



Exploring Innovative Techniques for Formation on Mannequins: Incorporating Optical Fibers for Aesthetic Enhancements



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Abstract

The given text selection provides context on the technique of formation on the mannequin, the use of optical fibers, and various elements involved in fashion design. It also discusses the importance of fabric selection, specifically organza fabric, and highlights the characteristics of this type of fabric. The text mentions the benefits and challenges of formation on the mannequin, as well as the significance of color, spaces, and materials in the design process. The importance of experimentation and creative approaches in fashion design is also emphasized. The text selection discusses encouraging beginners to implement and create organza designs using innovative solutions in mannequin design. It mentions the benefits of exhibitions, setting up training sessions for using cassettes in the workplace, and using creative approaches with interwoven trains and warp ribbons. The focus is on promoting experimentation, invention, and drawing shapes on the mannequin to inspire creative ideas and provide a richer environment.

Keywords: formation on mannequin, Optical fiber, Using several lighting technique.

Introduction

One technique for designing and preparing the pattern is forming on the mannequin, which involves arranging textiles on the mannequin to create harmony between the material and the design. [1]

The ability to create complex designs is provided by formation on the mannequin; it is a precise technique for preparing patrons that are challenging to prepare in flat ways, and it guarantees results in terms of the degree of adjustment and provides the time for adjustment and adjustment; it is a manual adaptation of the fabric in order to obtain the shape and effect of the required design, and any fashion designer must be proficient in this technique. The results of the formation on the mannequin are good in terms of the degree of adjustment, and it fosters. [2, 3]

The person responsible for shaping models in world fashion houses uses designer drawings to implement design drawings or design ideas, ensuring that the products of the modeling process on the

mannequin correspond to the designer's ideas. However, if the formation process begins without any prior planning, it will lead to a collection of costumes that are different in form and style, making it impossible for this disparate collection to form a real collection that can be displayed in haute couture houses. [4]

We often hear the term "fiber optics" or "fiber" without really understanding what it means or how it is used. However, these are transparent fiber glass smaller than the hair diameter used in optical communications due to their ability to broadcast over large distances and support extremely high data transfer rates.

The technique of forming on the mannequin to highlight the aesthetic shape, and here we use optical fibers.

What is the formation on the mannequin?

Formation is the transformation of the material into a product or a pattern of the clothed product

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commensurate with the shape of the body to be made of the clothed piece. [5, 6]

Formation on the mannequin

A three-dimensional style similar to the sculptor's style during his creation of his sculptures, because it works directly on the mannequin to form the various parts of the pattern and install them together until it reaches the desired effects by collecting the lines of dysfunctional seamstresses. [7-9]

As it works directly on the mannequin to shape the various components of the pattern and install them together, the form on the mannequin is a three-dimensional style that is comparable to the sculptor's style during the development of his sculptures. The intended results by assembling several seamstresses' lines. [2]

In the middle of the nineteenth century, fashion makers discovered that the style of clothing production of engineering designs close to the size of the customer and then adjusted and modified to match his body, a style that requires a long time and it is not given freedom of design, innovation and flexibility, so fashion makers developed the classic method of making the costume or forming the fabric on the body to a design method by which the fabric can be formed on a mannequin of a size identical to the customer. Hence, the use of formation on the mannequin began in general and wide with the aim of design, and since the beginning of the emergence of formation on the mannequin was in France, it was called the classic French formation style, and this method has not changed much to this day, which is the method used by the majority of haute couture designers as it is used in an increasing way for ready-made garment makers. In general, the clothes made inside fashion houses are often made by hand and adjusted for each customer in a special capacity, and all designs in these houses are translated according to the characteristics of the customer's body that will be worn and for this the value of the technical clothing and price is very high, because this includes thin materials at a high level of quality and manufacture, each customer. [2]

Mannequin, different fabrics

woven material that is shaped like a body to fit certain measurements, patterns, models, then machine- or hand-sewn for one or more people to accomplish specific purposes

The potential to demonstrate probability theory's capacity for diversity and renewal while incorporating it into designer fashion has resulted in a variety of configurations from the basic costume's design, even when the fewest number of decoration units were used. By providing answers and opportunities for experimentation with probability theory's wide vocabulary, these configurations enhanced the de-

signer's artistic vision and validated the uniqueness of the work. [10]

He pointed out that formation is a link between the tools and materials that the artist mixes with his thought, sensory components, innovative abilities, and subjective experiences to produce original and creative costumes. It is the method used in the development of fabric on the mannequin and its results are good in terms of the degree of control. It is used to design, obtain models or modify flat models and is a high-end knitting technique with sufficient information about the texture and textures to meet the design requirements. [11]

Optical fiber

Since it can transmit data at a faster rate and over greater distances than traditional wire cables, this flexible transparent fiber composed of plastic or pure glass (silica) is used in optical communications. Its diameter is slightly thicker than that of a human hair. [12]

A specific design can be made on a mannequin by forming it; however, the holographic mannequin's three geometric dimensions are taken into consideration in order to form a design directly on it. Fabrics, such as bafta or raw cotton, are used in the formation and design, and they are all distinguished by the clarity of their fabric lines when used to create the desired design. To create the basic designs used in the formation on the artificial body, smooth transparent paper with cross-lines printed at one-inch intervals can be used in the mannequin formation. This paper is easy to form and makes the direction of the fabric in it clear. [2]

Formation elements

Forming on a mannequin is an important study and an important work to understand fashion and the method of compatibility with the different types and fabrics that require study. The method of **forming** on a mannequin is an artistic method for the method of shaping and highlighting the fabrics on the mannequin. Forming different cuts with fabrics. Here we use organza fabrics with light fibers that work to highlight the aesthetic art. For the dress, I use the aesthetic values and available fashion styles, while creating a model design using organza fabrics and light fibers.

Formation elements on the mannequin

Dots

They are the simplest elements that can be included in any formation, and they determine the directions and steps to work towards determining a point. [13]

The point is the beginning of everything, and it consists of small dots, then it becomes a line at the

end of its assembly, and it can be combined into geometric shapes.

Fonts

Calligraphy is considered an important element in fine art work because he creates a design after assembling the lines in order to visualize his ideas formally. [14]

For creativity to create spaces and voids by forming cuts on

Spaces

It is the area seen between lines that move in various directions, either forward or backward, raising or lowering, or both. It might be subtle and tend to fade, or it can be conspicuous. [15]

The space in mannequin compositions, which are a type of plastic art, is the culmination of several

It is the space between the shapes, which also symbolizes the width of the shapes, or the surface that the shape is set on, among the details in an elegant, concentrated form.

The general principles that control the method of distributing spaces in design and while drawing cuts on a body.

Mannequin before starting the molding process

The distribution of gaps in the cuts between the mannequin's size, form, and measurement and the design's shape must take balance into consideration.

The distribution of spaces in the design should be compatible with the purpose of the design and what this distribution requires. The regions of the cuts should be distributed so that the design achieves unity with diversity and the dominance of part of it.

For emptiness

Space is related to the nature of the place, affects the activities of the volumes that reside in it, and varies between surrounding spaces with bodies, permeating them, or running out of them, because there was a vacuum created.

Color

One of the most significant and fascinating aspects of design is color. Without colors, it is impossible to imagine the world of fashion.

It has a broad reach and is ingrained in who we are and the nature of our emotions. And I'm headed there

Material

Since the beginning of time, man has participated in the creation of the work of art. In the realm of

art, the medium is regarded as the foundation for numerous expressions.

Different kinds of fibers, some natural and others synthetic, are used to make fabrics. And the visual artist working with the mannequin is the one who, via working with its raw materials (fabrics), learns from society what its tone, rhythm, and necessities are.

Fabric direction

The fabric's direction refers to the longitudinal and transverse lines that are used to weave it; certain designs require a change in direction as the fabric's width increases or there are cuts made in it.

A p is occasionally added when cutting a portion of the cloth along the rib or in the direction of the rib. Longer lifespan for current apertures and corners. It also gives since the drape folds fall freely and slantedly.

Design-wise, the intercostal route exhibits more flexibility and expansion than the longitudinal tissue direction. Or informal, it's utilized in a lot of designs that need to draw attention. [16]

The importance of formation

- It gives a sense of the body's three dimensions (length, width, and depth).
- An easy and quick way to obtain forms.
- It reduces adjustments and rehearsals of the garment during the sewing process

Fabrics:

One of the key elements influencing the mechanical and physical characteristics of a material is its structural makeup.

The fabric a product is made of has an impact on its quality and fit for its intended use.

A crucial part

Fabrics may be categorized into three primary groups based on how they were made

First Section: Woven Fabrics

This kind involves utilizing two different kinds of threads twisted at a right angle to one other in order to create the necessary textile structure.

Section Two: Fabrics Woven with a Single Thread

Knitted textiles are an example of a fabric that may be made with just one thread because the threads overlap each other to form rings without needing to be interlocked.

Section three non-woven textiles are covered

The fibers of this variety are obtained mechanically or chemically, and weaving operations are not

necessary. Examples of such methods include felt and broadcloth

***Aruganza**

It is a transparent, thin, basic fabric that is typically made of silk. Nylon or polyester fiber yarns are added to a lot of organza fabrics during production. Many mills in Zhejiang Province, China, located along the Yangtze River weave silk organza. India's Bangalore area also produces coarse silk organza. The opulent organza made of silk is produced in Italy and France.

Evening and wedding gowns are made using organza. In order to create effects in bedrooms and across rooms, it is also utilized in interior design and décor.

Properties of organza fabric

We list below the most important positive and negative characteristics of this type of fabric:

Features of organza fabric

Below are the most prominent and unique characteristics of organza fabric

Breathable: The perforations in the organza fabric facilitate easy airflow into the body due to its texture.

Transparency and elegance: Organza is a translucent fabric due to the way its fibers are weaved, which results in tiny holes throughout the fabric. The bigger the number of holes in the fabric, the better the quality.

The beautiful and elegant manner that organza fabric absorbs and reflects light is what makes it so appealing. It looks different from other varieties of silk and has a particular aesthetic because of the quality of the silk strands it contains and the various processing techniques the fibers are exposed to before weaving.

Sturdy and non-shrinking: Over time, organza fabric does not fray, shrink, or acquire any other flaws.

Maintaining shape: Organza fabric holds its shape well, so even if it is folded repeatedly, it will continue to fold in the same way that it does when used to make curtains or pleats when used in gowns and other formal attire. [17]

Simple to clean: No extra materials are needed. Instead, ordinary cleaning supplies may be used to give it a wash. It can withstand organic solvents used in a range of cleaning supplies. If you keep it clean, you won't need to wash it as often. It is stain-resistant as well.

The drawbacks of organza cloth

The drawbacks of this cloth are listed below. [17, 18]

Easy to wrinkle and tear: Because of its thinness, this fabric wrinkles easily. Even with its strong fibers, it may also tear easily if there aren't enough layers of fabric, and if the outer layers aren't covered by other layers, rip marks may show. [18, 19]

Stiffness and rigidity: This property is caused by the pre-weaving treatment applied to the fabric's fibers. Organza textiles are not as soft as typical silk fabrics, which they mimic, and are instead regarded as robust materials.

Delicate fabric: Among the most delicate materials is organza.

Delicate fabric: One of the most delicate materials is organza, which is made of very thin threads that are tightly wound before weaving. In order for it to become clear.

Expensive: In spite of its superior quality, the price is a little bit steep.

The necessity of a lining: When used to make clothing or curtains, its transparency, which reveals what is underlying, and the numerous holes it contains necessitate a thorough lining underneath.

Challenges in processing: One of the trickiest processing procedures is cutting organza fabrics since they are slippery and need a variety of expert techniques and talents during the production process.

For applied operations

Experimentation is considered one of the most important approaches to implementation when using different materials and combining them

Experimentation requires that we have a design idea through which we can express a special artistic vision

Non-random, and exploiting the skills and experience of female researchers in the field of fashion design

To produce evening dresses with a renewed character and in line with fashion challenges in easy and low-cost ways.

The researcher carried out the practical applications by following the following stages [20]

Stages of preparing the experiment. Preparing the tools and parts that you will use in the applied processes:

1. The tools and pieces that will be used in making evening dresses have been collected.
2. Choosing the organza fabric material to make a dress interwoven with ribbons on a miniature mannequin using light threads.

Summary

The context provided discusses the technique of forming on the mannequin in fashion design. It

highlights the importance of this technique for creating complex designs, ensuring adjustments and control, and achieving the designer's vision. The text also mentions the use of organza fabric and light fibers in creating flowing dresses. Additionally, it touches upon the elements involved in formation, such as dots, fonts, spaces, emptiness, color, fabric direction, and materials. The properties of organza fabric, including breathability, transparency, elegance, shape retention, and ease of cleaning, are mentioned. The drawbacks of organza fabric, such as wrinkling, tearing, stiffness, and delicacy, are also mentioned. The text emphasizes the significance of experimentation in fashion design and the need for a design idea and artistic vision to express through materials.

Conflict of Interest

There is no conflict of interest in the publication of this article.

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