ISSN 2181-8622

Manufacturing technology problems



Scientific and Technical Journal Namangan Institute of Engineering and Technology

INDEX COPERNICUS

INTERNATIONAL

Volume 9 Issue 1 2024









DEVELOPMENT OF MODEL LINES OF MEN'S TOP KNITTING ASSORTMENT

NABIDJANOVA NARGIZA NASIMJANOVNA

Professor of Namangan institute of textile Industry, Namangan, Uzbekistan Phone: (0893) 671-0114, E-mail: <u>nabidjanova74@mail.ru</u>

AZIMOVA SAYYORA GULAMJANOVNA

Doctoral student of Namangan institute of textile Industry, Namangan, Uzbekistan Phone: (0877) 277-7424, E-mail: <u>sayyora_azimova@inbox.ru</u> **Corresponding author*.

Abstract: This article provides information on the model lines created for the design project of men's outerwear based on the combination of outerwear made from raw materials available in our Republic and useful waste fabrics from the cutting process in the leather industry. The type of textile fabrics, the combination of knitted and leather fabrics, the length, width and shape of the clothes were used in the creation of the model series of samples recommended for the development of sketch models of men's outerwear. As a result of scientific research for the development of sketchy model patterns of men's top knitwear, several structures, more informative elements in dressing the form of clothing, which are perceived as preliminary information for a series of constructive-unified andases of the form of clothing using lactic tissue fabrics and leather waste, have been agitated. Outer knitwear made from raw materials available in our country and useful waste fabrics from the leather industry were obtained in the programmed series and based on them, a number of men's outerwear sketch models were developed in 3D format.

Keywords: project, design, model line, men's outerwear, horizontal, vertical, quality, index, clothing, assortment, tailoring, technology, economical.

Introduction. Currently, scientific researches aimed at expanding the types of knitted fabrics and improving the production process are being carried out around the world on the basis of resource-efficient technologies. In this direction, taking into account the physico-mechanical characteristics of knitted fabrics produced in our Republic and their quality indicators, many innovations are proposed to expand the range of fabrics made from different raw materials, as well as ready-made clothes. However, it is almost unknown that scientific research has been carried out on the improvement of the technology of sewing men's outerwear from knitted fabrics produced using natural raw materials grown in our country and their mixtures, and the creation of modern sketch model samples and clothing model lines. There is no information. On the basis of the above information, the creation of clothing model lines for the purpose of developing men's knitted outerwear sketch models is one of the current problems.

Methodology. The type of textile fabrics, the combination of knitted and leather fabrics, the length, width and shape of the clothes were used in the creation of the model series of samples recommended for the development of sketch models of men's outerwear. As a result of the scientific research carried out for the development of sketch models of men's outerwear, a number of structures that are accepted as initial information for the series of constructive-unified models of clothing form using rubber textile fabric and leather waste, the methods of creating the form of clothing more informative elements are extracted (Fig.1).





Figure 1. Basic silhouettes of clothes made of knitted fabric.

On the basis of the modeling of the structural elements of the form, the programmed series of outerwear was obtained from the model structural element. Figure 1 shows fragments of matrices, the basic silhouette shape and constructive-decorative divisions are their elements [1-5].

Results and discussions. Horizontal row 1 is a drawing of matrix model rows of several variants of modern style semi-fitted jackets of the same length for men (Fig. 1).

Horizontally, the 1st model of the 1st row consists of a half-fitting jacket with a turndown collar. The sleeves are long-sleeved, two side pockets on the front are recommended, and the single-breasted front is fastened with 3 buttons. The collar of the jacket, the end of the sleeves and the mouth of the cover pocket are decorated with leather fabric.

Horizontal row 1, model 2: semi-fitted jacket with a suit collar. The sleeves are longsleeved, the flapped side pockets are recommended on both sides of the front, and the single-breasted front is fastened with 3 buttons. The lower part of the suit collar, pocket flaps and sleeve ends are decorated with leather fabric.

Horizontal row 1, model 3: semi-fitted, with a wide collar, a jacket with a stand-up collar. The sleeves are long, the front flap is recommended for two side slit pockets, and



the single-breasted front flap is fastened with 4 buttons. The stand-up collar, pocket flap and sleeve ends are decorated with leather fabric.

Horizontal row 1, model 4, a semi-fitted jacket with a full neck stand-up collar is recommended. The sleeves are long, and 4 small decorative buttons with leather cover are recommended for the ends of the sleeves (2 per sleeve). A large rectangular cover pocket is recommended on both sides of the front piece, and the single-breasted front piece is fastened with 4 buttons. The collar is decorated with leather.

Horizontally, the jacket shown in the 1st row, 5th model is designed with a halfclose fit. The sleeve is long and has a turn-down jacket collar. The front panel is recommended with two side slit pockets, and the single-breasted front panel is fastened with 3 buttons. Reversible collar, pocket frame and center of sleeve are decorated with leather fabric.

In the 2nd row horizontally, there is a drawing of the rows of the matrix model of the men's jumper in several options (Fig. 1).

Horizontally, the 2nd row, the 1st model has a length up to the hip line and has a straight shape. The sleeves are long, with a slit, and a one-layer cuff with high elasticity is recommended for the end of the sleeve. Without a collar, the collar is designed in the form of a semicircle. The front part is fastened with buttons and it is recommended to have pockets on both sides. The collar, the front panel, the mouth of the cover pockets and the center of the sleeve are decorated with leather fabric. The 2nd row horizontally, the 2nd model is shoulder-length and has a straight cut. The sleeves are long, fitted, and a one-layer cuff with high elasticity at the end of the sleeve and the hem is recommended. The collar is designed in a triangular shape, and a narrow collar is decorated with leather fabric.

Horizontally, the 2nd row, the 3rd model is 15-20 cm higher than the knee and has a straight cut. It has no collar, the collar is triangular in shape, and the sleeves are designed with long sleeves. The front piece is fastened with 1 large decorative button. It is recommended to use a lycra-based incomplete elastic fabric for the front piece along the collar. Leather fabric is recommended for the front two side lining pockets and elbow trim.

The 2nd horizontal row, the 4th model is shoulder-length and has a straight cut. The sleeves are long, with a slit, and a one-layer cuff with high elasticity is recommended for the end of the sleeve. The collar is designed in a triangular shape. The sharp-angled front part is fastened with 3 rows of small buttons. It is recommended to have a pocket with a frame on both sides of the front piece. The front piece along the collar, the seam of the lower sleeve and the pocket with the frame are decorated with leather fabric.

Horizontally, the 2nd row, the 5th model is 3-4 cm higher than the knee and has a straight cut. The sleeves are long, fitted, and a lycra-based incomplete elastic fabric is recommended for the sleeve end and front part. It is designed without a collar, with an open front, that is, without a fastener. The seam of attaching the sleeve to the shoulder,



the seam of the lower sleeve, the two side seams of the back and front pieces are decorated with leather fabric.

In the 3rd row horizontally, there is a drawing of the rows of the matrix model of the men's underwear in several options (Fig. 1).

Horizontally, the 3rd row, the 1st model has a length of 3-4 cm below the waist and is designed in a body-hugging style. It is recommended to use lycra-based non-woven elastic fabric for the shoulder and vertical collar. The front part has a zipper, and two side pockets are recommended.

Horizontally, the 3rd row, the 2nd model has a length up to the waist and is designed in a body-hugging style. Lycra-based non-woven fabric is recommended for the shoulder. Without a collar, the collar is designed in a triangular shape. The front piece is single-breasted and fastened with 3 rows of buttons. It is recommended to have flap pockets made of leather on both sides of the front part.

Horizontally, the 3rd row, the 3rd model has a length of 3-4 cm below the waist, and is designed in a half-close shape. It is recommended to use lycra-based non-woven fabric for the shoulder, triangular collar and hem.

Horizontally, the 3rd row, the 4th model has a length up to the waist and is designed in a body-hugging style. Lycra-based non-woven fabric is recommended for the shoulder. The collar is triangular in shape, and a narrow collar is recommended. The front piece is single-breasted and fastened with 3 rows of buttons. It is recommended to have flap pockets made of leather on both sides of the front part. Leather fabric is recommended as decoration for shawl collar, placket and button cover.

Horizontally, the 3rd row, the 5th model has a length up to the armpit line, and it is designed in a form that is half attached to the body. It is recommended to use lycra-based incomplete elastic fabric for the shoulder, semi-circular collar, and hem, and leather for the side seams of the front and back pieces.







Figure 2. Men's outerwear sketch model samples developed in Clo 3D program.

Based on the model lines obtained in the programmed series (Fig.1), a modern design project of a series of men's outerwear sketch models was developed in the Clo 3D program (Fig.2).

Conclusion. Outer knitwear made from raw materials available in our country and useful waste fabrics from the leather industry were obtained in the programmed series and based on them, a number of men's outerwear sketch models were developed in 3D format.

REFERENCES

1. Пармон Ф.М. Композиция костюма [Текст].- М.: Легпромбытиздат, 1985. - 264 с., с.63

2. Петушкова Г.И. Проектирование костюма:Учебник для ВУЗов. -2-е изд.- М.: Издательский центр «Академия», 2006. – 416 с.

3. KoivistoE., Mattila P.BrandManagementof 'NewLuxury': Case Saga Furs. [Text] //JournalofGlobalFashionMarketing. - 2012, Vol.3, Is.3. - P.135-145.

4. Гусева М.А., Андреева Е.Г., Мартынова А.И. Исследование конструктивных прибавок в меховых изделиях различных силуэтов // Дизайн и технологии. – 2016, № 52, С. 50-60.

5. Набижанова Н.Н. Разработка технологии и особенности проектирования нового ассортимента хлопко-шелковых верхних трикотажных изделий // Сборник материалов Республиканской научной конференции «Аспирантов, докторантов и стажеров» -Т: ТГТУ 2007. 1т. с. 78-81.



CONTENTS

PRIMARY PROCESSING OF COTTON, TEXTILE AND LIGHT INDUSTRY

Nabidjanova N., Azimova S.	
Study of physical-mechanical properties of fabrics used for men's outer knit	3
assortment	
Nabidjanova N., Azimova S.	
Development of model lines of men's top knitting assortment	7
Noorullah S., Juraeva G., Inamova M., Ortiqova K., Mirzaakbarov A.	
Enhancing cotton ginning processing method for better fibre quality	12
Kamalova I., Inoyatova M., Rustamova S., Madaliyeva M.	
Creating a patterned decorative landscape using knitted shear waste on the surface of the paint product	16
Inoyatova M., Ergasheva Sh., Kamalova I., Toshpo'latov M.	
State of development of fiber products – cleaning, combing techniques and technologies	21
Vakhobova N., Nigmatova F., Kozhabergenova K.	
Study of clothing requirements for children with cerebral palsy	30
Mukhametshina E., Muradov M.	
Analysis of the improvement of pneumatic outlets in the pneumatic	37
transport system	
Otamirzayev A.	
Innovative solutions for dust control in cotton gining enterprises	45
Muradov M., Khuramova Kh.	
Studying the types and their composition of pollutant mixtures containing cotton seeds	50
Mukhamedjanova S.	
Modernized sewing machine bobbin cap hook thread tension regulator	53
Ruzmetov R., Kuliyev T., Tuychiev T.	
Study of effect of drying agent component on cleaning efficiency.	57
Kuldashov G., Nabiev D.	
Optoelectronic devices for information transmission over short distances	65
Kuliev T., Abbazov I., F.Egamberdiev.	
Improving the elastic mass of fiber on the surface of the saw cylinder in fiber cleaning equipment using an additional device	73
Yusupov A., Muminov M., Iskandarova N., Shin I.	



On the influence of the wear resistance of grate bars on the technological gap	80
between them in fiber separating machines	
Kuliev T., Jumabaev G., Jumaniyazov Q.	
Theoretical study of fiber behavior in a new structured elongation pair	86
GROWING, STORAGE, PROCESSING AND AGRICULTUR	AL
PRODUCTS AND FOOD TECHNOLOGIES	
Meliboyev M., Ergashev O., Qurbonov U.	
Technology of freeze-drying of raw meat	96
Davlyatov A., Khudaiberdiev A., Khamdamov A.	
Physical-chemical indicators of plum oil obtained by the pressing method	102
Tojibaev M., Khudaiberdiev A.	
Development of an energy-saving technological system to improve the heat	100
treatment stage of milk	109
Turg'unov Sh., Mallabayev O.	
Development of technology for the production of functional-oriented bread	115
products	
Voqqosov Z., Khodzhiev M.	
Description of proteins and poisons contained in flour produced from wheat	120
grain produced in our republic	
CHEMICAL TECHNOLOGIES	
Choriev I., Turaev Kh., Normurodov B.	
Determination of the inhibitory efficiency of the inhibitor synthesized based	126
Mugumova G. Turavev X. Moʻminova Sh. Kasimov Sh. Karimova N.	
Creaturescenia analysis of a conheat based on urea formalin and suspinia	
acid and its complexes with ions of $Cu(II)$ $Zn(II)$ Ni(II)	131
Babakhanova Kh., Abdukhalilova M.	
Analysis of the composition of the fountain solution for offset printing	138
Babakhanova Kh., Ravshanov S., Saodatov A., Saidova D.	
Development of the polygraphic industry in the conditions of independence	144
Tursungulov J., Kutlimurotova N., Jalilov F., Rahimov S.	
Determination zirconium with the solution of 1-(2-hydroxy-1-	
naphthoyazo)-2-naphthol-4-sulfate	151
Allamurtova A., Tanatarov O., Sharipova A., Abdikamalova A.,	
Kuldasheva Sh.	
Synthesis of acrylamide copolymers with improved viscosity characteristics	156



Amanova N., Turaev Kh., Alikulov R., Khaitov B., Eshdavlatov E.,	
Makhmudova Y.	
Research physical and mechanical properties and durability of sulfur concrete	165
MECHANICS AND ENGINEERING	
Abdullaev E., Zakirov V.	
Using parallel service techniques to control system load	170
Djuraev R., Kayumov U., Pardaeva Sh.	
Improving the design of water spray nozzles in cooling towers	178
Anvarjanov A., Kozokov S., Muradov R.	
Analysis of research on changing the surface of the grid in a device for cleaning cotton from fine impurities	185
Mahmudjonov M.	
Mathematical algorithm for predicting the calibration interval and metrological accuracy of gas analyzers based on international recommendations ILAC-G24:2022/OIML D 10:2022 (E)	192
Kulmuradov D.	
Evaluation of the technical condition of the engine using the analysis of the composition of gases used in internal combustion engines	197
Braduction wastewater treatment technologies (On the evenue of	
Ultramarine pigment production enterprise).	203
Abdullayev R.	
Improving the quality of gining on products.	208
Abdullayev R.	
Problems and solutions to the quality of the gining process in Uzbekistan.	212
Yusupov D., Avazov B.	
Influence of various mechanical impurities in transformer oils on electric and magnetic fields	216
Kharamonov M.	
Prospects for improving product quality in textile industry enterprises based on quality policy systems Kharamonov M., Kosimov A.	223
Problems and solutions to the guality of the gining process in Uzbekistan	230
Mamahonov A., Abdusattarov B.	200
Development of simple experimental methods for determining the coefficient of sliding and rolling friction.	237



Aliyev E., Mamahonov A.	
Development of a new rotary feeder design and based flow parameters for a seed feeder device	249
Ibrokhimova D., Akhmedov K., Mirzaumidov A.	
Theoretical analysis of the separation of fine dirt from cotton.	260
Razikov R., Abdazimov Sh., Saidov D., Amirov M.	
Causes of floods and floods and their railway and economy influence on construction.	266
Djurayev A., Nizomov T.	
Analysis of dependence on the parameters of the angles and loadings of the conveyor shaft and the drum set with a curved pile after cleaning cotton from small impurities	272
ADVANCED PEDAGOGICAL TECHNOLOGIES IN EDUCAT	ION
Jabbarov S.	
Introduction interdisciplinary nature to higher education institutions.	276
Tuychibaev H.	
Analysis of use of sorting algorithms in data processing.	280
Kuziev A.	
Methodology for the development of a low cargo network.	289
Niyozova O., Turayev Kh., Jumayeva Z.	
Analysis of atmospheric air of Surkhondaryo region using physico-chemical methods.	298
Isokova A.	
Analysis of methods and algorithms of creation of multimedia electronic textbooks.	307
ECONOMICAL SCIENCES	
Rashidov R., Mirjalolova M.	
Regulations of the regional development of small business.	315
Israilov R.	
Mechanism for assessment of factors affecting the development of small business subjects.	325
Yuldasheva N.	
Prospects of transition to green economy.	334
Malikova G.	
Analysis of defects and solutions in investment activity in commercial banks.	346