

# impressions

---

## Embroidery: Production

---

### The 'E' in Team

Here's how to minimize the trickiness of embroidering athletic and team apparel.

By Alice Wolf, Contributing Writer



---

*May 7, 2018*

There's more to sports apparel than meets the eye. Sure, the team gets the most attention, but behind the scenes, practice happens before those players and uniforms ever hit the field or court on game day.

And what about the fans who show their loyalty and spirit by wearing apparel with their favorite team logos or player names — all for the cause of inspiring victory? If you think embroidery can't be used to create custom options for such scenarios, think again.

Here are some pointers for embroidering logos, and customizing athletic, team and fanwear — while also keeping in mind the variety of fabrics you likely will encounter.

### **Not Your Grandma's Sweats**

Gone are the days of players wearing bulky, heavy sweat shirts and pants to practice in cold weather. During the past few decades, manufacturers have developed fabrics that not only provide comfort, but also enhance performance. Meanwhile, challenges along the lines of branding and personalization have materialized.

Following are the types of fabrics you likely will encounter when it comes to embroidering on team and fan apparel:

**Polyester:** Moisture-wicking polyester appears in virtually every type of sports apparel. It draws sweat away from the body and allows it to evaporate, keeping athletes dry and comfortable. Cotton/polyester blends give the appearance and soft hand of cotton, along with durability and less likelihood of shrinking. Double-knit polyester, often seen in golf shirts, is durable and will hold its shape while still allowing airflow.

**Fleece:** This fabric is seen in many forms. Traditionally used for high-performance outdoor apparel, it's now a top seller for many manufacturers. The two-sided pile material appears fuzzy on the inside of a sweat shirt or the outside of a jacket. The durable fabric retains warmth, can resist moisture and dries quickly. Air-knit polyester contains small perforations that provide airflow in warm-weather conditions.

These fabrics — and variations and combinations of them — can be seen in warmup apparel, jackets, sweat shirts and pants, and in similar fanwear. While some can be challenging for embroidery, the correct approach will result in success and repeat business.

Following are approaches to embroidery on team apparel that should be kept top of mind.

### **Don't Squelch the Stretch**

While fleece is sturdy enough to hold up to dense embroidery, thinner fabrics like polyester

are not. So if you go overboard with a dense design, overpowering number of stitches or heavy stabilization, you will eliminate the advantages of the stretchy garments.

Another consideration when dealing with stretch comes during the hooping stage. Since these fabrics also can be thin and slippery, hooping must be done carefully. By compensating for some of the stretch, the garment won't lose that benefit.

When embroidering a brand, design or personalization onto these fabrics, think light. A low-stitch-count design that won't overpower the garment with density is ideal. For customization, choose letters that are light, veering away from satin stitches. Are initials an option instead of a full name? What about stitching only a portion of a large logo or an outline of it? Alternatively, can you add the logo as an emblem and attach it with outline stitches?

If you control digitizing, approach the design for team apparel in the same manner as a baseball cap. Stitch the design from the inside to the outside to avoid puckering and distortion. Minimize density and avoid a 45-degree stitch angle.

In some cases, underlay can be used to stabilize stitches. Keep the area to a minimum, as doing this prevents the garment from stretching as intended. Push and pull compensation must be addressed; if you are aware of and can accomplish this, do it. But if you have questions, successfully embroidering stretchy fabrics begins with proper digitizing.

Hooping requires a bit of finesse. Think about how the garment will be worn and its pressure points, and introduce a slight amount of stretch when hooping. This is particularly critical with items such as swim suits and bicycle shorts, which constantly are stretched. Otherwise, you risk the garment "pulling," resulting in small holes appearing around the embroidered design.

By pre-stretching the garment in the hoop, imitating the garment's impact points when worn, you are compensating for how the stitches and stabilizer will prevent any further stretching, and ensuring comfort and minimal strain on the fabric.

### **Stabilizing Stretch**

There are many relatively new stabilizers on the market today, developed with the specific purpose of stabilizing stretch without going overboard. But using a backing that's too heavy will result in the "badge effect," where you can see its outline around the design from the front of the garment.

Nylon no-show mesh backing can be used on polyester moisture-wicking fabrics, polyester mesh and poly/cotton blends. It even is thin enough to use on mesh jerseys. It is intended for lightweight designs consisting of less than 7,000 stitches. If a design or fabric requires more backing, add a second piece of nylon no-show mesh or a lightweight piece of tearaway backing. Place the latter on the outside and the former next to the garment so it will be felt against the skin.

Heavier backing can be used with fleece. High-pile-fleece garments require a layer of water-soluble topping in order to prevent the stitches from sinking into the fabric's pile. The heavier the garment knit, the heavier the stabilizer that can be used.

### From Backing to Basics

With team apparel predominantly made from knit fabrics, use a ball point needle, as sharp needles can pierce some fine knits. This results in a "run" that is detrimental to the fabric and an eventual vulnerable point in the garment.

Thread choice should support the garment's laundering method. The softness and subtle luster of rayon embroidery thread could be ideal, as it will readily lay into the design and maintain a soft hand. Use a #70/10 needle with 40-weight thread. Thin, 60-weight thread can be used with a #65/9 needle for very thin, lightweight team apparel.

If there is a chance the garment will be harshly laundered or washed with water containing bleach — or if the logo is on bathing suits or towels — then polyester thread should be used since its properties will hold up to harsher chemicals.

The beauty of team apparel lies in its ability to stretch with the wearer, then return to its original shape. Embellishing these popular garments with embroidery enhances their attraction and customizes the message they share. Simply take care not to hinder the very properties these garments were designed to provide.

*Alice Wolf is the manager of education and publications for Madeira USA. She began doing marketing and public relations for the art industry in New York, and then migrated north to Madeira's New Hampshire headquarters. For more information or to comment on this article, email Alice at [awolf@madeirausa.com](mailto:awolf@madeirausa.com).*

## More Production News

---

### Standing Out from the Crowd

*August 29, 2018 | Production*

Stock-design companies provide a tremendous service to those embroiderers who don't do their own digitizing, as well as those who do but may need a starting point.

[FULL STORY](#)