## **Subject: Surface Embellishment**

## **Unit 1: Introduction to Surface Embellishment**

## **Quadrant 1 – E-Text**

## **Learning Objectives**

The learning objectives of this unit are:

- Define the term surface embellishments as used on innovative fashion products.
- Recognize the significance of surface embellishments on textiles as Value additions.
- List the categories of fashion and apparel products.
- Explain the scope of surface embellishments on fashion and apparel products.
- Classify the techniques of surface embellishments.

#### 1.1 Definition of Surface Embellishments

Fabric embellishments are decorations that are normally added to fabrics to make them more beautiful, because of the nature of decorative patterns, which they create. Common materials that can be used for this process include fringe, boutiques, beads and buttons. In many ways, embellishment is the ultimate tool of the decorator.

It can be seen, with some degree of accuracy, as the heart and soul of the decorative world. To understand and accept embellishment is to understand and accept decoration. Picking up a Collins English dictionary, the easy definition of the word embellish is: "to make something more attractive, by adding decorations" or "to make a story more interesting by adding details, which may not be true"



Collins Thesaurus makes an addition to the word embellish, by adding: decorate, enhance, adorn, dress, grace, deck, trim, dress up, enrich, garnish, ornament, gild, festoon, bedeck, tart up and beautify.



Surface Embellishment: is an important component of freeform, it's a great way of bringing your personality, your style and skills to your work and putting your own stamp on your project. There are 1000's of ways to embellish; the following are a few basics, that I hope you will find helpful and encourage you to experiment.

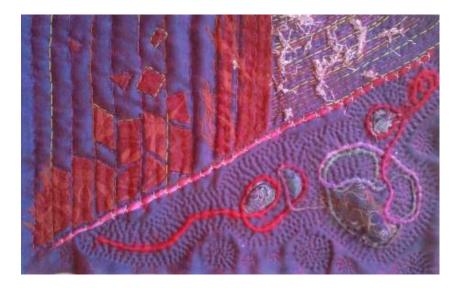
To make an addition to, or to enhance the sum of, seems to be an integral part of human nature. We have always felt the need to embroider, using the word in its loosest term, whether that be through design or craft, or indeed through fact or fiction. In this we are as one species, as no matter what culture or era we think of, we have all used decoration to enhance and embellish most elements of the artificial world that has been created.





#### 1.2 Textile Embellishment

Textiles in particular have a long and full tradition of embellishment. Additions to fabric can take the form of nearly anything, from the addition of pure stitching to other fabrics, beads, metals, wood, glass, precious stones and animal products. Embellishment can also take many forms, with pattern work following the suggestion of nature, the geometrical abstract, fonts and lettering. It can be perceived as a subtlety, the changing of colour, line and texture, or it can be much bolder, using large-scale shapes and patterns. Whatever the technique or suggestion for composition, the end result is always nearly the same, to make something more than it was, to add decoration to enhance its attraction to the individual.



## **Embellishment in the Decorative Arts**

However, embellishment was by no means limited to textiles. Ceramics, glass, metal, wood in fact all the major and minor decorative arts, used embellishment, as a legitimate tool in which to decoratively enhance their results.



It was also seen by successive generations as an integral addition to the skills base of the discipline, rather than as a filler or by-product of the main event.



This relatively intense and symbiotic human attraction to the decorative is something that Modernism, on the whole, failed to take into account. In many respects,

Modernism saw one of its tasks as the declaring of war on the traditions of human nature and human decorative art, seeing decoration and pattern as the addition of extraneous embellishment through dishonesty to the form and function of the product. To be fair this does have some merit, embellishment can well be seen as a form of tarting up, a disguise or distraction of the practical purpose of the product if you will, even to the point of the deflection of the truth. Anyone who has bought a frozen pizza in a box will know exactly what this is.



Even the second definition of the Collins English dictionary, stated above, although being an application towards fiction and story-telling, does make the implication clear as far as at least a proportion of embellishment is concerned: adding details which may not be true. Having said

that, was it strictly necessary to have a near iconoclastic crusade against the world of embellishment, decoration and pattern? Probably not.



A number of minimal Modernist enthusiasts had frankly disturbing ideas as to where they stood in the time frame of the decorative arts, compared to those who embellished.

Many of those ideas and analogies bordered on cultural bigotry with traditional decoration being seen by many, as belonging to a world of the non-sophisticated and the culturally backward. It is perhaps an unsavoury aspect of some of the 20<sup>th</sup> century theories on design and decoration, theories which are often stripped of their more contentious aspects by today's world. In many respects, the iconoclastic approach the Modernists took to decoration had a mixed result, at least on the level of the removal of pattern.



The 20<sup>th</sup> century history of textile pattern work is just as rich, if not more so, than the previous 19<sup>th</sup> century. However, embellishment is not quite what it used to be.

We have no arabesques or curlicues to embellish our phones, TVs, cars, laptops, building exteriors or pavements. We live in an environment where embellishment is often limited and contained leaving much of our artificial world often with a stark and plain prospect.



In some respects, is it any wonder then that graffiti, apart from the sanctioned graffiti of the advertising world, is often the only outward appearance of colour, intensity and expression, and even this, is frowned on, as a departure from the norm, in other words, an attack on the minimal by the decorative.

To define the term surface embellishments as used on innovative fashion products, textile surface design is the art of changing the appearance of natural and synthetic surfaces by the application of traditional, stylized, digitized and illusionary techniques to embellish a product. It is also the art of enhancing a textile surface structure by applying three-dimensional techniques, such as weaving, knitting, embroidery, lace, beading and embossing.



# **Embellishments in Sewing and Crafts**

In sewing and crafts, an embellishment is anything that adds design interest to the piece. Designing the surface of the garment to make it more beautiful and attractive is known as surface ornamentation or embellishment. Surface embellishment is a method of value addition to the fabric. It increases the value of the garment both by the appearance and by its price.



1.3 Significance of Surface Embellishments

In simple terms, one can define value addition as a means of enhancing the appearance and value of the garment. As we all know that fashion is a cycle and trends keep changing, at present people go in for highly ornamented garments, not only for weddings, they get into formals, party wear and so on. Ornamentation not just adds value for the garment, but also increases its price to a higher extent.



#### 1.4 Fabric Decoration in India

India has long been known for fabric decoration using traditional weaving, dyeing and embroidery. Indian embroidery has become synonymous with traditional fabric ornamentation. Its origin dates back to ancient times. Embroidery has adorned almost everything in fabrics, from hand kerchiefs to quilts to wearable and home furnishings.

Be it a simple running stitch of Kantha or the satin and chain stitch of Kashmiri Kashida to the intricate Chikankari of Lucknow inspired from the Mughal era, they all depict the passion and life of the craftsmen of India.



Embroidery is just one of the many value addition techniques used. Other techniques are appliqué works, printing and dyeing techniques, knitting, crochet, braiding, bead work, lace and ribbon work and piping.



Each of these methods have their own applications and value, which will be discussed in detail in this course. There is fascinating potential of the embellished and altered textile surface and form applied to the creation of fashion and fashion accessories.



With a large variety of techniques, applications and materials enabling you to create unique textile surfaces with rich and exotic textures, gorgeous colour and 3D, manipulated forms, there is an array of new and innovative techniques, that can be made with exploration and experimentation.



Quick explorations with samples lead to the production of embellished surfaces enhanced with gilding, painting, stiffening, beading, padding, stuffing, wiring, collaging, folding, gathering, wrapping, fraying, patch work, laminating and stitching. Surface ornamentation helps you translate your design inspirations into a special, unique artwork of your own choice. It encompasses a mixture of techniques and applications.





# 1.5 Classification of Surface Embellishment Techniques

## Introduction

Design on a Surface is a completely open-ended classification, for creativity that provides, almost limitless opportunities for artistic expression. A form of art that is not hindered by preconceived ideas, stereo-types or pigeon-holing. Textures and media may be presented in a new and unexpected way. The name "Surface Design" includes not only fibres, but other material too.



## **Textile Art**

The names "textile art" or "textile creation and design" are too limited, to be able to describe the possibilities. Today, soft, sculpted cloth figures, have become a recognizable art and craft form, encompassing, a wonderfully diverse range, of textile and art techniques.



Examples of textile and art techniques are: Portraiture, Caricature, Characterization, Fabric manipulation, Quilting or needle sculpture, Beading, Embroidery, Painting, Dyeing and printing, Knitting, Weaving, Crochet, Fashion or costume design, and all sorts of other textile embellishment. Textile representations have been part of our social and cultural history for centuries. Few examples survive today, due to the perishable nature, of the materials used, and undoubtedly, the over-handling of the items. Those that do exist, provide insights into culture, fashion, fabrics and the economy of the times in which they were made. The creative power you possess, to transform a formless thought or vision, into a fully formed expression, and extension of yourself, using only a yard of fabric and a spool of thread is truly a creative gift, and is achievable by anyone with a little knowledge, some patience and a few basic skills.



## 1.6 Indian Market – Embroidery

Embroidery, till a decade ago, was largely in the unorganized sector. Totally, 60% of the market is governed by the organized sector. Surat and Mumbai are the major embroidery centers in the country. Bareilly and Muradabad are known for beadwork.

As the export market is getting more organized, more enterprises started export of embroidered articles. Leading company Aayee in Mumbai, has a market in the range of Rs.400 – Rs.1500 a metre, for hand embroideries, and Rs.50 – Rs.100 a metre for machine embroideries.

Our exports are growing at the rate of 15 - 20% per annum. Garments with sequins and crochet laces (of Indian looks) are well received by foreign customers, and now, such works are being done on sleep wear too. Sequin and beadwork, Tie and die textiles too have a good market value.





# 1.7 Techniques of Embellishment

Common techniques of embellishment used on textiles as value addition are: Applique, Embroidery, done either by machinery or hand, Quilting, Patch work, Trim (sewing), Lace, either pre-made or home-made, Piping made from either self-fabric, contrast fabric or simply a card, Fringe (trim), Smocking, Beads and Sequins, Printing and Dyeing methods. Items that normally serve a function may also be used as embellishment. For example: Buttons can be placed anywhere on the piece. Zippers can be unzipped and be used as piping or simply stitched on.



Sequins can be placed anywhere. Buckles can be placed anywhere on the piece.



# **Appliqué**

An appliqué is a small ornament or device applied to another surface. It is a surface pattern that is used, to decorate an aspect of a garment or product. It is highly used with the Textiles industry, but lately is a key trend, for make-do, mend items. In the context of sewing, an appliqué refers to a needlework technique, in which patterns, or representational scenes, are created, by the attachment of small pieces of fabric, to a larger piece, of contrasting colour, or texture. It is particularly suitable for work, which is to be seen from a distance, such as in banner making.





## **Embroidery**

Embroidery is the handicraft of decorating fabric or other materials with needle and thread or yarn. Embroidery may also incorporate other materials such as metal strips, pearls, beads, quills and sequins. An interesting characteristic of embroidery, is that the basic techniques, or stitches, on surviving examples, of the earliest embroidery chain stitch, buttonhole or blanket stitch, running stitch, satin stitch and cross stitch remain the fundamental techniques of hand embroidery today. The development of machine embroidery on a mass production scale came about in stages. The earliest machine embroidery, used a combination of machine looms and teams of women embroidering

the textiles by hand. India is a country which has a rich culture, tradition, art, music, literature and sculpture; embroidery is no exception. Important examples of embroidery in India are: Kantha, Kasuthi, Phulkari, Chikankari, Kashida to name a few.



# Quilting

Quilting is the process of using a needle and thread to join two or more layers of material to make a quilt.

Typical quilting is done with 3 layers:

The top fabric or quilt top, batting or insulating material and backing material. The quilter's hand or sewing machine passes the needle and thread through all layers and then brings the needle back up. The process is repeated across the entire area where quilting is wanted. A running stitch is commonly used and these stitches can be purely functional or decorative and elaborate. Quilting is done to create bed spreads, art quilt wall hangings, clothing and a variety of textile products. Quilting can make a project thick, or with dense quilting, can raise one area so that another stands out.

## **Patchwork**

Patchwork or "pieced work" is a form of needlework that involves sewing together pieces of fabric into a larger design. The larger design, is usually based, on repeat pattern, built up with different fabric shapes, (which can be different colours). These shapes are carefully measured, and basic geometric shapes are cut, making them easy, to piece together.

Patchwork is most often used to make quilts, but it can also be used to make bags, wall-hangings, warm jackets, cushion covers, skirts, waistcoats and other items of clothing. Some textile artists work with patchwork, often combining it with embroidery and other forms of stitchery.



## Lacework

Lace is an openwork fabric, patterned with open holes in the work, made by machine or by hand.

The holes can be formed via removal of threads or cloth from a previously woven fabric, but more often, open spaces are created, as part of the lace fabric.

Lace-making, is an ancient craft. True lace is not made, until the lace is created when a thread is looped, twisted, or braided to other threads, independently, from a backing fabric. Originally, linen, silk, gold, or silver threads were used. Now lace is often made with cotton thread, although linen and silk threads are still available. Manufactured lace may be made of synthetic fiber. A few modern artists make lace with a fine copper or silver wire instead of thread.



# **Piping**

In sewing, piping is a type of trim or embellishment consisting of a strip of folded fabric inserted into a seam, to define the edges, or style lines of a garment, or other textile object. Usually, the fabric strip is cut on the bias. It may be made from either or of leather. Today, piping is common on upholstery and decorative pillows, but it is also used on clothing. Piped pocket openings, garment edges and seams are characteristic of Western wear.



## Fringe (Trim)

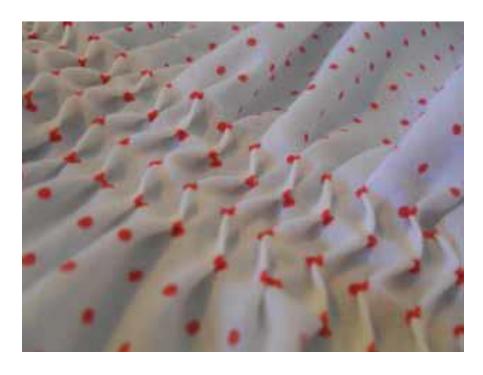
Fringe, is an ornamental textile trim, applied to an edge of an item, such as drapery, a flag, epaulettes, or decorative tassel. Fringe originates in the ends of the warp, projecting beyond the woven fabric. In this way, a cut piece of fabric, would not require hemming, in order to achieve an edge, which would not unravel: several strands of weft threads, would be removed, and the warp threads, would remain. More commonly, it is made separately and sewn on, consisting sometimes of projecting ends, twisted or plaited together, and sometimes of loose threads of wool, silk, linen, or narrow strips of leather.



# **Smocking**

Smocking is an embroidery technique, used to gather fabric so that it can stretch. Before elastic, smocking was commonly used in cuffs, bodices, and necklines in garments, where buttons were undesirable. Smocking developed in England and has been practiced, since the Middle Ages, and is unusual among embroidery methods in that it was often worn, by labourers. Other major embroidery styles are

purely decorative and represent status symbols. Smocking was practical for garments, to be both form fitting, and flexible, hence its name derives from smock, — a farmer's work shirt. Smocking may be done in many sophisticated patterns.



Standard hand smocking stitches are:

Cable Stitch, Stem Stitch, Outline Stitch, Cable Flowerette, Wave Stitch, Honeycomb Stitch, Surface Honeycomb Stitch, Trellis Stitch, Vandyke Stitch, Bullion Stitch and Smocker's Knot.

#### **Cable Stitch**

A tight stitch of double rows that joins alternating columns of gathers.

## **Stem Stitch**

A tight stitch with minimum flexibility that joins two columns of gathers at a time in single overlapping rows with a downward slope.

#### **Outline Stitch**

Similar to the stem stitch, but with an upward slope.

#### **Cable Flowerette**

A set of gathers worked in three rows of stitches across four columns of gathers. Often organized in diagonally arranged sets of flowerettes for loose smocking.

## **Wave Stitch**

A medium density pattern that alternately employs tight horizontal stitches and loose diagonal stitches.

## **Honeycomb Stitch**

A medium density variant on the cable stitch that double stitches each set of gathers and provides more spacing between them, with an intervening diagonal stitch concealed on the reverse side of the fabric.

## **Surface Honeycomb Stitch**

A tight variant on the honeycomb stitch and the wave stitch with the diagonal stitch visible, but spanning only one gather instead of a gather and a space.

## **Trellis Stitch**

A medium density pattern that uses stem stitches and outine stitches to form diamond-shaped patterns.

## Vandyke Stitch

A tight variant on the surface honeycomb stitch that wraps diagonal stitches in the opposite direction.

## **Bullion Stitch**

A complex knotted stitch that joins several gathers in a single stitch. Organized similarly to cable flowerettes.

#### Smocker's Knot

A simple knotted stitch used to finish work with a thread or for decorative purposes.

# 1.8 Dyeing and Printing Techniques

Tie-dye, is a modern term, coined in the ancient, resist-dyeing techniques, and for the products of these processes. The process of tie-dye, typically consists of, folding, twisting, pleating, or crumpling fabric or a garment, and binding with string, or rubber bands, followed by application of dye(s).



The manipulations of the fabric prior to application of dye are called resists, as they partially or completely prevent the applied dye from coloring the fabric. More sophisticated tie-dyes involve additional steps, including an initial application of dye prior to the resist, multiple sequential dye and resist steps, and the use of discharge. Unlike traditional resist-dyeing techniques, tie-dye is characterized, by the use of bright, saturated, primary colours, and bold patterns.



These patterns, including the spiral, mandala, and peace sign, and the use of multiple bold colors, have become clichéd, since the peak popularity, of tie-die in the 1960s and 1970s. The vast majority of currently produced tie-dyes, use these designs, and many are mass produced, for wholesale distribution.

However, a new interest in more 'sophisticated' tie-dye, is emerging in the fashion industry, characterized by simple motifs, monochromatic colour schemes, and a focus ,on fashionable garments, and fabrics, other than cotton. A few artists, continue to pursue tie-dye, as an art form, rather than a commodity.

**Batik**, is a technique of manua, wax-resist dyeing, applied to whole cloth, or cloth, made using this technique. Batik is made, either by drawing dots, and lines of the resist, with a spouted tool called a canting, or by printing the resist, with a copper stamp called a cap.

The applied wax resists dyes, and therefore, allows the artisan to colour selectively, by soaking the cloth in one colour, removing the wax with boiling water, and repeating, if multiple colours are desired. A tradition of making batik is found in various countries, including Nigeria, China, India, Malaysia, and Sri Lanka; the batik of Indonesia, however, is the most well-known.



# 1.9 Fabric Manipulation

There are different types of fabric manipulation techniques. They include: Embellishment through addition, Beads and beading, Embellishment through subtraction and Construction techniques.



Embroidery And	Embellishmen	Embellishment	Beads and	Construction
Fabric Manipulation	t Through	Through	Beading	Techniques
Manipulation	Addition	Subtraction		
Gathering	Applique /	Decoupe /	Tambour Work	Patchwork
	Applied Works	Reverse		
		Technique		
Shirring	Couching	Cutwork	Hand Beading	Applied
				Patchwork
Pleating	Stitching –	Drawn Thread	French Beading	Log Cabin
	Hand Stitching			Patchwork
Tucking	Beads and	Pulled Work		Crazy
	Beading			Patchwork
Smocking				
Quilting		·		-

# 1.10 Types of Quilting

There are different kinds of quilting techniques. These are: Cord quilting, Corded Italian quilting, Stuffed / Trapunto quilting, Wadded English quilting, Flat quilting and Shadow / Ombre Quilting.

## **Cord Quilting**

A technique that uses cord or similar padding to raise the surface of the fabric to create the design. Cord quilting is worked on one layer of fabric, with the cord held in place underneath the material by stitching worked by hand or machine across the cord.

## **Corded / Italian Quilting**

Two layers of fabric are used with the underneath layer traditionally of thin butter muslin. Two rows of parallel stitching are worked with a padding cord or yarn threaded through the channel from the back creating a raised design.

## **Stuffed / Trapunto Quilting**

A method of quilting using two layers of fabric with the underneath layer traditionally of thin butter muslin, with padding inserted between the layers in areas. The padding is inserted from the back of the material into 'pockets' created by stitching around the design.

## **Wadded English Quilting**

Three layers of material in a sandwich construction are held in place by patterns of stitching forming the design. Wadded quilting is the most commercial method of quilting often used in clothing and interior furnishings produced industrially by the metre.

#### **Variations:**

Button quilting with buttons securing the layers.

## **Flat Quilting**

Flat quilting is unpadded quilting using one or two layers of fabric worked with patterns of stitching.

## **Shadow / Ombre Quilting**

This technique uses strongly coloured yarn, fabric or found objects underneath a transparent top layer of material using one of the quilting methods.

## **Embellishment through Addition**

All embroidery techniques that involve the addition of fabric, embroidered motifs or found objects to a ground. This technique is often combined with quilting.

## **Couching**

This is a technique, of using a working thread, to secure another thread, or yarn, to a material's surface. This is particularly found, in metal thread embroidery.

## Stitching - Hand Stitching

Traditional hand stitched techniques, are numerous, with many cultural variations. Some main types are: whitework, canvas work, counted thread work, blackwork, and metal thread work.

## White Work

The term is used to reference embroidery using white, on white. The main types are: Ayrshire embroidery, Broderie Anglaise, Renaissance and Richelieu embroidery.

#### **Canvas Work**

Embroidery worked on canvas. The main types are: bargello / Florentine embroidery, Berlin woolwork and cross-stitch embroidery.

#### Blackwork

This is Monochrome embroidery, usually worked in black.

## **Metal Thread Work**

This technique uses precious metal threads (or alloys or synthetics), spangles or sequins to embellish materials. It is used in heraldic work, ecclesiastical, military and ceremonial embroidery, ethnic costume and fashion. Many types of metal thread, materials and techniques are used.

## **Beads and Beading**

There are different types of beading work.

## **Tambour Work or Beading**

Commercial embroidery worked with a fabric is worked within a frame with the beads / sequins supplied on a continuous thread. This method can be used for other embroidery techniques in addition to the application of beads and sequins and is still much in use within the fashion industry.

## **Hand Beading**

Variety of methods of applying beads by hand individually or by couching to create surface texture or pattern. Beads may also be worked over wire or thread constructions (bead weaving).

## French Beading

This is a method of hand stitched beading that imitates the fluid handle of tambour beading without the use of a frame.

# Decoupé / Reverse Appliqué

In this technique, threads stitched through fabric are drawn together to reduce the fullness of a material to a required width. The stitches may be worked by hand, but usually by the use of a gathering foot, (ruffler), or industrial machinery.

#### Cutwork

In this method, part of the fabric is cut away. Stitches may then be worked in the remaining spaces by hand or machine.

#### Drawn Thread

In this method some threads from a fabric are withdrawn. The remaining threads, are pulled together, with stitches, and decorated with further stitches. There are many variations, the main one being Needleweaving.

## **Pulled Work (Drawn Fabric)**

In this embroidery technique, stitches are worked, on a loosely woven fabric, and pulled tightly together, to create patterns of 'holes'.

## 1.11 Construction Techniques

#### **Patchwork**

The process of joining fabrics together using stitches. This technique is often used in combination with quilting and appliqué.

## **Applied Patchwork**

Joining pieces of material together onto a ground.

## Pieced Work / Mosaic Patchwork / Inlay:

Pieces of fabric are joined together with stitches.

## **Log Cabin Patchwork**

Strips of material are joined together in a pattern to form squares. These are then pieced together.

# **Crazy Patchwork**

Irregular patches of material are applied with decorative stitches to completely cover the base fabric.

#### Lace

Lace is an intricate material made by various methods by hand or machine using intertwining, knotting or looping processes. The main types are needlemade lace, bobbin lace and machine made lace.

#### **Needle Made Lace**

This lace is fine material constructed by hand using a needle and stitches.

The main types are: Renaissance lace, Reticella lace and Richlieu lace.

#### **Bobbin Lace**

This is a hand method of constructing fine material using bobbins to weave threads between pins arranged on a lace cushion.

## **Machine Made Lace**

This method began in the early 1800's. Machine made laces are usually named after the machine that constructed them.

## 1.12 Industrial Embroidery Equipment

There are many types, of industrial embroidery equipment. New technology is constantly becoming available offering further opportunities for the embellishment of fabric.

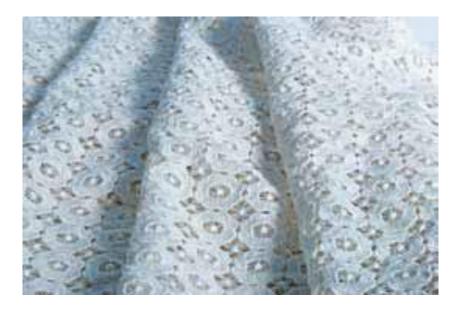
## **Hand Operated**

Hand operated industrial equipment includes the Irish machine, Cornely machine, with many variations, for applying two thread and three thread cords, ribbon, beads, braid and sequins. The Barratto scalloping machine, for creating embroidered decorative edges, and the 'threadless' embroidery machine, producing needle punched embroidery designs. An example of this is Tanaka.



## Schiffli Embroidery

Schiffli embroidery, is produced using the extremely complex, Schiffli machines. They are able to produce, narrow sections, or fabric widths, up to fifteen yards. The number of needles per machine, is usually about 1000, and these may all be programmed, to be working at the same time, on one design. Schiffli lace, is created by working the designs on net, which may then have, the background fabric removed.



# **Computerised Embroidery Equipment**

The commercial, embroidery industry, is vast, and is used for customisation of work wear, as well as for fashion and interior textiles. Computerised embroidery systems, are now extremely sophisticated, and replicate many embroidery techniques, previously only achievable through hand embroider or the use of hand operated industrial machinery.

## **Tools**

Boring tools, cord and sequin attachments, are now available, for most makes of industrial CADCAM embroidery, multihead machines, including ZSK and the Tajima computerised embroidery machines. Machines range from Modular machines that are becoming more popular such as Amaya machine, with the capability for each head to be working on separate designs.



## Maya

The Maya series of computerised machines, allows the fabric to be embroidered and quilted simultaneously, on continuous fabric rolls. This is being used extensively for bedding soft furnishings and is widely used in the textile and garment industry. The Maya series of computerised machines, allows the fabric to be embroidered and quilted simultaneously, on continuous fabric rolls. This is being used extensively for bedding soft furnishings and is widely used in the textile and garment industry.



# **Laser Cutting**

Flatbed material laser cutting is popular within the textile industry. It offers the ability to precision cut a wide variety of materials such as silk, denim, leather and suede at speeds suitable for mass production and at bed widths up to 2000m. This technique can be combined with other processes such as CADCAM embroidery and print.

## **Laser Engraving Machines**

The Laser computerized engraving machine can engrave and precision cut, in one process on a continuously moving bed to a maximum size, of 1800mm x 1800mm with speeds up to 24 metres a second. This process can produce images, text, logos and textures on finished items or raw materials including leather, wood, plastic, man-made and natural fabrics. It can also be used to change the colour and texture of some surfaces.

## 1.13 Conclusion

To summarize, in this unit, you have learnt about surface embellishments that are used on innovative fashion products and recognized their significance as value additions on textiles. the unit also gave you an insight into the scope of surface embellishments on fashion and apparel products. And finally, you were also given an overview of various surface embellishment techniques.