

APPLICATION OF RECYCLED WOOL RAW MATERIALS IN TEXTILE CRAFTS

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Certified recycling of textile materials complies only with the requirements and technical conditions of the basic Textile Exchange Global Recycled Standard 4.0 and the accompanying regulatory documents. As a result of the application of standardized conditions, recycled fibrous raw materials create the basis for the production of sustainable textile products. The technological requirements of the regulatory processes represent frameworks in which: recyclable materials, garneting and carding treatment, and possible products are considered.

Recyclable textile materials originate from “hard” technological waste, which starts from spun yarns and through fabric scraps are ending with sewing products. The distinction between hard and regular textile waste is of particular importance. All separated fibrous materials from the sliver to the drawn roving in the aspiration of the spinning machine are subject to recovery by reprocessing on the same technological equipment. Hard textile waste requires a recycling process that changes the characteristics of the fibres. Wool fibres are distinguished by their high value and ability to be repeatedly processed. This is the reason why, since the end of the 19th century, an organized system of collecting and recycling wool waste through mechanical processing was established. After the mechanical processing of reverse splitting and carding the wool fibres, a reduction in their initial staple length is observed.



The significant change in the recycled mass consists in the presence of residual parts of twisted yarns. More intensive carding of the waste will lead to additional breakage of the fibres. This will drastically reduce their spinning ability. The optimal technological regime of mechanical recycling allows for unprocessed residues, which are dissimulating or give artisanal authenticity to the yarns. Recycled wool raw materials can be used to make woollen yarns for industrial coarse goods or handicrafts.

The subject of this article is the application of certified yarn made from recycled wool fibres in sustainable hand-woven products. The goal of the development is to compile an exemplary assortment of recycled woollen yarns and possible hand-woven fabrics for household purposes.

Keywords: wool, recycling, hand weaving, artistic products.