Process & Effective Methods of Pattern Making For the RMG (Readymade- Garment) Sector

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Abstract: Last few decades garment industry had been changing very quickly all over the world. Continuously, it is keeping large contribution for world economy but still it is facing huge challenges. For instance, infrastructure problem, lack of skilled labor, resource not available, wrong sample and so on. In clothing industry mainly depends on pattern making. Pattern making is the critical steps for the industry and plays vital role. In the readymade industry, pattern always important to make accurate sample for collecting execute order from buyers. It is one of the most accurate functions that the industry survives. Accurate pattern making helps to eliminate fabric waste, the garment must be designed, and a pattern made for it, with fabric waste elimination as a design consideration, alongside aesthetics, price, target market, etc. This article describes the process & effective methods of pattern making.

Keywords: Garment, readymade industry, Pattern making, fabric waste, aesthetics.

I. Introduction

A pattern is the actual copy of different parts of a garment that is made by cutting board or hard paper by using measurements which has taken from models or dress form after sketching on it. According to this pattern cloth is cut and then garment is made. For industrial production different patterns are made for different size and a marker is made with these different patterns for a large-scale production. Then many cloths are cut at a time and finally garments are made by large number of workers in garments industry.

Pattern making is an individual art, where manipulating and shaping a flat piece of fabric to conform to one or more curves of the human figure. Pattern making is a connection between design and production. A sketch can be turned into a garment via a pattern which interprets the design in the form of the garment components. Pattern is an original garments form on the paper or cardboard templates which other garments of a similar style are copied from which the parts of garments are traced on to fabric before cutting out and assembling (sometime called paper pattern).

II. Methods Of Pattern Making:

The concentration here is on the type of communication from the fashion designer that takes initiates the patternmaking method. Basically pattern making consist three methods –

- Paper Pattern Making
- Draping
- Digital Pattern Making
- a. **Paper Pattern Making:** A system of pattern making that depends on measurements taken from a dress form or model to create basic, foundation, or design patterns. It is a two dimensional basic method of preparing a paper pattern. The garment prepared by this method fits exactly to the satisfaction of the wearer or consumers. It is economical to draft one's own pattern. Also changes in style can be made adopting the basic pattern set. Measurements for total length, Neck, chest, Shoulder, waist, hip and so on, and ease and sewing allowances are marked on paper and construction lines are drawn to complete the pattern.
- b. **Draping:** Draping can be treated as one involving a detailed survey and study of the figure to build up a reliable fitting experience. Draping originally was called modeling. This was the original method of constructing garment patterns. Draping is a free approach and is always to a certain extent experimental and cannot be described as a precise technique. It involves the draping of a two dimensional piece of fabric around a form, conforming to its shape, creating a three-dimensional fabric pattern. Ease allowances for movement of body are added to make the garment comfortable to wear. Advantage of draping is that the designer can see the overall design effect, style and silhouette of the finished garment on the body form before the garment piece is cut and sewn. However, it is more expensive and time consuming than paper pattern making. Draping can be made on a dress form.

c. Digital Pattern Making: A system of pattern making which is depends on measurements taken from a dress form or model or measurement chart which is given by buyer. In this system mainly created one specific size pattern which called basic size or base size. After that adding grading on basic size according to measurement differences between basic to other sizes to different sizes pattern. Then completion of grading all seizes pattern sent to marker making for industrial bulk production. Different types of pattern making software are used in industry to make the pattern. Like LECTRA, GERBER TECHNOLOGY, TUKA TEC, OPTITEX and so on. It is one of the easiest ways, time consuming and requires minimum number of staff rather than paper pattern making and draping.

III. Process Of Pattern Making:

Above mentioned method there are different pattern making terms which are related to the workroom have pointed out in the following:

- Pattern Drafting
- First Pattern
- Working Pattern
- Revised Pattern
- Grading Pattern
- Master or Block Pattern
- Production Pattern
 - a. Pattern Drafting: Pattern drafting is most often associated with apparel. It is a form of drafting used to produce, through a series of stages, a graded paper pattern for sewing. Using body measurements, a pattern maker converts individual specifics into a series of straight lines and curves on template paper. During subsequent stages, those lines and curves determine how the garment is broken down into sections, cut and tested for fit, and ultimately converted to a reusable pattern. Specific methods and stages of pattern drafting vary from pattern maker to pattern maker, depending on each professional's chosen approach, any software used, and if the pattern is intended for eventual mass production.
 - b. **First Pattern:** The first pattern is a pattern set that has been created form drafting pattern. Where trace the main line or necessary lines from drafting pattern no seam allowance include on it. It usually prepares to check the shape of the pattern. The original pattern or first pattern developed for each design. Half a pattern for front, back & sleeve is developed unless the design is asymmetrical.
 - c. Working Pattern: After the testing or checking shapes from first pattern then added sewing allowance on it which known as working pattern. Working pattern is that which is used as a base for manipulation to generate design patterns. This pattern is generally made from mark on paper and usually requires fitting and adjustments. Then it transfer to fabric to stitch for checking fit of a particular body measurement according to requirements.
 - **d. Revised Pattern:** This pattern process not work anymore unless if any problems are on working pattern then need to solve the problem and modify on it which called revised pattern. After checking sample, understands which measurements have to modify. Again trace modify pattern and add seam allowance after modify pattern then it will turn in to working pattern. On revised pattern then it transfer to fabric for stitching and checking fit.

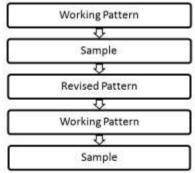


Figure 1: Steps to make revised pattern.

e. Graded Pattern: Pattern grading is the process of turning base size or sample size patterns into rest of sizes using a size specification sheet according to measurements. Grading system can be done manually or digitally using computerized pattern cutting software. This system is referred to as garment grading rules. Grading is a necessary step that must be taken before approaching sample manufacturers

- or factories, because they require sets of your specific patterns and an order of garments to be produced. Grading determines how your garments will fit in all sizes. Having a variety of sizes for each of your garments fills out your minimum garment order cost effectively. Grading will not create shape or changing shape, but only system to increase or decrease size of original shape.
- f. Master or Block Pattern: A master or block pattern is a basic garments shape from which a pattern drafted from as starting point. Also known as a basic template, from this clothing patterns are created with different design variations. Pattern cutters use basic pattern shapes and adapt draft pattern each season to create clothing connection with different wearing ease for fitted, semi fitted and loose fitted shapes. Block pattern is any pattern without seam allowance from which other pattern are designed, also called block pattern or foundation pattern. Ease is the amount of space in a garment beyond the body measurement, the specific amount of ease will from style to style.
- g. Production Pattern: The production pattern is a pattern set that has been correct and perfect and contains every pattern piece required to complete the garment. In the production pattern have seam allowance & all information. Production pattern has to be full pattern as we always make half pattern of full garments. There are some basic info should be included like Grain line, Style name, Size, and sometimes number of cut.

IV. Results

Importance of pattern making & accurate process -

- Pattern provides the clear idea of right style & accurate measurements of garments.
- A correct pattern helps to make an appropriate sample.
- It will eliminate fabric wastage.
- Pattern contains clear information of construction, sewing allowance, grain line & fabric cutting direction.
- It helps to get more order from buyers.
- Pattern suggests the factory to estimate the resources required for construction of a particular style.
- Pattern making process solve all the problem initial stage which helps the bulk production process.

V. Conclusion

Readymade garments industry is one of the most dynamic sectors in the global trade. The industry is expected, estimated and generate a considerable amount of revenue and employment in a global perspective. Manufacturing garments is one of the demanded businesses in global arena. Pattern making methods and its way of processing are crucial steps for the industry. Pattern is most important to make accurate sample to buyers for collecting order. Except pattern it difficult to make sample. It always provides clear idea to require resources for the industry. It helps to reduce fabric wastage.

Acknowledgement

I would like to extend my deepest gratitude towards my colleagues, BGMEA university of Fashion and Technology, Dhaka, Bangladesh. I am highly acknowledged to my co-author for consistent support and guidance in correct direction. Without his proactive support I could not write this article.

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