

# SUMMER GLOW

S/S 2023 Knitwear Collection

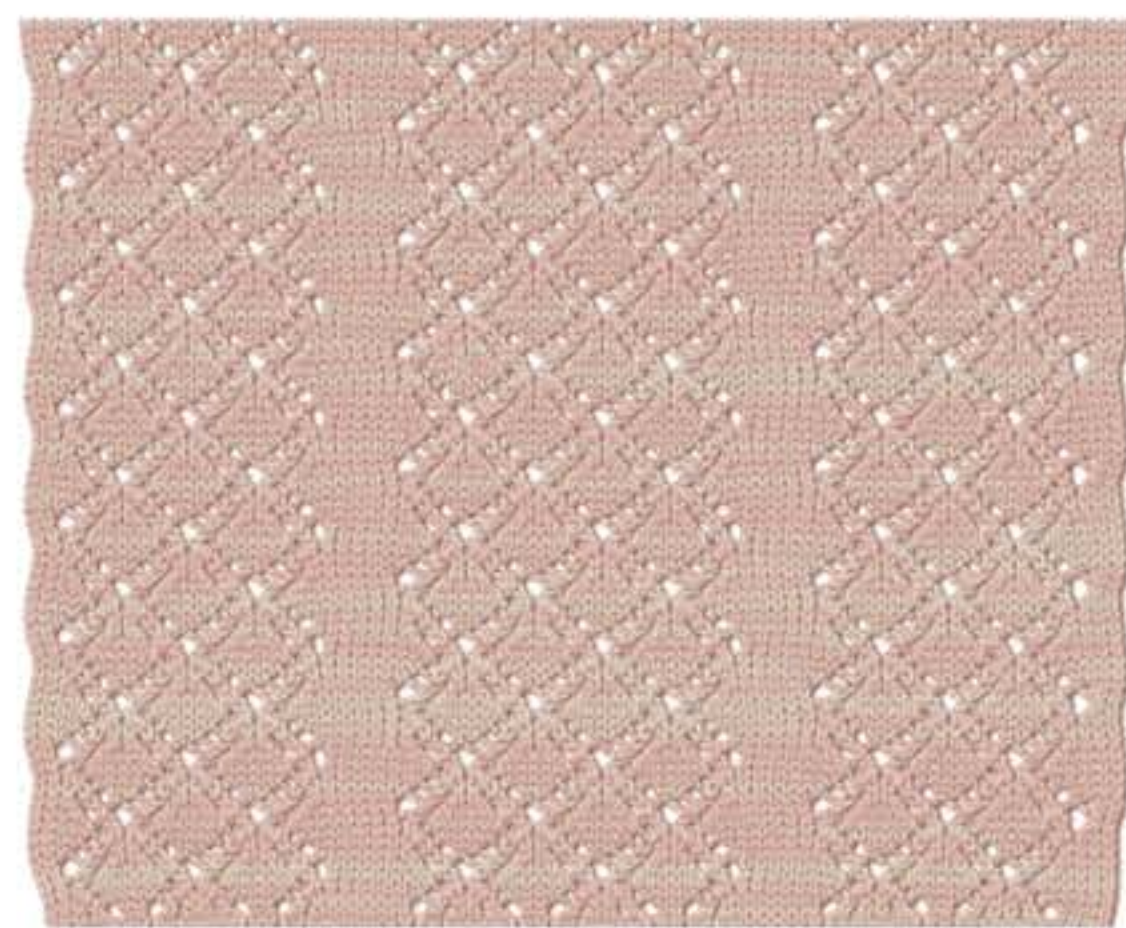
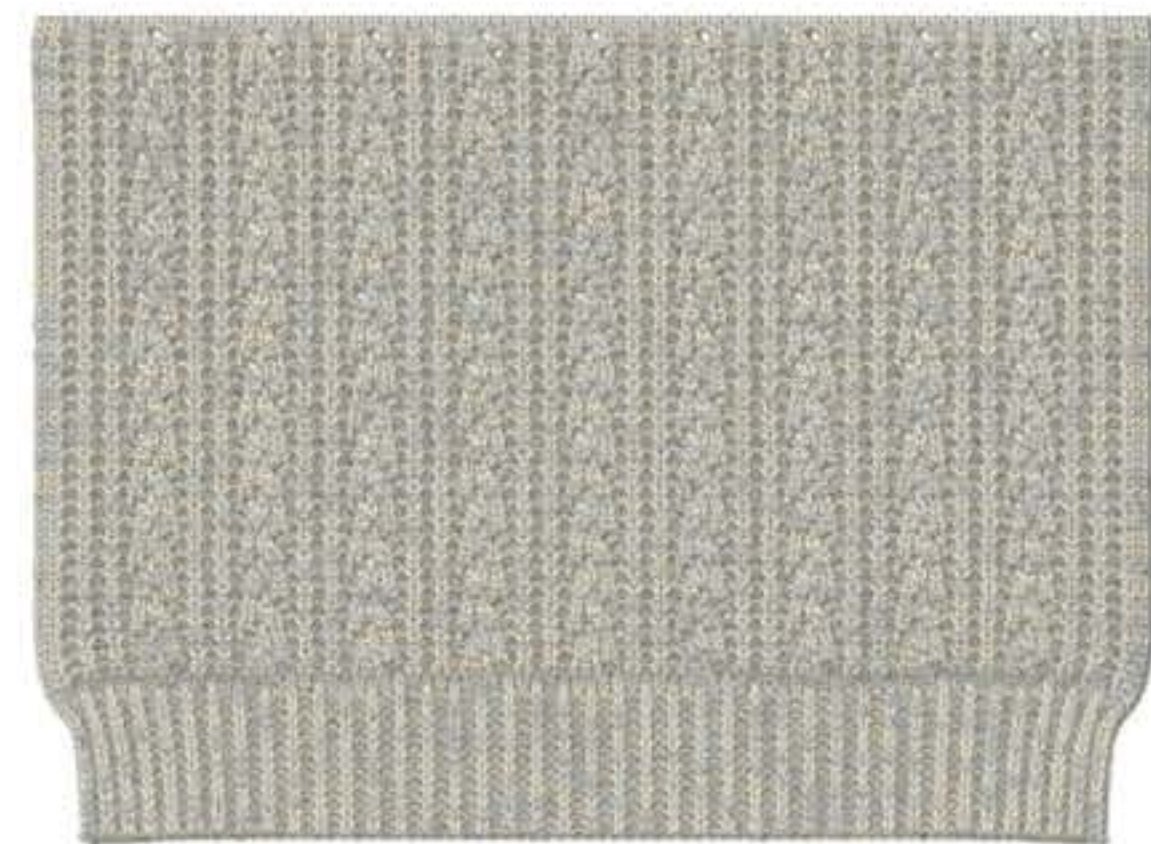


Using SHIMA SEIKI Knit Paint 64 Software, knit swatches were developed as an exploration of knit programming techniques. Pointelle structures as well as capabilities of miss stitches/floats were explored. Complementing structures of cables and ribs add bold shapes to the sweet and delicate surface designs. Virtual simulations of swatches were created to illustrate yarn types and colors pertaining to each knit structure. Prototype swatches were then created on a 7G SHIMA SEIKI SSR112 knitting machine.

Knitwear designs have a focus on comfort in warm climates and easy wear and care



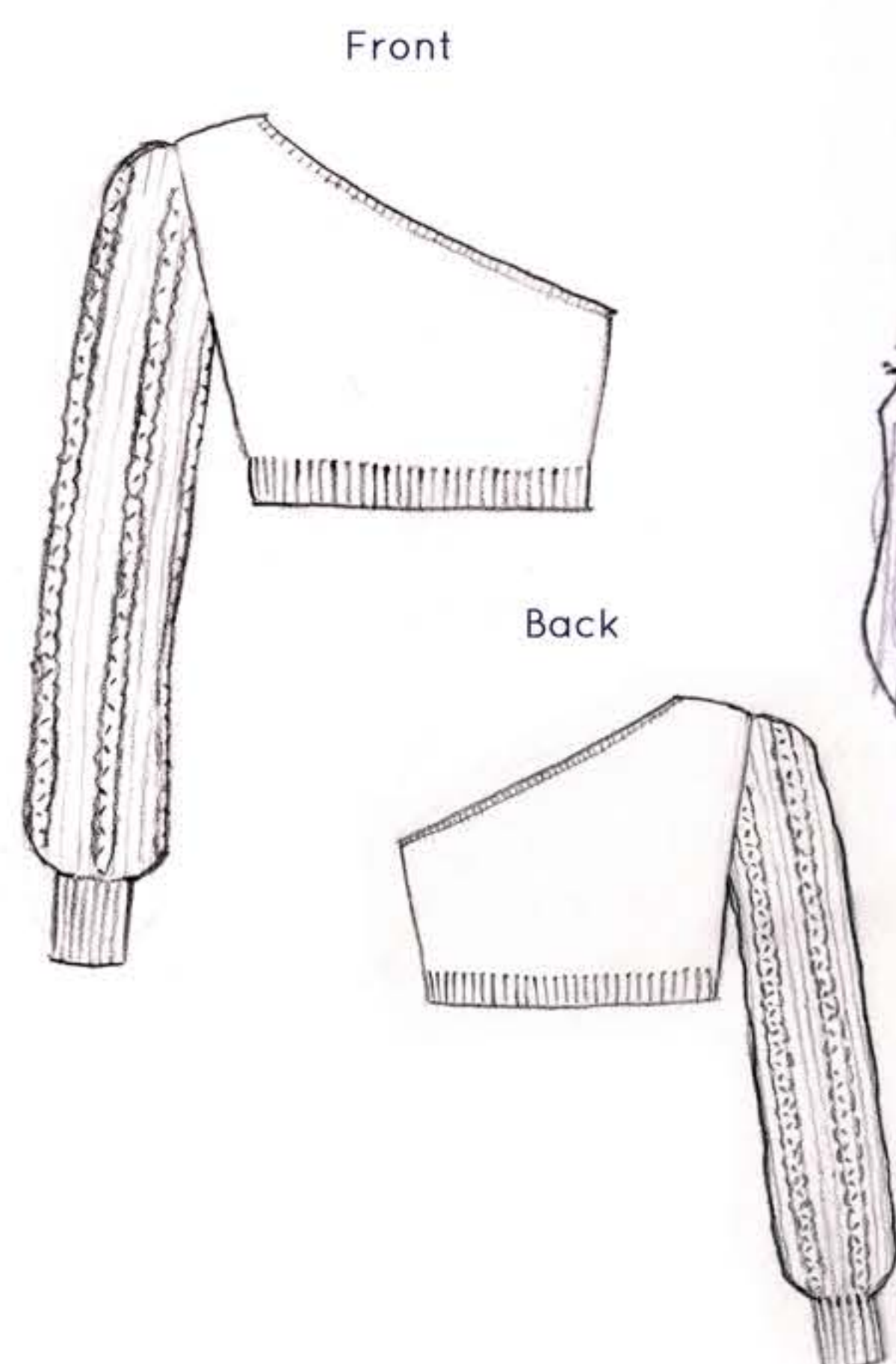
Prototype swatches



Virtual swatch simulations

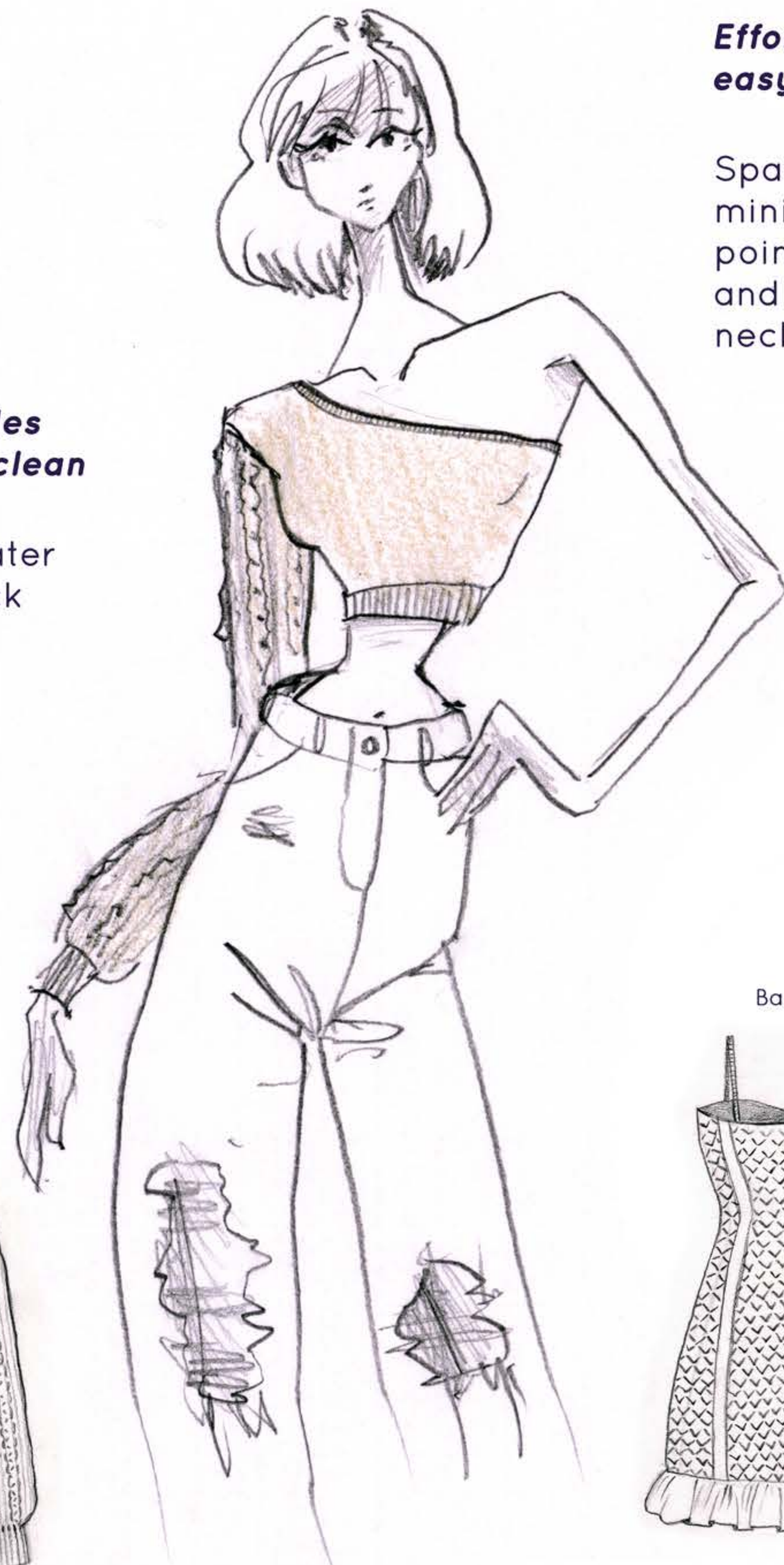
**Moisture wicking provides coolness while staying clean**

One shoulder crop sweater with 1x1 rib hem and tuck stitch long sleeve in natural wool color and slubby cotton blend



**Effortless and easy maintenance**

Spaghetti strap bodycon mini dress in scalloped pointelle with ruffle trim and gathered sweetheart neckline in pastel pink



**Inclusive design offers UV protection**

Cable knit sleeveless drop shoulder hoodie featuring a magnetic one hand zipper with 1x1 rib hem and cuffs in hazy lavender



**Natural colors retain colorfastness**

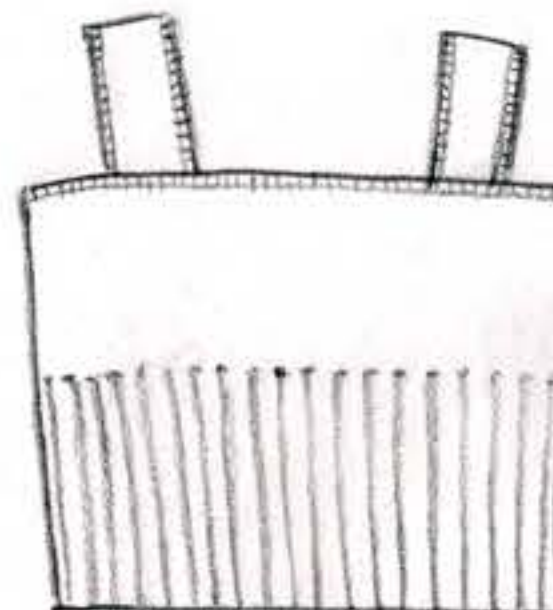
Thick strappy marled crop tank top with heart shaped floats and 2x2 rib in faded chartreuse



Front



Back



Front



Back



# INSPIRATION

This collection is inspired by the album “*Lover*” by Taylor Swift. Swift drew her own inspiration from imagery evoking fantastical feelings of love, femininity and freedom to inform the era of her album. While this collection isn’t made just for Swifties, it nods to the influences of the singer/songwriter’s seventh studio album. Just as the album makes the listeners feel blissful and carefree, this collection aims to make its wearers feel confident in embracing the sweetness of looking at life through rose colored glasses.

# TARGET MARKET

Women ages 15-30 looking for lightweight knitwear for the Spring and Summer. The target customer prioritizes easy care and maintenance of garments to support an easy-going lifestyle. The customer values sustainability and ethical sourcing of fibers, as well as doing their part to uphold sustainable values within their home. The customer also values accessibility and adaptive designs in clothing to enable people with disabilities to dress independently.

# SUSTAINABLE DESIGN PRACTICES

Sustainable practices will be ensured through using only natural fibers that are either Woolmark® or OEKO-TEX® certified. Woolmark® certification allows the benefit of fiber traceability, quality standards and authenticity (*The Woolmark Company*). OEKO-TEX® STANDARD 100 guarantees cotton fibers are completely organic and free of GMOs (*OEKO-TEX*). The two fibers composing of the yarns are a wool and cotton blend (either Supima® or recycled). Wool contains many properties fit for easy care and maintenance in warmer climates, such as:

- Crimp gives wrinkle resistance and anti-static properties for easy care of garments

- Moisture wicking and stain prevention for care and keeping cool in warm climates

- UV resistance for wear in sunny outdoor climates

- Lanolin treated wool has anti-bacterial and odor wicking properties to support sustainability and easy maintenance through less laundering (*Hallett & Johnston, 2022*)

Supima® has complimentary properties to enhance those provided by wool fibers, including adding a cooler, silkier and lighter hand to the fibers. These properties are:

- Remains cool, moisture wicking properties and silky hand for coolwear in summer and warm climates (*Hallett & Johnston, 2022*)

- Resists breakage, pilling and tears due to extra long staple length fibers

- Excellent colorfastness and ability to hold dyes (*Supima*)

Being both wool and cotton are made of natural fibers, it ensures that the garments will decompose naturally and replenish their nutrients to the earth, confirming the garment’s end of life sustainability (*Hallett & Johnston, 2022*). While end of life is important in assessing total sustainability, longevity of the garment’s life is necessary to consider. Designs in this collection were created with the intention of being a staple yet statement piece in a young woman’s wardrobe for a long period of time.

To further establish sustainable manufacturing, this collection will use yarn dyeing techniques as well as water efficient dye methods while maintaining colorfastness. Green Matters Natural Dye Company specializes in natural, biodegradable dyes using locally grown plants and gathered rain water from their own facilities. The company has a wide range of colors and works with designers to create custom compostable dyes (*Green Matters Natural Dye Company*).

## Works Cited

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# COLOR PALETTE

Colors were carefully chosen to compliment each other and the delicate motifs of the designs. Varied shades create a subtle marled effect, making each garment unique.



# TECHNICAL COMPONENT

The product claims of this collection support simple care and maintenance in the context of warm climates. The properties of wool and cotton blends ensure clothing can withstand periods of time without washing. When it comes time to wash the garments, Supima® cotton ensures colorfastness of dyes, which is crucial pertaining to natural botanical dyes. To support these claims, testing will be conducted using test methods **TM107 Colorfastness to Water**, **TM211 Reduction of Bacterial Odor on Anti-Bacterial Textiles** and **TM186 Weather Resistance - UV Light and Moisture**. These tests were chosen to ensure the fibers would be suitable for warm spring and summer climates with moisture-wicking and UV resistance. I also wanted to ensure that the garments would allow for easy care and be able to withstand going without washes between multiple wears, and that colorfastness of dyes would be maintained in washes as colors and marled yarns are important to the collection.

**TM107 Colorfastness to Water** assesses how dyes withstand being submerged in water for long periods of time. The test ensures that yarn dyes will resist washes in water (although the test utilizes distilled/ionized water as tap water varies). This test is important in supporting the product claim of colorfastness with natural dyes.

**TM211 Reduction of Bacterial Odor on Anti-Bacterial Textiles** assesses single layered textiles treated with anti-bacterial finishes for reduction of odor. This ensures the garments remain hygienic with multiple wears between washes, especially for climates where the wearer may be more prone to sweat and oils.

**TM 186 Weather Resistance - UV Light and Moisture** assesses textiles in an artificial weathering environment using UV lamps, condensing humidity, and wetting. This test will support the fiber choice of wool for warm climate knitwear.

# AATCC MEMBERSHIP BENEFITS

As a student in fashion design, AATCC membership is beneficial in providing educational content and events, professional networking, and standards for textile testing and development. Access to member only events is an important resource in expanding textile knowledge and networking with those in the textile industry. Through my AATCC membership, I was able to watch the Runway of Dreams Foundation student event from March 2022. What I learned from this event made me carefully consider if anyone could independently dress in the garments in my collection. Knitwear offers excellent adaptability through stretch and recovery of the structures, allowing the wearer to easily pull garments on and off. I hope to further explore accessibility through knitwear to allow people to feel empowered through their clothes. Accessibility in clothing is vastly underrepresented, and creating adaptive designs allows not only for the market to grow, but for every person to feel seen in the fashion industry.