

Spunlace: The Shift Continues

As wipes continue to commoditize, manufacturers continue to look for new areas for spunlaced nonwovens.

Karen McIntyre, editor 03.17.16

Once upon a time, it seemed, spunlace was synonymous with wipes. As wipes grew, so did spunlace investment. Numerous lines came onstream around the world looking to capture on the dynamic wipes market.

Today, the story has changed. Sure, wipes continue to be a major destination for spunlace capacity around the world as the technology is valued by wipes makers for its softness, absorbency and all-round textile-like feel, but many markets for wipes are facing commoditization. This has encouraged many of the key makers of spunlaced nonwovens to look outside of wipes, into more value added products for sales growth.

“With the right product portfolio and differentiation of your products, (spunlace) can still be a favorable market,” says Martina Brunold, group strategy and communications manager, **Jacob Holm**. “New markets are merging and spunlace is becoming increasingly competitive to other technologies in non-traditional markets.”

This diversification should help spunlace nonwovens continue to grow in the high single digits, experts predict, as the wipes market continues to find new consumer and industrial areas to target and manufacturers and spunlace makers target new areas outside of wipes.

“The spunlace market has been growing steadily for the past few years and continues to do so. In spite of an already very versatile range of applications, opportunities for growth do exist but can only be realized by continuously introducing innovative products following the market’s needs,” says Carolin Weber, sales director of hygiene and wipes for **Sandler**.

Investments Continue

Many of the wipes market’s main substrate suppliers are focusing their investment efforts on wetlaid, rather than spunlace, as part of a strategy to grow their flushable wipes business. **Suominen** is currently investing \$60 million in a new wetlaid line in Bethune, SC, a move that is reported as the biggest portion of an overall growth strategy.

“With this investment, Suominen will take wetlaid technology to a whole new level in the nonwovens industry. The new manufacturing line will be tailor-made, based on our unique technological expertise, enabling us to supply our customers with exclusive, best-in-class nonwoven products,” says Saara Söderberg, vice president, marketing and product management for Suominen. “This is perfectly in line with our strategic intent to achieve market driven product leadership.”

In late 2014 Suominen launched a three-year growth strategy that called for a focus on profitable growth. Part of this growth strategy was creating a more balanced product portfolio so that the share of products with a higher added value will increase. “We aim to develop our product portfolio so that in the future, the share of products with higher added value—which means especially nonwovens for workplace, household and personal care applications as well as for hygiene and medical applications

—will increase,” Söderberg says.

Smaller pieces of this growth strategy included upgrades to existing lines in Paulínia, Brazil, and Alicante, Spain, to expand Suominen’s offerings in medical and hygiene markets, which play a key role in the implementation of its strategy. “Historically, we have been in both medical and hygiene markets and hold a great knowhow and capability basis to build upon. We see there is huge potential in this market for product innovation driven growth,” Söderberg adds.

In addition to capital investment, new product development has been crucial to implementing this growth strategy. In November 2015, Suominen launched a spunlace product that it says is ideal for hygiene applications. Fibrella Move features superior masking, efficient fluid management, comfort and exceptional body fit. Suitable for all end use areas in hygiene—be it feminine, baby or incontinence, Fibrella Move is designed for high speed converting and is compatible with other materials/components in a hygiene product.

Also new to Suominen’s product lineup is Fibrella Lite, an advanced, lightweight and extremely soft substrate for stretch applications. The material, which was launched last year, meets the exacting requirements for a light yet stretchable material with strength and elongation properties required in laminates for absorbent hygiene products. In January 2016, Fibrella Lite received the RISE Durable Product Award at INDA’s RISE conference.

Lynda Kelly, senior vice president of Suominen’s Care business area accepted the award on Suominen’s behalf.



“Suominen’s history in nonwovens specialty processes such as thermal bond, fiber spinning and spunlacing provided the depth of knowledge necessary to create this complex lightweight

Suominen has focused a great deal of new spunlaced product development efforts outside of wipes. spunlaced product made with 100% thermoplastic fibers, pushing the capability of traditional spunlaced production,” she said.

Meanwhile, in medical, Suominen has expanded its offerings with the launch of Fibrella Zorb and Fibrella Zorb+ for use in the operating room for critical surgical applications. Fibrella Zorb is an absorbent lightweight top layer with a new texture using Suominen’s unique patterning while Fibrella Zorb+ is a highly absorbent structure designed for use around the incision site for fenestrations in surgical drapes.

Also in the medical arena, Suominen initially launched its wound care and cleansing product, Fibrella Perf, in South America but is now supplying it around the world. This product range features an apertured structure which makes it very soft and skin friendly and allows it to offer solutions suitable for traditional and advanced wound care as well as surgical applications.

A Holm Run

Also focusing beyond wipes is the Jacob Holm Group. The company, which completed work on its new U.S. line last year, reports that wipes sales now comprise just under half of its total sales, down from 80% six years ago.

“The wipes market continues to develop at a strong rate and spunlace continues to be the preferred technology, however the term spunlace is now evolving into many different applications where new combinations of process and fiber selection are being utilized for specific market demands,” Mikkelsen explains.

Mikkelsen says this has been achieved through a combination of innovation and investment. “We have differentiated our product portfolio and placed our money behind these innovations,” he says. “New lines, the rebuilding of older lines and a continued drive to take spunlace into places it has never been.”

For its part, the Jacob Holm Group has been at the forefront of taking spunlace into applications beyond just wipes for the past several years. The Jacob Holm Group has recently developed ultra lightweight products, some as low as 15 gsm, that are revolutionizing the idea of what is possible in the hygiene market. The Jacob Holm Group also developed and commercialized a whole new portfolio of pulp/staple fiber products from its new line in Asheville, NC.

“Combinations of different technologies and multilayer structures are developing more and more opportunities for spunlace,” Mikkelsen says. “In hygiene markets, spunlace has actively replaced some airlaid in acquisition and distribution layers and successfully competed with carded thermal bond in elastics, topsheets and backsheet covers. Where premium performance and aesthetics are required spunlace is rapidly becoming the material of choice.

“Of course, the integration of the Sontara business, which Jacob Holm purchased from DuPont in late 2014, has contributed to this product diversification. The proprietary Sontara technology has long been used in critical wiping and medical applications globally. “The capabilities of the Sontara production units are truly unique and the brand recognition for a nonwoven is second to none,” Mikkelsen says. “The Jacob Holm Group has been able to start to expand on these characteristics while the investment of both capital upgrades and right resources to the Sontara product line has been highly positive.””

Coming to the U.S.

After 18 years in nonwovens, Turkey’s **Mogul** announced last year it would enter the U.S. market—its first foreign investment—with the establishment of a new spunlace operation in South Carolina. “For the initial (foreign) effort, we considered an investment with little technical risk and created a specific volume and turnover,” commercial director Serkan Gogus explains. “The salability of wipes and spunlace met these features.”

During the past five years, Mogul has invested steadily in new and state-of-the art machinery with a focus to fabric quality, hygiene and good manufacturing practice procedures as well as on high quality customer service, and the company will continue to focus on these issues as it moves into the U.S. In addition to the new U.S. line, Mogul is adding a second plant in Turkey, which will house two new lines, both featuring spunlace technology to complement and diversify its product range.

One line will be a cross-lap spunlace that will serve the needs of most of Mogul’s current customers in spunlace while allowing it to expand into new areas.

The second Turkish line will feature bicomponent micro filaments which is a more unique technology. “Here, the hydroentangling process gives unique softness and tactile properties that will help us to penetrate clothing and upholstery markets,” Gogus explains.

With its parallel laid spunlace, Mogul mainly targets wipes applications but the company is seeing an increasing trend for hygiene applications as well as medical, automotive and coating substrates are some other applications.

The new cross-lap spunlace technology will complement Mogul’s existing spunlace fabric offerings and target demand in automotive, artificial leather, dry wipes, depilation pads, roofing and medical and hygienic markets. The cross-lap line will also incorporate the latest technology in in-line impregnation for fabric padding, acrylic binding, water and alcohol repellent treatments, flame retardant treatment and fabric coloring.

“We entered the U.S. to grow our business volume,” Gogus says. “Our other new investments will be more market and technology driven. We have some ideas in mind but are not yet fixed on them. Generally, we are keen to invest in new technology that will bring us a competitive advantage and help expand our business. “

Wipes: Still in Play

As it tailors its future investments to broaden its role beyond wipes, Mogul still considers wipes the biggest market for spunlace—with the biggest competition, Gogus says.

“Wipes are becoming a commodity with standard type materials therefore strong price competition which squeeze margins,” he says. “To be competitive in the hygiene market, fabric weights need to significantly decrease which in turn force process limits and productivity.”



Sandler also continues to focus on improving and diversifying its wipes business and continues to report the bulk of its spunlace sales are within wipes, an area where the company continues to focus on new product development.

Sandler has focused much of its efforts on the wipes market when it comes to spunlace. Sandler’s new sawatex tactile TriLace spunlace material is a multi-layer product that offers a combination of properties targeting applications in cosmetics. An exfoliating layer removes makeup dirt and dead skin cells while a soft side refines the cleaning effect and leaves skin feeling refreshed and revived. “Sawatex tactile TriLace meets the increasing demand for more comfort in use, adding a certain something to everyday care and transforming makeup removal into a mini-wellness treatment,” says Weber.

Sandler has incorporated this multilayer technology into products designed for hygiene and technical applications.

Recently, Sandler launched a new range of nonwoven substrates for wet and dry wipes which offer an improved MD-CD ratio for optimized dimensional stability as well as increased thickness: It includes soft product variants; colored substrates that provide visual differentiation between different applications; perforated nonwovens as well as materials enhanced with a grid structure—the right wipes substrate for every application from baby care to household cleaning.

Moreover, Sandler now offers a new embossing motif in its range of designs. Designated “square,” this new hydro-embossing takes the shape of rows of small rectangles. It enlarges the nonwoven’s surface for optimized dirt removal and makes the substrate more voluminous for a softer, fluffier feel. Owing to this combination of efficiency and comfort, this motif is applicable for baby care as well as cleaning wipes.

With the wipes market continuing to represent the bulk of Sandler’s spunlace business, product differentiation has become essential to success in this market. “Cleaning efficiency and absorbency are basic requirements and, arguably, customers take them for granted,” Weber says. “Added value in terms of design, haptics or additional functionalities is key. Sandler offers product differentiation through different embossing designs—available in our product range or designed individually for our customers but also through product structure or fiber composition.”

** Editors Note: An earlier version of this story stated that Saara Söderberg is vice president of marketing and product management for Sandler. Söderberg works for Suominen Nonwovens. Nonwovens Industry regrets any confusion this may have caused.*