Fiber Innovation Key to Success at Hills

By Charles Heschmeyer, Editor

Hills is constructing a new manufacturing facility to further the company's multi-component technology development.

Those who have conceded the manmade fiber business to the Far East probably have never visited Melbourne, Florida, a small beach community not far south from Cape Canaveral, home of the NASA Space Shuttle program.

There, situated unglamorously off the beaten path on eight acres of sandy, densely vegetated industrial land sits Hills Inc., the recognized world leader in manufacturing technology for bi-component and multi-component fibers.

The first thing one notices about the place is there are not enough parking spaces for the growing number of employees and visitors who arrive daily at the site. The second thing is the construction work.

Sometime in the first quarter this year, the company will put the final touches on 17,000 square feet of new manufacturing and fabrication space that will boost the total amount of space under roof to more than 50,000 square feet.

Hills is keeping quiet about the work that will take place there until the project has been completed. However, it's safe to assume the project will serve to further the company's technology in the area of multi-component and other specialty fibers.

"The vast majority of business we do around here involves multi-component spinning," said Hills President Arnold Wilkie. "We are the world leader in that field. With the technology we have, especially in the areas of polymer temperature separation and the spin pack, we can do things that are just not practical to do any other way in terms of polymer combinations, hole densities, complex cross sections, pack sizes and other aspects of this type of fiber manufacturing."

Hills is more a fiber developer than machinery manufacturer, although most all of its revenue comes from the design and manufacture of highly specialized multi-component fiber and filament extrusion systems.

"We could probably best be described as an opportunistic, technology-driven company," said Hills Business Unit Director Dr. John Hagewood.

"We are constantly developing technology," he added, "whether it's bi-component, tri-component, or the addition of other components, such as metals and waxes, to fibers. We develop the technology base and then work with our customers to meet

their needs and the needs of their customers."

COMPANY HISTORY

The company was founded by Bill Hills and his wife Shirley in 1971. Mr. Hills is a former Monsanto Co. executive who was instrumental in developing the early spunbond process in the 1960s.

"Bill was ahead of his time in terms of doing project consulting and designing extrusion systems when most of this was being done in-house," said Mr. Wilkie, also a Monsanto company veteran, who, along with his wife Penny, acquired majority interest in the Hills company in January 1988. Since that time, the company has grown from fewer than 20 employees to more than 80, and annual revenues have been on the same upward march. In fact, once the final figures are tallied, 2003 will likely be the best year in the company's 33-year history, Mr. Wilkie said. (Privately held Hills does not publicly release revenue or earnings figures.)

The company estimates that there are about 100 bicomponent extrusion lines with Hills technology running worldwide today, with an installed capacity of more than 500,000 tons per year of fibers and filament.

Hills, which began life as an innovator, continues even more so under Mr. Wilkie's direction.

Business Unit Director Dr. John Hagewood inspects tri-component spin beam.

DIFFERENT BY DESIGN

"We have intentionally tried to differentiate ourselves, and I think we've succeeded," he said. "We are very inventive, very intellectual property-oriented."

The company years ago abandoned the commodity arenas. "At one time Hills was one of the real leaders in areas such a polyester staple from bottle scrap, in-house BCF (bulk continuous filament) and the like. But we don't participate in those markets anymore because they are today served adequately by large manufacturers."

What Hills does is focus on specialties, smaller niches that can eventually develop into big markets — like spunbond nonwovens, for instance.

"What may come as a surprise to some people is that we are quite active in the spunbond market, supplying the spinning technology to major producers who have their own proprietary fabric formation. That, along with supplying other machinery manufacturers, is an increasingly important part of our business," Mr. Wilkie said.

King of the Hill

Arnold Wilkie, a 17-year veteran of the Monsanto company, spent most of his corporate career in fiber R&D and commercial development. He holds a degree in mechanical engineering from the University of Tennessee and an MBA from the University of West Florida.

In the late 1980s, when he decided to take the entrepreneurial plunge and buy Hills Inc., the theory advocated by the nation's leading management gurus was that a company ought to be No. 1 or No. 2 in its business or get out.

It was advice that Mr. Wilkie took to heart and which has served Hills well.

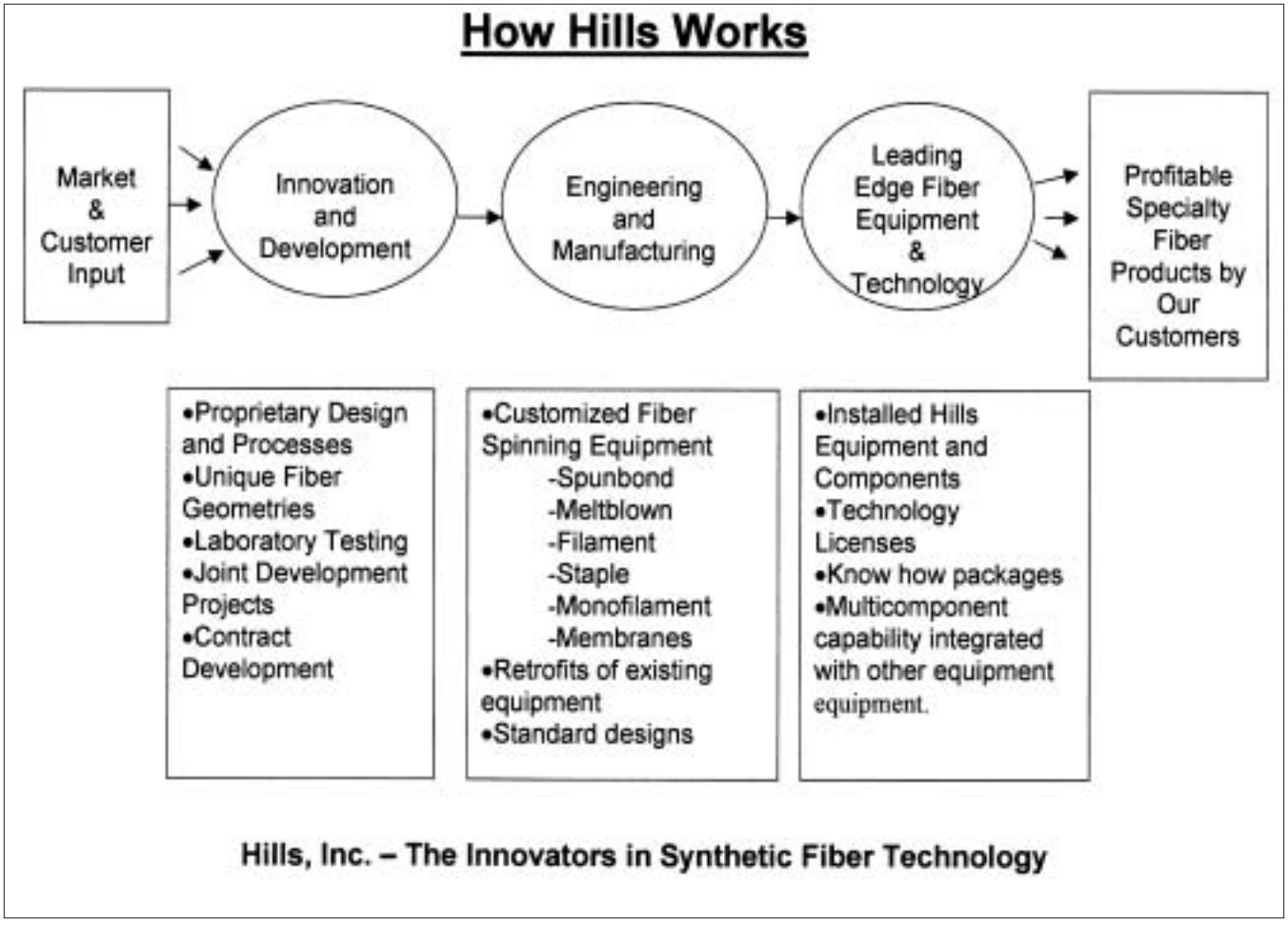
"I was influenced by that thinking, and I started to look around for what exceptional technology we had that we could use to grow into the No. 1 or No. 2 company in the field."

That was bi-component technology. "So we intentionally set out to be the best in that area, and we've accomplished that, not only in the area of bi-component but in multi-component as well, where we are the world leader," he said.

But Mr. Wilkie is not unaware of the pitfalls of being top in one's field, and he refuses to rest on his laurels.

"It's a lot easier getting to the top of the mountain than it is to stay there," he said, "because when you're on the top, people can see you real well."

That awareness is what keeps Hills king of the hill.



"About 50% of our business is now in spunbond projects," added Dr. Hagewood, and an increasing volume of business is coming from Asia.

LOOKING EAST

"In the filament area, almost all of our bi-component and tri-component projects are in Asia," he said. "Ultimately, about half of the equipment we sell ends up in Asia."

Hills partners with world-leading fiber and nonwovens equipment manufacturers to make specialized components, mainly spin beams and spin packs, for those systems. The company also works directly with fiber and nonwovens producers to design and build their own equipment.

"We see the need to continue to develop higher and higher technology-based products that have a sophisticated manufacturing requirement," Dr. Hagewood said. "That's really our niche."

"Let's face it," added Mr. Wilkie, "you're not going to be the low-cost manufacturer in the United States. Hills is not going to shrink in manufacturing, in fact we have a group of world-class code-welding and precision machine specialists who we will continue to develop, and we are adding some very high-tech manufacturing to our site, but we don't see manufacturing as our growth area. We are even beginning to take advantage of some lower-cost manufacturing by starting to source some components in Asia, built to our designs. What we do see increasing is our intellectual property, new processing technologies and joint developments with others."

LAB WORK

Customer trials are a daily occurrence at Hills labs where two pilot lines – one filament/staple line for POY, HOY, bi-component and tri-component spinning, and one spunbond/meltblown line – run almost nonstop. "Our labs stay extremely busy," Dr. Hagewood said. "We have had as many as three or four customers in here on any given day."

"We are very joint-development oriented with our customers," said Mr. Wilkie. "Our lab schedule is booked all the way through March."

"We also think it's a good economic indictor," he added. "When our lab time is full, expect the economy to start booming. And when our lab time starts to tail off, look for the economy to start slowing. It's a pattern I have observed for 12 or 13 years. It leads the market by at least six months to a year."

Dr. Hagewood said also that the types of experiments run in the Hills labs are a good indication of where the fiber markets are going and which will see the most activity. "Right now we have tremendous activity in the areas of melt-blown and spunbond," he said.While the Hills labs don't contribute significantly to the bottom line, they do play a leading role for the company.

Said Mr. Wilkie: "Our labs keep us on the leading edge of the industry's wishes and desires and long-term capabilities." And that's where Hills intends to remain.