

# Designing Beaded Patch Appliqué Using Digital Surface Layering Technique

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## ABSTRACT

Layers shape a fundamental module in any computer aided design programming. This experiment manages the idea of planning beaded fix appliqué utilizing computerized surface layering procedure in computer aided design. The work included three stages. The primary stage is the production of the work of art. The coveted fine art and its measurement are chosen physically utilizing an unpleasant portray. The desired art work of 5" x 4" was created using the graphic designing software. The final graphical appearance of the art work was clearly analyzed. Phase II involved the layering process whereby the process of completing the appliqué was decided. Phase III involves the finishing of the beaded patch appliqué. Seed beads, mini Seed beads, large bead, tube beads and black sequins were used to stitch the beaded appliqué. This technique guarantees precision in plan, precision and proportionate outline and additionally material wastage is kept away from and correct amount and valuing can be controlled by this strategy.

**Keywords :-** Layer, Patch, Appliqué, Design, CAD, Beads

## I. INTRODUCTION

This article deals with layers in computer aided design. Layers outline an imperative module in any computer aided design programming in no time open in the market. This is genuinely a fundamental thought or felt that everybody working with computer aided design programming needs to consider. The hidden periods of computer aided design were simply to deal with the 2D drafting approaches [7]. These are a part of the essential issues that the architects of computer aided design were bothered with. The impression of the drawing on the screen would be incredible, yet when the pulling in was to be printed to make a printed rendition the originators of computer aided design felt the crush. Within line, covered line et cetera ought to be printed with lesser thickness than the rule borders. Since all the line sorts were on a comparative layer the probability of dealing with this got the chance to be troublesome. This delivered layers in computer aided design [1].

A layer is a sheet of direct paper on which certain substances are drawn. A customer is fit the bill for make as significantly number of layers he requires in computer aided design programming. A layer can hold specific data much as an inside line in a particular layer and the estimations in another layer and the outer draw of the portion in another layer. Each layer made can be self-rulingly turned on and off with a particular true objective to have a predominant see capacity of the drawing. For eg In the event that one just needs to see the chart of the part, he/she can uncommonly well switch of other layer containing center lines, and so on. [8][9].

Various present day visual computerization programming programs utilize layers, frequently engineered in floating

gadget palettes, to help developer's arrangement and deal with plan parts in their signs. Essentially, these layers give the ability to incorporate and stack different "sheets" or workmanship sheets on top of each other, so that adjusting and effects can be associated with each layer autonomously, without impacting compelling artwork on various layers. Despite this, many tasks will allow particular levels of straightforwardness to be associated with different layers, so that the photo shows up through from the layers underneath. A couple ventures, for instance, Adobe Photoshop, moreover allow the utilization of effects and channels to different layers. Routinely, the demand of the layers can be enhanced and layers can in like manner allow less requesting adjusting of diagram parts on various layers [11].

Despite Adobe Creative Suite things, for instance, In-Design, Illustrator and Photoshop, some extraordinary plan applications which at present give layer helpfulness fuse QuarkXpress and Corel Painter. Some of these instruments are also prepared to import layered reports from various tasks [10].

Interlaced and appliqué are particularly out of date methods and now and again suggested as one. The principle refinement between them is that joined or piecework is the path toward seaming little bits of surface into a greater whole, while appliqué is the route toward sewing more diminutive bits of surface onto a greater establishment surface. It is a method of confining a single case with different bits of material. Bits of surface are associated on top of another for enhancing or utilitarian purposes [4] [6].




Appliqué is an old-fashioned arrangement of making phenomenal and upgrading things with different bits of material. Antiquated individuals have since a long time prior sorted out their tents and even lit up them with elucidate


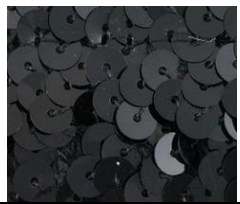

appliqué. Intertwined materials made for outstanding occasions are found in many places all through India [2]. Pieced and appliquéd family things are made by women for shares. These articles consolidate lighting up packs, pads and sitting mats. Appliqué had affect in religious materials too. It has for a long while been used to make enhancing clothing, in light of the way that most dress is used until it is depleted and a short time later again re-used to make flawless cases out of the all-around utilized surface. This fills both fiscal and upgrading needs. Little bits of surface are sliced and joined by each other to make a significant piece of surface or for repairing a hurt surface. The claim to fame seems to have been inescapable all over India [2] [3].

## II. MATERIALS AND METHODS

### A. Raw material

TABLE 1: MATERIALS REQUIRED FOR DIGITAL LAYERED BEADED APPLIQUÉ WORK

S. No	Product Group	Qty	Size	Colour
1.	Fabric	1	5" x 4"	Grey
2.	Seed Beads 	294	8 mm	Crystal Iridescent Black
3.	Medium beads 	8	6 mm	Crystal Iridescent Black
4.	Bead 	1	4 mm	Crystal Iridescent Black
5.	Tube Bead	15	10 mm	Crystal Iridescent

				Black
6.	Sequin 	3 Gross	10 mm	Crystal Iridescent Black
7.	Thread 	1	10 m	Black

### B. Tools

Art pencil to draw the base design, needle to stitch and a pair of scissors to cut the fabric.

### C. Process

Appliqué, which is a French expression, is a strategy of framing a solitary example with various bits of fabric. Bits of texture are connected on top of another for ornamental or practical purposes. [5]

### D. Design

Most appliqué plans are appeared as full-size drawings for the finished outline. The fine art is typically done physically, however with the enormous development in the PC supported planning frameworks the fine art here is drawn with the assistance of CAD programming.

Before the real appliqué handle starts, the foundation square is cut and arranged for sewing. Figure 1 demonstrates the work of art drawn over the lattices. The measurement of the fine art is 5" to 4". The work of art must be sufficiently clear so it could be followed effectively onto the texture.

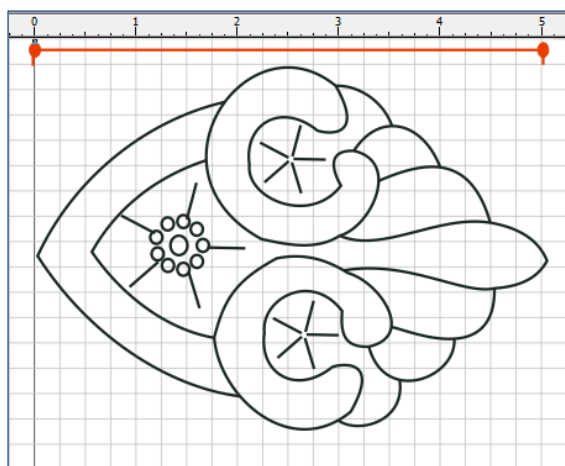


Figure 1: The art work for the appliqué work

Figure 2 demonstrates the craved works of art last graphical appearance. It demonstrates the courses of action of seed globules, tube dots, smaller than expected dots and sequins in the work of art.

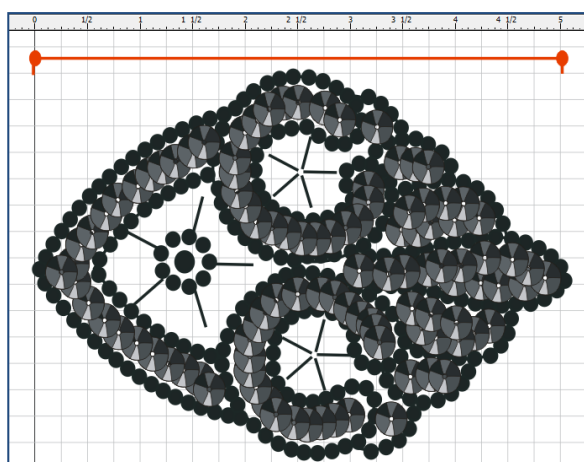


Figure 2: Completed Graphical art work

#### E. Tracing

A real measured drawing of the plan is exchanged on to an extensive bit of following paper. Following paper is set on top of the plan and the outline is followed out. Gaps are penetrated on the following paper along the plan and water erasable ink is utilized along the spotted line to exchange the outline on to the texture.

#### F. Pasting

The cloth is set on to the foundation texture and set with paste (called "lai" in the nearby dialect, it is made out of wheat flour, gum and water).

#### G. Cutting of shapes / design

Once the texture is readied and the required outline is followed on it, 1/2" space is left between plan themes to take into consideration the crease when removing the shapes. The shapes are removed leaving 1/8"- 1/4" all around the drawn line for turning under.

#### H. Tidying

The molded edges are turned over on the drawn or sewed line. Corners are made sharp and edges smoothened. The texture fix ought to hold the state of the format used to cut it.

#### I. Stitching

At that point utilizing a visually impaired line or appliqué fasten, the cut texture is sewn with coordinating string and globules as required in light of the graphical work of art is sewn on to the foundation texture. The sewing is begun with the outskirts first then the interior outlines are done.

#### J. Finishing

The appliqué is given last completing touches. Any additional strings are cut, and edges smoothened.

### III. RESULT AND DISCUSSION

#### K. Design Layering

Appliqué is the best methods for layer by layer designing. When the process is clearly understood any kind of appliqué can be designed easily.

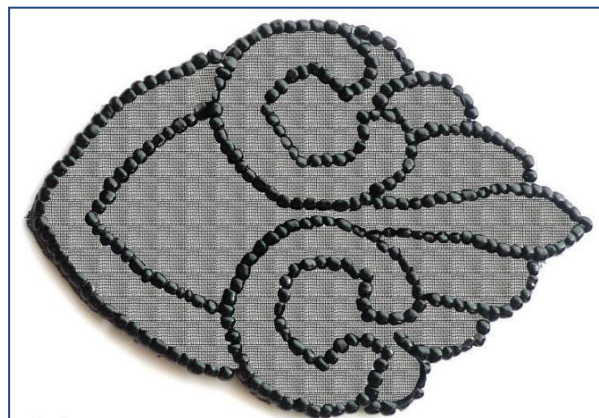


Figure 3: Design layering process 1

The Figure 3 shows the design layering process 1 where by the border design is stitched first on the base cotton fabric. The seed beads are stitched first with the help of appliqué stitch. A total of 294 seed beads of 8mm size in crystal iridescent black colour were used to stitch the design.



Figure 4: Design layering process 2

The Figure 4 shows the design layering process 2 where by the internal small motif design is finished after stitching the border design. The 6mm beads and 4mm beads are stitched first with the help of appliqué stitch then the tube beads of 10mm size are stitched around the seed beads.

The Figure 5 shows the design layering process 3 where by the internal small motif design is finished with 10mm black sequins. The final appearance of the layered patch appliqué is shown in figure 5. It contains fabric, seed beads 8mm, medium beads 6mm and 4mm bead, tube bead of 10mm side and black sequins of 10mm.



H. Stitch Time Consumption

The Beaded patch appliqué stitch time consumption has been shown in Figure 6. It can be seen from the Figure 6 that the seed bead takes 7.6 mins, the medium bead takes 12 seconds, the large bead take 1.5 seconds, tube bead takes 37.5 seconds and sequin takes 45 seconds to complete the appliqué process.

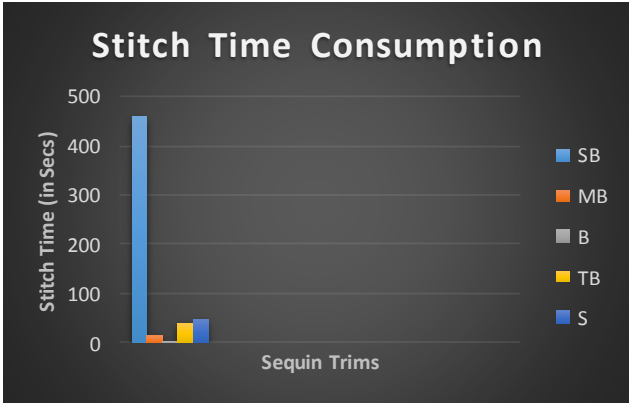


Figure 6: Beaded patch appliqué stitch time consumption

L. Trim Consumption



Figure 7: Beaded patch appliqué Trim Consumption

The Beaded patch appliqué trim consumption has been shown in Figure 7. There are 320 sequins, 294 seed beads, 8 medium beads, 15 tube beads to construct the patch appliqué.

M. Thread consumption

The Beaded patch appliqué thread consumption has been shown in Figure 8. The patch appliqué consume 2.5 meters of thread to complete a single patch appliqué.

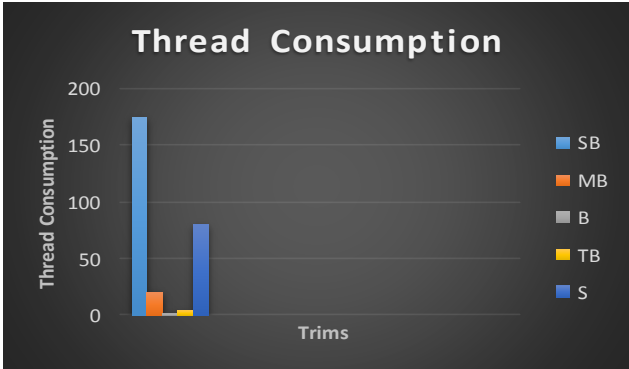




Figure 8: Beaded patch applique Thread Consumption

#### IV. CONCLUSION

This experiment manages the idea of outlining beaded fix appliqué utilizing computerized surface layering strategy in CAD. This technique guarantees precision in plan, precision and proportionate outline and additionally material wastage is dodged and correct amount and valuing can be controlled by this strategy. This strategy for study is appropriate to other sort of fix work appliqué planning like texture appliqué, bind work appliqué, sequin work appliqué, lace work appliqué, neck line appliqué, twofold sided appliqué and so on. The best favorable position of this strategy is the material utilization that can be effectively worked out. Henceforth it will be of more noteworthy advantage to planners who outline at a little amount and for makers who are locked in a mass generation who can gauge the correct amount of crude materials to be obtained for their creation arrange.

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