

PENANG SANGAM HIGH SCHOOL
P.O.BOX 44 RAKIRAKI
HOME ECONOMICS
YEAR 11 (week 15)

Strand	Clothing and Textiles
Sub strand	Fiber decoration (cont from week 14)
Content learning outcome	1. Define structural and surface design. b. Identify various methods of basic and traditional fabric decoration c. Classify and discuss methods of applying color on fabrics.

PRINTED FABRICS



- ❖ Printed fabrics are defined as fabrics that have been decorated by a motif, pattern or design applied to the surface of the fabric after it has already been constructed.
- ❖ A form of applying colour decoration to a fabric after it has otherwise been finished is called Printing.
- ❖ Used to add colour to localized areas only. Allows for greater design flexibility and relatively inexpensive patterned fabric.
- ❖ Wet prints use a thick, liquid paste. Dry prints use a powder.
- ❖ Foam prints use a colorant dispersed in foam.

Types of Printing

Screen Printing:

Screen printing is a printing technique where a mesh is used to transfer ink onto a substrate, except in areas made impermeable to the ink by a blocking stencil.



- This is a method in which ink is applied directly to the surface to be printed (substrate).
- The image to be printed is photographically transferred to a very fine fabric (the screen) such that the non-printing areas are
- Blocked off and the fabric serves as a stencil.
- The ink is wiped across the screen to pass through the unblocked pores and reach the substrate.
- For each color to be printed a separate screen is prepared and the process is repeated.
- It is more suitable for curved shapes (such as bottles and cups), non-porous surfaces (such as ceramics and metals), and short print runs.

- Also called serigraphy.

Advantages of screen printing

- Colours can be produced in brighter, cleaner shades than are possible with roller printing.
- Designs to be repeated can be much larger than in roller printing.
- Clearly defined geometric designs can easily be produced, because the areas not to receive the dye are painted out by the lacquer, in contrast to cardboard or metal stencils in which the cut areas would fall away.
- On a knitted fabric it is the only method of printing other than transfer printing, as other methods smear the dye.
- Rotary metal screens are lightweight in contrast to heavy copper rollers in roller printing.

Disadvantages of Screen Printing

- More colours equal higher costs. Since separate screens are prepared for each colour, each layer of colour leads to more preparation time and more resources used.
- Images can turn out blurred. Detailed photographs or graphics with specific gradients or shades may not come out as focused or exact due to the limitation of colours. Another factor is the thickness of the garment.
- Costly method for small on-demand orders. We have the capacity to fulfill small on-demand orders. However, more preparation is required for custom screen-printing, which is more time consuming than other techniques.
- A lot of water is used to clean the screens and mix the inks, so screen-printing is not an eco-friendly method.

Stencil Printing

Stencil is the name used for the thin cut outs which are usually made of paper, plastic or metal. The paint is applied (sprayed, brushed or sponged) through the holes and the design is imprinted on the surface of the fabric. The holes in the stencil form the design which is printed on the fabric



- The pattern is cut out of a sheet of stout paper or thin metal with a sharp pointed tool, the uncut portions representing the part that is to be left uncoloured.
- The sheet is laid on the material to be decorated and colour is brushed through its open spaces.

Advantages of Stencil Printing:

1. the method is simple to operate and does not require elaborate or expensive equipment; the cost of production is low.
2. The stencil plates can be cut rapidly and can be used with prolix in executing small orders for which the expense of block cutting would be prohibitive.

3. A great variety of graded color effects can be obtained from one stencil by blending different colors or different parts oil the stencil with one stroke of the brush; suction effects cannot be obtained by other methods

4. Any kind of color can be used in stencil printing including oil colors and watercolors, other methods of printing do not permit the use of such colors,

Disadvantages of Stencil Printing

1. Complete rings or circles, as well as unbroken lines, cannot be obtained by this method; the designer's freedom is, therefore, limited;

2. The process involves manual work and is, therefore laborious

3. The method is not suitable for large-scale production.

Block Printing:

<p><i>Block printing is the process of printing patterns by means of engraved wooden blocks. It is the earliest, simplest and slowest of all methods of textile printing. Block printing by hand is a slow process. It is, however, capable of yielding highly artistic results, some of which are unobtainable by any other method.</i></p>	
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- The blocks are usually made of wood and the design is hand carved, so that it stands out in relief against the background surface.
- The print paste is applied to the design surface on the block and the block then pressed against the fabric.
- The process is repeated with different designs and colours until the pattern is complete.
- Block printing is a slow, laborious process and is not suitable for high volume commercial use. It is a method still practiced in the oriental countries where markets exist for the types of printed fabrics produced.

advantages		Disadvantages	
(1)	This method is simple and decorative method of printing.	(1)	This method involves much manual work.
(2)	Method is quite simple so any expensive equipment is not required.	(2)	Method is slow and therefore low output (production is less)
(3)	In this method, there is not any limit in repeat of size of style	(3)	Good skilled labors needed for multi color design in this method
(4)	Prints produced have great decorative value and stamp of craftsmanship.	(4)	Fine and delicate designs are hard to produce using this method

Activity

Essay

Applying design and decoration to fabric can bring about a satisfying look to the fabric.

With reference to the above statement, discuss

- Two methods of applying colour to fabric.
- One advantage of each of the methods identified above.
- One disadvantage of each of the methods identified above.
- Two reasons why decoration and designs are applied to fabric.