Table 2 – Results of calculation of coefficient of thermal conductivity of materials

Indicator name	The sample number							
	1	2	3	4	5	6	7	8
Material name	Slimtex-100	Slimtex-150	Slimtex-250	Hoopon-100	Hoopon-150	Hoopon-200	Isosoft-200	Isosoft-250
A coefficient of thermal conductivity of materials, W / m · ºC	0.019	0.025	0.017	0.027	0.050	0.066	0.038	0.062

The carried out experimental researches allowed to define values of factors of heat conductivity of new kinds of heat-insulating materials. Values are obtained and graphs of temperature variation in time for the upper material layer are constructed at a heat flux of 180 W. The results of the work will allow selecting the materials with the best thermophysical and physicomechanical parameters that will be used in the formation of packages of materials to improve the ergonomic, hygienic and operational performance of special protective clothing.

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COLLECTION OF JACQUARD CARPETS
КОЛЛЕКЦИЯ ЖАККАРДОВЫХ КОВРОВ

Prishep A., Samutsina N., samusiya@mail.ru
Vitebsk State Technological University, Vitebsk, Republic of Belarus
Прищеп А.В., Самутина Н.Н.
Витебский государственный технологический университет,
г. Витебск, Республика Беларусь

Key words: collection of carpets, carpet design, artistic design.
Ключевые слова: коллекция ковров, дизайн ковра, художественное проектирование.

Abstract. With the use of modern information technologies and package of applied graphical programs Adobe Photoshop pictures of a collection of jacquard carpets were designed, which are supposed to perform two-canvas method from

polypropylene yarn. Every pattern of carpet of collection is an individual from the point of view of the psychology of color, causes some pleasant associations that were considered during the creation of the collection as a whole. Sketches are located in such sequence that allows the most active to open up their color and graphic characteristics.

Аннотация. С использованием современных информационных технологий и пакета прикладных графически программ программы Adobe Photoshop создана коллекция рисунков жаккардовых ковров, которые предполагается выполнять двухполотным способом из полипропиленовых нитей. Каждый эскиз коллекции является индивидуальным с точки зрения психологии цвета, вызывает определенные приятные ассоциации, что учитывалось при создании коллекции в целом. Эскизы расположены в такой последовательности, которая позволяет наиболее активно раскрыться их цветовым и графическим характеристикам.

With the aim of expanding the range of carpets, a collection carpets was created, which are was supposed for perform two-canvas method using the author's design. The following tasks are set in the work:

– to study the actual motivations for modern carpet weaving;

– to establish the main trends of the artistic transformation of the selected motif;

– to develop a collection carpets.

In the search of new phenomena in art of contemporary textiles, we studied ornamental complex of the popular Belarusian fabrics and we installed actual motivations for modern home interior: stylized shapes or parts of peacock feathers. We analyzed ways and methods of artistic transformation of the imaginary and symbolic foundations. We founded the source of inspiration, created by famous designers of interior products.

It is determined that the peacock is a symbol of family happiness. It is credited with qualities such as royalty and beauty, incorruptibility and fearlessness. Images of this bird can be seen in a variety of crafts products in many countries.

Beautiful peacock feathers have always attracted attention. Plastic lines and the proportionality of the elements of form, rhythm all these are taken as a basis, the designer is reworking the motifs and images of birds.

On the basis of the obtained data the collection of jacquard carpets was developed, consisting of eight sketches. The graphic series is built on symmetry, asymmetry, curvilinear lines, which contrast to the tone of the background. Plastic shape of the line allows to achieve a visual effect using only exquisitely complex configuration (figure 1). The feathers are smooth and have rounded shapes at the end more focused on ovals whith the round «eyelet» the spot with the active element in the center. Curvilinear elements are present from the beginning of the barrel of the pen all along the length.

Every single sketch of the collection is made with Adobe Photoshop and is an individual from the point of view of the psychology of color, causes some pleasant associations that were considered during the creation of the collection as a whole.

Sketches are located in such sequence that allows the most active to open up their color and graphics features.

The basic idea, the idea of the collection is the development of the artistic image and composition, creating a conceptual and compositional unity. All of sketches can be divided into primary (active) and secondary (passive). The major is built on the principle of symmetry, secondary – asymmetry.

When we build a visual effect of the large, medium and small parts, we allocate them in main and secondary lines in color and size. Thus in the composition of the pieces are manifested the principles of nuance and contrast. While not the motives, but only their individual areas of focus, performing the composition of the ornament functions of the dominant. Rhythmic organization emphasizes the color rhythm that manifests itself in different thickness and tone of the picture.

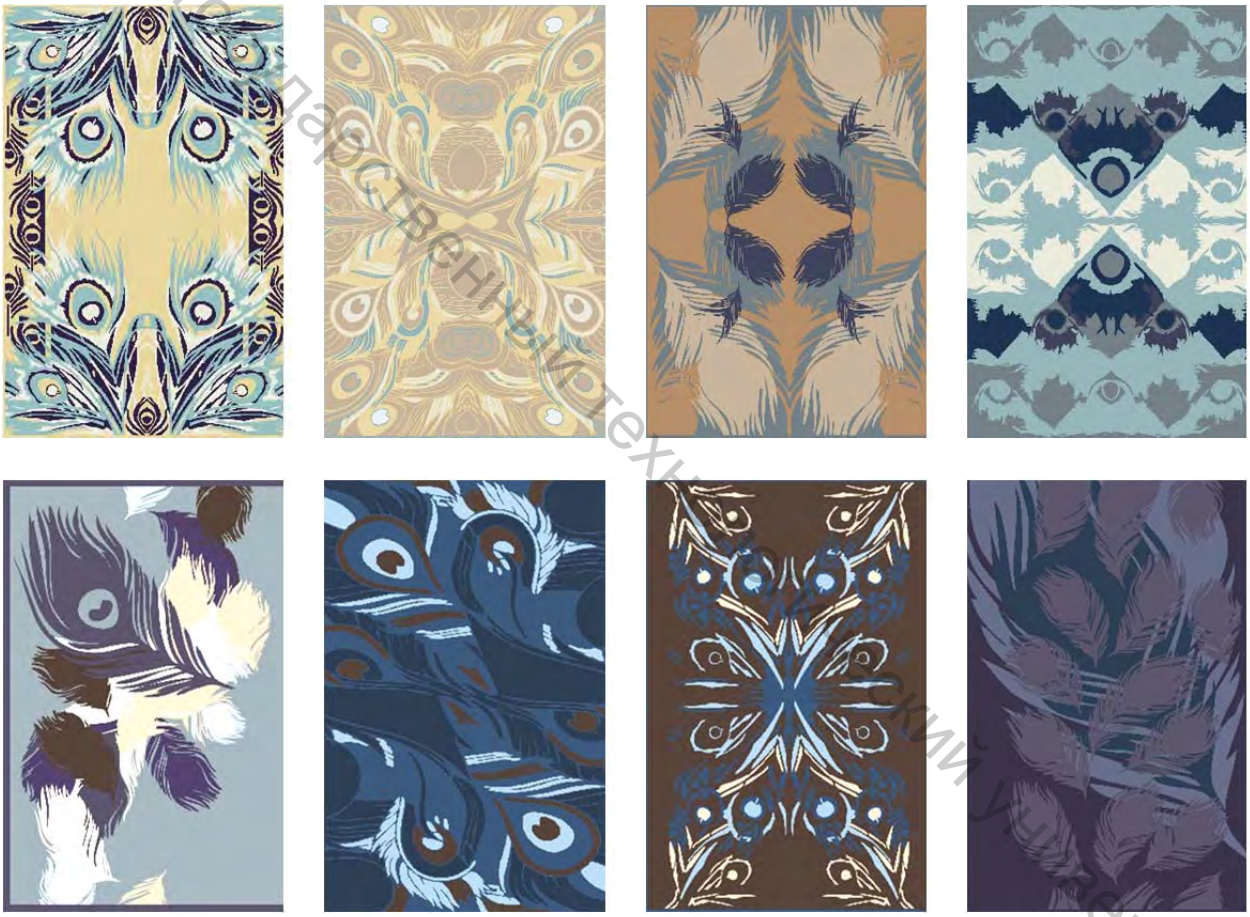

Figure 1 – The collection of jacquard carpets

Color palette of the collection is built on cold and warm colors, contrast of light and dark, used also a palette of nuanced shades in the color of the lines. Such combinations always look strictly, laconically. In the figure are used both static and dynamic elements. Color palette of the collection preserves the unity of the composition on svetlichnyj gradations. The composite series is constructed from light to dark, from warm to cold color. A small number of colors used in the drawings of

the carpet, gives the collection a touch of contrast. The basis for the development of the collection is the use of different depth and intensity of shades in the background and the figure. Dark colors are at the edges, lighter in the figure, the contrast in the figure, quiet in the background.

Texture is represented by a pile of 9 mm, is closely associated with the pattern itself and emphasizes its expressiveness. The properties of the yarns attach for added depth of color. Raw material composition – polypropylene yarns that have a low cost, high antistatic properties, susceptibility to heat treatment, resistance to many contaminants, do not cause allergic reactions and is able to maintain color throughout the service life.

One of the elements of the collection in the size 2x3 m was completed at the "Brest Carpets". We used four colors of yarns.

The collection of jacquard carpets is made in a minimalist design that will complement of originality to the interior. It is expected, that the carpets will be used in a residential living room that combines ultra-modern elements and ethnic components of the style.

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AUTOMATED DEVICE FOR DETERMINING OF HEAT-PROTECTIVE PROPERTIES OF PACKAGES OF CLOTHING MATERIALS

Sokolova A.S., Kuznetsov A.A, Nadyozhnaya N.L., sokolova203509@gmail.com
Vitebsk State Technological University, Vitebsk, Republic of Belarus
Соколова А.С., Кузнецов А.А., Надежная Н.Л.
г. Витебск, Республика Беларусь

Key words: coefficient of thermal conductivity, thermal resistance, coefficient of air permeability, packages of clothing materials, heat-shielding properties, automated device.