LESSON 7 INTRODUCTION TO STENCIL MAKING AND PRINTING TECHNIQUES

STRUCTURE

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7. **INTRODUCTION TO STENCIL MAKING AND PRINTING TECHNIQUES**

The process of Stencil making and printing with the stencil is the first step to modern screen printing technique which is described in Unit 5 (Lessons 13, 14 & 15) of this course. In this lesson you will be introduced to the stencil making and stencil printing processes: The next two lessons will deal with stencil cutting and printing with stencils in greater detail.

7.0 **Objectives**

After going through this lesson you will be able to:

- Understand the basics of stencil making and stencil printing technique
- Describe the tools and materials used for stencil making and stencil printing.
- Select designs for stencil printing and transfer them to the stencil
- Explain how further value addition could be done to a stenciled piece of work.
- Carry out stencil printing on different objects.

7.1 **Introduction**

Stencil making involves cutting a design through a thin sheet and then transferring colour on to the surface to be printed through the cut out of the design. Printing with the help of stencils is one of the basic fabric ornamentation techniques. This is an art through which designing, printing and decoration can be experimented on different materials apart from fabrics. In this chapter, you will learn about the technique of making stencils and equipments required for it.

7.2 **Historical Background**

Stenciling technique is an ancient art which is said to have started in China and Japan, and was one of the widely used methods of printing. North Americans were amongst the first to start ways by which the stencils could be used in home decoration.
In the 18th century, American wallpaper was considered to be a luxury which only the wealthy could afford. However, the people soon found out that with a little imagination and patience, and by repeating the same motif again and again they could achieve a uniform overall pattern just as good as the one produced by fine printing techniques.

The origin of this technique in India can be traced to the Gupta period (6th to 8th century) though even before the Gupta period, this process was used in the execution of paintings.

During the Mughal and Rajput periods the use of stencils for the decoration of textile material was very popular.

### 7.3 Materials and Tools Required

The materials and tools needed for making stencils and using them for printing on fabrics are either available commercially or can be easily made or improvised.

#### 7.3.1 The stencil

The material for making a stencil should be thin and easy to cut. The following materials may be used for this purpose:

- Cartridge sheet
- Ivory sheet
- Bond paper
- Discarded photographic film negatives
- Discarded X-Ray film
- Plastic sheets

#### 7.3.2 Devices for cutting stencils

- Paper cutter
- Stencil cutting knife (Fig.7.1)
- Scissors
- Razor blades
- Metal ruler (for cutting straight lines)

#### 7.3.3 Colours for printing with stencils

There is wide variety of colours ranging from modern synthetic colours to most primitive traditional variety of colours. Some of these will now be briefly described.

- **Poster colours**: These are water soluble colours which are available in a wide range of shades in liquid form. They are best used undiluted. If they are used on
wood, the application of several coats of polyurethane clear varnish, after the paint is quite dry, will render it waterproof and hard wearing as well as increasing the brilliance of the colours.

- **Acrylic colours**: These are also water soluble and quick drying colours which are available in a wide range of shades in liquid form. They also are best used undiluted and maybe used to decorate wood using the same procedure as for poster colours.

- **Fabric colours**: They are usually water soluble and are fixed by ironing the printed fabric from the backside with a hot iron. Fabric colours can also be sprayed and can be used on fabrics for stenciling and they produce a very subtle shade.

- **Glass colours**: These colours are available in a wide variety, ranging from water soluble to gels, which produce a frosted or etched glass effect.

- **Acramin pigment colours**: Acramin pigment colours are not soluble in water and are used along with SLN binder and other ingredients to form a printing paste. They are extensively used for creating coloured designs using blocks and screen and are described in detail in Lesson 14.

### 7.3.4 Tools for applying paint

- **Cotton pads**

  These are made by enclosing a small cotton in a white, coarse cotton rag and then tying it with a knot. This cotton pad helps in applying paint through the openings in the stencil while printing (Fig. 7.2). It is advisable to have a different pad for each colour to be painted.

  - Stencil brushes
  - A stiff bristle brush (with trimmed bristles)

### 7.3.5 Other materials

- A sheet of glass to act as a surface for keeping the stencil paper while it is being cut.
- Pencils
- Thumb pins
- Adhesive tapes
- Clean rags
- Old newspapers
- Drawing papers
- Carbon paper
- Graphite paper
- Tracing paper
- A cleaning solvent like water, spirit etc.

**Self-check Questions**

1. Enlist the tools and materials required for the stencil printing method.

2. Name five types of colours that can be used in stencil printing.

**Activity**

1. Draw neatly labeled pictures of the major tools and materials required for stencil printing.

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**7.4 The Stencil Making and Printing Processes**

The stencil making and printing processes proceed as follows:

1. Selection of an appropriate design.

2. Transfer of the design on to the stencil material.

3. Cutting of the stencil.

4. Painting through the stencil on to the fabric.

5. Cleaning up of the stencil and brushes.

**7.4.1 Selection of a design**

An appropriate design suitable for the purpose of decoration in a particular context is first selected. The design can be taken from nature or from the surroundings or it may be based on some geometric pattern, Flowers, leaves, plants, birds or animals (Fig. 7.3), cartoons, magazine illustrations, a piece of art or craft, or one’s own drawings, or alphabetical letters etc., all these are appropriate. A bold type of design is good for an efficient stencil printing output (Fig. 7.4). Some bold types of symmetrical designs are shown in Fig. 7.5. Good, clear alphabetical letters can also be produced easily and quickly using a standard alphabet stencil sheet.

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![Fig. 7.3 Animal’s shadow images](image1)

![Fig. 7.4 Bold flower design](image2)
A photocopier may be used to enlarge or reduce the size of the design according to the area of the surface.

7.4.2 Transfer of the design

The next step is to transfer this design onto a stencil card using a tracing paper or a carbon paper. A stencil card can be a suitable paper or plastic material. The stencil material may be fastened on to a glass sheet or a hard cardboard. The design outline is then transferred onto the stencil material using a carbon paper (Fig.7.6).

7.4.3 Cutting out the design on the stencil

After transferring the design on to stencil card, the next step is to cut out the stencil carefully leaving the ‘Ties’, (explained in Lesson 8) and a thick border around the outline. Keep the stencil sheet on a hard surface, like glass or a hard board, for easy cutting. Cut the entire design through the stencil board, using a stencil-cutting knife or razor blade or a paper cutter (Fig. 7.7). Try to make clean sharp cuts.
7.4.4 Printing with the stencil

The final and the most interesting part is to use the stencil to print a fabric. This is done by first securing the fabric on a rigid support (like a table) in a tight stretched state and then applying the colour with the help of cotton padding or stencil brush or a painting brush or even a tooth brush. Using any of these devices, the colour is applied evenly through the openings in the stencil onto wood, plastic, glass etc.

7.4.5 Cleaning the stencil

Finally the stencil should be cleaned immediately before the paint left on it dries up and becomes difficult to remove. For cleaning, place the stencil on a newspaper and wipe it with a rag moistened with water. Care should be taken that small bridges on the stencil are not broken while cleaning. Brushes should be cleaned thoroughly in solvent and then washed with warm soapy water.

Self-check Questions

3. What is a stencil?

4. What is a stencil board?

7.5 Value Addition

After stencil printing a design on a cloth, some embroidery work on it can produce remarkable results, if done with panache for colour and creativity.

A single stenciled motif such as a sailing ship or a palm tree, for example, is easy to cut out and can be stenciled onto a T-shirt or a table mat, the pocket of a shirt or the front of a laundry bag, along with some extra ornamentation done over the print (Fig. 7.8).
Nowadays stencil printing techniques are being used in design houses for sampling of designs, so as to cut down the time for getting the end product of a sample.

**Activity**

2. Get a small piece of a fabric with some nice floral print on it. Try to do some value addition to it, by doing embroidery or mirror work or painting on it.

### 7.6 Stencil Printing on Different Objects

Stenciled motifs can be repeated over and over again to make a border or an all-over design. Delicate flower borders on sheets and pillow-cases or on a child’s dress can be very effective, while all-over patterns can be used on a number of items, such as tablecloths, scarves and shirts. Straw hats and baskets, satin shoes and canvas items can all be stenciled.

Stencils can easily be applied to china or glass. As shown in Fig. 7.9 they are used to label food storage jars. The simplest stencils can give character and beauty to any common household object, for example the wooden cups in figure Fig. 7.10. By cutting stencils one can produce designs according to one’s own requirements. For example the birds printed at the back side of a plastic chair automatically give the chair an artistic look (Fig. 7.11).
7.7 Assignments

7.7.1 Class assignments

i) Draw five simple designs for stencil printing. One of these should be symmetrical.

7.7.2 Home assignments

i) Collect small printed pieces of fabrics from a tailor’s shop and figure out by which method they might have been printed.

7.8 Summing Up

To sum up, we can say that hand stenciling is an ancient art which is being experimented upon in different areas of designing, printing and decoration. It can be used by people of all ages with equal ease. One can make a stencil of almost any design or pattern and print it according to one’s taste and choice. The material and tools for stenciling are not very expensive and they can even be easily improvised at home.

7.9 Possible Answers to Self-check Questions

1. Tools required for stencil printing:

   i) Materials for making stencils: These include sheets of thick paper or plastic materials, for e.g. cartridge sheets, transparency sheets etc.

   ii) Tools for cutting stencils: Paper cutters, stencil cutting knives, scissors etc.

   iii) Object to be printed: Fabric or any other hard object.

   iv) Tools for printing or passing the paint through stencil: Cotton pads, brushes etc.

   v) Suitable colours and pigments.

2. Colours for printing:

   Acrylic colours, fabric paints, poster colours, spray paints, glass colours etc.

3. A stencil is a clear and accurate shape cut out through a thin sheet of paper or plastic material through which paint can be passed to get its exact impression on the object beneath.
4. A stencil board is the material on which a stencil is to be cut. It can be made by cutting any stiff type of sheet, like a plastic sheet or a cardboard or a film negative.

7.10 Terminal questions

1. Which types of material can be used for making stencils?
2. Discuss the objects other than fabric which can be printed upon with stencils.
3. Explain the process of stencil printing briefly.
4. Why is it necessary to clean the stencil after printing?

7.11 References and Suggested Further Reading


7.12 Glossary

1. Stencil Board  Thin sheet of material which can be cut
2. Cotton pad  A small cotton cushion
3. Acramin Pigments  A water insoluble pigment colour
4. Symmetrical  A figure, whose mirror image is identical