

The simplex story

This type of fabric, so important to the foundations market, tells its tale at last.

Simplex fabrics don't get a lot of publicity. And yet, they have long been favored by the foundations sector, not as replacements for single-faced tricot, but rather as unique alternatives.

With their reputation quietly established, the time is right to tell the simplex story. After speaking to Allan Gallaway, vice president, sales, Star Knitting Fabrics, Inc.; Jerry Gardner, vice president, merchandising Continental Warp Knits; and Murray Ekstein, president, Gilray-Fairlane, a history emerges.

Simplex gets its name from the machine that was developed in Germany somewhere between World War I and World War II. The machine was designed to produce double-faced fabrics, fabrics knit on both sides.

Simplex fabrics are double-faced warp knits. In addition to the aesthetics of simplex goods, "the beauty of simplex is its function," notes Gallaway. "It has a natural stretch and recovery, has body and opacity, is available in whole range of deniers and is stable. Any number of patterns may be done in simplex and the fabric is durable."

When simplex machines first began to run in this country, the main users of the end product were glove manufacturers. "At that time, well over fifty years ago, there were only a few people who went into the simplex business," says Gardner. "They sold primarily to glove manufacturers and the west side. Everyone who made gloves used simplex fabrics. And many of the glove people were vertical and therefore owned their own simplex machinery."

Enter foundations

It was in the late 1950's, early 1960's that simplex fabrics made their entrance into the foundations arena. A now defunct operation called Perfect Brassiere Company had gone in search of something different in the way of fabric. This low-end concern turned their sights to the west side where they happened upon a simplex fabric that was being used by a dress manufacturer.

Noting the hand and inherent stretch properties of the fabric, the company turned the cloth into a bra. This bra, made of a 40 denier nylon simplex fabric, was called "Purr-fect" and was to be the forerunner of all simplex-fabricated foundations.

The "Purr-fect" bra hit the market with the handle, 'don't touch me unless you want to buy me,' pointing up the softness and luxury of the fabric. With consumers responding positively to the bra and its fabric, it was only a matter of time before other foundations houses jumped on the simplex idea, making this fabric more prevalent on the mass level.

The interest in simplex fabrica-

tions then carried over into the swimsuit market. These fabrics dominated the bathing suit area up until a few years ago when nylon/spandex fabrics took over.

Today, foundations are the primary end users of simplex cloths, gloves having seen their hey day years ago. The 40 denier nylon simplex of yester year has given way to increased fiber and denier offerings. Simplex fabrications in today's market run from sheer trilobals into 50 denier opaques. They can be nylon, they can be polyester. And they can be dull, semi-dull or bright. In short, the simplex market is no slouch when it comes to keeping up with technological trends.

Simplex qualities

Today, "because of the continued success we've had in the foundations area, we've geared our fabrics almost exclusively to that trade," says Gallaway. "About 98% of our goods end up in bras."

Why a foundations house might opt for a simplex fabric lies in the qualities of the goods. "Firstly, the hand of the fabric is luxurious," says Gardner. "The simplex technique yields fabric that is silky on both sides. This affords smoothness next to the skin and a pleasing look on the outside of the garment."

"The two-faced aspect of the fabric makes for a look that's nicer than any that may be gotten from other warp functions," agrees Ekstein. "Also, a simplex fabric offers more body than other warp knits. This means that the resultant cloth has a smooth, almost woven look, even when the fabric is made very sheer."

The durability of the fabric makes it that much more appealing. "This is a better performance fabric," adds Gallaway. "The more the consumer washes it, the better the fabric gets. It also wears extremely well. And the fabric doesn't run."

The one thing that mills and manufacturers both state as probably the most redeeming characteristic of simplex fabric is its natural stretch.

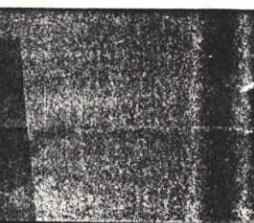
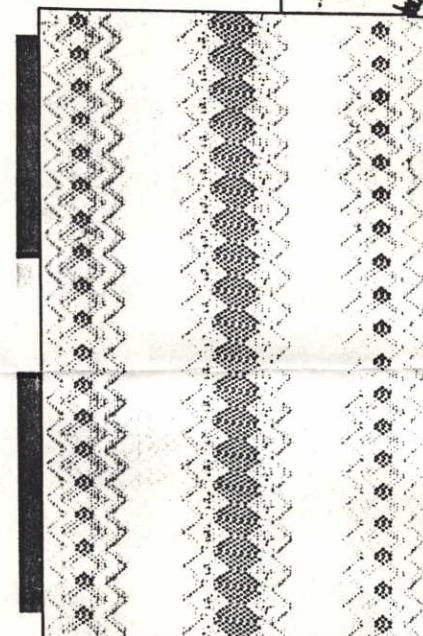
"Because of the way the fabric's knitted, the stretch and recovery is inherent," says Ekstein. "This makes the fabric a natural for foundations."

"The stretch and recovery factor is key," agrees Gallaway. "Not only is it a plus for the cups of a bra, it also makes it possible to construct the entire bra out of one fabric. Before simplex was used, the cups would be tricot and the wings would be power net. Because of the natural stretch of simplex, the cups and wings can be made of the same material."

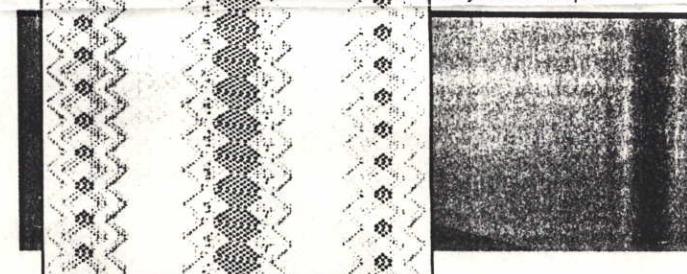
And when simplex is constructed out of polyester, it is moldable, "although simplex has its place and is equally valuable in a cut and sew



This burn-out effect is news at Star Knitting Fabrics, Inc.



Star Knitting Fabrics, Inc. offers this engineered lace ribbon stripe.



style," says Ekstein.

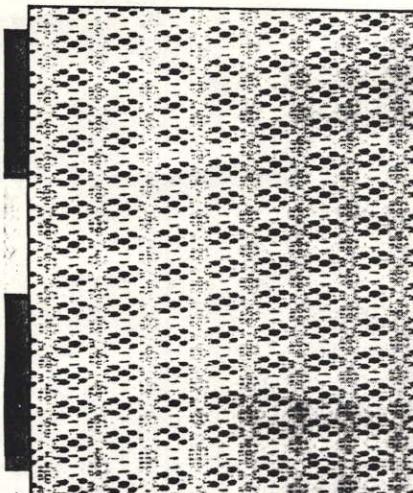
Density and opacity are two additional factors that make simplex an important fabric. "The depth of color that can be achieved is wonderful. This is because of the fabric density," notes Gallaway. "Also, because of the density and opacity of the fabric, fiber fill can, in some cases, be eliminated because the fabric has enough body to offer support."

Manufacturers say . . .

Foundations manufacturers are equally enthusiastic when it comes to upholding the qualities inherent in simplex. Gloria Falla, chief designer, *Lily of France* is impressed by the weight of the fabric. "The weight of the fabric offers control,"

she explains. "If it's used in a molded bra, because of the fabric's density, a woman's nipples won't protrude as much. This is good for the more modest customer."

"The weight or density of the fabric is terrific, especially when constructing for the full figure customer," says Burton Singer, vice president, production, *Splendor Form*. "Because it's knitted double, a 40 denier is really like an 80 denier. This eliminates the doubling up and laminating process we'd sometimes have to do with single-faced tricot to get support. Often, in a cut and sew full figure bra, we'd have to double up the tricot and laminate it together in the bottom cup to give added support. The laminating process often ended up leaving water



The simplex net effect is from Star Knitting Fabrics, Inc.



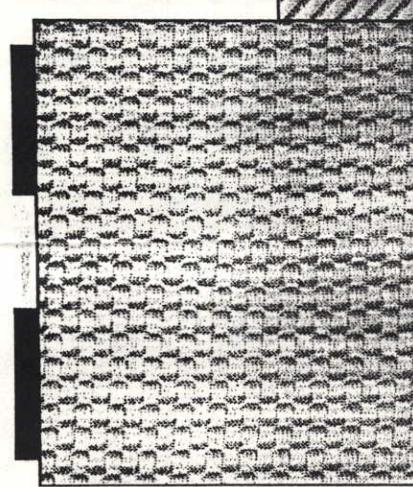
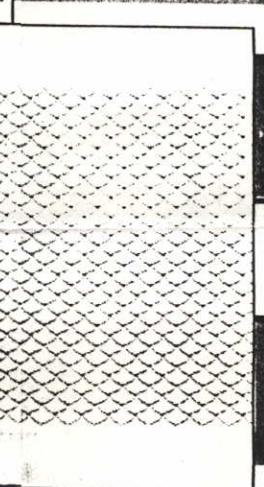
Continental Warp Knits, Inc. offers a delicate diamond pattern.



Irray-Fairlane offers their half moon pattern.



Irray-Fairlane offers a Bohr-like effect.



patterned gossamer effect in simplex from Irray-Fairlane.



The engineered pattern from Continental Warp Knits, Inc.

lines and making the fabric stiffer. Because of simplex, we don't have to do this process, and the bra remains soft but still affords support."

The stretch factor, of course, is primary. "The natural stretch of the fabric makes it perfect both for cups and backs," continues Singer. "This allows for a totally matched garment in terms of fabric and color."

"In addition, simplex retains its stretch after molding. This allows one bra to fit a variety of figure types," adds Singer.

"Because of the way it's knitted, simplex fabrics give better stretchability," agrees Jack LoCascio, vice president, product design and development, Bali Company. "The double knit also makes the fabric more drapable."

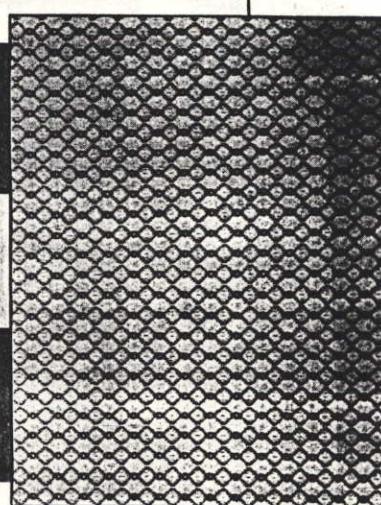
"I like what it does on the body," continues Falla. "It offers control and lift due to the way the fabric is constructed."

In terms of direction, "the trend is to surface interest simplex fabrics," says Gardner. "Light weight sheers are popular also."

"Small patterns are important," notes Ekstein. "We do things like small boxes, half moons and a four leaf clover stitch. We're also researching new patterns to constantly keep current."

In summing up the simplex story, LoCascio relates, "Simplex fabrics are superior. The richness of the hand is unsurpassable, the drapability is wonderful. Simplex fabrics are truly fine both to the eye and touch."

—Lynn Rhodes



This diaphanous sheer has a hint of sparkle. From Continental Warp Knits, Inc.

