

Embroidery

Embroidery is the process of turning a graphic or text into a needle-and-thread work of art for application to a garment or other fabric item. Using state-of-the-art software and multi-head industrial sewing machines, embroidered designs can be simple, one-color designs or multi-colored works of intricate detail. Of all the methods of fabric embellishment, embroidery is considered to add the most sophistication and a higher perceived value to a garment.

EMBROIDERY PROCESS:

Today's custom embroidery is a primarily automated process that translates a digital image into data that guides the operation of industrial sewing machines capable of up to 1,500 stitches per minute.



DESIGN AND DIGITIZE IMAGE:

Create or adapt a design for embroidery, bearing in mind that simpler designs with open areas translate best into stitches. Designs with open areas will allow fabric to drape more naturally. Once complete, the design must be digitized to translate it into stitch data for the sewing machine. This may be done in-house using software compatible with your embroidery machine, or outsourced to a reputable digitizing firm. Send the digitized image to your embroidery machine.



STABILIZE AND HOOP:

Select the appropriate stabilizer for your item's fabric, apply temporary spray adhesive, and smooth the stabilizer onto the item. Next, place all layers firmly in your embroidery machine's hoop, which holds the fabric securely and moves as the item is sewn. The fabric should be smooth and flat, but not stretched out of its original shape. Insert the hoop into your embroidery machine.



STITCH THE DESIGN:

Once you insert the hooped item and send your digitized file, the embroidery machine does most of the work. It will stop when it's time to change thread or if other action is needed. When the machine finishes sewing, remove the hoop, unhoop the fabric, and trim any excess thread from the stabilizer. Some items may need a light steam pressing to smooth any creases caused by the hoop.

EMBROIDERY EQUIPMENT AND SUPPLIES

- **COMPUTER:** A computer with specialized software that translates digital imagery, e.g., a GIF or JPEG, into stitch data to guide the embroidery machine, or the services of a digitizing company that will translate the image into stitch data for a fee.
- **EMBROIDERY MACHINE OR SEWING MACHINE:** A wide range of machines are capable of doing embroidery, ranging from low-cost, consumer-grade sewing machines to automated, multi-need industrial machines capable of producing complex, highly detailed stitched graphics.
- **SUBSTRATE:** Many fabric items are suitable for embroidery, from T-shirts and fleece to totes and hats. Very lightweight or highly elastic fabrics can be challenging to embroider, with a greater tendency to pucker or wrinkle. Plush fabric such as fleece requires densely stitched embroidery to prevent the fabric from showing between stitches.
- **STABILIZER:** Even low-end home embroidery machines can make several hundred stitches per minute, putting tremendous strain on most fabrics. A stabilizer supports the fabric during stitching to prevent shifting, stretching or distortion.