

## **Equipment Design in the Design of Industrial Products**

## Valijonov. T. M

Kamoliddin Behzod, National Institute of Art and Design, Senior teacher of the "Design" department

**Abstract:** From the beginning of the design until now, in order to produce a consumer product of various complexity, it is necessary to draw up its necessary project. It is natural that many errors appear in the design, shape and even style of the product created without a necessary project. The project composition and design of the product allows to match the exact dimensions of the manufactured item, to fully study the volumetric shape and design aspects of the product, and to perceive the shape of the product as an object.

This article talks about the importance and production of furniture products in industrial design.

Keywords: art, artistic design, technique, complex, skill, material, solution, visualization.

The complex solution of artistic and technical design problems in the field of art not only increases the quality of the finished product, but also serves to create a comfortable spatial environment for it.

According to the design schedule, the product checks the dimensions of the parts, compliance with all the requirements of the actual existing product. The main requirement for a product project is that it provides a complete picture of the design and form, information about the products, their individual parts and how they are connected. When solving practical problems that arise in the design project, using consistent knowledge in creating design and the skills of rational selection of necessary constructive materials, not to get lost in a difficult situation that occurs when creating a design project, to be able to come out of such situations with a perfect solution, to analyze the situation in the right direction, clearly and completely makes it possible to set good goals, as well as to achieve these goals.

The main creative process of designing design products is very complex, multi-stage, and it is not subject to any regulatory requirements. Any specialist-designer, relying on his high experience, not only finds a unique and suitable way to solve the problematic aspect of the project, but also forms his artistic vision in the project - a real work of art. Creates a z-style pattern.

Implementation of projects is carried out by expert carpenters and mechanics.

And technologists should know well the constructive aspect and physico-chemical properties of the materials used, the necessary rules in design, the basic technology of product production, the necessary tools and many other things.

With the help of furniture, a person arranges a place for the comfort of work and rest. In the field of furniture design, its perfect design, size, color, style, along with the development of industrial products, aesthetically allows each member of the design to become a designer. Based on the needs of the consumer of the furniture product, the designer should combine the aesthetic functions of the furniture, its durability, and the design features in his project.

From the manufacturer's point of view, furniture should be produced with reasonable use of material and labor resources. The art of a designer, constructor and technologist is to find a compromise solution to ensure high-quality furniture, comfortable working and living conditions, and to meet aesthetic requirements. In the development of furniture design, new trends should be taken into account and new technologies, progressive equipment, construction and finishing materials should be used in the design. The process of creating a furniture structure should combine artistic and engineering design activities. In the creation of any furniture design project, the product is the main creative process, which depends on the interaction of various factors that affect the characteristics of the products and the implementation of the project, revealing its desired aesthetic aspects. 1 must also be governed by:

1) Methodologically, the unity of directions;

2) Ergonomic and anthropometric factors of the product;

3) Volumetric-spatial and compositional solutions - size, shape, color;

4) From the volumetric-spatial point of view - static, dynamic form;

5) In terms of composition, it is necessary to use symmetry, asymmetry - proportion - scale, rhythm, module - nuances, contrast - volume-spatial structure, tectonics, etc.

Proper assessment of the impact of each of these factors in a design project is the result of professionalism. Overestimating the necessary conditions for creating furniture products, exaggerating their shakily importance, can lead to the loss of artistry, harmony and comfort of the project and turn it into an unnecessary design product. The main factors are evaluated depending on which main aspect the value of the rest is focused on.

Furniture products are portable or specially installed products for equipping various households and public buildings, in landscape design, entertainment areas and other places necessary for human needs.

The furniture assortment is the composition of products for equipping buildings for a certain purpose and certainly for human social needs, as well as for creating comfort in his living conditions.

Furniture assortment is the composition and proportion of individual types, as well as general unity in products or production, distribution or consumption.

A group of products assembled together for a specific area, artistically styled and interconnected according to different constructive features is called a furniture collection. In furniture, in contrast to their set group, the set type can be seen as a whole in relation to the set. Furniture is classified according to its composition and functional purposes, constructional-technological characteristics, used materials and its production properties for consumption. According to the above-mentioned main characteristics and purposes, furniture is divided into furniture for residential areas and public buildings.

The exterior design of furniture should embody the combination of modern life and rapid technological development, which is entering the daily life of a person. The characteristics of innovative modern materials and the speed and length of large-scale production have a great impact not only on the appearance of products, but also on their popularity.

Furniture products are the most basic part of the social needs of a person throughout his life - during his work process and in residential buildings necessary for living.

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