

# Bemis Takes Bonded



A large warehouse space at the Bemis Associates Inc. complex has been cleared, making way for the installation of a new multi-layer extruder. The huge machine will compliment the gigantic triple extruder that Bemis added just over three years ago, which followed on the heels of another plant addition. In fact Spring 2011 marks the fourth major capital investment in two decades for this New England-based manufacturer.

A crowded sample room serves as further proof of the company's continued development. New innovations are piled high ranging from jazzy-looking athletic footwear to high-tech football pants to whisper-weight ballerina slippers. The proliferation of Bemis bonded technology now ranges from eye hook construction on the back of a skimpy bra strap to sturdy seams on an extreme weather gear. Fabrics include synthetics as well as bamboo, and other natural fibers. Prints are plentiful.

Indeed, "the possibilities are endless," comments Bemis marketing manager Chris Parlee.

That wasn't always the case. Parlee recalls that when the company's Sewfree technology launched "all we heard was 'give me a break — replace sewing?' Now people are chasing us down."

Bemis introduced Sewfree technology 10 years ago, at the ripe old corporate age of 90. The innovation has propelled the adhesive specialist into a myriad of new markets. Not only has "bonded technology" become part of the modern textile lexicon, but the latest industry lingo includes "Bemisize," as in "synthesize." Or instead of cut and sew, and "Bemisize."

"I remember people laughed at us at the first intimate show," says Parlee, who joined Bemis as Sewfree entered the market. "Then they thought this was just a fad."

After those initial guffaws, however, the intimate sector was first

on board. Significant early adopters in the outdoor arena helped get business rolling. "I remember showing bras to folks from Arc'Teryx and they responded saying, 'hey, we can benefit from this technology.'" And it became like, 'if we can do it here, then we can do it other ways, too,' Parlee states.

And from there sales grew, somewhat organically, word-of-mouth from one designer to another, from one industry to another. Currently brands willing to be "Bemisized" include Victoria Secret, Burton, Columbia Sportswear, Adidas, Reebok, Under Armour, Marmot, The North Face, Vaude and Arc'Teryx among many, many others.

With established big-name partners and constant expansion it is little surprise that these days Bemis is doing a bang up business. The company has benefited from controlled, yet consistent double-digit growth since 1990.

## From Gum to Glue

Bemis got its start making chewing gum a century ago. The corporate name hails not from a founder, but rather from the site of the original facility located on Bemis Square in Watertown, MA. (It was the Bemis family that was responsible for many innovations in New England mills and factories in the early 1800s.)

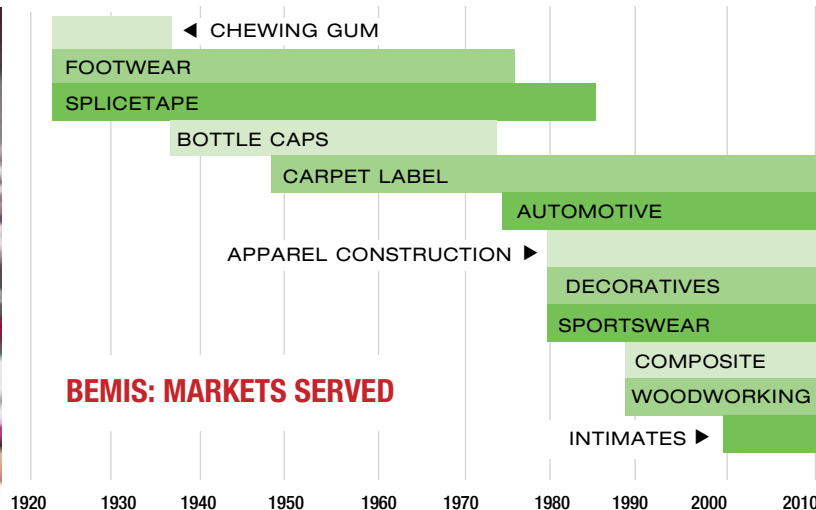
While the company transitioned out of chewing gum a long time ago, it stayed with "stickiness" and has built its heritage on the design, development and manufacture of thermoplastics and the equipment to process them. Privately held, Bemis has been in the Howard family since 1930. Fourth generation family members Steve and Scott Howard are currently at the helm, with plans for fifth generation Howard family to join them.

Often in the case of family firms, the rule of thumb is that the first generation builds the business; the second generation thrives with the business; and the third generation ruins the business. The Howard family has not followed that course, but rather has emerged over the years as a worldwide player known for adhesives, specialty films and seam tape. Although rooted in the small town of Shirley, MA, located about an hour



**Bemis Extrusion:** Intimates and sportswear took on a whole new look with Sewfree, developed during the last decade.

# Tech to the Limit



train ride from Boston, Bemis now has 323 employees globally, a Hong Kong operation, sales offices in Taiwan, South Korea and Sri Lanka in addition to sales, technical services and converting in the UK.

Apparel and footwear balance industrial end uses such as woodworking, automotive, photovoltaic and consumer electronics.

Going forward, Parlee describes a diversified yet targeted approach with growth projected across the board.

A good example of how Bemis continues to innovate and impact the market is the new E39 shirt by Under Armour. An electronic compression baselayer, Bemis worked with UA to create a top that tracks biometric signals. The data is stored in the heart of the shirt and transmits to a computer. The E39 top was worn by athletes at the NFL combine to provide real-time fitness data.

Another football innovation comes in the form of technical padded shorts by Nike. The shorts feature two different kinds of foam strategically bonded into place.

On the footwear front, market trends are right in stride with Bemis products. Shoe designers looking to reduce weight and keep a sleek look find Bemis tapes appealing.

Conventionally, Bemis products have been used on the outside of footwear for abrasion resistance and aesthetics. However, Reebok's new Easy Tone collection employs Bemis tape on the inside of the shoe as an anti-chafing feature.

## Formulating for the Future

Sophistication in design, functionality and machinery is keeping Bemis competitive even as it celebrates 100 years in business. Bemis continues to devise more formulations to work with a range of textiles. No longer focused primarily for bonding with synthetics, now products made with bamboo, organic cotton and wool can benefit from Bemis adhesives. "We

have more formulations to work with a range of textiles," says Parlee.

Chemistry and lab work is an integral part of Bemis. Keeping pace with fabric tech, developing formulations and knowing what tape to use requires an enormous amount of testing, which is done both at Bemis headquarters and in the Hong Kong lab.

As fabric technology advances, so too must Bemis products. Parlee mentions body mapping as a good example of staying current. "We need to bond to two different types of textiles within one garment. In some cases that can mean bonding mesh to softshell."

Also, the adhesives should not inhibit the functionality of a material. So if a baselayer is antimicrobial, Bemis must test to make sure that benefit is not sacrificed by bonding.

"In order to achieve the design aesthetic and the function of the garment, we need to stay in step with what is happening in the industry — be it intimate or outdoors," says Parlee, who points out that while a "techno" look is nice, the idea of bonding is to provide a function. "The glue performs another function beyond holding two things together." Specifically, features such as durability, weight reduction, less abrasion, increased water resistance and anti-fray characteristics.

"We are not a commodity supplier. This is not just an off-the-shelf type product. Yes, we sell glue, but we also sell our expertise and our knowledge of machines and fabrics," explains Parlee. "We are the engine. We tout our product and support our customers."

She highlights continued improvement in machinery which helps with speed and pricing as well as strides in sustainability as other Bemis developments. Bemis is newly bluesign certified.

To summarize Sewfree's evolution in the marketplace Parlee finds a quote from philosopher Arthur Schopenhauer. "All truths pass through three stages: 1. ridiculed 2. violently opposed 3. accepted as being self evident.

"And that's exactly what happened with SewFree," quips Parlee. ●



**An Eye for Innovation:** Behind the scene lab work keeps Bemis on the cutting edge with new formulations to work with a range of textiles.