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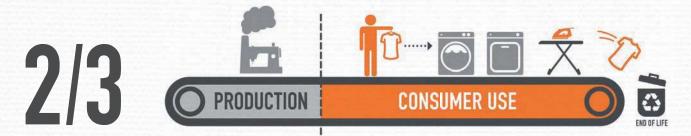


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Executive Editor Mark Sullivan msullivan@formula4media.com 646-319-7878

Editor / Associate Publisher Emily Walzer emilywalzer@sbcglobal.net

Managing Editor Cara Griffin

Art Director Francis Klaess

Associate Art Director Mary McGann

Contributing Editors Suzanne Blecher Kurt Gray Jennifer Ernst Beaudry Kathlyn Swantko

Publisher Jeff Nott jnott@formula4media.com 516-305-4711

Advertising

Jeff Gruenhut jgruenhut@formula4media.com 404-467-9980

Christina Henderson 516-305-4712 chenderson@formula4media.com

Troy Leonard tleonard@formula4media.com 352-624-1561

Katie O'Donohue kodonohue@formula4media.com 828-244-3043

Sam Selvaggio sselvaggio@formula4media.com 212-398-5021

Production Brandon Christie 516 305-4710 bchristie@formula4media.com

Business Manager Marianna Rukhvarger 516-305-4709 mrukhvarger@formula4media.com

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PO Box 23-1318 Great Neck , NY 11023 Phone: 516-305-4710 Fax: 516-441-5692 www.formula4media.com

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TEXTILE TALK | EMILY WALZER

Finding Relevance in Politics & Prose



Despite our intentions, and before water glasses were filled, we were discussing NAFTA and BATs. few times a year I get together with old friends for dinner at a restaurant in Westport, CT. The town is centrally located and loaded with good eateries. Actually Westport is a pain-in-the-neck drive for three out of four of us, but we do it because Rich commutes from the City, takes care of all the planning details – date, place, time – and even remembers birthdays. He's our ringleader and without him we likely wouldn't be sharing meals and having fun conversations that blend opinions about current events with memories of our Midnight at the Oasis Prom. After all, these are my nights out with "the boys from high school." And it should be noted, Rich lives in Westport.

We met last week and it was decided right off the bat that there would be no talking politics until the main course. Like many get togethers these days among friends, family and colleagues, passions run deep when it comes to the new administration and the political agenda taking shape. So, too, our little group – one die-hard Republican, and three Democrats that range from way far left to middle of the road independent – around the table.

Despite our intentions, and before water glasses were filled, we were discussing NAFTA and BATs. In all our years of dinners, I can confidently report that we have never before bantered over trade agreements let alone referred to the specific acronyms. By meal's end we had touched on immigration law, Sweden, Russia, the latest cabinet pick, and ended on a high note finding common ground and laughs over a recent SNL skit.

Sitting there, it was crystal clear to me that textiles had a place in every bit of the evenings discourse. From sourcing to reshoring, and corporate tax structure to jobs, the textile industry is in the thick of it. And we dig into these issues on the following pages.

However, what's also come to light during the past few months is how textiles have long served to telegraph a political message; denim, plaid, and leather were chosen specifically to make a stance on current events. Today that has taken the form of pink Pussy Hats, worn at marches and also worn by models marching down fashion runways this season. White bandanas knotted in belt loops and on purse straps have come to signify a united fashion industry. Tanisha Ford, an associate professor of history at University of Delaware has written an entire book on the topic of "Liberated Threads" that makes for interesting reading.

While textiles remain relevant, another industry item is not. Sadly, this headline caught my eye recently: "Monopoly Ditches the Boring Thimble." According to the article, "The thimble appeared when the game launched back in 1935, in a time when many more people sewed their own clothes, so the piece made more sense back then. These days most people don't have any idea what a thimble is for, so it's time to go." Last time we checked, the momentum of today's maker movement has not only elevated sales of sewing machines, but also sparked a resurgence of embroidery among Millennials. We say thimbles unite! Or if you prefer, let's Make Thimbles Great Again! •

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Emily

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IN THE MARKET | OUTDOOR RETAILER

Utah's Stance on Public Lands Irks Brands and Sparks OR Show Exit. By Emily Walzer

Future Forecast?

utdoor Retailer Winter Market wrapped up in early January yet news on what's next for the trade show has been non-stop ever since.

It appears the door is open for Outdoor Retailer to leave Salt Lake City. Brands are pulling out of the show, and Outdoor Industry Association (OIA) efforts to work with Utah officials on the public lands issue were disappointing. Show execs have stated they will leave Utah and already Denver and Portland, OR have expressed interest in hosting the trade show. The where, when and how in the way all this unfolds remains to be determined.

Outdoor Retailer Summer Market will be held as scheduled in Salt Lake City July 26-29, 2017. What happens after that is in question. While the OR Show is contracted to be in Utah through 2018, it is considering the option of leaving earlier.

The feud was sparked due to Utah's stance on public lands conservation, and specifically Governor Herbert's decision to rescind protection of the Bears Ears National Monument. Patagonia president Rose Marcario issued a statement summarizing the situation stating: "Utah Gov. Gary Herbert signed a resolution on Friday urging the Trump administration to rescind the Bears Ears National Monument, making it clear that he and other Utah elected officials do not support public lands conservation nor do they value the economic benefits - \$12 billion in consumer spending and 122,000 jobs – that the outdoor recreation industry brings to their state. Because of the hostile environment they have created and their blatant disregard for Bears Ears National Monument and other public lands, the backbone of our business, Patagonia will no longer attend the Outdoor Retailer show in Utah



Left to right: CoolVisions dyeable polypropylene shows off color and pattern in this new filament range. Terramar integrates carbon into its ClimaSense tech to boost thermo-regulation functionality and enhance comfort.



and we are confident other outdoor manufacturers and retailers will join us in moving our investment to a state that values our industry and promotes public lands conservation."

Patagonia's bold move was the first crack in the foundation of the current OR show. Others haves since chipped away at it too, including announcements from brands such as Arc'teryx and Polartec that they would not attend the show as long as it was in Utah. Ibex will exhibit, but with reduced booth size, fewer staff onsite, and plans to shut down early on Day 2 to protest. Anticipated cost savings resulting from a smaller OR footprint, projected as \$10,000, will be donated to the Conservation Alliance.

It's important to note that even before the Utah dispute, there were other concerns that defined the January fair. Big news at that time – the announcement of three OR shows in 2018; one in January, June and November with the June and November events will co-locating with the Grassroots Outdoor Alliance—now has fallen off the news radar.

That schedule was problematic from the get-go. The consensus during ORWM17 among the textile community, a foundation of OR since the Show's inception in 1990, was that the new three-times-a-year Show schedule does not align with the fiber/fabric development cycle, let alone current budgets for trade shows. Textile execs' immediate reaction was they would need to re-think how and when to exhibit at OR going forward.

Other issues top of mind during winter OR were retail rationalization, the fate of free trade agreements, and the Trump effect in general, all together combining to dampen the usually energetic OR atmosphere.

But Let's Not Forget About Product

Amidst all the news swirling around the Show and industry flux, textiles remain an important market driver. Suppliers kicked off the calendar year with strong fabric collections designed to appeal today's eco-minded outdoor consumer. Lines continue to blur ore with outdoor crossing over to not just lifestyle, but denim, workwear and small-batch, modern outdoor product. Two trends in particular stood out at ORWM17 for the upcoming Fall season:

Natural Performance

Textile suppliers are dialed in to meet consumer demand for fabrics that combine comfort, performance and modern style. New blends are better than ever with natural fibers offering tech advances for added functionality and the latest synthetics offering the feel and familiarity of natural yarns. Polyester, polypro, and nylon find comfort partnering with wools, cotton and cellulosics, while natural fibers get a functional factor from moisture moving, anti-microbial, easy care synthetics. New active lifestyle textiles aim for versatility, wearability and subtle tech as a wardrobe of natural performance materials becomes a mainstay.

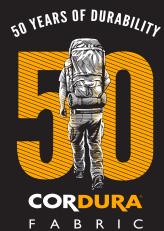
New Age Warmth

2016 was the hottest year on record, on the heels of a record-setting 2015 and 2013. Savvy textile suppliers are re-thinking their approach to warmth with new lighter weight, hybrid-constructed, breathable products that provide a better fit for today's active outdoor consumer and for current climate patterns. Synthetic "featherless" insulation was buzzy at ORWM17 with suppliers pushing attributes such as ease of manufacturing, price stability, and freedom from compliance complexities. Plus, fleece is enjoying a renaissance moment with today's strong retro trend, in addition to continued interest in sweater fleece with some knock-out collections previewed in Salt Lake.



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IN THE MARKET | ISPO

Color, Performance and Sustainability are Main Drivers for Fall/Winter 18/19. By Louisa Smith

Innovation Port of Call

ISPO_{op}

opened its doors to the international market highlighting the collections for Fall/Winter 17/18, with ingredients for the textile and trim collections for Fall/Winter 18/19 showcased in adjacent halls. The first port of call for brand developers and designers is ISPO TEXTRENDS, a unique platform for the latest developments in the textile industry, and one of the most-visited forums at the show. Here it was obvious that R&D departments have been busy bees in bringing innovation to the market with textiles that meet consumer demands for sustainability, lighter weight products and most excitingly, creative flair.

It was immediately apparent that textile suppliers have embraced a new and positive approach to the season, as color came through in much more bold and vibrant tones. From a trend perspective, surfaces have been engineered to provide a new textural appeal, in physical and optical aspects, enhanced through layering technology. The mood for lightness continues, as much lighter weight products yet still packed with performance, were featured throughout textiles, trims and accessories.

The importance of a cleaner textile process was evident in the latest developments, especially in the area of PFCs. Greenpeace has been calling on the textile industry to eliminate all hazardous chemicals from its supply chain, highlighting PFCs as priority chemical groups. The Detox Outdoor campaign put the spotlight on the outdoor apparel sector in recent years for its prevalent use of PFCs in making waterproof membranes and water-repellent coating. The industry continues to shine a bright light on sustainability advances.

W.L. Gore announced during the show that the company will eliminate PFCs of Environmental Concern from its general outdoor weatherproofing laminates (85 percent of products made with these laminates) by the end



of 2020 and from its specialized weatherproofing laminates (the remaining 15 percent of products made with these laminates) by the end of 2023. The company will develop new, more environmentally friendly technologies for weatherproof membranes and water repellent coatings for consumer products, researching both fluorine-free and fluorinated options, and publicly document that no hazardous PFCs are released into the environment throughout the product lifecycle.

The continuing elimination of PFCs has led to the new nano-based technology and bio-mimicry developments, as DWR continues to be crucial in the

Textile suppliers have embraced a new and positive approach.

outdoor market. Developments are being noted in the industry. Nanomembrane continues to evolve its commercial range of highly durable plasma DWR PFC-free laminates. With a fiber diameter of less than 150 nm, the eco-friendly laminates deliver thermal regulating, breathability, waterproofing and windproof to fabrics.

Sustainability featured throughout from recycled synthetics and bio-sustainable

fibers and finishes to innovative hybrid blends and reduced water processing. Swedish company, We aRE SpinDye, exhibited in ISPO Vision. Its forwardthinking polyester dye development eliminates water in the textile process, resulting in excellent colorfastness, durability and traceability.

Advancing Performance in Reflectivity and Thermo-Regulation

A highlight at the show was the increased development in reflective trims and coatings. Safe Reflections has developed a unique and patented reflective coating, that delivers the safety element, but also allows for a more decorative aspect through textured relief. Reflective embroidery yarn also featured from Gunold.

Reflectivity was featured on zippers, printed coatings and trims combined with taping products, a key development in the market. The growth in reflective technology is crucial to the season, not just for the safety aspect it delivers to products but through the latest innovative developments brands

are given a greater scope of design development for a signature style to the final products.

As always for the Fall/Winter season, warmth is a must-have and the insulation sector is pushing through with new developments from hybrid blends to natural fibers. Freudenberg Performance Materials presented comfortemp fireball padding. Made from loose "Fiberballs," the unique structure combines the advantages of loose down filling and padding. Achieving a thermal insulation up to 80 percent higher than conventional padding, the new material is as light and soft as down.

Innovation is at the forefront of BeHOT, a new range of heat generating fabric from SITIP using Roica Stretch Energy from Asahi Kasei. Traditionally stretch fabrics minimize heat when worn, but through this new development consisting of innovative knit construction with the inclusion of Roica Stretch Energy, the fabric generates heat when stretched.

Moving forward, designers and product developers have no excuse in failing to deliver exciting ranges packed full of performance and detail for Fall/Winter 18/19.

ISPO TEXTRENDS is one of the most visited forums at the show.



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IN THE MARKET | PGA SHOW

Links Style Performance. By Emily Walzer

A Golf Market Looks to Functional Fabrics for Future Development

Performance & Sports Textile Sourcing area at the January PGA Merchandising Show gave designers, product developers, sourcing managers and retailers easy access to fabric specialists consulting on how to integrate functionality into golf wear. About 30 suppliers participated, taking a swing at the golf market and providing further evidence that the traditional golf uniform is giving way to more lightweight, active-inspired clothing that has wicking, stretch, and UV properties.

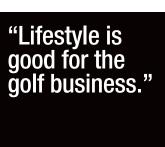
Now in its second year, the textile space at the Orlando fair had a little something for everybody including new product, education and supply chain information. The largest contingent of textile providers onsite were from Asia, but firms from the U.S., Mexico and France were represented as well, showcasing insulation for outerwear, as well as performance knits and wovens for tops and bottoms, along with stretch fabrications, temperature regulation technologies and supply chain services.

Functional fabrications were also featured in displays throughout the PGA

convention. Insulated vests were everywhere and indicate a sure trend for Fall 2017 women's collections. Outerwear in general appears ready to push into performance, as golf wear designers increasingly incorporate insulation into a variety of styles.

Textiles execs were generally positive about their involvement with PGA's Performance & Sports Textile Sourcing section.

All were quick to comment that PGA organizers made exhibiting very easy, going so far as to serve as matchmaker arranging meetings with golf wear designers. Booths were fairly uniform in size and had good locations near the speakers' area where attendees gathered to listen to presentations throughout the day.



"They (PGA) organized pre-set meetings," said Heather Manuel, Outlast director sales/marketing, a first-time exhibitor having walked the 2016 fair. "We gave them a list and they reached out to companies. We have 20 confirmed appointments and 10 more said they will swing by." Outlast is featured in Puma footwear, New Era hats, and Calloway knit products.

"PGA offered remarkable service as matchmaker, organizing meetings and people encouraged to shop," said Virginie Wittmer, with the French firm Sofileta. "We are first-time exhibitors doing pioneer work. In return we learn and have good exchanges and both parties are up to date."

Burlington made a return appearance and found it to be more organized with more suppliers exhibiting compared to last year. "This year we made time to make appointments, and the PGA contacted big retailers and reached out, and got them interested," said account manager Katie Anich. "We're also meeting with a non-golf retailer who said they had heard textile people were here at the Show."

Transitional & Fashionable Tech

"Our hope is that by spending time with developers they will bring a higher level of performance into golf outerwear," said Joe DiGirolamo, sales director, Thermore. He highlighted Thermore's high-efficiency, compact insulation that provides good warmth without bulkiness. "Golfers want full mobility and a thinner profile with stretch is the kind of performance they like," added DiGirolamo. "Let's call it transitional tech."

Sofieleta, known for functional stretch fabrics, featured New Life Down, a recycled down for outerwear applications. "Beyond what we offer in terms of performance, we as European makers come with the added value of our aesthetic: tech that does not look like tech," said Wittmer, business unit manager. "We call it fashionable performance."

Burlington's Anich, states, "Lifestyle is good for the golf business, as golfers want some performance, but performance that is more understated than super high-tech." She explains that golfers want "live-able-type features," with attributes Burlington offers such as UV, weather protection, wicking, anti-odor.

Textile exhibitor Cocona/37.5 displayed a variety of apparel that featured the versatility and comfort provided by its performance technology; company



exec Gregory Haggquist presented wearing a suit made with 37.5 technology. "Brands are looking for real performance but they want to offer something their customers can really feel," said Christy Raedeke, VP global brand, Cocona, Inc. "And that's comfort."

SGS Seamless Global Solutions based out of Puebla, Mexico (Central Mexico) showcased its XOUL Golf brand line and merchandise. According to president Bo Guillen, "We currently produce about 400,000 to 600,000 seamless garments per month."

Rounding out the fabric exhibitors was Inovatex, a new San Franciscobased supply chain services firm. "We take care of everything from soup to nuts and are already doing active apparel, sportswear and private label," explained Bob Moran, EVP sales/merchandising. "Golf is a good channel for Inovatex." •

Burlington shirting can be customized with tech including UV protection, wicking, and anti-microbial properties.

IN THE MARKET | SIA

Progression & Style Set the Look and Tone of the Snow Show 2017. By Jessica Kaplan

Seeking Positive Change

aradigm shifts were abundant at the Denver SIA trade fair showcasing a transition in command as Nick Sargent and his team take over following David Ingemie's retirement as SIA president.

Though foot traffic on the floor, and at the Sourcing Snow area, was slower than previous years, attend-

ees and exhibitors at the January trade event exuded an excitement on where the trade show is headed. Many seemed to bask in a sentiment that "change is good."

After attending SIA for over 15 years, I've seen many shifts take place. (One of the

Many seemed to bask in a sentiment that "change is good."

biggest being its location from Las Vegas to Denver in 2010.) For 2017, what stood out the most were new sec-

tions like "Winter Luxe" and "Trail Gate," each bringing forth an interesting and unique twist. The former was located at the entrance where young brands, in hardgoods and softgoods, along with companies that make provisions like coffee and honey, had prime real estate. From Weston Snowboards bringing in its own "tiny house" on wheels and Coalition Snow boosting the profile of women in snow, to Caribiner Coffee Co. selling bags of coffee — logistically, trade show attendees walked by each of these booths to get inside the hall. Youthful spirit was overflowing.

Within "Winter Luxe," brands J.Lindeberg, Odd Molly, Eider, Alps & Meter and Japanese newcomer to North America, Goldwin, previewed technical outerwear that caters to a more affluent demographic within snow.

Additional fresh points included the third installment of Industry + Intelligence; SIA's educational forum filled with various seminars, which traditionally kicks off the day before the show opens. This symposium garners a larger attendee base each year with more industry members craving enriching information about their business practices.

Trend Takeaways & Product Highlights

Over the past five years, I've presented at Industry + Intelligence. My objective is to showcase overarching trends that influence the snow landscape from the non-endemic arenas of culture, fashion and technology. Important this year is the blanket approach to minimalism. This trend translates to ski and snowboard product

in collections for 2017/2018 in a less is more approach, channeled through solid textiles with minimal, or zero prints. Essentially, snow enthusiasts want more bang for the dollar and look at product as an investment, translating to higher price points along with more technically advanced outerwear.

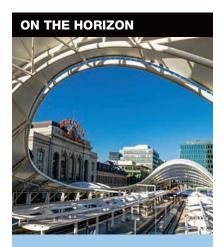
Kjus' Freelight Jacket stood out with what it calls, "the world first fully knitted ultra stretch ski jacket." The sweater-like fit, yet waterproof construction is exceptional. The jacket itself is designed to enhance the body's flexibility in conjunction with shape memory. Another winner from Kjus is the upcoming collaboration with textile manufacturer and brand, Loro Piana. The two companies created the Staz Parka that feels and looks as luxurious as it is functional. Patagonia unveiled its Hyper Puff

Hoodie boasting an innovative accor-

dion-like insulated called Hyperdas that can compress and then expand in a totally new and fully-functional manner. Helly Hansen came to the table with its Icon Jacket showcasing a "Life Pocket" with PrimaLoft Aerogel Insulation that essentially allows the battery power of electronics to stay alive in frigid temperatures.

This is Roxy's third season using Biotherm across several styles such as neck warmers and gloves. The textile technology boasts microcapsules in the fibers that release moisturizing ingredients when on contact with skin. Roxy is the only manufacturer to use this technology. •

Above: The Freelite jacket from Kjus is a unique stretch knit construction designed with shape memory.



The Snow Show has upped its contract to stay in Denver through 2030. Denver may play an even bigger trade show role in the coming years what with the brouhaha across state lines in Utah where officials' stance on public land conservation has irked outdoor brands enough to encourage Outdoor Retailer to decamp after 20 years at the Salt Palace convention center in downtown Salt Lake City. Could OR re-emerge in CO? The industry associations aligned with OR and SIA respectively, have very different business models making a collaborative effort resulting in a united winter trade fair held under one roof in Denver come 2018 an iffy outcome. Stay tuned. This situation is worth watching. In the meantime, a letter to members from SIA's new president Nick Sargent outlines goals going forward and makes a passionate plea for members to come together to create a trade show that matters. He states: "Our vision is clear - Help the winter sports industry thrive."

Read the entire letter: blog.snowsports.org/snowsource



IN THE MARKET | EURO REPORT

Intimates Refocus on Femininity for Spring/Summer 2018. By Louisa Smith

Back to Romance

KEY TRENDS: SPRING/SUMMER 2018

Femininity returns for lingerie and active intimate apparel

Color: intense tones return for classic styling through to eclectic applications

Decoration: embroidery is making a comeback and prints continue to develop through being applied to textured surfaces for an unruly effect

Lightness is key in all fabrics, yet still maintaining the core characteristics of the previous generation of fabrics

Sustainability continues on course - eco aspects feature heavily throughout

Performance fabrics are stronger in style

Core spun cotton makes a return - a natural hand with invisible performance

Athleisure shifts to street sports for livingwear

Smoothing fabrics for all sectors of the market

Moisture management and cool touch from athleisure

hen athleisure dazzled as the hot new lifestyle trend, many textile mills turned their attention to performance in the hopes of finding a new avenue for growth. Emerging after the global financial crisis and ushering in a change in attitudes, athleisure was regarded as a necessity for many. The message then was diversify or die. Today's message is different, diversify too much and you will die!

This swing in direction, an about turn if you will, was noticeable at the recent Interfilière Show as this season's collections took on a more romantic and sexy approach in knits, lace and embroidery. It's back to the core business for many, with mills returning to what they did best before spreading themselves too thin.

Athleisure remains, in a more sophisticated way. But its influence, and perhaps its legacy, is in the way performance yarns and finishes have found a place in the traditional lingerie textile sector. Having lost their way for awhile, lingerie textiles now have regrouped to deliver a fantastic and targeted offering for brands and designers in delivering unique and innovative collections. Functional fabrics stand out, with a new stylish approach — more in keeping with lingerie than with activewear — yet they also deliver key performance attributes for the spring/summer season: moisture management, cool touch and soft hand.



Fashion and function find balance in new collections for the season. Shown here are the latest qualities from Piave Maitex, at left, and Gemma Knits, right.

Directional & Sustainable

Penn Textile Solutions offered a lace band with an engineered edge to eliminate additional seaming. The reduction of reduced cut-and-sew, results in a smoother finish but also reduced garment production. A hybrid blend of mercerized micro modal and nylon, with comfort meeting a super sensual touch in an interlock structure, perfect for intimates or active was one of Tintex' new developments.

The importance of sustainability continues to be noted by the industry with the latest arrival on the branded fiber front coming from Eastman, using Interfilière to introduce a new yarn. Called Naia, it is a cellulosic yarn made from wood pulp from certified and sustainable managed forests. Due to the filament yarn construction, Naia not only has a sensational touch and high luster it also contains the performance benefits of stain resistance, moisture management and cool touch, guaranteeing it as a new bio-based alternative. Additionally the sustainable aspect of the wood source combined with the inherent performance aspects, especially moisture management, eliminates the need for any further finishing, therefore improving its eco credentials.

Brugnogli's Art Tenda, a transparent striped jacquard with geometrical and wave shape on the surface stood alongside the company's 100 percent bio-based nylon, thus confirming the future of sustainable solutions. Iluna chose Interfilière to launch its Green Label collection with Roica Eco Smart spandex/elastane in Jacquardtronic and textronic articles. Eco Smart is an eco-stretch elastane that is GRS certified (Global Recycling Standard by Textile Exchange). The production uses polymer science to repurpose up to at least 50 percent pre-consumer waste.

Sporty & Stylish

Active intimate apparel is still a growth area. Performance collections are more stylish, and moving beyond the typical gym-gray mélange to a better use of color. A more decorative approach also came through from lace and embroidery manufacturers as companies realize that women love the comfort and purpose of a sports bra for daily wear but want traditional lingerie flair.

It seems the way forward for intimates suppliers is to go back to what they are good at, producing sensational materials to create collections. "Women like classic as long as you update it," said Jos Berry, creative director of Concepts Paris, the firm that organizes Interfilière's trend forum. "Women are buying items that last longer. Not for nothing are there bestsellers in the world," added Berry, citing Triumph's Doreen, the best selling non- wired bra for over 40 years, as a case in point. "Don't try to reinvent all the time, re-color, change the lace."

This season's wonderful offering of textiles, and evident refocus on textile producers' core expertise, will result in vibrant and decorative collections.

EDUCATION | UNIVERSITY OF CAMBRIDGE

New Research Ups the Performance Possibilities in Cotton Fabrics. By Kathlyn Swantko

Groundbreaking Graphene-based Inks

otton is about to ramp up the performance challenge to the next level. Through the use of graphene-based inks and research being conducted at the University of Cambridge, cotton is on the verge of new possibilities in creating inexpensive, scalable applications for flexible and wearable electronics in smart fabrics.

Wearable electronic devices are now progressing into textiles for everyday apparel. Graphene is a single atom-thick membrane of carbon that is highly conductive, environmentally-friendly, and an ideal metal for broader applications.

"In response to this need, our team of over 20 PhDs and MEng students began investigating the production of graphene in liquid by direct exfoliation of graphite into the solution through the application of ultrasounds," explains Dr. Felice Torrisi, University Lecturer in Graphene Technology and Project Leader for the Cambridge Graphene Centre (CGC) at the University of Cambridge, UK.

Over the last five years, the research has evolved into the formulation of graphene-based conductive inks for printed and flexible electronics.

The CGC researchers, working in collaboration with scientists at Jiangnan University, China, developed a method for infusing the graphene-based inks onto cotton to produce a conductive textile. The inks, made of chemically modified grapheme flakes, were found to adhere easier to cotton than unmodified graphene.

"Our printing technology has enabled the integration of graphene printed motion sensors directly onto cotton fabric by using an environmentally-friendly process that is compatible with the natural fiber, leaving the comfort of the cotton substrate unaltered," cites Torrisi. "The cotton fibers act as an effective host matrix for the conductive graphene flakes. After depositing the ink onto the fabric, a heat treatment improves the conductivity of the modified graphene, creating a conductive network of many graphene sheets."

This printing process creates a thin and uniform conducting network of nanometer flakes, and is the secret to the high sensitivity to strain induced by motion. A simple graphene-coated conductive cotton textile, used as a wearable strain-sensor, has shown it can detect up to 500 motion cycles, even after more than 12 washing cycles in a typical washing machine.

Advantages and Future Advances

The adhesion of modified graphene to the cotton fiber is similar to the way cotton holds colored dyes, and allows the fabric to remain conductive after washing. Both modified and pure graphene inks printed on the cotton fabric enable direct circuit patterning, which makes the process eco-friendly, scalable and easy to integrate into traditional cotton fabric dyers and printers.



Scanned electron microscopy image of the graphenecotton fabric.

Turning cotton fibers into functional electronic components can open up an entirely new set of applications from healthcare

and wellbeing to the "Internet of Things." Commercial opportunities for graphene-cotton fabrics range from personal health technology, high performance sportswear and wearable technology/computing, fashion-tech, military garments, and into automotive end-uses



such as a motion/pressure sensors and heaters in car seats. Graphene and Related Materials (GRMs) are changing the science and technology landscape with the ability to create attractive physical properties for electronics, photonics, sensing, catalysis and energy storage that extend beyond cotton and natural fibers. Torrisi explains, "Our short-term goal is to expand the range

of GRM-enabled electronic devices on cotton, and establishing this technology as a powerful tool for successful wearable electronic textiles. Our longterm goal is to bring a more intimate presence of nanomaterials into cotton, wool and silk fibers that will enable yarns with electrical and optical properties, which could be woven into commercial fabrics to create fully fiber-based electronics."

Kathlyn Swantko, president of the FabricLink Network, created TheTechnicalCenter.com for Industry networking and marketing of specialty textiles, and FabricLink.com for consumer education involving everything fabric.

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Partnership Opportunities: Kristi Rummel kristi@rummelmedia.com 608.435.6220

Editorial Opportunities: Kathy Swantko kgswantko@fabricklink.com 818.345.7501



IN THE MARKET | NW & NE MATERIALS SHOW

What's on Tap for Fall 2018 Footwear Fabric Trends. By Jennifer Ernst Beaudry

Material Issues

"The added texture of suedes and suede-like vegan alternatives like Clarino are seeing growth as material use gets more sophisticated. Suedes are trending in conjunction with minimal, classic design," Tim Berglund, VP of Sales for MatMarket, maker of Clarino microfiber leather.

robust crowd of designers, brand reps and manufacturers from all categories took to the Northwest Materials Show earlier this month in Portland, OR to take a look forward after a chaotic year that saw major upheaval in the footwear business, a troubled retail market across the board and a new administration debating trade policies that could have dramatic effect on the footwear and apparel business.

Many manufacturers touted their American manufacturing capabilities, whether longtime or newly energized. And despite uncertainty about what sort of environmental policies would be enacted, innovation in sustainability, certification by Bluesign and other agencies, and more product offerings in the PFC-free arena were hot topics of conversation.

Here, *Textile Insight* runs down the top footwear-related trends at the NW Materials Show:



Texture Rules: Brands are looking for leathers with texture, tanneries said — and that's meant increased demand in suede splits. "Designers

are looking for a diversified texture look," said Chris Moseley, USA Director for Simona Tanning. And pairing tonal suedes and leathers lets brands add interest to both casual and athletic styles in a more sophisticated way. Tim Berglund, VP of Sales for MatMarket, maker of the Clarino microfiber leather, said the added texture of suedes and suede-like vegan alternatives like Clarino are seeing growth as material use gets more sophisticated: "Suedes are trending in conjunction with minimal, classic design."



Natural Or Supernatural?: Crunchyearthy or super-tech? When it comes to uppers, there's no need to choose: Earthy colors and treat-

ments are growing, but so are flashy, futuristic treatments like color shifts and reflective everything. Tanneries confirmed that browns, tans and neutral shades continue to lead, along with colors, like the muted berries, blues and grays. ISA Tantec's palette of dusty tones inspired by spices, take their cues from the natural world. And that goes for finishes as well: oily leathers and tannages that showed off the leather's inherent characteristics were popular. As Olivia Daher, director of sales and marketing for Shanghai Richina Leather Ltd. Co., said, "Customers want leather-looking leather, across the board."

But equally strong were fresh finishes like shimmering metallic synthetics and reflectives in a broad range of colors. Sunnylite showed translucent Aurora reflective TPU and its Colorific nonwoven PU upper material in a variety of colors that can work together to create elaborate patterns when the material is hit by a flash, selling points for customers (and consumers) who demand differentiated product, GM Paul Lo said. Pony Leather USA showed color-shifting treatments on synthetic leathers that run from warm to cool are hot, following the established trend in the automotive space, according to VP of product creation Jason Eric Brown.



Waste Not, Want Not: Multiple brands exhibiting at the NW Materials show promised high performance as well as innovative solutions to waste issues — solutions that take trash to treasure. Italian manufacturer Finproject brought its XL Extralight

Sustainable closed-cell compound, which the brand said can incorporate as much as 30 or 35 percent post industrial waste. Texas-based Austin Rubber Co., with tagline "A new spin for old tires," has developed a technique for devulcanizing old tires and scrap rubber sourced in the U.S. The rubber

compound it creates, APX, costs less than virgin material, according to president Donald Drew — and can be used in much higher concentration than most recycled compounds, as much as 50 percent. Meridian, MS-based Bloom Foam uses material culled from algae blooms — the sometimes harmful rapid accumulations of algae in fresh water — to create a flexible foam that can be used for insoles, midsoles and outsoles.

Reps on hand at the NW Materials Show included this extensive line-up:

Bata, John Fluevog, Shye, Div, Speedo, Giko, Shoes for Crews, New Balance, Keen, Under Armour, Heel the Sole, Nau, Creative Recreation, Skechers, Adidas, Lululemon, Nau, Lacrosse, Nike, Amer Sports, Brooks, Ariat, Merrell, The North Face, Columbia Sportswear, Cobra Puma Golf, Salomon, Asics, Paimo, Ortho, VF Corp., Rocky Brands, Timbuk2, Jansport, Puma, Vans.

Bloom Foam uses material culled from algae blooms to create a flexible foam for insoles, midsoles and outsoles.



LUBRIZOL ENGINEERED POLYMERS Launches TPU DesignFEST



he Lubrizol Corporation's Engineered Polymers business recently launched TPU DesignFEST, a contest aimed at partnering with leading universities and their students to progress design thinking methodology and the

Lubrizol's innovative thermoplastic polyurethane (TPU) material solutions.

TPU DesignFEST offers students a real-world design experience focused on how performance comes together. Working in teams, students must creatively apply research into the design of performanceoriented applications, in this case, sports and outdoor recreational applications that

development of innovative new applications featuring

hard goods, with an emphasis on hands-on learning, internships, and a mix of design, materials and business training. As such, it makes a perfect complement to Lubrizol's objectives with TPU DesignFEST. Undergraduate students will focus their application development efforts around indoor/outdoor sports, recreation, exercise and active lifestyle activities, including performance



The campus of Utah State University, the first participant in Lubrizol's TPU DesignFEST contest.

incorporate Lubrizol's BounCell-X[™] TPU and Estane[®] TRX TPU materials, building on key performance properties and aesthetics, while considering manufacturability, marketability and sustainability.

This inaugural TPU DesignFEST is hosted in collaboration with the newly chartered Outdoor Product Design & Development (OPDD) program at Utah State University. The OPDD program is the first such four-year bachelors degree of its kind in the USA, created with input from industry leaders such as Black Diamond®, Cabelas®, Patagonia® and Northwest River Supplies®. Launched in 2016, the program trains tomorrow's leaders in soft and the seemingly boundless opportunities of Lubrizol's innovative TPU technologies such as BounCell-X[™] TPU high performance foams and Estane® TRX TPU high traction, high abrasion resistant resins," says Kenneth Kim, global sports and recreation market development manager, Lubrizol Engineered Polymers. "We are eager to see what these talented students can do."

TPU DesignFEST will be judged by a panel of industry experts who will assess entries on the basis of performance, practicality, aesthetics and sustainability.

The Top 3 designs and winning teams will be announced in April.

COMPANY OVERVIEW

The Lubrizol Corporation, a Berkshire Hathaway company, is a market- and techologydriven global company that combines complex specialty chemicals to optimize the quality, performance and value of our customers' products while reducing their environmental impact. Lubrizol serves customers in more than 100 countries, from sales, technical and manufacturing sites across the globe.

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*Bio-based content as certified in accordance with ASTM D-6866

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compete for cash prizes and publicity that can help advance their educational and career development opportunities. "We are excited to partner with Utah

footwear, apparel, sporting

goods, outdoor gear and

accessories. The teams

State University and the Outdoor Product Design & Development students to further explore

IN THE MARKET | NW & NE MATERIALS SHOW

What's on Tap for Fall 2018 Footwear Fabric Trends. By Emily Walzer

New Dates, Venue Usher in NE Materials Show '17







n recent years newcomer exhibitors to the NE Materials Show had to set up booths that spilled out of the main ballroom, into the hallways and then around the bend to the back area of the available conference space. It was clear that after many years in the Danvers locale, it was time for a change in venue.

Similarly, a change in show dates was also needed in order to accommodate contemporary product development cycles. Having established itself over the past decade as a March trade fair, this year the show date was changed to the second week in February.

Hence, a double-whammy of change for the NE Materials Show. And that's a lot, especially coming off a tumultuous 2016, and into a 2017 that bears more than a bit of uncertainty not just for the footwear market, but for retail and for trade agreements that may have textile sourcing ramifications, not to mention business in general.

As far as venue, exhibitors were pleased by the capacity of the new space. The Aleppo Shriner's Auditorium in Wilmington, MA, was large enough that all booths were under one roof in traditional trade show style making the venue appear larger yet at the same time easier to work the aisles. Attendees could visit all 150 booths in an efficient layout, which provided a better means to view new product and get a sense of overall trends, as well as network. As such the number one goal of providing one big room for all participants was achieved.

There were drawbacks, however. Execs commented on the lack of carpeting on the cement floor and slightly tired looking arena. Lunch service was slow, and few food options existed close by the Auditorium. None of which would have mattered if traffic in the aisles bustled. Unfortunately weather played a role in attendance – as is often the case in mid-February in the Boston area. A string of snow days and the forecast of more snow on the way put a damper on attendance. As did new show dates; the February 15-16 time slot came just as folks were back from ISPO and/or were weary from a trade show circuit that began in early January.

There is no easy answer to trade show scheduling these days. Yet, like other industry gatherings, the NE Materials Show is trying to seek positive change. \bullet

Top to bottom: Sheehan's etc. technology used in the lining of this Reebok Cross Fit shoe reduces friction and temperature to boost comfort; Faytex is on trend this season with its range of color-shifting materials for footwear application; Taiwanese firm Dingzing highlights material developments that are soft without sacrificing performance. The company is known for advanced thermoplastic polyurethane solutions and technical films. Say Goodbye to Friction and Heat with etc™ lining materials.





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AABE UN ANER UN

A MODERN MANUFACTURING MINDSET

How Thinking Like a Start Up Is Reinventing Established Production Methods



"small white-box spaces" that will be between 2,000 and 20,000 square feet, catering to companies working in patternmaking, marking and grading, cutting and sewing, and sample making. The city estimates that 25-to-30 garment manufacturing tenants will work in the property. In addition, the State University of New York's Fashion Institute of Technology will run two courses out of the Brooklyn Army Terminal, in conjunction with the Made in New York campus.

In other words, Sunset Park Brooklyn is a new take on the old Garment District.

New York City is not alone in re-thinking domestic manufacturing; across the country a similar modern mindset is giving rise to new business models characterized by an entrepreneurial spirit. The conventional "this is how it's always been done" attitude is being replaced with a contemporary can-do mentality. How does "factory in a box" sound, for example?

These and other innovative production methods are reinventing how product gets made in today's market that is demanding faster, smarter manufacturing in a safe worker environment. Call it regionalism, or call it reshoring, but at the end of the day it's all about American made ingenuity.

"We want to position ourselves as a start-up company with a 40 year history," says Marty Oliver, executive director business development at Crawford Knitting in North Carolina.

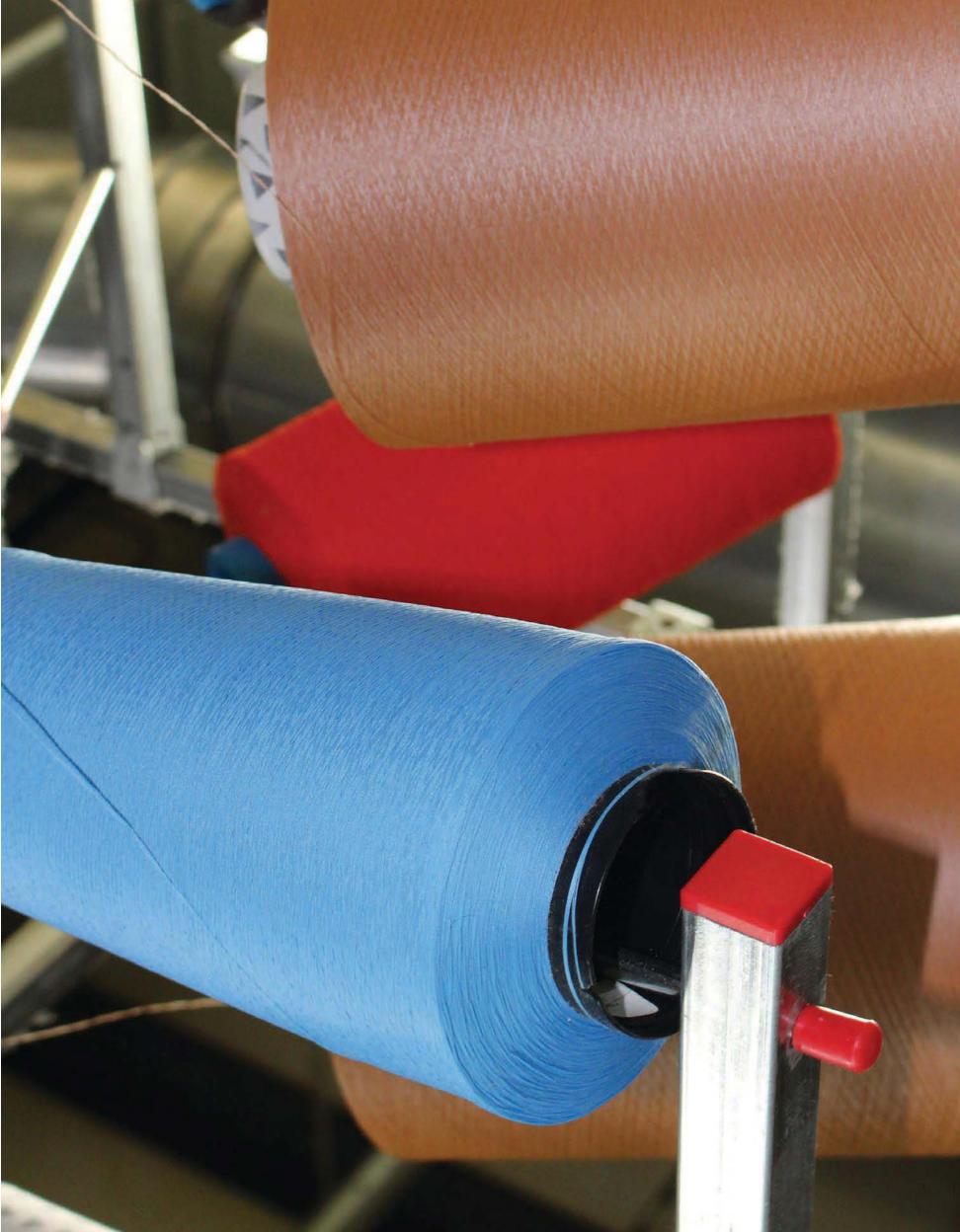
Massachusetts-based 99 Degrees Custom is in fact a startup, and taking the activewear business by storm. Says founder Brenna Schneider, "Four years ago when I started I just had this gut sense that domestic manufacturing was coming back, that there was opportunity, and that the landscape was changing."

Schneider and Oliver have manufacturing and textile backgrounds, but not so for Peter Santora, who believes fresh eyes on the industry has helped his Georgia-based company Softwear Automation succeed with its portable work lines. "Imagine pulling up outside a mill in an 18-wheeler with a production line that can instantly begin producing 800,000 t-shirts. You don't need a giant factory to get started."

Collaborative work spaces, pod-style automation, production partnerships, marrying experience with entrepreneurship, and following a gut instinct are all ways businesses are repurposing domestic manufacturing. Here's a close up look at how firms are determining the future of Made in America.

Made in North Carolina

Crawford Knitting is a small hosiery company on the rebound. In less than two years management has revamped its business model based on forward-thinking brand building strategies. "Everyone in the hosiery business, from big companies to small players have to be resourceful. You have to get out of your comfort zone and look for new markets, and more new ways of doing business," explains Oliver, who came on board at Crawford



MADE IN America

in October 2015, when the Ramseur, NC-based knitter owned by John McCuiston was in need of fresh ideas.

A compartmentalized approach has since been implemented that consists of Digital/Social media, Brand Partnerships, and Contract Knitting. These elements, both separately and combined, are now driving growth.

The company sells its branded Pro-Tect Copper Defense sock line on a dedicated website. Says Oliver, "We have to have a presence online. This business is in its infancy, but we're getting orders and feeling hopeful." Newly forged partnerships with 511 Tactical and Wells Lamont are building brand awareness, and are viewed as a strength going forward. Contract knitting has good potential. Crawford owns top-shelf Lonati machines - 144-needle equipment - one of the few factories with this capacity and can handle volume that would usually go overseas. "Crawford is flexible enough and has the machinery to accommodate the needs of

today's market," says Oliver. He called on Walmart for 12 years and worked with Renfro for five years. "We are a vertical company and can produce 12,000 dozen per shift, multiplied by three shifts, and knit that in a week. 144 needle capability is needed right now and we have it. We are getting a lot of inquires."

Growth through partnerships is a key part of Crawford's new business model, as a means to both diversify and strengthen market awareness. The company has built vertical relationships with Cupron Enhanced Copper and TransDry cotton.

"These technologies allow us to differentiate ourselves and also allow us to pass that differentiation along to brands like 5.11 Tactical, Wells Lamont and others," Oliver explains.

Chris Andrews is the CEO at Cupron in Richmond, VA. The firm supplies copperbased technology that features antimicrobial, odor capture/ control, and skin enhancement performance qualities. The company, with business in three diverse markets, is growing its U.S. presence; it has re-located manufacturing from China and recently built a plant in the States that now employs 50 people.

Andrews explains that the company had success with a similar style partnership in its healthcare category. "Specifically, how do we use technology and turn it into a value that can differentiate a

With innovation happening faster than ever, planning two years ahead wasn't smart or efficient. It was an old model. I saw how automation and tech was changing other industries, and how it also made labor costs less relevant." Brenna Schneider, founder, 99 **Degrees Custom**

99 Degrees Custom is founded on regional, quick-turn development for performance activewear and sportswear brands allowing for innovation and making inventory less of an issue. product in the marketplace," said Andrews. "Our partnership with EOS in the healthcare sector has been a success and we look to mirror that with Crawford's line of Pro-Tect socks."

Looking ahead Oliver envisions developing a micro supply chain with other mills and technology suppliers in neighboring locales in North Carolina. "We could create a head-to-toe performance group within a 15 mile radius," says Oliver, who imagines a consortium that would utilize the strengths of each partner to the greater good of all.

In October of 2012, 60 Minutes reporter Scott Pelley did an interview with Crawford 's McCuistan. Footlocker had just taken their business off shore and, Pelley was focused on the "Not made in USA angle." It was a tough time for Crawford, and all USA hosiery and other producers. McCusiton was quoted stating, "With clients taking business overseas, I doesn't see a future for our company." Oliver reached out to 60 Minutes recently. While he couldn't convince them to do a follow-up interview, he made it known that Crawford not only survived but is producing and the angle now is "USA made."

Made in Massachusetts

If you happened to swing by the Polartec booth at Outdoor Retailer this January you were no doubt intrigued by the onsite workstation producing custom fleece pullovers; attendees could place an order and within hours receive a text that their pullover was ready for pick up. It was a 99 Degrees Custom line of operators stationed on the show floor using Americas 21st advanced machinery – a set up that 99 Degrees Custom's Schneider looks to have installed at her Lawrence, Massachusetts facility very soon.

"When thinking about starting my business I saw a globally fragmented industry with a lot of inefficiencies, long lead times, lots of waste and costs," says Schneider. "With innovation happening faster than ever, planning two years ahead wasn't smart or efficient, it was an old model. I saw how automation and tech was changing other industries, and how it also made labor costs less relevant."

99 Degrees Custom is founded



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MADE IN America

on really smart, lean process with semi-automation focused on regional manufacturing for regional demand. The company is in growth mode, actively working with about 15 brands, including New Balance, and has established partnerships with Polartec and Bemis. A Bemis collaborative "Playroom" space is on site, offering 99 Degrees Custom availability of SewFree technology, ultrasonic bonding and laser cutting.

Schneider relates that 99 Degrees Custom was founded "out of entrepreneurial necessity" when she was working for a factory that closed in 2012. "I felt that we were on the cusp of a U.S. manufacturing trend."

Creating good jobs with transferable skills is central to the company's mission. "You hear a lot of fear about machines replacing our jobs and excitement about robots," Schneider says. "But I see there is an incredible sweet spot between the machine and human side. I see tech as a pathway up, along with semi-automation replacing low-skill operation, and better wages while at the

same time improving efficiencies and raising employee engagement in their work," explains Schneider who was recently recognized for her vision. Last fall 99 Degrees Custom was one of four winners of an award given by Massachusetts Institute of Technology's Sloan School of Management to companies efforting "partnerships between man and machine and drive innovation to under-served communities." The \$125,000 prize 99 Degrees Custom received in what was MIT's first Inclusive Innovation Competition is slated towards the purchase of stand-up Toyota advanced manufacturing equipment from Americas 21st.

Made in Anywhere USA

Last month Softwear Automation arrived in Vegas with its Sewbots in tow. The company was exhibiting at the Sourcing Magic Made in America section. It was about to unveil the first public viewing of the company's fully automated t-shirt workline. Santora, VP sales and marketing for Atlanta- based Softwear Automation also presented at Magic speaking at the Innovators: Great Factory Stories seminar and was a panelist for the Maker Movement discussion.

"The original idea behind the creation of Softwear Automation was bringing sewing back," explains Santora. "But in a new way, along the lines of building something like an autonomous driving car." That kind of thinking



Softwear Automation is helping bring about the factory of the future with technology and autonomous equipment that works with sensors, and cameras along the lines of driver-less cars. and ongoing research ultimately resulted in a product line of uniquely innovative autonomous equipment that works with sensors and cameras to map out methods and robotics to steer fabric through needles.

Development has continued with the recent addition of the two new lines that cut and sew; one for t-shirts, available this summer, and another for jeans that the company built for Walmart.

Santora explains that back in the '90s Levis had a nearly complete automated system. The problem, however, was the machines didn't keep pace with apparel innovation. Because his company is software driven, it can adapt to a changing market place and doesn't rely on retooling machinery. "Software has advantages over hardware," Santora says. "For us problem solving is in the tech and is software based."

There is also a job creation aspect. "Any job we bring in is a positive. And if you look downstream, you create jobs for individuals making the robots, delivering the system, and running the new product line," Santora adds. "It's job creation through automation."

Softwear Automation spent its first seven years in incubator stage at Georgia Tech University, where Santora was a research faculty member and advisor on the project. More R&D followed with only two people on board. Three years ago, they received grant money from DARPA, and funding from Walmart, that help propel the business forward. "Basically it went from science project to company in the last three years," says Santora.

Now the company has its sites set on putting Softwear Automation worklines in different regions of the country and acting as hubs for manufacturing. "The workline can go anywhere. It's good for established big companies as well as small startups," Santora explains, "You don't need a giant factory; what we're doing is 'factory in a box.' You just pull up outside a mill or an office, unload the system, and start producing."

Santora and others in the company all come from a tech background. "We bring fresh eyes to an old industry."



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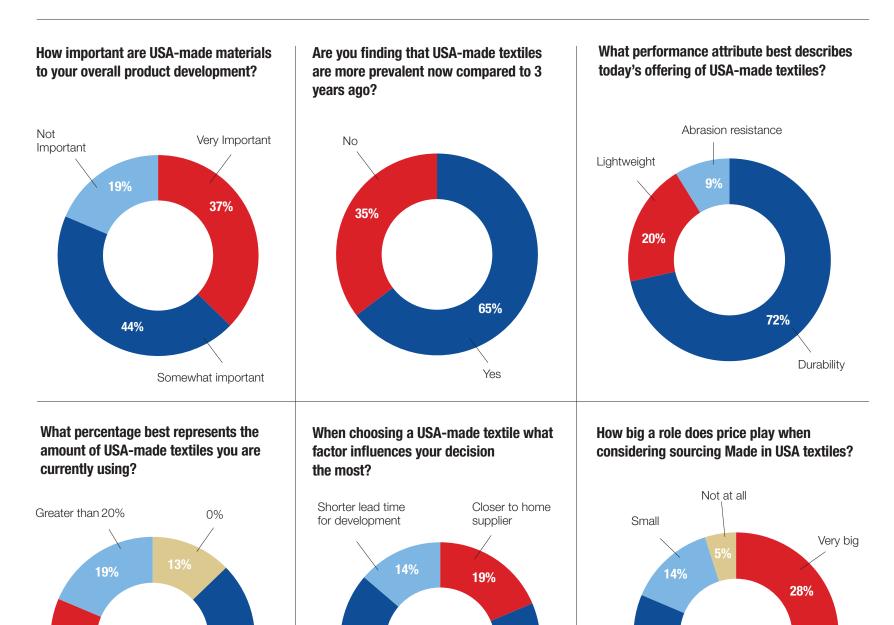
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industrial designer TRENDINSIGHT

he charts shown on this page represent direct feedback from industrial designers who are in the trenches when it comes to sourcing textiles for leading edge product development. On the topic of Made in America, the big takeaway is that more designers would use locally produced materials if more Stateside plants existed. For example, 95 percent of the responders said they would be inclined to use domestic factories if these operations were more widely available. There certainly is room to accommodate growth of domestically sourced textiles used in contemporary collections. According to survey results, the amount most reported when asked what percentage best represents the amount of USA-made textiles used currently was less than 10 percent.

Trend Insight Industrial Designer is a new feature within Textile Insight that delivers research conducted on the MESH1 Platform. MESH1 collects data from a select panel of 100 industrial designers. For information on the Mesh1 Platform and its industrial design community of 10,000+, contact Brian Bednarek at 603-766-0957 or brian.bednarek@mesh01.com. For more information on Trend Insight Industrial Designer and how your company can participate, contact Jeff Nott at 516-305-4711 or inott@formula4media.com.



68%

High-quality

of the product

24 • Textile Insight ~ March/April 2017

33%

10% - 20%

35%

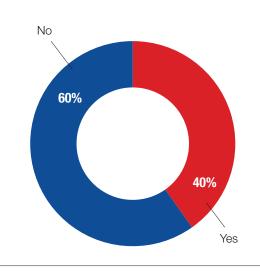
Less than 10%

53%

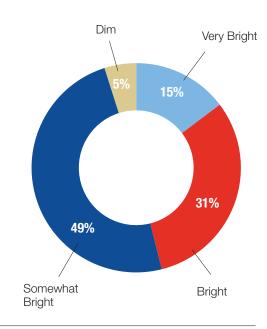
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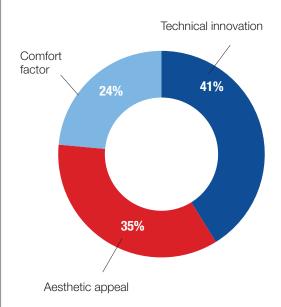
According to our survey results, some of the main advantages of sourcing materials from that develop as a result of local partnerships. In terms of manufacturing, are you using more domestic factories for production purposes?



How would you characterize the future of the USA textile industry?

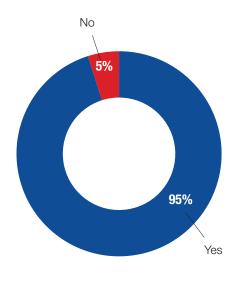


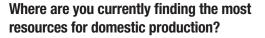
What is the main driver in your choice of textile in general?

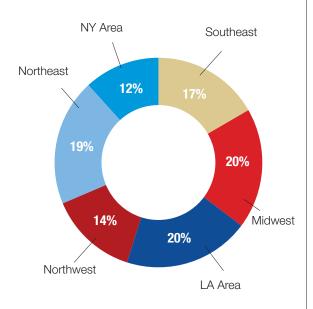


domestic suppliers are the strong relationships

Would you be inclined to use domestic factories if these operations were more widely available?







How important is it for brands to promote their use of USA-made textiles?

91%

Yes

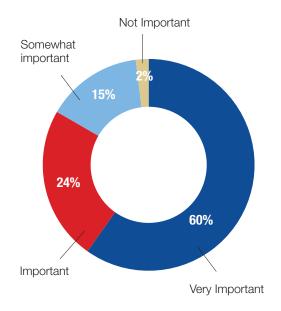
A main advantage often cited in favor of using

that develop with local suppliers. Agree?

9%

No

USA-made materials is the strong relationships



TECHNOLOGY | DENIM

Today's Performance Push Gives Way to Denim that Does it All.

Functionally **Fit Jeans**

FACTS **MUST HAVES**

DENIM

70% Fit Comfortable to wear

KEY DRIVERS 0% Keeps its shape

- Stretch
- Is durable

EMERGING DRIVERS

- Feels soft
- Lightweight
- Helps me stay warm when it's cold
- Helps me stay cool when it's hot

Market research conducted last year by ICM Research on behalf of INVISTA identifies purchase preferences and highlights consumer interest in the concept of a summer jean.

hat started with just a smidgen of stretch has evolved into a full-blown category of jeans that wick, cool, temperature-regulate and resist wear and tear as the denim marketplace increasingly headlines functionality as a means of promoting year-round comfort and lifestyle versatility.

Textile ingredient suppliers are rapidly building and expanding partnerships with denim makers giving rise to what's become known as the "performance denim" category. These companies, long-established in the active space, are finding success in denim as textile tech and innovative fabric blends are proving just the ticket in a denim market that has taken it on the chin recently with the explosion of yoga pant popularity.

Enhancing the fit, feel and function of denim is happening across the board, with performance denim styles gaining acceptance not only in men's and women's products but teens as well. Lightweight, yet durable, soft yet wear-tested, the latest denims deliver on many fronts from fashion to outdoor, workwear and urban bike commuting.

Textile execs see denim as a growth area with ingredient technologies playing a major role as consumers continue to clamor for comfort in their everyday wardrobes and denim brands seek newness and product differentiation. While it is difficult to quantify the current performance segment, the category continues to generate buzz at trade fairs with denim businesses investing both in engineered materials and marketing efforts to promote these new technologies. According to Fashion United's latest tally, the global denim industry comes in at \$56.2B, with the U.S. projected as the largest denim market worldwide at \$13.7B.

Stretch was at the forefront of this performance movement. According to Invista consumer research, over 70 percent of those surveyed report that they have to feel comfortable in their jeans and 50 percent of consumers want jeans to keep their shape, stretch and be durable. "Stretch is the cost of entry. New emerging drivers are cooling and warmth," explains Jean Hegedus, global segment director - denim, Invista. "Consumers have that comfort in their fitness wear and now they want it in ready-to-wear."

Invista is one of several textile brands making strides



in denim with its CoolMax, Cordura and Lycra brands. Several others are on the denim scene, including Lubrizol, Optimer drirelease, Lenzing, 37.5, Dyneema, Unifi and Schoeller; Cotton Incorporated has introduced Storm cotton and TransDry programs.

Here we highlight just a few of the latest developments:

Broadening Market Appeal

Just three years ago performance denim was found only in small programs, mostly for travel wear but times are changing. For example, Invista recently teamed with Hollister to introduce a new line of performance jeans, aimed at teens, which incorporates CoolMax All Season technology and Lycra. The fabric moves moisture so wearers stay cool and dry in warm weather, but also features insulating fibers so wearers stay warm when it's cool outside.

According to recent Invista research, the age 18-24 segment is the demographic most interested in this performance attribute. Hegedus mentions that teens like to have a level of engagement with the products they use whether that is in the form of electronics or what they wear. "Performance qualities are something that helps teens engage with clothing," Hegedus explains. "Performance is part of teen lifestyle."

Another teen preference is to wear jeans year round, regardless of the conditions. This carries over to adults, too, particularly when it comes to being comfortable in the heat. "There is a lot of interest among consumers in the concept of a summer jean and among cooling ingredient brands, the CoolMax name was the most likely to impact purchase preference," states Hegedus, citing Invista consumer research.

Hollister and Invista created a global, multi-channel

Hollister's Advanced Stretch jeans with CoolMax All Season technology offer year-round comfort, a performance attribute that research shows resonates with 18-24 year-olds.



social media campaign with a fun, and educational video highlighting the jeans' benefits by digital illusionist/YouTube star Zach King. Take a look here: https://coolmax.com/en/News-and-Blog/2017/01/Zach-King.

The collection includes 10 styles for girls, 14 styles for guys, and according to Hollister brand president Kristin Scott, the launch has been received positively with Hollister continuing to offer this collection in future seasons.

Advancing Durability & Enhancing Fit

Product development focused on fit, feel and function are at the top of the innovation list for suppliers.

Lubrizol's new X4zol-J fiber homes in on the fit issue. Used in denim, X4zol-J provides a thinner, more breathable garment. That's because X4zol-J is an elastomeric monofilament with a flatter modulus so it stretches more easily than conventional products and doesn't feel restrictive regardless of body type.

Denim with X4zol-J holds its shape for a longer period of time, stays dryer longer and clings less when wet, the latter an added bonus during inclement weather. "X4zol-J fiber elevates denim fabric by providing a softer, yet stronger stretch that makes for denim that boasts exceptional fit and shaping. Denim made with X4zol-J fiber features an even compression stretch in all directions the result of which is a jean that beautifully contours the body," says Ravi Vedula, Lubrizol global market development manager. Lubrizol partnered with Olah Inc., a New York-based denim agency, in developing denim fabrics with leading denim mills and selling these fabrics to brands and retailers. NYDJ was the first to exclusively launch the denim made with X4zol-J last fall under their Future Fit collection.

Olah, in tandem with the Chinese mill Prosperity Textile, is creating a new range of denim under the "J-Fit" trademark.

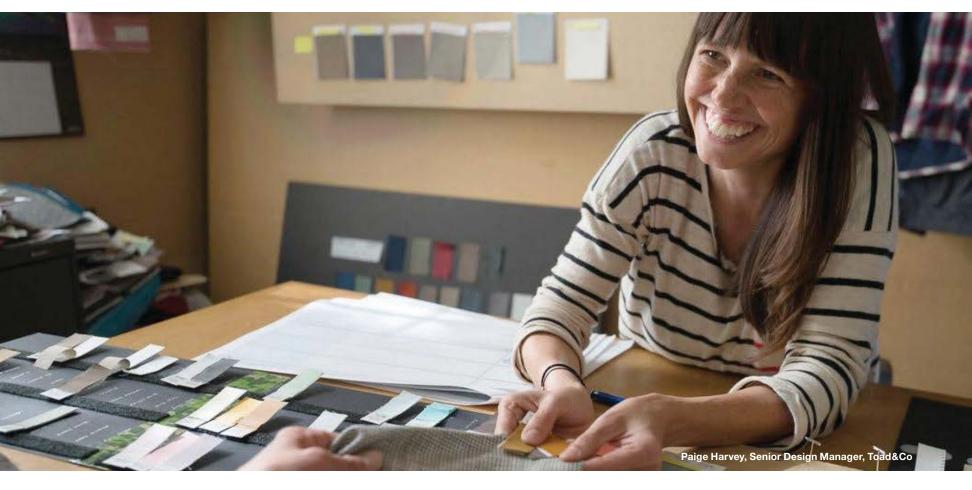
Cordura has made significant inroads in the denim marketplace in recent years. Many of these collections were on display at Outdoor Retailer Winter Market in Salt Lake City this January where Cordura celebrated its 50th brand anniversary. Three new programs in particular showcased the range, diverse nature and contemporary take that Cordura brings to its growing performance denim business. Specifically, a first ever Cordura Selvage denim done in collaboration with Cone Denim; a first ever collaboration with Cotton Incorporated; and an X. Venture Collexion produced in collaboration with Cordura, Artistic Milliners and Struktur Studio with Tencel from Lenzing and Schoeller Technologies AG.

Says Cindy McNaull, global Cordura brand and marketing director: "Both the Cordura brand and Cone Denim have a rich history involving textile production and denim fabrics, and combining our extensive experience to create the first-ever selvage denim incorporating Cordura Denim technology is a great way to honor our mutual heritage and usher in new performance denims of the future."

IN THE STUDIO | WORKWEAR 2.0

Contemporary Looks Designed to Get the Job Done Right.

Performance Wear Fit for Today's Industrial Athletes





e are experiencing a workwear renaissance, with brands refreshing the category with apparel that gets the job done using durable yet comfortable fabrications in contemporary silhouettes that incorporate savvy design details. Why this revival? Some say that workwear represents a juxtaposition to our crazy-busy, tech-driven

urban existence. Others believe today's maker movement is responsible for creating a need for modern-day utilitarian clothing. The latest looks draw from diverse influences – heritage outdoor, construction work, new-age artisans – however the result is the same: performance garb that looks great, feels good and is as at home on the range as it is on a job site or a suburban backyard. Here are two good examples of workwear 2.0.

Toad&Co: Menswear Collection

Paige Harvey, Senior Design Manager

Canvas is the core material in the brand's new collection of workwear inspired menswear, and for good reason says Toad&Co senior design manger Paige Harvey. "It's about durability; the plain-woven fabric has been around forever and is known for sturdiness. Think of sails and backpacks — these are made from canvas and are meant to last — as is workwear."

The canvas used in the Fall 2017 men's Double Bock Jacket is a beefy yet soft-to-the-touch 8.8 ounces that serves as a prime example of Toad's product development ethos: the functional fabric is 100 percent organic cotton and highly versatile. "Sustainability is our number one filter," says Harvey, "and number two is the trail to tavern filter."

"There is nothing about organic cotton that is less durable; and there is no less performance," Harvey states. Toad&Co's signature coziness and crossover capabilities are all there, too. "People always say they like the look of our product, but they love how it feels," Harvey adds.

The three-piece men's collection falls into the Life & Style category and features what the company refers to as JET, which is

Toad&Co lingo for Just Enough Tech. The Double Bock is fully lined with traditional high pile fleece and insulated with 60-gram fill (even in the collar). The Carver Canvas Coat uses the same organic cotton canvas and is lined with a recycled poly/wool blend and insulated with 60-gram polyfil. The Cache Cargo Pant features a bluesign approved, eco-friendly organic cotton/ recycled poly blend that sports a UPF rating of 50+. The canvas weighs in

"People always say they like the look of our product, but they love how it feels."



Men's Double Bock Jacket pays homage to the old-school outdoorsman with some modern updates. at 6.5 ounces, so it is slightly lighter than what is used in the Double Bock and Carver, and has a bit of spandex for resilience. Explains Harvey, "Spandex is more accepted in menswear. For Fall 2018, all men's pants will have spandex."

Design details are subtle. "We don't call out the stitching for example, we wouldn't do a hammer loop, and we hide the zipper," says Harvey. "Design details are understated." But pockets are aplenty: The Double Bock has pockets designed to fit a smartphone, Leatherman tool and even emergency jerky stash. The Carver coat has hand warmer pockets, and the Cache Pant features five drop-in pockets, as well as two zipper-secure pockets.

Workwear is on the radar as wardrobes get more casual, Harvey explains. "People want to look good but in a modern way. It's also a way to take a breath," she adds. "It is a respite from the on-our-phones-all-the-time lifestyle."

Harvey dates workwear's rebirth back to 2014. When traveling in Europe that year Harvey recalls seeing raw denim, plaids, chambray and oxford color boots everywhere she went. "And now it's here," says Harvey.

Carhartt: Force Utility Knit Legging

Dawn Thao-Yang, Senior Designer Manager, Women's

The need for a new kind of hybrid pant for women came to light in July of 2015 when the Carhartt team was doing consumer research at a Habitat for Humanity work site. Volunteers were building a foundation for a house and a majority of the women participants were wearing leggings; others had on denim and canvas dungarees. The leggings offered comfort, but lacked qualities like durability and stretch and recovery. An idea started to form: Wouldn't the women working that hot summer day be better off wearing a pant more like athletic wear — a garment with wicking and other functional properties for example?

"Carhartt does a lot of consumer research attending job sites on a weekly and monthly basis trying to see things through our customers' eyes," explains Dawn Thao-Yang, senior design manager for the women's line. "For us, its not about what's cool, but about solving a need and how the product serves our customer."

Soon development began on a hybrid garment that was as comfortable as an athletic pant, as durable as a work pant, and versatile enough to wear on the job site as well as on the weekend. "A light bulb definitely went off that July day at Habitat for Humanity," Thao-Yang states.

Fast forward to this season with the arrival of the Force Utility Knit Legging. Described as a "new workday staple," the garment features quick-drying and odor-fighting technologies in a rugged fabric with excellent stretch and recovery. Design details include a wide waistband to enhance fit and prevent gapping, and sturdy front, back and utility pockets that securely hold tools of the trade.

The Knit Legging features two fabrications; the body is a 10-ounce, 95 percent nylon/5 percent spandex ponte with abrasion resistant stretch woven reinforcements on the knees and front and back pockets. The Legging features Carhartt Force FastDry technology to keep the wearer cooler with sweat-wicking capabilities.

Comfort and durability are key characteristics. "The fabric has to stand up to washing, wear and be easy care, but also be supercomfortable," explains Thao-Yang, who has been with Carhartt for five years. "A lot of people perceive knits as not durable for bottoms. But this is a durable knit, and we think we can continue to push knits for head to toe wear, including expanding knit bottoms for women," Thao-Yang continues, "There is a lot of innovation within knit fabrications, for example, it can look like a "For us, its not about what's cool, but about solving a need and how the product serves our customer." woven but perform like a knit. Or be a knit with durability of a woven, and that's exciting." She adds that knit functionality for workday is going to be a Carhartt direction for women's in 2018. The new Legging brings a timelessness and ageless

C

quality suited for a mom, as well as her daughter. "It's not trendy, but it is market relevant – and not meant for one time use," explains Thao-Yang. "You could wear these leggings for working in the yard, running errands as well as a workday wardrobe."

Prior to her role at Carhartt, Thao-Yang worked in fashion. However, she says workwear is in her DNA. "My family had a farm and my dad wore Carhartt. So I have more empathy, as well as heart and passion for our customers."

The Force Utility Legging had a very soft launch on Carhartt's ecommerce site in Fall 16

and is currently available at retail. Thao-Yang says they have been blown away by the positive feedback. "It was the best reviewed product in terms of functionality."

According to Thao-Yang, the women's category is Carhartt's fastest growing business and they see huge opportunity going forward. "We need to understand their needs. In the past we had women's product that was too trendy, especially with knit tops, and/or we had too much color. Now we feel we've got it right. And we feel good about it."

Above: Women's Force Utility Knit Legging offers a comfy, close to the body fit. Below: Dawn Thao-Yang, senior designer manager, women's and a selfdescribed "Carhartt-loving, hard-working mama." Shown here with son Dre.



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PERFORMANCE DAYS® functional fabric fair is internationally known for sourcing high performance textiles and accessories. Synchronized with the industry's seasonal sourcing schedule, and the kickoff of new collections, the Munich-based trade fair makes it possible for designers, purchasing and product managers to manage sourcing at exactly the right time. Presenting the latest innovations in April/ May and November, PERFORMANCE DAYS® offers visitors the entire functional product range from yarns and fabrics to finishes and accessories, at the same time providing a focused, yet comfortable working atmosphere.

The opening of Hall 6 with its Hotspot Area was a great success in November 2016 and the Hotspot Area returns this April serving as the starting point for Hotspot Tours, and serving free coffee for all. More than 160 exhibitors from about 22 nations are participating with workshops by 37.5/Cocona, Derun, HeiQ, Invista, Lenzing, Microban, Spindye, Stylem, Südwolle. All other suppliers are also confirmed and are already listed online. A unique program will highlight technology and sustainability topics, provide trend information, offer fabric presentations, and host workshops.

The PERFORMANCE FORUM showcases the newest offerings. The PERFORMANCE AWARD will be given to the most innovative product, and the ECO PERFOR-MANCE AWARD will be handed to the most sustainable product of the fair. The "Focus Topic" will be "BIODE-GRADABLE - Back to Nature" and will be explained in texts, presentations and exhibited as products.

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PERFORMANCE DAYS[®] attracts all the major manufacturers in the sports- and outdoor industry to this exclusive fair. Booth spaces have been sold out

PERFORMANCE DAYS® LOOKS FORWARD TO WELCOMING YOU APRIL 26-27th IN MUNICH!

since December for the April 2017 two-day event with a wide array of well-known brands participating. Suppliers on hand include: 3M, Coats, Concept III, Kingwhale, Optimer Brands/drirelease, Pertex, Polartec, Pontetorto, PrimaLoft, Safe Reflections, Schoeller Textile, Singtex, Sympatex, Toray, Toyota Tsusho and more. Rounding out the recurring exhibitors, are many newcomers for the April 2017 fair including established textile specialists Franz Barta, Huntsman and Sidonios. For all involved, PERFORMANCE DAYS® proves to be the platform to talk business!

In addition to the vast variety of textile suppliers, the fair always features the core accessory producers. This year is no exception showing yarns from Flocus, Hologenix, Nilit and, finishings by Polygiene as well as accessories by ACG Accent, Prym, Rudholm&Haak, Thermore and YKK. The complete exhibitor list is online at **www.performancedays.com.**

What's New at the Fair & What's New Online

Visitors will enjoy learning about a new partnership between PERFORMANCE DAYS[®] and the designer Nora Kühner and a team of international designers. PERFORMANCE COLORS by Nora Kühner will reveal how to shorten the process of lab dips thanks to light and wash fastness estimation for Polyester, Cotton, Polyamide 6 and its color recipes by DyStar/CSI.

GET YOUR FREE TICKET FOR PERFORMANCE DAYS®

Become part of the growing functional fabric fair's community! To stay updated follow us on facebook! The unique PERFORMANCE COLORS by Nora Kühner consists of printed color swatch cards and the digital e-magazine. It is not only the first color and trend forecast of the season, but an important working tool to identify potential challenges before lab dipping. It is available for the summer 2018 and winter 2018/19 collection plus will appear shortly before the April fair for summer 2019. It is 100€ (excluding shipping) and can be ordered at the fair or online. For more details please contact **info@performancedays.com.**

PERFORMANCE COLORS by Nora Kühner is a good example of how PERFORMANCE DAYS[®] succeeds by evolving with new features, but at the same time staying true to its identity as a working fair serving as the platform for innovation and trends.

In addition to the onsite services and tools, PERFORMANCE DAYS® has enlarged its support online in the special area "24/7 SOURCING" to make the fair available all year. Here buyers can search not only for potential suppliers, but also for products in a database of 2700 fabrics and accessories. Technical datasheets are available together with images, composition and information on the supplier - even samples can be requested directly! In this way PERFORMANCE DAYS® has digitalized its PERFORMANCE FORUM covering all parts of the layering system, from baselayer to 3-layer, from pants to lightweight outerwear, plus an archive of accessories dating back to the November 2012 fair.

Trends from the field of fabrics, accessories and colors are also available and all previous "Jury Like" and PERFORMANCE AWARDS winners can be reviewed, too. Additionally, the PERFORMANCE ARCHIVE displays all presentations as PDFs plus audio files with recent entries. The newest added-value feature online is Focus Topics. Here visitors can find a complete introduction to and reports on such as topics as "Hybrids - Engineered and Composed Through all Layers," "Recycled? Challenges & Opportunities", "Athleisure - Rethinking Performance Knits", and "A Responsible Approach to Wool."

We hope to see you at PERFORMANCE DAYS® this April!



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STRATEGIES | INDUSTRY ASSOCIATIONS

With All Eyes on Domestic Manufacturing, Textile Organizations Up their Game. By Suzanne Blecher

Getting Politica

s a guest of a former presidential candidate, Advanced Functional Fabrics of America chief marketing officer Eric Spackey took an invitation to attend the Inauguration on January 20, 2017 as an opportunity to also promote his new organization. Spackey spent some extra time in Washington D.C. meeting with the governors of Arizona, Arkansas, Kansas and Mississippi promoting Fabric Discovery Centers, which he

tion used to be pocketed in places like North Carolina, now Spackey is eyeing spots like North Dakota, where Governor Doug Burgum, a former Microsoft SVP, may be willing to take a chance on functional fabrics. "Technology can come from non-traditional areas. With automation we can create pockets so we don't have to create one large production facility," said Spackey.

The goal of the AFFOA is to "weave clothing into systems" by combining forces of academia (MIT, FIT, NC State), industry (PVH, DuPont, Nike), textile firms (Apex Mills, Milliken) and tech companies/start ups (WiseWear, FullScaleNano). As an AFFOA member, New Balance is "seeing great advances and interesting transferrable concepts from tech, automotive and home design industries with advanced technologies having relevance in how we design and build product for athletes," said NB senior innovation manager for digital sport, Portia Blunt. Spackey and his team are currently working on a "fabric to digital platform," an idea which he's shared with Trump's most senior Finance Advisor in October 2016. At that meeting, "we talked about bringing manufacturing back to the U.S.

THE TEXTILE JOURNEY OF A

CHECK THE TAG.

PAIR OF PANTS

NOT ALL IMPORTS ARE CREATED EQUAL

would like to have in every state. While innova-



Left: The NCTO

to Check the Tag.

Military Relies on American Textiles

Top: The U.S.

Reminds Consumers

in terms of technology. The two discussed spending "hundreds of millions" of dollars on the effort, which Spackey was told, "is exactly what the Trump administration wants."

Spackey isn't a career politician, but rather a CEO of a firm that manufactures uniforms and equipage for the U.S. Department of Defense. It was after his firm, Bluewater Defense, let go1500 employees and closed four plants that he decided to get involved. "All of those jobs are important," he said. While low cost labor may never come back domestically, the AFFOA is "looking for a new low labor content, high capital expenditure model," the exec commented.

Making an Impact

The U.S. unfortunately lost a lot of talent in the sewn products and textiles industry when jobs went offshore and people pursued other professions. "It's almost like we lost a generation," said Sarah Friedman, executive director for The National Association for the Sewn Products Industry. "There must be more training done here and hopefully we can make the new DC administration realize we need this," she added. SEAMS, which promotes the growth of USA fashion by bringing textile providers, contract manufacturers, brands and retailers together, is celebrating its 50th anniversary this year. To celebrate, the group is giving its newsletter a facelift and doing special e-blasts highlighting its members, in addition to holding spring and fall conferences.

Friedman hopes President Trump will have a positive impact on the textile industry since "his message is to bring jobs back to the U.S. and try to help companies already in business." With word that NAFTA will be revisited, "We're already seeing companies checking in to bringing part of their work back here. They are calling us. Members are getting calls. They are saying we want to produce here, can you give us companies who can help," she said.

> Kevin Williams, president of Americas Apparel Producers' Network, hopes that soon some brands doing business overseas will come back home. "We find that many brands and retailers - especially those accustomed to sourcing in Asia - are simply unaware of what can be accomplished closer to home," the exec said. The AAPN serves as a source of information as well as a network for locating suppliers either online or during in-person networking events. A new initiative for the organization this year is to host regional meetings where "we take our show on the road into the cities where brands and retailers are," he noted. The first of such meetings was in Dallas last fall. This year brings meetings in Los Angeles, Seattle, New York and possibly Minneapolis.

USA Made Gets a Rebrand

The National Council of Textile Organizations continues to fight for "rational rules of origin" for U.S. textiles in CAFTA, Trans-Pacific Partnership and other trade deals, however, "what many may not realize, is that there is a well-funded set of special interest groups that are constantly pressing for policies that favor the importation of low-cost goods, mainly from Asia," noted NCTO president Auggie Tantillo. "In response, American textile manufacturing has had to reposition itself to fight more effectively for old markets and to develop new ones by investing in automation and innovation," he explained.

To illustrate how well the industry has adapted to become "leaner and meaner," the NCTO launched an industry rebranding effort two years ago. In 2016, the organization rolled out the American Textiles: We Make Amazing industry campaign with an inaugural edition of its Textures magazine, PR outreach, advertising, social media, a revitalization of emails and an updated website. As a result of these efforts, "more people have been exposed to an accurate and positive image of the American textile industry than have been so in a long time," the exec said.

SUPPLY CHAIN | TRADE UPDATE

Commentary on Free Trade Agreements from those on the Front Lines.

Talking Trade



o better understand the newsy hot-button issues of NAFTA, BATs and China, here are a handful of excerpts from conversations with industry experts that help make sense of what's on the table now and the outlook on trade going forward.

Rick Helfenbein, president/CEO, American Apparel & Footwear Association (AAFA) presented at the Performance & Sports Textile Sourcing area at PGA days before the Inauguration. His

comments, while early in the trade discussion, have proved insightful:

"What we expect from President Trump? TPP – gone; big trade deals – gone; NAFTA – will get a tune up; more enforcement of legislation already on the books: and BATs possible."

"What does that mean for retailers? Costs may go up (20 percent or more)." "Synthetics carry one of the highest duty rates: 27 percent. You want to

avoid that so you will have to strategize how to use trade agreements to avoid a high duty rate." "In terms of NAFTA, yes, a lot of jobs left the United States and went else-

where. Not necessarily to NAFTA countries, however. What's left out of this '23-year old adventure' in NAFTA is that trade quadruples and exports tripled. You don't want to dismantle something that has had this result."

"On the China front, there is a lot of reason to express concern. If X percent of your business is in China, then you may want to re think this. China and the U.S. are the biggest trade partners. Hopefully we wont do something rash, but the three players now at the trade table are known to for their pro-America, anti-China rhetoric."

"The moral of the story: Everybody needs to get involved in this."

In Washington, DC last month Kingpins Media, in a collab with just-style, live-streamed a Q&A focused on what the current political climate has in store for the denim and apparel industry. Robert Antoshak, managing director of Olah, Inc., spoke with Julia K. Hughes, President of the United States Fashion Industry Association (USFIA) and Augustine Tantillo, President and Chief Executive of the National Council of Textile Organizations (NCTO). Here are takeaways from the conversation:

Tantillo: "Regarding BAT, you need to take a broader look at the corporate tax structure, which our organization believes is long overdue for a debate and is fundamentally dis-advantageous to U.S. manufacturers. The U.S. is the only major economy and nation that does not have a BAT arrangement. All of Europe does, and so does all of Asia. We're talking about a system that when a manufacturer produces something and exports it, in every other country

Where Apparel Comes From

49% China: 39% Vietnam: 10%

65% China Vietnam India Bangladesh Indonesia

/ 0 70 China, Vietnam, India, Bangladesh, Indonesia, Mexico, Honduras, Dominican Republic, El Salvador and Nicaragua. **Border Adjustment Tax (BAT):** A proposal that would essentially treat imports and exports differently.

they get their taxes rebated back to them. That creates an enormous advantage to them in the global market. When we ship a product to any other market, not only do we normally pay a tariff, but then a value added tax on top of that. In many cases that is 20 percent of what we're shipping. We produce about \$65M worth of product a year, and we export 35 percent of that. So if U.S. government is going to suggest to us that we will rebate taxes on 35 percent of your output, that's a strong pull from our perspective."

Hughes: "Of course tax reform needs to happen. However, we are opposed to the (BAT) proposals that are out there right now. While helpful for manufacturers, for those of us in the service sector they are not. We have product made in the U.S., but some is imported as well. We will now not only pay the highest duties, but so too higher

tax rates (for some companies 100 percent higher). Clearly that system isn't going to work. It's going to raise prices to consumers, and it's going to potentially appreciate the dollar, which is not necessarily good for our exporters."

Antoshak: "The Yarn Forward Rule of Origin has been a contentious issue. Would this be revisited if NAFTA were re-negotiated?"

Tantillo: "We want to keep the Yarn Forward Rule of Origin requirement encased in NAFTA. There are loopholes – some view these as the 'good stuff,' but we view them as 'damaging.' When you have an exception to the Yarn Forward Rule then it means that China can ship yarn and fabric to Mexico to be cut and sewn, and sent in the form of a garment sent duty free to the U.S. We strongly disagree with the view that China should be benefiting under the agreement and we think the Yarn Forward Rule can be improved."

Hughes: "We take a different perspective. This is a global industry, and a global supply chain, and where the Yarn Forward Rule holds back the Western Hemisphere supply chain is the ability to be nimble. If a product is not available in the U.S. or Canada or Mexico – whether that is silk from China

or a product from Italy or Peru –we'd like to have the opportunity to get those products in this supply chain. We'd like to introduce flexibility into NAFTA, like a 'short supply' provision or other provisions be made available to respond to current consumer demand."

A recent email blast from the SEAMS organization on the Trans-Pacific Partnership (TPP) offered this update: "TPP Was a Non-Starter from the Beginning. President Trump's decision not to join the TPP was expected as during his election campaign he railed against international trade deals, blaming them for job losses and focusing anger in the industrial heartland. TPP negotiations began almost 10 years ago and designed to create major changes in the economies of the 12 signatory countries. The countries involved previously made up 40 percent of the world economy. The agreement began as almost casual negotiations between New Zealand, Brunei, Singapore, and Chile but rapidly expanded. The final agreement was signed by Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, United States, Vietnam, and Australia. Each country needed to pass and ratify associated legislation for the partnership to begin.

However, even though the U.S. is out of the treaty others are promising to go ahead with the deal. Australia and New Zealand say they are hopeful of pressing ahead with the Trans Pacific Partnership trade deal, despite America's formal withdrawal. Australia has already devised a name for a possible new agreement: TPP-12 Minus One." •

OUT OF CONTEXT The Outdoor Product School

by Kurt Gray



WITH THE PROPER CREDENTIALS ONE CAN walk up to, touch, and examine a wide selection of cutting edge technical apparel and hard goods at the Outdoor Retailer Show and then go upstairs, stroll through the materials promenade and discover most every component used in the products you were just ogling.

Outdoor Retailer's value is more about being an open sourced exposition than a market.

The halls are thick with teams of young designers and developers from all kinds of brands and businesses, including many of the stands on the floor. These teams are sent on finely tuned, hour-by-hour missions to source and suss materials, processes, and expertise from the supply chain companies in attendance. Their action plans are detailed and thought-out well in advance because there are very few, if any, venues where state of the art apparel manufacturing shows its wares and all the suppliers involved in such an intimate, even-handed and Socratic atmosphere. The Outdoor Retailer booths are friendly, language isn't much of a problem, and there is usually enough show time that if you loiter, you can get a sit down with pretty much anyone and learn about pretty much anything.

The net effect has been greater than the

sum of the parts. The Outdoor Industry has taught anyone who shows up how to make technical sewn goods by showcasing and explaining what makes them special in the same halls shared with the long chain of people that actually make it happen. The magic is this simple synergy of market-right product and advanced materials people both being accessible at the same time.

The core outdoor design belief, i.e. textiles-follow-form-follow-function, acts as a touchstone with wide ranging effect.

Endorsing the Value of OR from a Sourcing Perspective Military clothing, workwear, athletic apparel, hunting, biking, sailing; all have deep roots in outdoor technical styling, construction and fabrication. The stylistic and

performance expectations of many markets depend on the outdoor industry.

And now everyone wants to leave the current Salt Lake City version of Outdoor Retailer and start over. The blow-it-up-and-rebuild-it mentality seems to be the flavor of the day, however, in the rush to the door, I can't help but wonder; are we losing the foundation of technical product development for a whole bunch of people? After all, the reason that Target's and Cabela's soft shell garments have looked so similar is, they are copies of the same garment found on the floors of Outdoor Retailer.

Perhaps the big companies can figure it all out in Asia. They can afford to send development teams on long trips to source, develop and verify their product. Perhaps design teams will once again travel and shop to find inspiration. And if designers can no longer lurk around the booths of their competitors there will be less style homogeny. However, one thing is for sure, for less than the price of a plane ticket to Hong Kong a product person can spend four days at OR with the world experts in fabric and material science, see the offerings from hundreds of talented designers / brands, and catch every bit of market trending in a huge and difficult to understand category. That's a lot of education. Technical product training has been virtually free at OR for the last 20 years, and this has helped power an outdoor inspired ripple across the American cultural and business landscape.

Disclaimer: Mr. Gray is so old he thinks "Fifty Shades of Gray" is an emotional account of the sunglasses he has loved, and yet lost. His opinions are not necessarily shared by the publisher(s) or those who are more careful with their possessions.

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