

Tools, Equipment and Making

This section deals with the **tools and equipment** used to **make** textile products and is divided into the following areas:

- ❖ Equipment and tools as used in a classroom environment.
- ❖ Commercial patterns and pattern language.
- ❖ Material testing.
- ❖ Style details.
- ❖ Seam construction and basic processes.

The resources included in this section are designed to support students in their knowledge and understanding of textile manufacturing in a school environment. Resources include:

- ❖ Tools and equipment commonly used in schools
- ❖ Videos to explain processes or concepts
- ❖ Photographic images and illustrations to exemplify concepts and products
- ❖ Exemplar examination question with answers

The sewing machine

There are a few types of sewing machine:

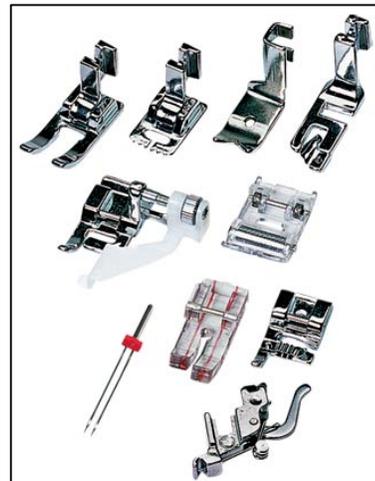
- a basic machine
- an automatic machine
- a computer-controlled machine.

Models vary but all have similar functions such as:

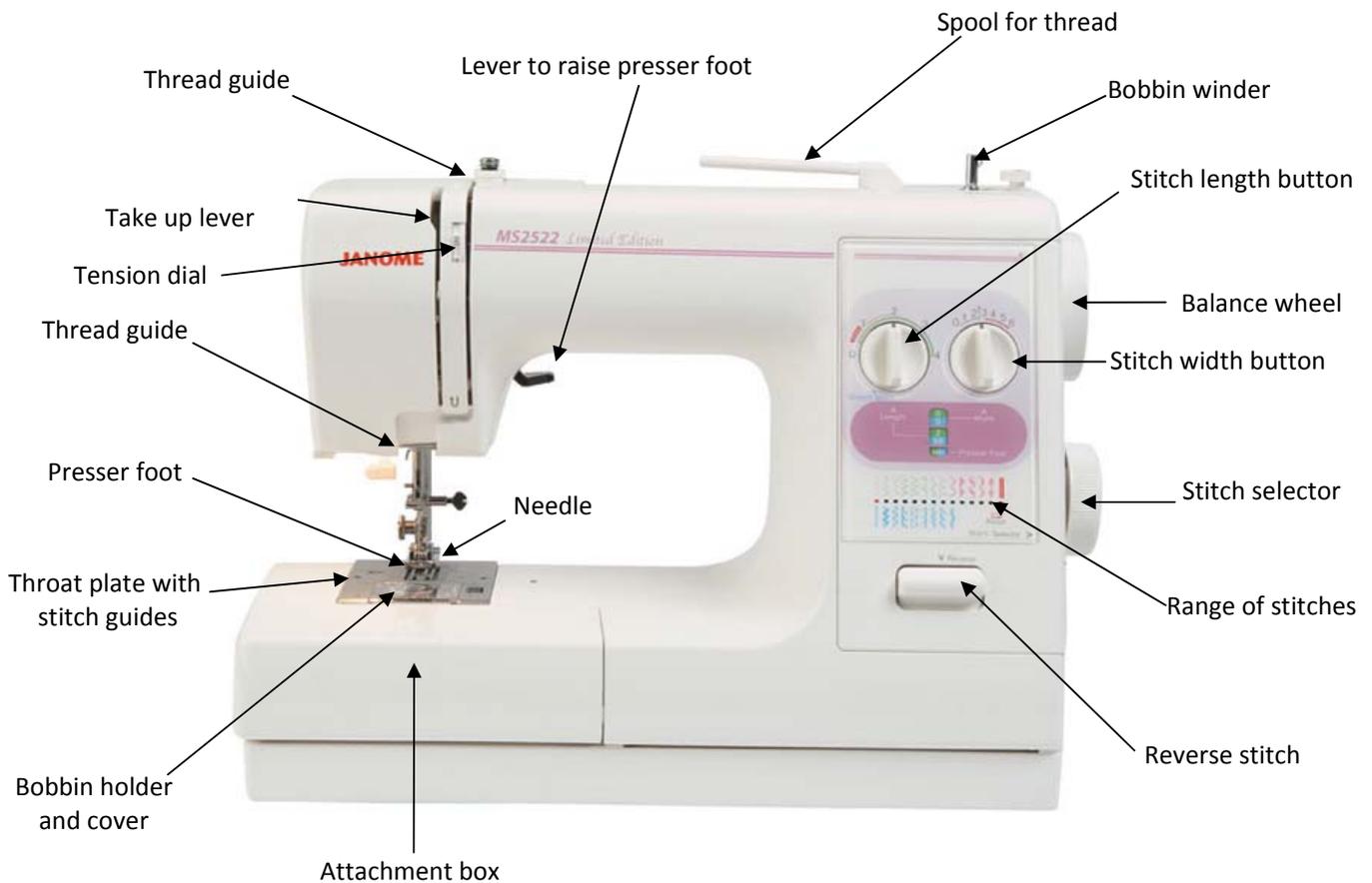
- a basic range of utility stitches
- some decorative/embroidery stitches,
- a button hole function

Most machines have a range of different 'feet' or attachments which extend the number of functions the machine can do such as:

- a zipper foot
- a button/button hole attachment
- a quilting guide
- a piping foot
- a gathering foot
- a free machine embroidery foot



A basic sewing machine



Each sewing machine has its own operating guide but all function in a similar way.

Computer controlled and automatic machines have a large number of additional stitches and functions. Some have specialist software which enables you to design your own stitches and embroideries.



Different materials require specialist machine needles in order to stitch correctly, for example:

- a ball point needle for stitching on jersey materials
- a leather needle for leather and suede

The size of sewing machine needles should also be changed according to the material being used.



Heavy duty material like denim will require a larger needle to stitch through the materials, for example a size 16. The thread used for top stitching is often much thicker, that too needs a thicker stronger needle.



Sheer or very fine materials like the chiffon used in the top opposite need a finer machine needle. This will help to avoid needle damage on the material.

TIP: Whatever the task, always test the stitch first on a sample of the correct material to check:

- the right size needle
- the right type of needle
- the stitch tension is correct
- the stitch type is suitable
- the type of the thread is suitable
- the colour of the thread is suitable



The overlocker



- The overlocker has either 3 or 4 cones of thread.
- It has a blade that trims the end of the material as it is stitched.
- The stitches loop over the edge of the materials creating a neat finish.
- The stitch width and length can be altered depending on the type of finish needed.

