



Pattern Making

The development of a garment comprises of different process. Fit is the most important factor leading to the final acceptance or rejection of a garment. Fit must be designed into the original pattern through subtleties in the pattern that provide fullness unobtrusively at appropriate locations to accommodate body bulges in a flattering manner (Hudson). Good customized fit is dependent on the pattern drafting incorporating various shapes and proportions of the individual customer. With the onset of the Industrial Revolution, standardized patterns were essential to the success of ready-to-wear clothing.

Pattern making is an art. It is the art of manipulating and shaping a flat piece of fabric to conform to one or more curves of the human figure . Pattern making is a bridge function 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 .

A pattern is flat while the body is not. The body has height, width and depth. With in this roughly cylindrical framework there are a series of secondary curves and bulges, which are of concern to the pattern maker. Darts are the basis of all pattern making. They convert the flat piece of cloth into a three dimensional form, which fits the bulges of the body.

A patternmaker typically makes a pattern from a flat sketch with measurements or a two dimensional fashion illustration. The basic pattern is the very foundation upon which pattern making, fit and design are based. The basic pattern is the starting point for flat pattern designing. It is a simple pattern that fits the body with just enough ease for movement and comfort .

Methods of Pattern Making

Pattern making involves three methods-

- Drafting
- Draping
- Flat paper patternmaking

Drafting:

It involves measurements derived from sizing systems or accurate measurements taken on a person, dress or body form. Measurements for chest, waist, hip and so on, and ease allowances are marked on paper and construction lines are drawn to complete the pattern. Drafting is used to create basic, foundation or design patterns.

Draping:

It involves the draping of a two dimensional piece of fabric around a form, conforming to its shape, creating a three-dimensional fabric pattern. This muslin is transferred to paper to be used as a final pattern (Armstrong). Ease allowances for movement are added to make the garment comfortable to wear. Advantage of draping is that the designer can see the overall design effect 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 flat pattern making.

Flat Pattern Making:

It involves the development of a fitted basic pattern with comfort ease to fit a person or body form. A sloper is the starting point for flat pattern designing. It is a simple pattern that fits the body with just enough ease for movement and comfort (Shoben and Ward). Five basic pattern pieces are used for womens clothing. They include a snug-fitting bodice front and bodice back with darts and a basic neckline, a sleeve and a fitted skirt front and back with darts. However, as fashion changes frequently womens styles fluctuate frequently. These basic slopers are then manipulated to create fashions.

A basic sloper has no seam allowances, which facilitates its manipulations to various styles. It has no design interest, only construction lines are marked on it. It is necessary that the basic structure of a sloper should be such that adjustments can be introduced easily. For a good pattern making, accurate measurements are of utmost importance.

The flat patternmaking method is widely used in the ready-to-wear market because it is fast and accurate

Material add form book . (methods for making flat pattern)

List of Pattern Making Tools and Their Uses

Pattern Making Tools:

To work efficiently, the pattern maker must have the proper pattern making tools and supplies. For making better communication with the workroom and to minimize errors due to misunderstanding, the pattern maker should know and understand some terminology related with pattern-making tools.

1. Straight pins:

Dress maker used it for draping and fitting.

2. Straight pin holder:

Pincushion or magnetic holder which is used for wrist and table.

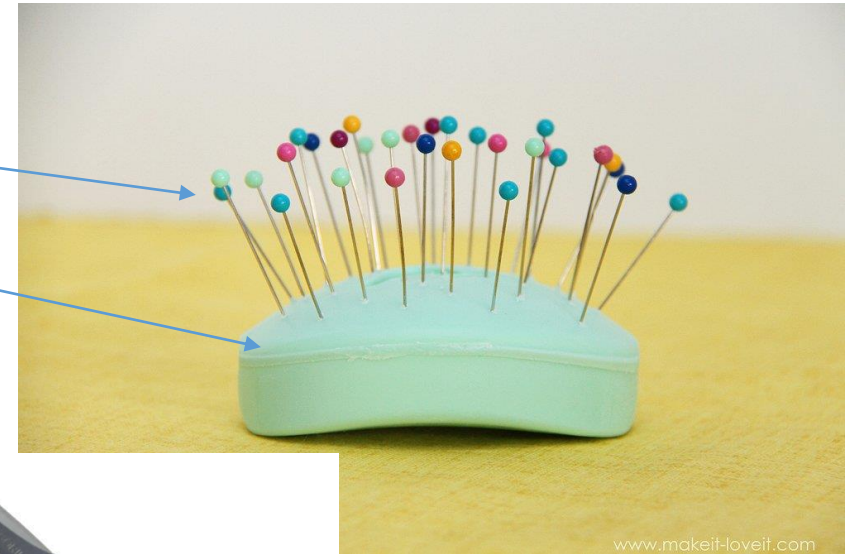
3. Scissors:

There are different types of scissors such as paper scissor, fabric scissor etc.

4. Pencils and pens:

- Mechanical pencil and sharpener which is used for pattern work.

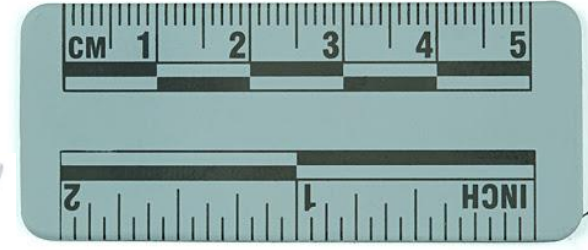
- Red and blue colored pencils are used to identify pattern changes. Black, green, red and blue felt tip pens for pattern information.



5. Rulers:

• **Tailors** square (24 × 14) inch metal ruler with two arms forming a 90° angle that measures, rules and squares simultaneously.

• Also used to triangle with the measurements to square lines.



6. Curve rules:

French curve is one of the several curves used for shaping arm hole and neck line.



7. Hanger hooks or ringers:

It is used to hold the patterns together for hanging on rods.

8. Push pins:

Push pins are used for pattern manipulation. It also prevents pattern slippage when **cutting** several plies of paper together.



9. Magic mend scotch tape:

It is used to mend pattern work.



10. Black twill tape:

Black twill tape is used for the placement of style lines on **garments**.



11. Notcher:

It is used to indicate **seam** allowance, center line and also to identify front and back of patterns.



12. Tracing wheels:

It is used to transfer pattern shape into paper.

13. Awl:

It is used to indicate the ending of darts, pocket, trim and button hole placements.

14. Metal weight:

Metal weight is used to hold the patterns in place for tracing and marking.

15. Measuring tape:

It is used to measure the size of pattern.

16. Tailors chalk.

Tailors chalk is used for making adjusted seams and style lines.



Pattern making in Today's World

Pattern making today has become an easy job with the use of the computers. Now-a-days different softwares are available in the market to meet the needs of the manufacturers. The different softwares used are Gerber, Lectra, Tukatech , OptiTex etc. These softwares has made the job of the Pattern master easier. They have made the process of pattern making more economical and less time consuming.

Pattern-making softwares enables you to input your measurements and draft out a pattern. These softwares draft patterns to fit your measurements specifically, eliminating much fitting trial and error in the sewing room.

A pattern can be made from a 3D form in just a few steps by using these softwares. An individual's measurements are collected from 3D body scanner. The measurements are used to create a virtual 3D model of the individual's body. The 3D to 2D software allows the user to define a garment surface in relation to the 3D body model. Once the garment surface is defined, the application automatically unwraps and outputs a 2D flat pattern in .dxf format.