

# Modelling's wear by unitization

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## Abstract:

A area of research is creation of a database for further development of computer-aided clothes design on the stage of sketch creation. The basic idea is to create a product based on a complementary database, the result of which will be receiving different amounts of clothing designs in 2D format, with the ability to sketch converted to 3D format and formatting.

## Key words:

Garment industry, computer-aided design of clothing, fashion design, drawing, 3D-design, 2D-design, customer, database, designer, stylist, mannequin, drawing, market CAD, automatization

## Introduction

Garment industry, like others, is developing constantly. There is a searching of new designs that improve production. But, with all this, there are still urgent problems that need attention and improvement. Thus, the automation of the process of product development is one of these problems. A partial or full automatization of the production stages reduces necessary time while production organizing. In the first stage it is important to identify the main stages of production. One of the first steps is to create a collection of sketches intended. This stage involves obtaining a number of models of visual matching requirements.

The aim of this work is to automate the design process in a surround sketching costume.

The objectives of the study include:

- Analysis of the CAD clothing;
- Systematization content design stages;

- Develop a method for visualizing the sketch.

In the production of garments is important to optimize the manufacturing process model. To do this, reduce the time to create the product at certain stages.

Currently, this problem can be solved by the introduction of computer-aided manufacturing (CAD). There is CAD-system that solve the task in the stage of building the product, that of partial of full automatization products during cutting, CAD KOMTENS [1] software package JULIVI [2], CAD ASSOL [3], etc.

Partial or fully automatization in the stage of sewing of the product is possible. Stage to create the layout, just by implementing automated creating 3D CAD models. These programs are integrated with software to create the speech of products. [4] These programs operate on the following principle: in the initial phase a scratching of product a basic design, then to the drawings make changes and corrections drawing "dressing" of the finished mannequin in 3D format. [5] The undoubted advantage of the presented programs is the creation of a preliminary design drawing, which subsequently prepared for the print. [6] One of the downsides, I think, is the inability to quick creation of surround sketch, and the obligatory presence of a certain knowledge in the design of clothing.

Thus, on the market CAD can not meet the demand for rapid creation of surround sketch to work with the customer. [7] And how, is not unimportant to see how the product will look like at the stage of creating a sketch, when you set a complex model, or need to clarify something with customer. Program to create thumbnails on the set parameters are very reduced and would facilitate the work of artists, designers and technologists.

It is also up-to-date for designers and stylists to work with the program.

The next version of the program is possible that reduces the time required to create the sketch. Program meets the needs of users, not just an experienced designers. With the help of which you can create thumbnails in

two-dimensional space, i.e., planar images, and convert them into 3D space, skipping the stage of creation of the sketch. Analyzing the set-up parameters, the user can choose from the following data necessary and get a sketch model, which you can later convert into 3-d space [8].

The program includes an extensive database of systematically classified garment parts. So, shoulder parts consist of collars, fillers, sleeves, foundation, clasps. Each of these groups, in its turn, consists of the types: whole-cut collars, racks, turn-down collar, flat lying, standing turn-down collar, shirt collars, jacket collar, collar like shawl and Apache. Neck type consists of the following: shaped necklines (v-shaped, square, round, boat, etc.), cut-loop, neckline with frill, notch-collar. Sleeve type is divided into types: set-in sleeve, whole length sleeve sleeve, Raglan Sleeve, kimono-type sleeve and so on. Foundation (base) type is divided according to the degree of fit: a strong bond, bond, a small bond and volume. Type of closure is divided into: the buckle in a joint, Central, biased, on buttons, zipper, secret and so on. Belt products are divided for skirt and for pants, and are characterized by means of belts, pillars and the bottom of the product.

Next, you can select dress group consisting of the bases of dresses with different variants of the length, they can be combined with types of shoulder and belt products. The types of finishes also included, such as ruffles, fringe, rubber band, lace, fabric, characterized by the type of surface. This database is open and systematically needs to be updated.

Assembling the necessary kinds of presented variations, we get a sample in 2-dimensional space. The sample in this program may be adjusted in accordance with specified parameters, and get color and surface finish.

#### Conclusion

The presented variant is suitable for quick creating of illustrative images, both in a small atelier and in large production. It reduces time spent on searching and creating variants of working sketches, will give a Visual representation of the proposed models, which, in its turn, greatly increases the production efficiency.

Automation of the design process is very important and popular trend. thanks to the introduction of new technologies can greatly improve the production process, to minimize losses and increase profits. prischityvat error in the initial phase of the project.

Have the opportunity to grow, to develop new technologies and improve the production process

Internet resources:

[1]

<http://www.comtense.ru/soft/soft.php?page=design3d>

[2] <http://julivi.com/ru/prods265.htm>

[3] [http://www.assol.org/programmnye\\_produkty/po\\_assol-dizajn/](http://www.assol.org/programmnye_produkty/po_assol-dizajn/)

[4]

[http://www.igta.ru/files/metod/kshi/Kyzmichev\\_metod.pdf](http://www.igta.ru/files/metod/kshi/Kyzmichev_metod.pdf)

[5]

[http://www.cadcatalog.ru/a\\_cad\\_download.html](http://www.cadcatalog.ru/a_cad_download.html)

[6] <http://axoft.ru/software/Assol/>

[7]

<http://club.season.ru/index.php?showtopic=12490>

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[8] Kuzmichev VE Artistic and structural analysis and design of the "figure-clothes": Ouch. Manual / V. E. Kuzmichev, NI Ahmedulova, LP Yudin. - Ivan: ISTA, 2010. - 300 S. (From 84)