

HANDOUTS

Chapter 3

Chapter- 3

Pattern nesting of various bottom components

Pattern nesting

- It also known as material estimation.
- It means placing of pattern on the specified pattern paper by considering the cost of material and usage.
- It is critical in footwear industry.
- It is an approximate judgment or calculation as the value, amount, time, size, or weight of something.
- It is a method used to known the consumption of that pattern for in one pair of shoe.
- It is a foundation for product costing and pricing.
- Materials are required to be estimated in the production process as the costing of a product depends on the raw materials.

Method of material estimation

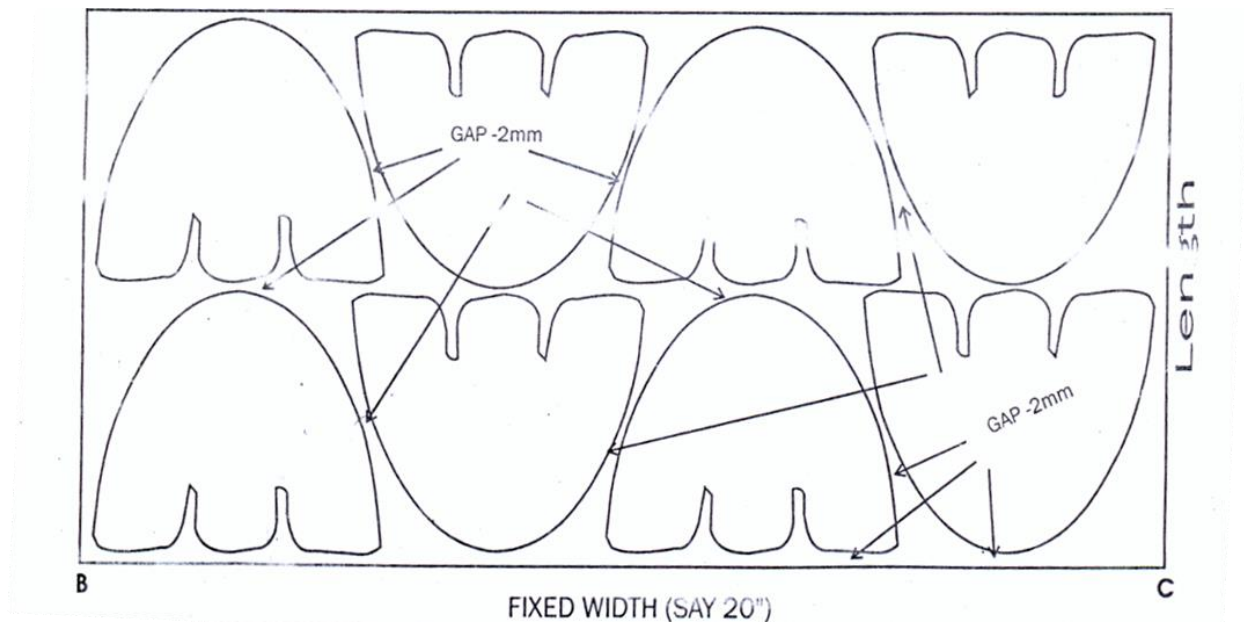
- In generals, the whole shoe material has its own methods as per the materials used.
- For example: -
 1. The material used like leather material. It is estimated by
 - Marking-up methods
 - Graphical methods
 - Russ and small methods
 - SLM
 - SATRA sum
 2. The material used like **synthetic, fabric, and other materials** like **insole board, shank board**, and other like materials.it is estimated by
 - Graphical methods
 - Tracing methods

From this bottom components pattern are estimated by **graphical method** or **tracing methods** because of the material that can be used to make any bottom components are synthetic or fibers.

N.B:- Pattern estimation for bottom component is a simple task; procedure you should follow is the following.

1. first prepare sheet paper with size 100 x 150 centimeter because size of one insole board for example have 100 cm x 150 cm. as you see in chapter one above.
2. Next to this, prepare estimated pattern and estimation paper and any other tool that can be used for like pencil, steel ruler, table and soon.
3. Finally, start tracing with best interlocking at the end count the traced component in single.

Example:-



Importance of pattern nesting

1. Economic importance
2. It is a foundation for Product Costing and pricing
3. It is very important to know the quantity of materials required to make a pair of shoe and their costs; to be competitive in the market.

Product cost:

- It is the direct or indirect costs of producing goods or services for the production of a product, include: material(direct and indirect), labor (direct and indirect), overhead cost (manufacturing cost and administration cost)

BOM:

- It is a main input for product costing.
- BOM (bill of material) is a list of the raw materials, sub-assemblies, intermediate assemblies, sub-component, parts and the qualities of each needed to manufacture a single end product.

Objectives of nesting or pattern estimation

- To establish the cost of a style /**estimate the norm**/
- To control the performance / **consumption of material of clicker**/
- To standardize the norm for a particular style
- Used for production planning /**MRP**/

Attributes of material estimation

- The profitability of the company depends on accurate costing. So that Sufficient accuracy to be used as a standard against which cutting result can be compared so that action can be taken to eliminate the wastage.
- It is also important to get accurate figure; sufficiently accurate figure are needed to set material consumption allowance.
- The consumption allowance related to a batch for clicker to cut is called clickers allowance and can be as a basis for payment for result on leather saved against allowance by the clicker.
- Consistency between style and shoe size and materials types.

End of chapter three

Quiz (10%)

1. List and explain importance of pattern nesting or pattern estimation?
2. Define what is pattern nesting means?
3. List methods of bottom component pattern nesting?
4. What is the major importance of pattern nesting?
5. What is the importance of BOM?