

конструкторських рішень та технології пошиття. Аналіз сучасних досліджень показав, що найбільший вплив на збереження тепла мають: структура утеплювача, технологія з'єднання шарів, умови експлуатації та ступінь деформації волокон у процесі використання. Застосування інноваційних синтетичних наповнювачів, а також впровадження безшовних і зональних технологій пошиття дозволяють суттєво підвищити енергоефективність та довговічність зимових жилетів.

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DMYTRO MITCHENKOV, LIUDMYLA HALAVSKA
Kyiv National University of Technologies and Design

ANALYSIS OF THE ASSORTMENT OF KNITTED HEADWEAR AND ACCESSORIES

Purpose. *To analyze the assortment of knitted headwear and gloves and to segment them according to classification features.*

Keywords: *knitted headwear and accessories, knitted products, knitwear production.*

Problem statement. The modern assortment of knitted headwear and gloves is characterized by significant diversity, driven by the development of knitting machinery, the introduction of new yarns and fibers, the emergence of innovative decorative accessories, and the increasing demand for products with advanced functional and aesthetic properties. The market of these products is segmented by purpose, construction, materials, and

functional characteristics [1, 2]. Systematizing knowledge in the field of knitted headwear and accessories manufacturing enables the development of competitive design proposals aligned with current fashion trends.

Research methods. To accomplish the task, an analytical research method was applied, including data processing and systematization in the field of knitted headwear and accessories manufacturing.

Research results. Functionally, knitted headwear and gloves are divided into several main groups: **fashion products** focused on trends and aesthetics; **sports and outdoor products** providing protection against cold and moisture during active use; **protective products** certified according to international standards; **technical (smart/technical) products** integrating conductive fibers or heating elements; **eco/sustainable products** made from recycled or organic raw materials.

The classification of headwear by design features includes *beanies* (with or without a cuff), *balaclavas*, *bonnets*, *trappers* (ushankas), as well as seamless or flat-knitted models. The structure of *gloves* is represented by gloves (five-finger), *mittens*, *fingerless* gloves, and combined two-layer products.

Depending on the intended use, headwear and gloves are made from natural fibers (wool, merino wool, cotton), synthetic fibers (acrylic, polyester), as well as blended and recycled yarns. Special conductive threads ensure compatibility with touch screens, while fleece or laminated linings improve the thermal insulation properties of headwear and gloves. Functional characteristics are defined by the ability to provide thermal insulation, moisture management, wind resistance, durability against mechanical impact, as well as additional features such as touchscreen compatibility, reflective elements, and special palm coatings for improved grip [3].

Conclusion. The analysis of the modern assortment of knitted headwear and gloves indicates a high level of differentiation in terms of purpose, construction, materials, and functional properties. Key development trends include the integration of modern materials and technologies to enhance comfort, thermal insulation, and protective functions; expanded functionality through the use of touchscreen elements, reflective inserts, and special coatings; and a focus on sustainability, utilizing recycled yarns, which reflects global trends in sustainable development.

Market segmentation by functional purpose (fashion, sport/outdoor, work/PPE, smart, eco) enables manufacturers to effectively cater to the diverse needs of various consumer groups. Further development of knitted headwear and accessories should combine traditional protective and thermal

properties with innovative technologies and eco-oriented yarns and fibers. This will ensure product competitiveness on both domestic and international markets while meeting contemporary consumer demands.

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OLHA HARANINA, KYRYL VOROBIOV
Kyiv National University of Technologies and Design, Ukraine

ANTIBACTERIAL TEXTILE IN THE MEDICAL INDUSTRY: A REVIEW OF MODERN TECHNOLOGIES AND PROSPECTS

Purpose. *Analyze modern approaches to providing antibacterial properties to textile materials. Identify the advantages and limitations of the most common antimicrobial agents. Systematise the requirements for medical textiles: safety, biocompatibility, preservation of functional properties after repeated washing, environmental neutrality.*

Keywords: *antimicrobial effectiveness, medical textiles, textile materials, biostability.*

Objectives. Economically developed countries are observing a clear trend towards the continuous expansion of the range and growth in the production of medical devices, which differ in their functional purpose and manufacturing technologies [1]. This contributes to the formation of separate markets for medical textiles, which are developing dynamically. Given the significant volumes of imports of these products, it is relevant to create our own market for antibacterial products in our country [2]. Economically developed countries are observing a clear trend towards the