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DESIGNING WOMEN'S FUR CLOTHING BASED ON RESOURCE EFFICIENCY AND WAYS TO IMPROVE COOKING TECHNOLOGY

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Abstract: This article presents a study of the physical, mechanical and hygienic properties of women's outerwear made of natural fur and leather.

Keywords: waste, material, natural fur, decoration, shred, construction, measure, waste-free technology.

Аннотация: В статье представлено исследование физико-механических и гигиенических свойств верхней женской одежды из натурального меха и кожи.

Ключевые слова: отходы, материал, натуральный мех, отделка, лоскуток, конструкция, мера, безотходная технология.

Annotatsiya: Ushbu maqolada tabiiy mo'yna va teridan tikilgan ayollar ustki kiyimlarining fizik, mexanik va gigienik xususiyatlari o'rganilgan.

Kalit so‘zlar: chiqindi, material, tabiiy mo'yna, bezak, maydalash, qurilish, o'lchov, chiqindisiz texnologiya.

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Currently, the development of the national economy is of great importance for the rise of the economy of our republic and the reduction in the influx of imported products and raw materials. After Uzbekistan gained independence, our republic, which had previously become a source of raw materials, began to take measures to produce its improved, processed, superior products in all sectors of production and achieved considerable success in this regard. [1]

The contribution of chemists to the development of the fur industry is especially great. The reason for this is that with the development of the chemical industry, the leather and fur industries developed. [2].

The Action Strategy for the five priority areas of development of our republic, in particular, "raising industry to a new level of quality, processing local raw materials, accelerating the production of finished products, using predominantly newly mined secondary resources". Open domestic and foreign markets, imports; o The tasks of "providing competitive domestic consumer goods with substitutes and mastering modern technologies that allow achieving economic efficiency" have been defined. In this regard, among other things, scientific research aimed at the use of resource-saving technologies based on the use of modern technologies that ensure sustainable operation of clothing industry enterprises and effective methods for processing existing secondary raw materials is of great importance. [3].

Resource-saving technologies are a set of technological means and processes that have the least impact on natural ecosystems and humans at all stages of the production cycle. The concept of resource conservation includes several options for environmentally positive business activities: from direct resource conservation to industrial and household waste and recycling of products, as well as reuse of products.

Supplier selection consultations cover several options for improving recycling efficiency: from direct supply to industrial production and renewable products, as well as product recycling. from direct supply to industrial production and renewable products, as well as product recycling. [4].

The basis of resource conservation is the rational use of energy and resources (with a constant reduction in consumption and losses), recycling of non-renewable natural resources The basis of resource conservation is the rational use of energy and resources (while continuously reducing consumption and losses), recycling non-renewable natural resources and preventing environmental sustainability limits from being exceeded. In

addition, to limit the loss of resources and prevent pollution, it is necessary to take into account the intensity of the impact of industrial and household waste on the environment when they are received. For example, it is much easier and cheaper to prevent an increase in the types and sizes of waste generated by clothing production than to clean up an already polluted atmosphere. [5]

Resource saving includes: low-waste and non-waste technologies. This allows for maximum technical savings in materials, raw materials and useful waste and resources. Theoretically, it is impossible to achieve complete waste of raw materials, because the flow of raw materials is one-way, and all of it ultimately becomes a product.

Waste-free technology is a chain of technological processes in which waste from one production becomes raw material for another (it is assumed that these raw materials will be used without waste). The use of industrial waste is not only economically important, but also helps to obtain valuable raw materials suitable for recycling and eliminate sources of environmental pollution. In the process of economic activity, the resources of an enterprise occupy a central place, so saving resources in an enterprise is very important. Financial policy in the field of resources is aimed at influencing the long-term state of the enterprise, as well as determining its current state. It determines trends in economic development, the promising level of scientific and technological development, and the state of the enterprise's production capacity. [6].

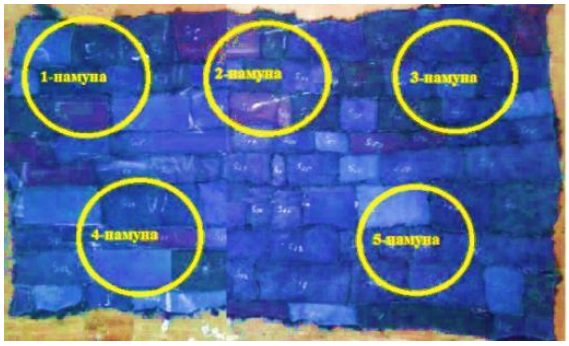
The introduction of new equipment and technology is a complex process. It is generally accepted that the improvement of technical means reduces labor costs and the share of labor in the cost of a unit of production. However, now technological progress is becoming more and more expensive, since it requires the creation and use of increasingly expensive machines, robots and computer control; an increase in environmental protection costs will be prevented. However, the competitiveness of an enterprise, its ability to remain in the market of goods and services primarily depends on new equipment and technologies of goods manufacturers, allowing the production and sale of high quality goods with the efficient use of material resources. resources. Therefore, when choosing equipment and technology options, an enterprise must clearly understand for what tasks - strategic or tactical - the purchased and implemented equipment is intended. Considering the properties of fur, the use of resource-saving technologies in clothing production processes is of particular importance. The production technology of fur products depends on the characteristics of semi-finished fur products, and their accounting is one of the important stages of resource saving.

Fur industry enterprises process dozens of different types of fur raw materials and fur products. In this case, the skins differ as follows: - size, thickness and strength of the skin; - due to the length, density, color, shine, softness, strength and cut of the fur layer. [7].

Study of the physical, mechanical and hygienic properties of women's outerwear made of natural fur and leather.

Breathability. To test the breathability of a real fur bag, 10 round samples are cut out and prepared. The air permeability of each sample is measured in arithmetic values.

Samples taken for testing:

a) 

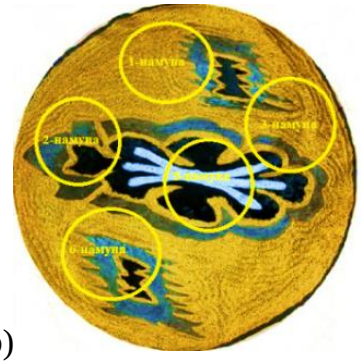
b) 

Fig. 1.

a- Sample of packaging made from natural fur, made using existing technology;

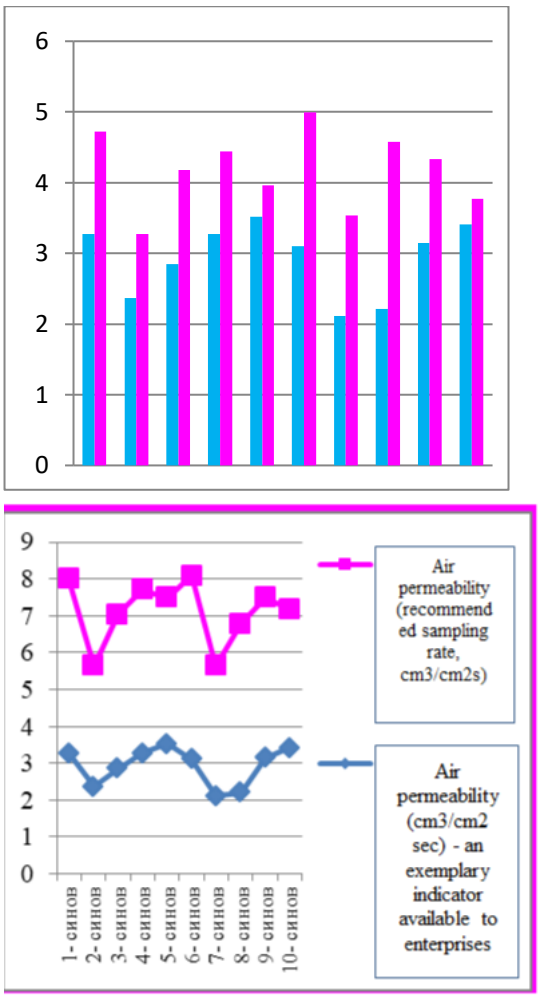
b- Sample of natural fur packaging made using the proposed technology.

Intended for measuring the air permeability of packages made of natural fur, it is carried out using the AP-360SM device.

The air permeability parameters of the tested fur bags in accordance with GOST 12088-77 are presented in the table.

s/n	Name of measurement characteristic	Options									
		I	II	III	IV	V	VI	VII	VIII	IX	X
1	Air permeability (cm3/cm2 sec)	4.75	3.31	4.21	4.40	3.93	4.99	3.54	4.58	4.31	3.72

Based on the results obtained, graphs of the air permeability of natural fur packaging are shown.



Air permeability chart for natural fur packaging.

During the experiment, using a special device “AP-360 SM”, the air permeability of the existing sample of natural fur packaging and recommended samples is determined. The air permeability values determined in the samples were compared. [8].

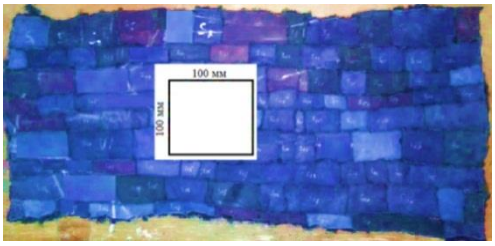
The results show that the air permeability of bags made of natural fur, obtained on the basis of the proposed technology, is significantly higher than the air permeability of bags made of natural fur, obtained on the basis of existing technology. [9].

Weight. Determination of the weight of packages made of natural fur and leather is carried out using the GX-400 device.

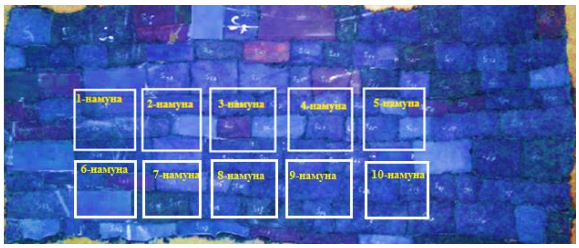
To determine the mass of packaging made of natural fur and leather, 10 samples with a surface area of 10 cm2 each are prepared. The arithmetic values of the mass of each of the 10 samples are measured separately.

Samples taken for testing:

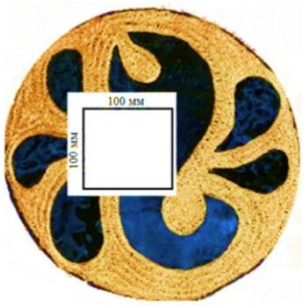
a)



b)



c)



d)

Fig. 2. a, b - samples of natural fur packaging made using existing technology;

c, d - samples of natural fur packaging made using the proposed technology.

During the test, the mass of available samples of packaging made from natural fur and leather and recommended samples was determined,equal to an area of 10 cm2. The masses determined in the samples are compared.

The results of studies in accordance with GOST 38-11-72 of samples of tested packaging made of natural fur and leather with a surface area of 10 cm2 are shown in the table. The mass indicators of natural fur packaging samples are equal to 10 cm2 of surface area.

Name of measurement characteristic	Options									
	I	II	III	IV	V	VI	VII	VIII	IX	X
10 sm^2	5.14	4.59	4.35	4.12	4.21	4.27	4.52	4.66	4.72	4.42

Based on the results obtained, graphs of mass indicators of natural fur packaging were constructed.

2. Mass of a sample with an area of 100 cm2, g. Recommended sampling frequency.

The indicator graph was obtained based on the mass of samples of natural fur packaging, equal to a surface area of 10 cm2.

During the experiment, using a special device “GC-400”, the mass of the available sample of natural fur and leather packaging and the recommended samples was determined. The measured masses of the samples were compared. The results show that the weight of bags made of natural fur and leather obtained using the proposed technology is significantly lighter than the weight of bags made of natural fur obtained using existing technology.

In conclusion, it should be said that based on the results of experimental tests, it was established that the weight of bags made of natural fur and leather made using the proposed technology is much lighter than the weight of bags made of natural fur made using existing technology.

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