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STUDY OF CLOTHING QUALITY CONTROL AND ANALYSIS

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Abstract: This research study studies the processes of quality control and analysis of clothing products. The work provides information on the quality indicators of clothing products, their assessment criteria, control methods, and modern analysis methods. Also, factors affecting quality at the production stage and in the finished product are analyzed, and ways to identify and eliminate them are considered. The study used laboratory tests, visual inspection, quality assessment methods based on consumer requirements and international standards. As a result of the work, recommendations were developed for improving the clothing quality monitoring system.

Keywords: Clothing quality, fabric, product, brand, customer, zipper, quality circle.

Introduction. Clothing quality control is a set of comprehensive measures aimed at ensuring that the product meets established standards and consumer requirements at all stages of production. Clothing quality control and analysis includes checking various aspects: from material quality to compliance with standards and aesthetics. This helps ensure that clothing is safe, durable and meets consumer requirements.

The quality of sewing products is constantly changing and changing depending on the needs of a growing society. The quality level of sewing products is assessed using a complex of indicators. The hygienic quality index of sewing products takes into account hygroscopicity, thermal protection, air permeability, water resistance, etc. The quality of sewing products depends on the quality of fabrics, the quality of modeling, construction, sewing technology. Quality control of sewing products is carried out by comparing products with reference samples.

Standards and technical conditions define technical requirements for products. For example, requirements for the production of outerwear: processing of edges of details, use of lining materials, edging, processing of pockets, requirements for lining, trimming of the bottom of clothes and sleeves, use of extensions. Sewing products should have a beautiful appearance, keep their given shape well, be comfortable and practical to wear.

Garments can be of grades 1 and 2. The grade of the garment depends on the presence of defects and the conformity of the garment to the drawing. Defects in

garments are divided into three groups: defects in appearance and fit, defects in production and sewing, and defects in the materials used.

In complete products, the grade of the product is determined separately. In this case, the price of a jacket or blazer is taken as 60% of the price of the entire suit, and trousers or skirts as 40%. If this is a three-piece suit, then the price of the jacket is 50%, the vest is 15%, and the trousers are 35%.

In complete sewing products, the grade of each product is determined separately and is determined based on the lowest grade product. For example, if a suit has a grade 1 jacket and grade 2 trousers, then the entire set is grade 2 and the discount is determined based on the price of the trousers.

The grade of sewing products is determined by a limiting system; The number of defects, their size and location are taken into account.

Methodology & empirical analysis. Sewing products are marked in accordance with the requirements of the standard (GOST R 51121-97). Information for consumers must be in Russian. Sewing products are marked with a cardboard hanging tag and a fabric ribbon. The image of the brand name, the composition of raw materials, size parameters and indications for the care of products are applied to the fabric ribbon; ribbons are used to mark outerwear, light clothing and headwear.

The product label must be artistically designed and may be in the form of a booklet or leaflet.

The product label contains the following information:

- product name;
- name of the country of manufacture;
- name of the manufacturer;
- legal address of the manufacturer and/or seller;
- information on mandatory certification or voluntary certification (if any);
- manufacturer's trademark (if any);
- raw material composition of the product;
- measurement parameters;
- designation of a regulatory or technical document (for domestic production);
- information on the product's mark of conformity to state standards (on a voluntary basis);
- barcode;



Figure 1. Sample Cutting Machine

The SmartCut Fabric Sample Cutting Machine can sample fabrics in 3 minutes. It is equipped with intelligent sample cutting software, which sets up many test standards and the corresponding sample cutting requirements: sample graphics, and dimensions so that you can choose according to your needs. Then you can also save this requirement for the re-use next time. Next, the SmartCut fabric sample-cutting machine will lay out the sample graphics.

Packaging and storage. Sewing products are packed in polyethylene or paper bags, boxes with lids, cardboard boxes. Men's and women's outerwear is transported unpackaged, hanging or unfolded. Raincoats are packed in bags. Headwear is placed in boxes or boxes.



Figure 2. Industrial Air Permeability Tester for Textiles and Nonwovens

Storage of sewing products requires certain conditions: the relative humidity of the premises should be 60-70 YAN and the air temperature should be 15-20 ° C. Sewing products are protected from moths and rodents; Valuable items are stored in cases. Sewing products are hung on racks, protected from direct sunlight and dust by curtains or sheets. Warehouse buildings should be regularly ventilated.

Quality factors. The quality of clothing products determines their high consumer impact:

- ◆ compliance of clothing with the dimensions of the human body (individual organs) during the period of purchase and use of the product;

- ♦ hygiene, providing protection from adverse environmental factors, as well as controlling breathing, gas exchange, the release and removal of water vapor;
- ♦ aesthetic aspect;
- ♦ the ability of clothing to quickly restore its original shape, i.e. dimensional stability;
- ♦ wear resistance;
- ♦ economic efficiency, which includes not only the cost of the product when purchased, but also the costs of maintaining it during its operation.

Ensuring these quality characteristics depends on various factors. The most important quality factors are: model, design, materials, quality of technological processing (production), technical level of equipment, level of regulatory documents, quality of work of performers.

The model determines the purpose of the product, its compliance with fashion trends and consumer tastes.

The design ensures that the product meets the dimensional characteristics of the human body, determines the quality of the product's fit to the figure and its convenience during use.

Materials participate in the formation of all groups of properties and are the most important factor in the product being created. They also play a decisive role in the total cost of production.

The quality of technological processing allows us to distinguish products with normal (OK) and high (VK) sewing quality. VK products are characterized by the use of a silk lining, fittings with only anti-corrosion coating and smaller extensions on parts (for example, in OK products, 6 extensions are allowed on the lower collar, and in VK products - 4). There are a number of other differences that determine the high quality of VK products. Technological processing the quality of a product also includes the accuracy of processing of product assemblies and parts, the strength of connections, a high level of technological process and the absence of production defects [1].

Quality scope. Quality indicators can be divided into eight parts, which are:



Figure 3. Quality scope

1. The performance of a process is based on the primary operational characteristics of the product.
2. Product features are secondary characteristics that support the primary functions of the product.
3. Reliability refers to the probability of a product failing or failing within a given period of time.
4. Conformance refers to the degree to which the architectural and functional characteristics of the product conform to previously specified requirements.
5. Durability refers to the lifespan of a process or product.
6. Serviceability refers to the ability of a product to be easily repaired.
- Aesthetics refers to the appearance, feel, taste, or smell of a product. The visual aspects of a product are all components of this property.
8. Perceived quality refers to what consumers perceive as the appearance and market reputation of a product.

The technical level of equipment is an objective and important factor. Its condition is characterized by significant wear and tear not only in the garment industry, but also throughout the republic. According to statistics, the depreciation of fixed assets in the garment industry exceeds 58 percent. At the same time, the 60% mark is very significant in the world.

Conclusion. The more fully the listed factors are implemented in the creation of sewing products, the higher their quality level will be and the more fully the needs will be met. Quality control during the production process also helps to improve the quality of products. Also important are inspections that can be carried out at industrial and commercial enterprises by the state control bodies of the Committee for Standardization, Metrology and Certification. They have the right to prohibit the supply and sale of goods that do not meet the requirements of standards and other regulatory documents.

Quality control should begin at the initial production stage, especially when accessories are used in the final fabric or textile product. The quality of accessories largely affects the quality of clothing products and should be carefully and professionally checked.

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CONTENTS

TECHNICAL SCIENCES: COTTON, TEXTILE AND LIGHT INDUSTRY

Kadirov K., Xoldorov B., To'xtashev A.	3
Analysis of power quality indicators in light industry enterprises	
Monnopov J., Kayumov J., Maksudov N.	15
Evaluation of deformation properties of highly elastic knitted fabrics in sportswear design	
Nazarova M., Musayeva G., Mirzaraximova S.	22
Study of clothing quality control and analysis	
Abdullayev R.	28
Theoretical basis of technological parameters of the new pneumo-mechanical gin machine	
Bakhritdinov B.	33
Increase production volume by regeneration of cotton	
Otamirzayev A.	38
Measures to dangermine during the initial processing of cotton	
Kamolova M., Abdukarimova M., Mahsudov Sh.	42
Measures to dangermine during the initial processing of cotton	
Shogofurov Sh., Jurabayev N., Xolikov K.	55
Analysis of the technology of obtaining knitted fabrics with patterns and their physical and mechanical properties	
Jurabayev N., Shogofurov Sh., Yusupov S.	64
Study of the physical and mechanical properties of hosiery products made from bamboo yarn	

TECHNICAL SCIENCES: AGRICULTURE AND FOOD TECHNOLOGIES

Nasriddinov B., Serkaev Q., Yo'ldiev A.	70
Effect of solvent compositions on oil indicators in cotton oil extraction	
Yulchiev A., Yuldashev Sh.	79
Economic efficiency in the production of cream-perfumed soap	
Ikromova Y., Ikromov F., Khamdamov A., Xudayberdiyev A.	85
Modeling of primary distillation process of vegetable oil miccella	
Ismailov M., Adashev B.	92
Prevention of external flood formation on the surface of heat exchanger pipes	

CHEMICAL SCIENCES

Tajibayeva N., Ergashev O.	99
Nanofibers based on chitosan and synthetic polymers: a review of properties and applications	

Kuchkarova D., Soliyev M., Ergashev O.	
Quantitative determination of adsorption activity of adsorbents obtained on the basis of cotton stalk and cotton boll	104
Abdullaxanova G., Ergashev O.	
Differential heat and entropy of adsorption of methanethiol in sodalite	112
Paygamova M., Khamzakhojayev A., Ochilov A., Paygamov R.	
Physicochemical properties of carbon adsorbents derived from renewable biomass	121
Kochkarova R.	
Use of electron spectra in determining the coordination number of central atoms of complex compounds based on Ni(II) and Co(II) ions	131
Yusupova M., Mamadjonova M., Egamberdiev S., Abduvohidov I.	
Study of the conditions for the aminolysis of secondary polycarbonate	136
Ikramova G., Askarova O., Siddikov D., Karimov A., Botirov E.	
Chemical components of perovskia kudrjashevii	142
Kaxarova M., Soliyev M.	
Types of plant growth regulators and their application in agriculture	147
Juraboev F.	
Investigation of the synthesis of acetylene amino alcohols and the study of their biological activity	151
Salikhanova D., Usmonova Z.	
Thermal activation of plums	155
Kadirxanov J., Urinov A.	
Development of composite materials for corrosion protection of main gas and oil pipelines with increased chemical adhesion	160
Sotiboldiev B.	
Synthesis of hybrid composites of polysaccharides based on methyltrimethoxysilane	167
Jumayeva D., Nomonova Z.	
Chemical characterization of raw materials used for adsorbent production	174
Muratova M.	
Method for producing a fire retardant agent with nitric acid solutions of various concentrations	183
Shamuratova M., Abdikamalova A., Eshmetov I.	
Physicochemical properties and results of sem analysis of soils in the regions of Karakalpakstan	192
Dadakhanova G., Soliev M., Nurmonov S.	
Composition of oil products and methods of separation of individual substances	199

Hoshimov F., Bektemirov A., Ergashev O.	206
Effectiveness of the drug "Akaragold 72%" against cotton spider mites	
Abdirashidov D., Turaev Kh., Tajiyeu P.	213
Analysis of the physicochemical properties of polyvinyl chloride and the importance of mineral fillers in increasing its fire resistance	

TECHNICAL SCIENCES: MECHANICS AND MECHANICAL ENGINEERING

Makhmudjonov M., Muminov Kh., Tilavkhanova L.	219
Classification and analysis of level measurement methods	
Mukhammadjanov M.	226
Digital modeling of the heat transfer process in oil power transformers in operation	
Mukhtorov D.	230
Investigation of drying efficiency in a solar installation with composite polyethylene film depending on the product thickness	
Tursunov A., Shodmanov J.	239
Advancing sustainable environmental strategies in the cotton industry through dust emission reduction	
Saidov O.	247
Event-driven process orchestration in e-governance: modeling asynchronous integration patterns	
Obidov A., Mamajanov Sh.	252
Organization of scientific and research processes based on information and digital technologies in higher education	
Turdaliyev V., Akbarov A., Toychieva M.	259
Theoretical study of the vibration of chain networks	
Abdusattarov B., Xamidov S.	265
Modeling the process of separating cotton particles from air in the working chamber of a cotton gin	
Toirov O., Amirov S., Khalikov S.	272
Diagnostics of the condition of elements of electric power supply substation	

ADVANCED PEDAGOGICAL TECHNOLOGIES IN EDUCATION

Mukhtorov D., Jamoldinov K.	281
Development and improvement of drying technologies in a solar dryer	
Uzokov F.	291
Graphical solution of systems of equations in two-and three-dimensional spaces using MS excel	

ECONOMICAL SCIENCES

Yuldashev K., Kodirov X.

Financing of pre-school educational institutions based on public-private partnerships and their results **299**

Boltaboev D.

Specific aspects of labor resource management in different countries **304**
