



## SA.CO.FIBRE SRL

### Art. **AEREA 108**

#### **Origin of the Material:**

The project of textile waste unraveling, coming from various industries such as the textile sector, special yarn productions, cordage, padding, and the automotive industry (from airbags and safety belts), aims to transform textile scraps into valuable resources through an innovative process of unraveling and regeneration. This circular approach allows for the creation of new fabrics, yarns, and innovative products, reducing the environmental impact and preserving natural resources.

With our project, we aim to promote sustainability in the textile industry and inspire other companies to follow this path, contributing to building a cleaner and more environmentally responsible future.

#### **Results and Testing:**

The regeneration process was a true engineering marvel. The polyester waste underwent careful selection and separation, removing any contaminants. The result is a product characterized by several qualities:

- Odorless
- Absence of oily residue
- Absence of metallic residues
- Low dust content
- Very good resilience
- Fiber length ranging from 40 to 50 mm

#### **Product Specifications:**

1. High tear and abrasion resistance: the material shows remarkable resistance to damage caused by tearing and abrasion, ensuring greater durability over time.
2. Washability: the material can be washed several times without increasing its initial size, shrinking, or deforming. Additionally, it dries quickly after washing.
3. Filtration properties: the product acts as a filter, trapping fine particles and contributing to improved air quality.
4. Acoustic properties: thanks to its structure and composition, the batting offers high sound absorption capacity, making it ideal for creating internal and external acoustic panels.
5. Thermal properties: the material exhibits good thermal properties, contributing to thermal insulation in environments and buildings.

#### **Uses and Applications:**

In civil construction, the material can be used for road pavements, basins, embankments, and the construction of water containment tanks. Its high resistance to tearing and abrasion makes it suitable for projects that require durability and wear resistance. Additionally, thanks to its thermal properties, the material can be used for building insulation, contributing to improved energy efficiency by reducing heating and cooling energy consumption in buildings. Furthermore, in the automotive sector, it is employed for padding and acoustic insulation, enhancing the comfort of the vehicle interior, and reducing interior noise. The material also finds application in the footwear and do-it-yourself sectors for various creative purposes.