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Improving the Protective Features of Personal Protective Equipment To Ensure Labor Safety of Workers

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Abstract: *The article provides information on improving the protective properties of personal protective equipment in order to ensure the safety of workers.*

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Introduction:

The "Model norms for the free provision of special clothing, special shoes, and other personal protective equipment for civil aviation employees" were produced by order of the Minister of Labor and Social Protection of the Republic of Uzbekistan No. 3-B of January 19, 2011 [1]. Rubber gloves are often supplied to Flight Attendants until they become useless. According to the "rules for organizing the work of air traffic controllers of the republic of uzbekistan" (ozr aq-95), who are included in the number of air traffic controllers and service providers, who perform the tasks of the operator or aircraft commander in order to ensure the safety of passengers, but a member of the crew who is not considered a member of the pilot's crew, whose work activities are carried out in accordance with passenger service technology o according to the findings of the monitoring, it was deemed inappropriate to offer rubber gloves to flight attendants.

Methodology. The study's goal was to use a video chronometer to record the behaviors of flight attendants who dispensed food and beverages as well as received and arranged kitchen and cooking equipment on the aircraft. To safeguard the labor safety of civil aviation personnel, it has been agreed to offer rubber gloves to flight attendants until they become worthless. The study's goal was to use a video chronometer to record the behaviors of flight attendants who dispensed food and beverages as well as received and arranged kitchen and cooking equipment on the aircraft. To maintain the labor safety of civil aviation personnel, it has been determined to offer rubber gloves to civil aviation flight attendants until they become worthless.

As previously said, personal protective equipment should ensure worker safety. Furthermore, protective apparel is designed to shield workers from the harmful impacts of the outside environment. The human body's air exchange function should not be affected in this circumstance.

It must be built in such a manner that the user feels comfortable and safe while working, it must not obstruct the person's free mobility, and it must not have any hanging or projecting elements

that may become entangled in spinning sections. Soft, easy-to-clean, and non-itchy materials are used to make special coats.

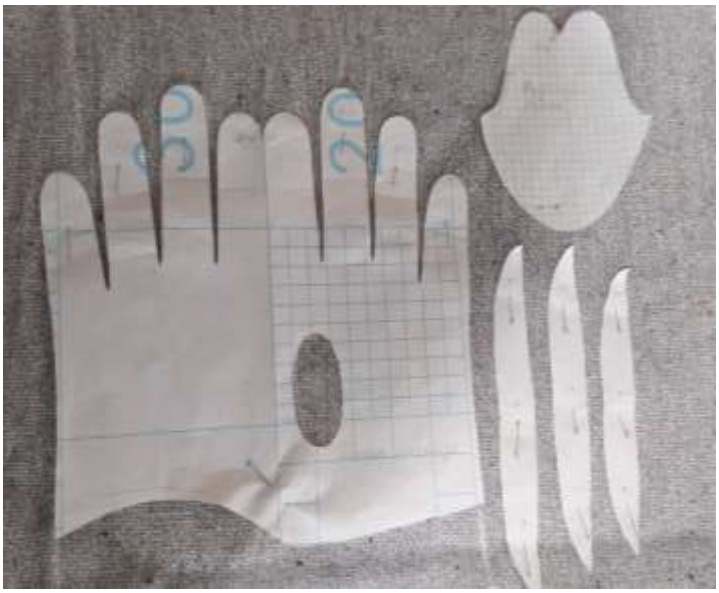
Knitted materials with up to 70% relative stretch were used for the suggested gloves.

The details of the gloves were cut based on designs created of three different types of knitted materials in order to produce gloves that are simple to place on the hand, attach to it, and do not impede movement.

A two-layer twill knit was used for the initial sample approach. They are classified into two categories:

1. Front-side knitting, both sides of this knit fabric consist of a mixture of front and back loops.

2. Back knitting, both sides of this knitting fabric are formed by a mixture of front and back rows of loops.



distinct front and back loop combinations can be used to generate distinct knit textures.

Similar to the single-layer knitted fabric, the double-layer cross-woven knitted fabric is separated into primary and derived textiles. The following are included in the two-layer cross-woven main fabric: 1. Reverse tissue [1]; 2. Rubber fabric [1].

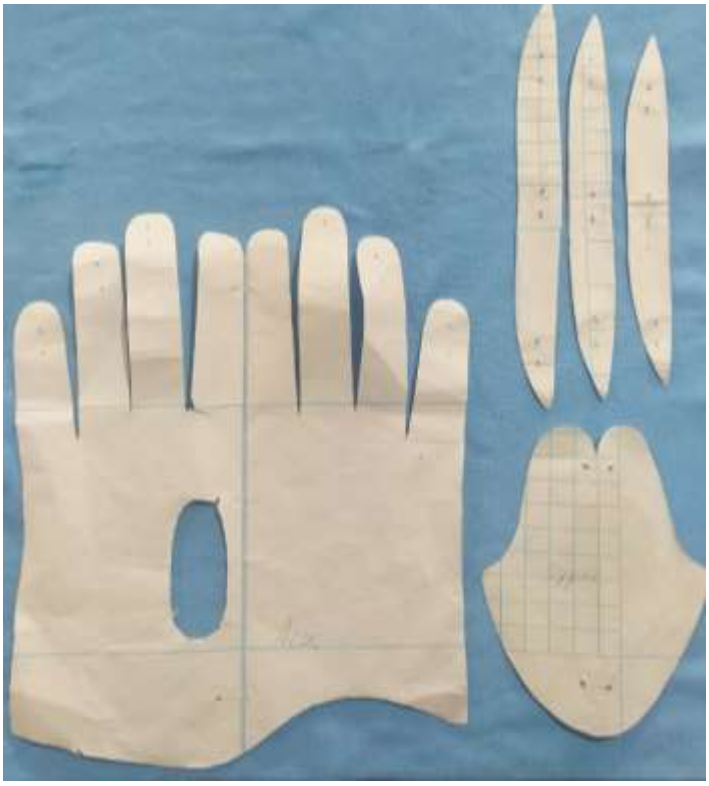
Figure 1.

Double-ply twill knit fabric

Torsion. A tire consisting of the identical combination of front and rear rings (1+1, 2+2) will not twist because the rings on one side balance the inclination to twist the tire in one direction and the rings on the other side balance the tendency to twist the tire in the other direction. A tire constructed from a distinct combination of front and rear rings twists across the row of rings in the direction of fewer front spokes and across the spokes in the direction of more front spokes. This is explained by the fact that there is a lot of strain on the side of the front rim of the tire that causes it to rotate.

Flexibility. Elastic 1+1 is undone only against the direction of knitting. Rubber 2+2 and its other compounds dissolve like glad.

Thickness. The thickness of knitwear is one of the primary variables influencing its thermal qualities. A cloth with a flattened level of knitting yarn was used for the second prototype. The knitting is the following thickness:



- The linear density of kalava yarn – the higher the linear density, the thicker the knitting;
- The degree of flatness of the thread – the more flattened the thread, the thinner the knitting.

For the watcher's movement, the cloth should be elastic. Sample textiles can be stretched in both directions.

Figure 2.
Fine knitted fabric

Glade elongation is the same as lengthwise elongation. When the tire is extended in width, one thread in each row resists it, and four threads resist it in length [38]. The density of a tire is measured in two directions: horizontal and vertical.

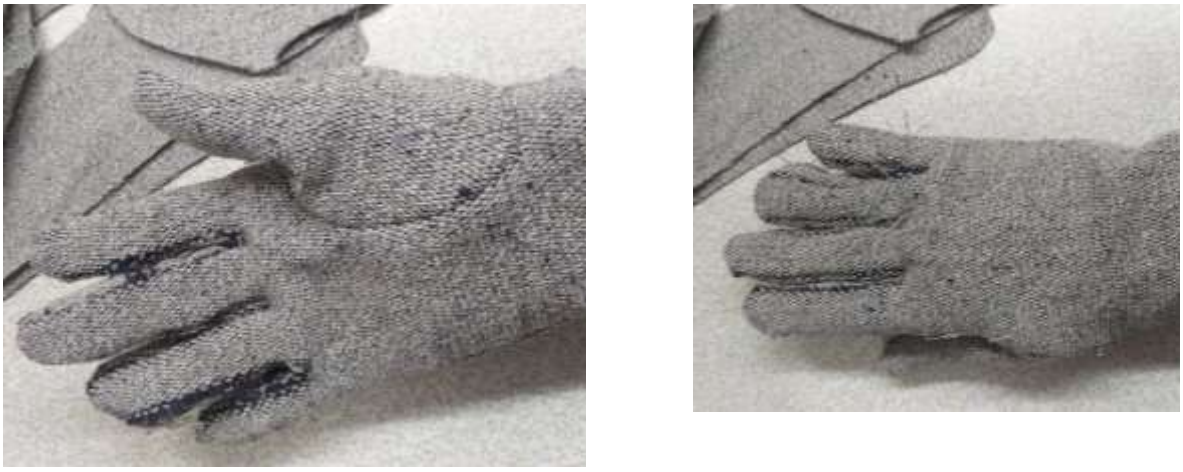


Figure 3.
Gloves made of double-layer twill knit fabric

Conclusion.

Because the primary goal of the study was to improve the fire resistance of the suggested glove, the mixture was made in the specified amount for soaking the glove.

The gloves below were created using pre-made knitted materials.

As stated in the article, the gloves were soaked in specific compounds and placed in a special drying cabinet to boost their heat tolerance since they are suggested for the distribution of food and beverages, as well as receiving and arranging kitchen and culinary equipment.

Figure 4.
The process of making knitted gloves fire resistant

References

1. O‘zbekiston Respublikasi Mehnat va aholini ijtimoiy muhofaza qilish vazirining 2011 yil 19 yanvardagi 3-B -son buyrug‘i.
2. «Безопасность жизнедеятельности» под общей редакцией д.т.н. проф. Белова С.В. М. «Высшая школа», 2000 г.
3. СанПин №0015-94 «Гражданские нормативы. Перечень ПДК загрязняющих веществ в атмосферном воздухе населенных мест на территории Республики Узбекистан».