SYSTEMATIZATION OF THE COMPONENTS OF ERGONOMIC CLOTHING FOR MILITARY PERSONNEL BY FUNCTIONAL CHARACTERISTICS

OSTAPENKO Nataliia[1], STRUMINSKA Tetiana[1], RUBANKA Alla[1], OLIINYK Halyna[1], MAMCHENKO Yana[1]
1Kyiv National University of Technologies and Design, Kyiv, Ukraine
*Corresponding author: MAMCHENKO Yana: e-mail mamchenko.yo@knutd.edu.ua

Abstract: *The aim of the research: generalization and systematization of the constituent elements of military clothing according to their functional characteristics in order to design modern reliable and ergonomic products. Methodology. The methodological basis of the study is a comprehensive approach to creating clothing for the military. The methods of system-structural analysis, classifications, generalization and comparison are used. Results: The components of modern sewing products are structural and compositional elements, which do not include nodes, details, joints, which are conventionally divided into basic and additional; elements fixing the position of parts of the product relative to the human body; elements of adaptation to morphological features of the consumer. It is proven that the effectiveness of the product largely depends on the rational combination of its constituent elements, their mutual location and consistency of parameters. Conclusions: Based on the analysis of the range of modern military clothing of domestic and foreign manufacturers, their elements were separated and systematized according to their functional characteristics. It was determined that the creation of varieties of modern military clothing with predictable ergonomic characteristics is achieved through a purposeful and justified combination of structural and compositional components of the product structure.*

Key words: *constructive and compositional elements, military clothing, shape-forming elements, ergonomic clothing, serviceman.*

1. INTRODUCTION

The relevance of designing modern effective and ergonomic products for military purposes is due to the urgent need to provide them to the military, preserve the health and life of servicemen, create comfortable conditions for them to effectively perform professional tasks, expand the range of textile protective products and materials for their manufacture, etc.

2. EXPERIMENTAL PART

Based on the analysis of the range of military products, a wide range of their compositional and constructive solutions has been determined, which confirms the feasibility of grouping their constituent elements according to their functions.

3. RESULTS

Modern military clothing has a wide range of products. It is known that shoulder clothes include a sweatshirt, a shirt, including military uniform, flannel, jacket; loincloths include breeches, pants, including windproof, fireproof ones; combined include overalls and semi-overalls special, including windproof and fireproof ones. Among the suits, there are field, demi-season (jacket and pants), winter (insulated

jacket and insulated pants), camouflage, etc. [1].The functions of clothing and its elements are well-known, namely the creation of a comfortable microclimate of the clothing space; ensuring compliance of the design of the product with the consumer's anthropomorphology; extension of the service life; correct fit and fixation of elements in the appropriate position; ensuring the speed and convenience of putting on and taking off products, etc. [2]. Constituent elements of modern sewing products are details, articulations, nodes, etc., which allow to adapt them to the needs of the consumer to perform tasks in specified conditions. The diversity of the constituent structural and compositional elements of products of military purpose determines the expediency of their conditional distribution into different classification groups: basic elements and additional ones; elements that fix the position and limit the movement of parts of the product relative to the human body; elements of adaptation to morphological features of the military. The main elements of clothing for military personnel should include a hood, yoke, collar, lining, leia, cape, pocket, pouf, fastener, gusset, fastener bar, articulation, pleats, etc. The elements of regulation on individual parts of the product and adaptation to the morphological characteristics of the consumer include: belt, drawstring, cuff, pata, whip, tie and various accessories (elastic band, cord, textile fastener, regulator buckle), etc. Among the elements that fix the position and limit the movement of parts of the product, there are belt, straps, cuffs, a thumb lock, ties, elastic tape, etc. The composition of additional elements that ensure effective assembly of the product depending on the purpose and specifics of the professional qualification activity includes: ventilation elements, corrugated, elastic, damping inserts, evacuation loop, elements for securing insignia, fastening technical means, signaling, transformations, masking. The combination of the listed elements in the product affects the ergonomics, functionality of the product, protective characteristics, mobility of the military, cost of the product, etc.

Discussion. The work is devoted to the generalization and systematization of the constituent elements of military clothing according to their functional characteristics and requires further exposure of information regarding their shape, configuration, location, means and methods of connecting the elements with the main details, as well as the development of the graphic part of the information base.

4. CONCLUSIONS

The developed systematization of structural and compositional elements allows in the future to make a rational and justified choice of products for military purposes with predicted characteristics of their ergonomics and reliability.

5. REFERENCES

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