-01) ethanol / propanol 65 %	passed

Beware: For inherently flame-retardant constructions, the use of fabric softener should always be avoided.

WHAT'S YOUR FREQUENCY?

Technical superiority and the incorporation of added values is essential to the development work of our design department. Our fabric creations aim to offer additional benefits, something unique, something you would not perceive at first sight. The multi-talent **NEWLIFE - Earth** for example, impresses with excellent acoustic properties and an extremely high durability so it can be used for both; upholstery and drapery application.

Sound absorption rating according to ISO 11654:

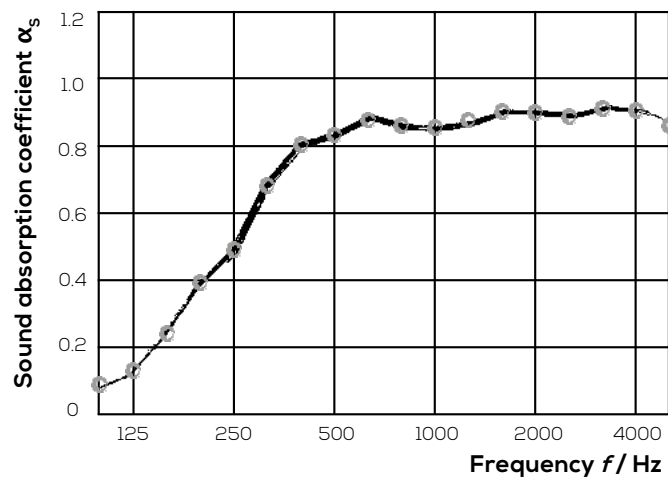
Weighted sound absorption coefficient $\alpha_w = 0,8$

Sound absorption class: B

Rating according to ASTM C423:

Noise Reduction Coefficient NRC = 0,75

Sound Absorption Average SAA = 0,78





ONE FABRIC COLLECTION, INFINITE USES



Office



Contract



*Cruise
ship*

The inherently flame-retardant fabrics are also salt water- and chlorine resistant. Some of them are even certified in accordance to the IMO regulations (Oceanwater Resistance DIN EN ISO 105-E02 Remark 5, Chlorinewater Resistance DIN EN ISO 105-E03 Remark 4-5), so they are an easy to use performance accessory for the cruise ship industry as well.



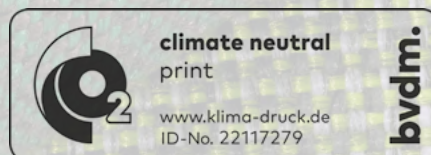
NEWLIFE convinces with inner strength against external harms. Get inspired by a constantly growing product portfolio.

Because sustainability and environmental awareness can not only look rather stunning, but also feel damn good.

We cannot
direct the
wind, but we
can adjust
the sail.

Aristotle





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