# THE STUDY OF METHODS FOR CREATING COMPLEX SHAPES IN THE MANUFACTURE OF TOP WOMEN'S ASSORTMENT

#### Muminova U. T.

Doctor of Technical Sciences (DSc), Professor,
Department of Fashion and Design

Malikova E.G'.

Master 2nd year joint faculty of AICP and TITLP

Annotation: This article is written about the study of methods for creating complex shapes, and its structure in the manufacture of women's top assortment. The development of women's clothing of complex shapes based on a design drawing, in which there are different types of outerwear for women.

**Keywords:** Structural elements, volumetric shape, clothing styles, patterns, production, fashion structure, layout.

## YUQORI AYOLLAR ASSORTIMENTINI ISHLAB CHIQARISHDA MURAKKAB SHAKLLARNI YARATISH USULLARINI OʻRGANISH

### Mo'minova U.T.

Texnika fanlari doktori (DSC), professor,
"Moda va dizayn" kafedrasi
Malikova E.G.

AICP va TITLP qoʻshma fakulteti 2-kurs magistranti

Annotatsiya: Ushbu maqolada murakkab shakllarni yaratish usullarini o'rganish va ayollarning yuqori assortimentini ishlab chiqarishda uning tuzilishi haqida yozilgan. Ayollar uchun har xil turdagi tashqi kiyimlar mavjud bo'lgan dizayn chizmasiga asoslangan murakkab shakldagi ayollar kiyimlarini ishlab chiqish.

Kalit so'zlar: Dizayn elementlari, hajmli kiyim uslublari, naqshlar, ishlab chiqarish, moda tuzilishi, maket.

# ИЗУ<mark>ЧЕНИЕ</mark> МЕТОДОВ СОЗДАНИЯ СЛОЖНЫХ ФОРМ ПРИ ИЗГОТОВЛЕНИИ ВЕРХНЕГО ЖЕНСКОГО АССОРТИМЕНТА

Муминова У. Т.

Доктор техни<mark>ческих н</mark>аук (DSC), профессор,

November 30th 2024

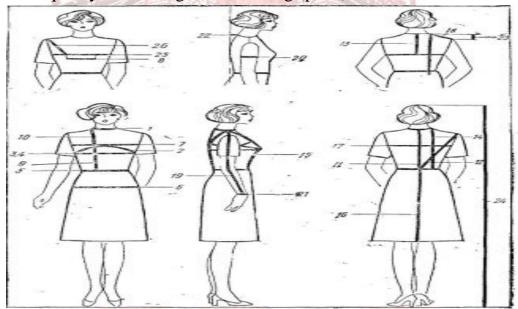
### Кафедра "Мода и дизайн" **Маликова Э.Г.**

Магистр 2 курс совместный факультет AICP и ТИТЛП

Аннотация: В этой статье написано про изучение методов создания сложных форм, и его строение при изготовлении верхнего женского ассортимента. Разработка женской одежды сложных форм на основе чертежа конструкции, в котором бывают разные виды верхней одежды для женщин.

**Ключевые слова:** Конструктивных элементов, объёмная форма, стили одежды, лекала, производство, структура моды, макетирования.

The highest goal of social production under socialism is the fullest satisfaction of the growing material and spiritual needs of society. The development of productive forces in our country is a means of improving the living standards of the people. The Soviet people increase the standard living, their aesthetic tastes are developing, and at the same time, the requirements for the quality of clothing are increasing.(pic.1)



Picture 1. The main measurement for women's clothing

At this stage, the leading criterion for the quality of clothing is its artistic level – beauty. Clothes should not only be beautiful in execution, but also necessarily fashionable in shape.

Fashionable clothes cannot be obtained without knowledge of modern design methods. Each form option offered by fashion requires a very thoughtful design solution. At the same time, the connection of structural elements with the shape of the product is important. Modern fashion, along with clear design solutions, offers rather voluminous complex shapes that require a more serious approach to their solution. The complexity of the shape can be

November 30th 2024

achieved by covering the whole and individual parts. The purpose of this work is to develop women's lightweight clothing of complex shapes based on a design drawing in patterns of various cuts and individual details of the dress. [1]

Various methods are used to create complex shapes in the manufacture of the top women's assortment:

Constructive (mechanical). It provides a three-dimensional shape of the parts due to the complete or partial division of the material into parts with constructive, constructive - decorative lines and tucks. The advantage of the method is the possibility of obtaining a shape surface of any complexity from any materials with high fidelity. This method is characterized by stable fixation of almost any shape and its shape stability in operation. It does not require complex special equipment to implement it. As a result, constructive means are often preferred when creating three-dimensional shapes of various products. The advantage of the method is the possibility of obtaining a shape surface of any complexity from any materials with high fidelity. This method is characterized by stable fixation of almost any shape and its shape stability in operation. It does not require complex special equipment to implement it. As a result, constructive means are often preferred when creating three-dimensional shapes of various products. [2]

Shaping using the molding properties of materials (physic-mechanical). This method provides a three-dimensional shape due to the mesh structure of textile materials, their drapery or bending (straightening) of the threads. In them, under the influence of external forces, rectangular cells formed by the warp and weft threads acquire the shape of a parallelogram, which ensures a three-dimensional shape. To preserve the resulting shape, edges, gaskets or seams must be laid along the edges of the parts, while one of the parts included in the seam must not have a fit. The limitations of using this method of shaping are due to the ability of materials to change the angle between the warp and weft threads to a certain limit (the maximum skew angle is 10-150), as well as the ability of materials to relax over time due to the redistribution of angles. In connection with the last remark, it is advisable not to carry out shaping on the support surfaces. [3]

Shaping using the plastic properties of fibers. It is based on the thermoplastic properties of fibers, that is, the change in the size of fibers under the influence of heat, moisture and pressure on the molecular structure of fibers.

Designing deformations along sections of parts (fit, stretch) and fixing them with the help of OBE (suturing, pulling);

OBE is most often used when working on the shape of outerwear made of woolen fabrics when they want to avoid the use of visible divisions (tucks). For example, to create a bulge in the details of the backrest in the area of the shoulder blades, the fabric is pressed

along the shoulder section and from the armhole side. Another option is possible: pull the fabric along the bend in the area of the blades;

Changes in the angle between the warp and weft threads (cutting the fabric taking into account the direction of the threads in the details and the acting forces);

The use of frame elements (shoulder pads, shape-resistant pads and edges.).

The limitation in the use of this method is due to the thermoplastic properties of the fiber. The advantage of the method is the possibility of forming multi-layered packages. Considering that relaxation of materials may occur over time, it is advisable to use this method to form sections of the product corresponding to the support surfaces. [4]

Combined. It is a combination of all three methods. In this case, it is possible to achieve high accuracy in reproducing the shape and its stability in operation.

Also, to create complex shapes in the manufacture of clothing, a layout method is used, which allows you to present a three-dimensional shape of clothing made of textile materials directly on a three-dimensional object (a mannequin or a human figure). In this case, it is possible to achieve high accuracy in reproducing the shape and its stability in operation. The combined shaping method is based on the simultaneous use of several methods.

#### LIST OF LITERATURE

- 1. Carbios: ligne de biorecyclage du polyester. №133-octobre/novembre/decembre 2023-ISSN 1637-8962.
- 2. Tendances Chaussant par "The Lycra Compagny".
- 3. Techtextil Texprocess Innovation et e'co-conception.
- 4. 4.Me`thode de trace`s v`etements fe`minins.