Screen Printing

Screen, Block (or Roller) and Transfer Printing Techniques
Screen Printing
- 3 colour design using one screen per colour

Equipment

- A 4 colour carousel for t-shirts
- A flat bed printer for fabric
- A squeegee
- A printing screen with polyester mesh 90 threads per cm
- One stencil per colour
Screen Prints

Work by Andy Warhol, Laura McCafferty and a part of a repeat for a furnishing design.
Advantages of Screen Printing

• Cheap to set up
• Economical for short to medium runs
• Versatile will print onto different materials
• Good for flat areas of colour and line detail
• Easy to repeat as many times as required

Disadvantages of Screen Printing

• One screen per colour
• Image size limited to size of screen
• Difficult to register complex designs
• Time consuming for long runs
Method In School

1. Produce one stencil per colour using thin stencil paper or acetate.
2. Select the darkest one first.
3. Tape it face down onto a clean screen.
4. Place the screen in position onto fabric.
5. Spoon acrylic printing ink across the top of the design.
6. Using a squeegee pull the ink towards you, once gently to flood the screen and once smoothly and firmly to push the ink through the mesh.
7. Repeat image as many times as required.
8. Take off stencil, wash up all equipment and leave the print to dry.
9. Repeat for each colour registering the screen carefully.
Differences In Industry

• Larger screens used
• Automated screen registration
• Purpose built tables, carousels and rotary beds to print onto.
• More complex designs with a greater number of colours
• Automated control of squeegee
• Faster more accurate production
Block or Roller Printing
Equipment Needed

- A block or roller per colour with a raised surface into which the design has been carved or etched.
- Printing Inks
- A printing table or surface
Block printed cloth

Roller Printing
Roller Printing

Advantages
• Once set up its very fast
• Economical for long runs
• Complex designs can be produced

Disadvantages
• One roller required per colour
• Not economical for short runs as it’s expensive to set up.
• Specialist equipment required
• Width of design limited to width of roller
Block Printing Methods In School

1. Create a raised surface on a piece of card or carve a design into the surface of lino or suitable block material.
2. Roll out printing ink onto a flat palette, then transfer ink to the surface of your block.
3. Press the block onto fabric or paper and repeat as necessary.
TRANSFER PRINTING

Photographic images can be printed onto cottons or polyesters.
Equipment Needed In Industry

TC TRANSFER PRINTING CALENDERS

- Dyes are transferred from transfer paper to textile by the effects of heat.
- This technology assures a reliable and compact system, transfer printers allows the required temperature to be maintained to within only +/- 1C.
- Twin transfer calender to print up to 3200 mm wide fabrics.
Method in school

EQUIPMENT

- Flat iron (not steam)
- Computer with Photoshop & Propaint software
- Ink jet printer
- Transfer paper
- Tracing or grease proof paper
Method in school

1. Edit image in Photoshop

2. Use Propaint to produce a repeat pattern A4 or smaller

3. Use ink jet printer to print onto transfer paper

4. Peel backing off

5. Place on fabric with tracing paper on top. Iron to transfer the print.
Transfer Printing

**Advantages**
- All colours can be printed at once
- Complex designs can be produced
- Good for prototypes and short & medium runs.
- Designs can be emailed to be printed elsewhere

**Disadvantages**
- Expensive to set up industry
- Expensive for long runs.
- ICT equipment required.
- Limited to size of printer
- Transfer paper is expensive
- The final garment needs to be treated carefully
• www.mickiemccormic.com/pic_pages/selfx4.jpg