Meadowbrook Inventions Gives Fashion A New Sparkle

By Elaine Gross, Special To American Sportswear & Knitting Times

The twinkle in Roberta Ruschmann's eye is not only a window to her bubbly personality, but is a reflection of the unusual products her company manufactures. A small, family-owned company, Meadowbrook Inventions, Inc., is the world's largest manufacturer and supplier of glitter.

If it glistens or gleams, you can be almost certain that Meadowbrook makes it. From true metallics to shimmering nylon and polyester fibers, from sequins to craft supplies and Christmas tree decorations, all that glitters has been turned into gold at Meadowbrook. And now, thanks to the company's latest product development, the patented Angelina fibers, Ruschmann, executive vice-president, is set on making fashion yarns and fabrics sparkle aplenty.

Ruschmann's father, Henry Sr., an inventor and toolmaker, began making glitter in 1934, in the bedroom of his Maplewood, N.J. home. He flashed upon a method for making glitter from aluminum and, later, from plastic, greatly improving upon the then standard of crushed glass.

In the 1940's, Ruschman Sr. moved his family to a Bernardsville, N.J., farm where, along with tending a herd of livestock, he developed the proprietary glitter-making technology that, although improved upon over the years, still forms the basis of the company's present production and provides its competitive edge.

Soon Meadowbrook's production outgrew the confines of the bedroom where it was turned out and moved upstairs, then to the basement, greenhouse, granary and cow barn until, in the 1960s, a proper plant was built on the property, just steps away from home.

Nature and artifice now converge where the meadow meets the brook, and where Meadowbrook has resided for more than 50 years. The glitter factory occupies a portion of the working farm where about 50 head of polled Hereford beef cows roam the countryside of this rural community, just an hour's drive from Manhattan.

"No, our cows don't glow in the dark, and no, we don't make glitter from cow hoofs," Roberta Ruschmann jokes, quickly dispersing some of the fantastic ideas that she is often confronted with. She assures that glitter production is a totally clean and pollution-free process that does not in any way interfere with raising the livestock.

Roberta Ruschmann, executive vice-president, Meadowbrook

"In fact, most people in town don't know we're here," she said. "We try to keep a low profile, blending into the rolling hills."

A Russian language major at George Washington University, Ruschmann intended to work on the international business scene, and got her basic training helping a friend in Ireland set up a radiator factory that sold to Japan and several European countries. Also conversant in French, Spanish, German (learned from her family) and some Italian (learned "because I like the food"), and with a designing mind since childhood, Ruschmann was ready to introduce Meadowbrook's products overseas.

Ruschmann joined the company in 1984, just five years before her father died at the age of 84. "They put me in charge of sequin production," she laughingly recalls, "because it was something I couldn t break."

At the time, the company offered sequins in only nine colors, a far cry from the current palette of more than 150 and growing, claimed to be the largest in the world. These include denim, velvet, crystal, hologram and glow-in-the-dark finishes. Stretch sequins (a single line of sequins attached to a stretchable thread) and iron-on sequins (produced in a single width chain) are the firm's newest patented designs.

With an ebullient passion for glitter, are Ruschmann's bailiwick is new product ideas, leaving internal company operations to president, Harold Sutton, and sales to Joe Colleran. The younger of her two brothers, Peter, serves double duty as the company's computer maven and manager of the farm.

With her language skills firmly in tow, Ruschmann wasted no time venturing into the European market, particularly Italy and Germany.

"I went to Europe because our products weren't being accepted here in the U.S.," she said. "Once American companies saw it in Europe, then they accepted it. European companies are coming to the U.S. for their innovations, and American companies are going to Europe when they have it right in their own backyards."

Over the years, as new materials came into being, Meadowbrook shifted its production to provide increasingly higher quality glitters. After aluminum and plastic, Meadowbrook introduced polyester and metal products and, among the more recent advances, laser embossed metallized polyester.

Angelina, introduced last year, is the newest member of the company's fiber family, made from either a polyester, nylon or metal base. Its predecessors include: Opalina, an iridescent material produced in a flake form for use in such things as fake snow for displays and laminating into place mats; and Crystalina, a similar but finer iridescent material.

Meadowbrook reported that Angelina is the softest metallic fiber available. Made in staple lengths, not continuous filament, it is particularly suited for use in yarns and textiles of all types.

"This will revolutionize the (metallic) market," Ruschmann said. "Now even nonwovens and felts, made from staple fibers only, can sparkle by sprinkling in Angelina fibers before punching, achieving an iridescent plush surface."

Angelina can be produced in any staple length up to eight inches, with two inch lengths for cotton blends and four inch lengths for acrylic blends, currently the most popular. It can also be produced in any denier, the finest a 7.5 count. Fibers can be either straight or deckeled, which heightens the glitter effect even more than crimping.

Angelina fibers are produced from film, which may contain more than 200 layers of two or more polymers. As light strikes these layers, it emits a range of luminous and iridescent effects.

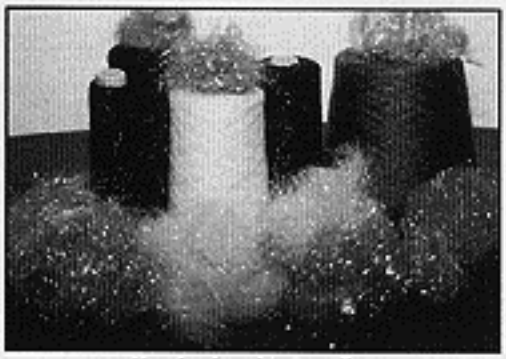
There are several variations in the Angelina range, it was noted. Metallic Angelina is made from a polyester base with less than one per cent aluminum content. Iridescent Angelina, 60 per cent polyester/40 per cent acrylic, is characterized by more than 120 layers, which results in a high level of iridescence. Metal Angelina can be made of either 100 per cent copper, steel, nickel or aluminum in a range of colors.

Although clear nylon (Type 6.6) and polyester Angelina maintains its brightness through conventional dyeing, the best results are said to be achieved when dyeing medium and deep shades. Meadowbrook suggests, however, that Angelina be used only in yarn-dyed constructions since they are not intended for wet processing.

The company cautions against dyeing yarns or fabrics containing the fibers unless they are subjected to rigorous testing procedures. It will perform these tests using the specific dyes and simulating the special conditions that the customer requests. Depending on the end-use application, Meadowbrook also offers a range of specialized coatings that are said to be able to resolve many dyeing needs.

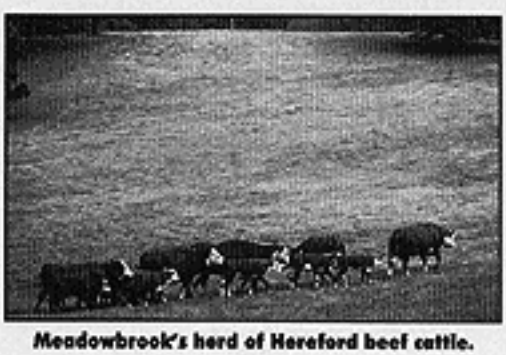
Metallic Angelina fibers, the company reported, are manufactured with a special coating that makes them solvent resistant for use in fiberglass. They are said to be resistant to dry temperatures of between 265 and 350 degrees Fahrenheit, depending on the base materials used, rending them usable in plastic injection moldings. In addition, it was noted, Angelina will shrink less than one per cent when measured at 100 degrees Centigrade for one hour, does not exhibit elongation problems during normal yarn processing, and shows different degrees of tensile strength in direct proportion to the fiber denier. (100 per cent polyester and nylon types have the highest tensile strength.)

By varying the concentration of Angelina in a fiber mixture, a range of effects, from soft or sparkling highlights to heavy metal, ultra high-tech looks can be achieved. Light refraction of fibers and colors plays an important part in determining the most appropriate blends and mixes for the intended end result. There are dozens of metallized and non-metallized colors in the present range, but, through blending, Ruschmann said the color possibilities are limitless.



Meadowbrook's Angelina glitter fibers and yarns.

Dazzle Dots, rolls of peel and stick glitter.



Meadowbrook's herd of Hereford beef cattle.

Although not inexpensive (price depends upon denier), the company currently has no minimum order requirements, and advises that only two-to-three per cent of Angelina fibers are needed to create a subtle, shimmery effect. Ruschmann does admit, however, that most yarns and fabrics look better when they contain a higher percentage of the fibers, primarily in the 5-20 per cent range.

Some of the companies currently creating yarns containing Angelina fibers are: Kramer Textiles, a specialist in long staple, tow and sliver spinning in heavier weights; Doran Textiles; Japan's Nagawa Co., Ltd., which combined Angelina with cashmere; Brodnax Mills, which spun velours yarns for automotive upholstery; and France's Achilles Bayart & Cie., which offers several knitting yarns in different blends of acrylic with 20-30 per cent Angelina content in either metallized or iridescent polyester, and a luxury blend of 60 wool/25 polyamide/10 angora/5 Angelina. Sample drapery, shirting and hopsack fabrics have also been produced, and several couture companies in France and Italy are showing keen interest.

If you're wondering what the market potential for glitter products might be, just ask Ruschmann. She's got a million ideas. Meadowbrook already sells Angelina fibers to companies in England, Austria and the U.S. for tying fishing flies. Is the medical textiles community ready to weave copper fibers into bed pads or blankets for the urthritis afflicted? How about metal scouring pads dyed to color coordinate with your kitchen. Or Angelina dyed to match carpet fibers for luster floor coverings, or to add glitz to socks. Angelina fibers, she said, also can be embedded into paper products and even be coated to absorb ink.

In addition to uses for the Angelina fibers, Ruschmann has a multitude of markets for Meadowbrok's other products, such as glitter fine enough to be sprayed from a can (Micronic Jewels) or rolls of peel and stick Dazzle Dots that were recently introduced to the crafts market by the Michael's retail chain.

There is no doubt that Ruschmann intends to spread her glitter throughout the world. If she has anything to say about it, fashion yarns and fabrics are in for a very bright and shiny future.■