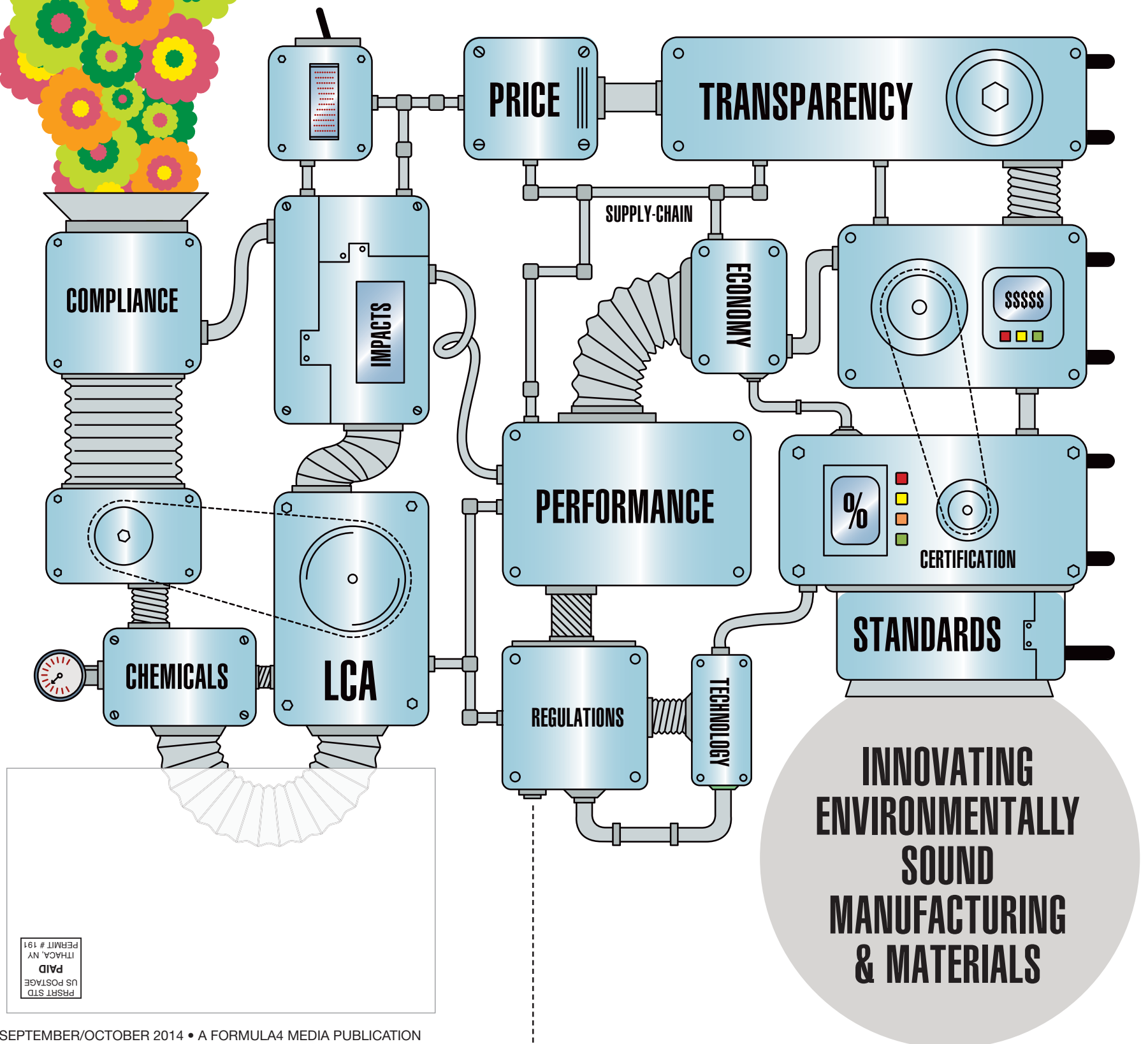


TEXTILE INSIGHT[®]

TRENDS IN APPAREL & FOOTWEAR DESIGN AND INNOVATION

TEXTILEINSIGHT.COM

THE SUSTAINABILITY MACHINE



PERMIT # 191
ITHACA, NY
PAID
US POSTAGE
PSRST STD



**Teflon® Brand.
Not Even Mother Nature Messes With It.**

Nothing messes with DuPont™ Teflon®—not rain, stains or dirt. Made to keep clothes looking newer, longer, Teflon® fabric protector enables the removal of 95% of oil- and water-based stains in the wash.

Introducing our Shield & Clean products that keep fabrics looking their best while helping to lower the impact on the environment.* Rediscover Teflon® fabric protector and see why nothing messes with it.



teflon.com/textileinsight

*Capstone® repellents for Teflon® fabric protector utilize short-chain molecules that cannot break down to PFOA in the environment. Capstone® repellents meet the goals of the U.S. EPA 2010/15 PFOA Stewardship Program. Copyright © 2014 DuPont. All rights reserved. The DuPont Oval Logo, DuPont®, Capstone® and Teflon® are trademarks or registered trademarks of E.I. du Pont de Nemours and Company or its affiliates.

TEXTILE INSIGHT®

TEXTILEINSIGHT.COM

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

Karla Magruder
Suzanne Blecher
Kurt Gray
Sandra O'Loughlin
Kathlyn Swantko

Publisher

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

Advertising

Beth Gordon
bgordon@formula4media.com
949-293-1378

Jeff Gruenhut

jgruenhut@formula4media.com
404-467-9980

Troy Leonard

tleonard@formula4media.com
352-624-1561

Sam Selvaggio

sselvaggio@formula4media.com
212-398-5021

Andy Tompkins

atompkins@formula4media.com
949-278-6712

Production

Matthew Mauer
516-305-4710
mmauer@formula4media.com

Business Manager

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



Subscriptions

store.formula4media.com

Formula4 Media Publications

Sports Insight
Outdoor Insight
Footwear Insight
Team Insight
Textile Insight
Running Insight
Trend Insight

PO Box 23-1318
Great Neck, NY 11023
Phone: 516-305-4710
Fax: 516-305-4712
www.formula4media.com

Textile Insight® is a registered trademark of Formula4 Media, LLC. ©2014 All rights reserved. The opinions expressed by authors and contributors to *Textile Insight* are not necessarily those of the editors or publishers. *Textile Insight* is not responsible for unsolicited manuscripts, photographs or artwork. Articles appearing in *Textile Insight* may not be reproduced in whole or in part without the express permission of the publisher. *Textile Insight* is published bi-monthly: Jan/Feb; Mar/Apr; May/Jun; Jul/Aug; Sep/Oct; and Nov/Dec.

Subscriptions: one year, \$24.00 (U.S. Funds) in the United States. All other countries, \$54.00 (U.S. Funds).

Postmaster: Send address changes to Textile Insight, P.O. Box 23-1318 Great Neck, NY 11023



In the Market

Outdoor Retailer show report, color commentary and denim developments. Plus: A roundup of eco initiatives and stats on activewear sales.

PAGE 6

Materials Show

Designers and product developers descend on Danvers, MA to review the latest footwear fabrics, components, trims, trends, and factory sourcing.

PAGE 20

Technology

The wool category evolves with new wool blends that elevate collections with enhanced functionality and versatility for year-round applications.

PAGE 28

Denim Trends

Sustainability and social compliance drive change within this global industry while authentic-look denim dominates trends for Fall/Winter 15/16.

PAGE 30

Sustainability

The textile community is focused on achieving transparency from fiber to finished product. Compliance and new chemistry is helping to attain that lofty goal.

PAGE 34

TrendSetter

Alvanon CEO Janice Wang is on a mission to create fit standards in the supply chain and bring technical skills back to the forefront of fashion design.

PAGE 50

Strategies

Contributor Sue Blecher reports on how a handful of textile firms are experimenting with new ways to promote their products with consumer facing labels.

PAGE 52

Supply Chain

During a trade mission this summer, executives from Taiwanese mills met with U.S. apparel makers to learn first hand about eco priorities going forward.

PAGE 56

Out of Context

Kurt Gray offers an insider's view of a community apparel design center in Denver, CO, and the firm at the heart of this emerging garment trade.

PAGE 58

The penny dropped: sustainability = water conservation = doing good for the planet.

Realizing Eco Achievements, not Shortcomings



Remember the first time I heard the word “sustainability” used in the context of environmental responsibility. It was 1996 and I was working at *Snow Country* magazine – a great publication that sadly melted under new ownership a few years later. It was during a weekly staff meeting and our editor-in-chief kept saying things like “we should focus on what’s sustainable,” and “let’s do a feature on sustainability.” I had no idea what the guy was talking about. And then he looked at me

and said, “do some research on sustainable architecture.”

Because earlier in my career I had done a short stint as a lowly assistant editor at *House & Garden* magazine – another wonderful publication no longer around – I was presumed to have some knowledge of design – along with my regular duties at *Snow Country* reporting on outdoor activewear trends and organizing skiwear fashion shoots.

Surprising myself, I found a home in Connecticut that had gotten some press for being

“based on nature,” which at the time seemed to meet the bill as far as sustainability. The owners were agreeable to a visit, but it must have been at non-work hours, or maybe on the weekend, because I took my kids with me – who were then the ages four and six years old.

If you have a vision of a modern, LEEDS-certified building in mind, forget it. After a long, winding dirt driveway we pulled up to a ramshackle structure set deep in the woods. There were several barrels outside the yard positioned to capture rainwater and a variety of styles of underwear and sheets hanging from string tied between trees. The owners were extremely nice, but after a quick tour, and realizing this was not what my editor had in mind, we said our goodbyes.

Once inside the car, my young son announced, “You know Mom, at this house you don’t have to flush the toilet!” I’ll skip the details of Will’s bathroom experience, but for me, the penny had dropped: sustainability = water conservation = doing good for the planet.

So here we are, many years

later and not only have members of the textile community embraced water-saving manufacturing methods, but ushered in a steady stream of sustainability initiatives ranging from chemical responsibility to social compliance. In our cover story, we take a good look at how these developments are driving change. More eco-related news appears throughout this issue with reports as diverse as how Hollywood celebrities are increasingly endorsing green apparel to the ban on PFOA products in Norway.

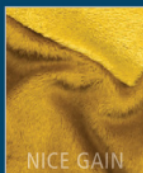
In recent years the textile business has come under fire from activist groups for what is not being done. And thus it is easy to focus on textile shortcomings, rather than celebrate industry achievements. But if we take a moment to look back, let’s say to the year 1996, we’ve made big strides in sustainability. At most fabric firms these days, anyway, corporate water-conservation policy does not restrict toilet flushing. ●

Emily

Concept III
Textile-Based Product Solutions

30
YEARS

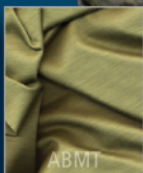
Your source for textile-based product solutions



NICE GAIN



DRY-TEX



ABMT



KINGWHALE



GUILFORD

Outdoor thrives on innovation.
Our ideas and new fabrics also come with superior service.



www.conceptiii.com

U.S./Canada: info@conceptiii.com 732.530.1976 Europe: info@conceptiii.co.uk +44.1756.702100

Polartec® is a registered trademark of Polartec, LLC. ©Polartec, 2014

“LET'S
OPEN
MINDS BY
CLOSING
THE LOOP.”



Impossible Made Possible. It's important to develop proactive solutions for growing problems. More than 20 years ago we began transforming discarded plastic bottles into the next generation of high performance Polartec® fabric technologies. So far we have turned more than 600,000,000 old bottles into new materials and value added products. Learn more about our commitment to upcycling innovation at POLARTEC.COM

POLARTEC.COM    

Functionality with a Twist



The textile community held its own this August at an Outdoor Retailer trade show that continues to expand and diversify in extraordinary ways. With 329 new exhibitors at Summer Market, bringing the total to 1,595 trade show booths, filling over 545,000 square feet of space, this was the largest OR show ever staged.

Innovative product, important supply chain initiatives and a consistent focus on performance allowed textile suppliers to stay above the fray during the four-day Salt Lake City event. There was lots of buzz about wool as both a warm-weather option and an ideal choice for active pursuits, as vendors offered a variety of beautiful, functional, lightweight merino and merino blends. (For more on wool trends, see page 28). Water resistant fabrications were also a focus; as was intimate-inspired next to skin products. Cooling materials continue to be a factor, but in a broader range of applications than the past, transitioning to include knits as well as wovens for lifestyle in addition to performance garments.

“Transitioning,” also aptly applies to the current state of the outdoor marketplace. In terms of format,

ORSM now plays host to a myriad of categories including running, yoga, technology, fly-fishing and even tailgating. CrossFit did not have a dedicated space, yet was very present at the Show as many textile suppliers featured CrossFit product in their booths, and brands promoted Spring '15 workout wear ideally suited for CrossFit. It wouldn't be surprising to see a CrossFit Zone at a future OR.

This theme of change carried over to The Pavilions. Once considered something akin to an island for misfit toys, The Pavilions, which now account for 95,000 square-feet of space and three separate areas, has come into its own and was definitely a hot spot this ORSM14. Inside and out, The Pavilions exuded energy and creativity with new looks in apparel, equipment and tech gear. The “Venture Out” section exemplified one the major shifts occurring in the outdoor business; specifically, an urban influence with an experience-driven outlook.

Industry veteran Mark Galbraith, who is GM at Nau, summed things up neatly commenting, “We've gone from sport-specific super techie to healthy, active lifestyle in sophisticated design.”

Peter Sheahan, CEO of ChangeLabs, who gave the keynote address at the Industry Breakfast, also provided perspective on transition. He suggested that in times of change retailers should “suspend your personal judgment and historic experience and elevate above your personal bias and attachment.” He added, “Look through the lens of what people are going to buy, not what has worked in the past.”

Looking Ahead to S/S 2015

The textile community is doing a good job of doing just that. Materials that resonated well at Summer Market hit on the growing trends of surf and SUP; blends designed for fashion and function;

responsible sourcing and green chemistry; and insulations with year-round application.

In something of a seasonal flip-flop, down, wool, and synthetic insulations had a high profile this August. Down is now where wool was five years ago, with increasing emphasis both on ethical treatment of animals, and expanded functionalities. For example, the new Responsible Down Standard (RDS), made a big push at the Show, but product innovation is ongoing, particularly with water-resistance. “Enhancing down with technology is key,” noted Chad Altbaier, Downlite VP sales and business development. The company recently teamed with Nikwax to provide fluorocarbon-free Nikwax Hydrophobic Down (NHD).

Indeed, traceability is an active conversation. All major players are focused on sustainability within the supply chain with efforts to innovate greener chemistries without sacrificing performance and provide certification according to standards every step of the way. (For more on eco initiatives, see page 34).

This eco-emphasis carries over to materials. Tencel has reached new status as an essential fiber for outdoor fabric blends, especially in modern travel collections and sportswear. Hemp, too, is making inroads. “We are seeing more opportunities for hemp than ever before,” says Nancy Williams Painter, VP designer, Hemp Fortex.

Ethical mindfulness is providing a new bridge between offshore and domestic sourcing. When it comes to sourcing materials, the new thinking is not so much “where,” but “how.” In other words, location isn't the defining element; good ethical decisions are the priority. ●

For a more in-depth look at the trends and tech from ORSM14, see the latest issue of Trend Insight at www.trendinsightmag.com.



“We've gone from sport-specific super techie to healthy, active lifestyle in sophisticated design.”

**MARK GALBRAITH
NAU, GM**

Polartec® is a registered trademark of Polartec, LLC. ©Polartec 2014

“I WANT
TO BE
IMMERSED
IN ACTIVITY,
NOT SWEAT.”



Impossible Made Possible. When you're active, base materials must continuously manage sweat on your skin to keep you cool, comfortable, warm, and dry. Polartec® Power Dry® provides patented mechanical wicking properties that evaporate moisture for quicker dry times to prevent it from soaking into your garment. Discover all our exclusive fabric technologies at POLARTEC.COM

POLARTEC.COM    

Brands Continue to Evolve Environmental Efforts.

From Certification to Surf Wear, Suppliers Up the Eco Factor



Making Waves: The Quiksilver AG47 New Wave Boardshort is a good fit for Repreve and its #TurnItGreen initiative.

“Thanks to Quiksilver and its new AG47 collection of boardshorts, we can show a new wave of individuals how choosing products made with Repreve can have a positive impact on the environment.”

**ROGER BERRIER,
PRESIDENT & COO, UNIFI**

Surf's Up as Quiksilver Expands Unifi Repreve in Boardshort Line

The newly designed Quiksilver AG47 New Wave Boardshorts, made with Repreve fibers, contain approximately 11 plastic bottles. In addition to Quiksilver's AG47 collection of boardshorts, Quiksilver now uses Repreve in more than 75 percent of its total boardshort line.

“Repreve fibers contribute to a fantastic performance material that we've incorporated into almost all our boardshort collections,” said Nick Drake, chief marketing officer for Quiksilver. “Being made from recycled plastic bottles, Repreve fibers are helping Quiksilver and our consumers make an important contribution to the problem of waste pollution in our oceans.”

The Quiksilver AG47 New Wave Boardshort is constructed using Quiksilver Dry Flight Technology and features four-way stretch with Scotchgard Protector Repellent by

3M, which helps water to bead up and roll off, allowing the fabric to dry quickly. Laser-cut, heat-welded panels offer maximum strength and lightness.

“Thanks to Quiksilver and its new AG47 collection of boardshorts, we can show a new wave of individuals how choosing products made with Repreve can have a positive impact on the environment,” said Roger Berrier, president and chief operating officer of Unifi.

Adidas Focuses on bluesign-Approved Products

In continuing its environmental efforts, adidas will use only bluesign-approved chemicals throughout its supply chain in the future. In a statement, adidas said it will assess the amount of bluesign-approved chemicals its suppliers currently use, starting with its strategic suppliers, then set targets for suppliers to switch to using only these chemicals. adidas will also train its suppliers and adapt its production processes to achieve this goal.

In addition, adidas is also looking to eliminate the use of per- and polyfluorinated chemicals (PFCs). The company states that it will ensure 99 percent of its products are PFC-free by 2017, leading to full elimination by 2020.

The company will publish discharge data from 99 percent of its Chinese suppliers by the end of this year, and 80 percent globally by mid-2016 as part of Greenpeace's “Right-to-Know” initiative.

Bolger & O'Hearn Becomes a bluesign System Partner

Bolger & O'Hearn, provider of fluorine free water repellent technology (Altotel F3) has become a bluesign system partner.

Shaun O'Hearn, the company's vice president explains that “The stringent requirements to achieving bluesign system partner status showcases our company's

commitment to designing high performance textile chemicals that consider the environmental, health, and safety impacts of the products we produce.”

The bluesign system partners are responsibly acting parties of the textile value chain. They range from chemical suppliers to manufacturers to brands and are committed to applying the bluesign system. As such bluesign system partners are required to meet a high level of safety for both people and the environment, to use resources responsibly, and to continuously improve their environmental performance.

“We are the leaders in fluorine free water repellent technology and becoming a bluesign system partner will help deliver the message that environmental consciousness and high performance is achievable,” said O'Hearn.

Allied Extends RDS throughout Supply Chain

Allied Feather & Down, supplier and processor of down to the outdoor and home markets, has completed the audit and certification process of the Textile Exchange Responsible Down Standard (RDS) for its processing plant in Montebello, California, making it the first down processor worldwide to offer RDS certified down that has met RDS certifications for every module of its supply chain, according to the company.

Allied's supply chains were RDS certified earlier this summer, meaning the farms where Allied buys its down do not practice live plucking or force feeding, and engage in ethical and traceable practices in animal husbandry. The next module in the certification process is the inspection and auditing of the processing facilities. From here, the down will ship to Allied's vendor partners who will use the RDS certified down in finished products. ●



WOOLY BULLY.

Introducing the **CORDURA® Combat Wool™** fabric collection. It's wool comfort with the durability of nylon. Constructed with Merino wool and nylon 6,6 fibers, options include canvas, baselayer/mid-layer knits, double face wovens, ripstop, dobby and stretch woven fabrics, plus styles for socks. It can be a battlefield out there. Now you're ready. Request samples at cordura.com/combatwool

CORDURA®
combat wool™ BRAND
F A B R I C

Patagonia CrowdSources a Campaign to “Vote the Environment”



Patagonia is crowdsourcing a Campaign to “Vote the Environment.” According to a Harvard University study, only 23 percent of Americans ages of 18-29 say they will definitely vote this midterm. To help inspire young people to get to the polls, Patagonia recently launched a crowdsourced art campaign inviting artists and designers to create a collection expressing why they believe the environment is the number one issue in the upcoming election.

Patagonia worked with top graphic artists Alex Trochut, Natas Kaupas and Eric Junker to produce three new “Vote the Environment” t-shirt designs.

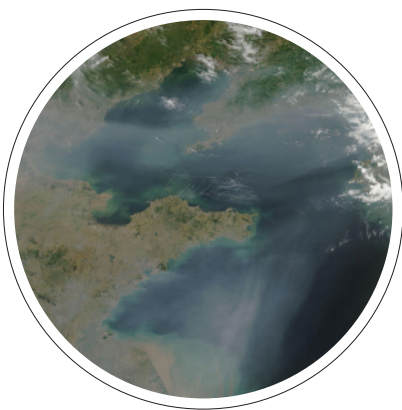
All submitted designs that meet the contribution requirements will be featured in the online gallery made available for sale as posters to spread the message. Forty percent of any net sales go directly to the artists, and 30 percent goes to support voter registration through HeadCount, a non-partisan organization that uses the power of music to register voters and promote participation in democracy.

The new “Vote the Environment” website provides

resources allowing people to register to vote in their state, gives information on candidates scored by the League of Conservation Voters according to environmental issues, invites artists to showcase their work and features information about the artists.

“We face a great crisis: climate change, extinction, destruction of wild places,” said Lisa Pike Sheehy, Patagonia’s global director of environmental initiatives. “That’s why we must support candidates who push hard for clean, renewable energy, restore clean water and air and turn away from risky, carbon-intensive fuels. We cannot afford to sit out this election.” ●

Cordura Life Cycle Analysis Demonstrates Real World Savings



Thick haze blown off the Eastern coast of China

“Recent testing demonstrates Cordura Classic fabric’s excellent performance in both durability and life cycle analysis,” states Cordura global brand marketing director Cindy McNaull. “Results reveal significant savings with solution dyed technology and support our brand’s ‘Sustainability Begins with Products That Last’ tagline.” A recent life cycle analysis (LCA) investigated the potential savings in energy, water and CO2

emissions comparing comparable weight 1000d Solution Dyed Nylon (SDN) Cordura Classic fabric versus 1000d conventional piece dyed nylon 6,6 fabric.

Savings identified were compared to real world savings:

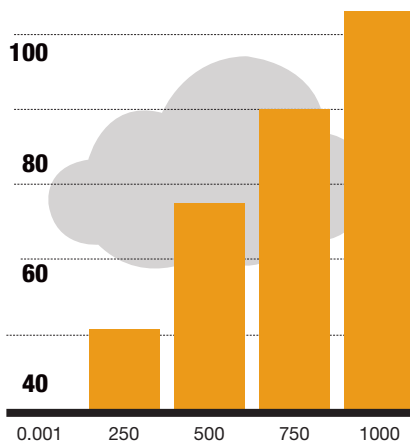
- For every 1 meter of SDN fabric processed, approximately 1.9 liters of water can be saved.
- For every 1 meter of SDN fabric processed, the energy saving is the equivalent of providing power to 10 households for a year.
- CO2 emissions can be reduced

by 107 grams, for every 1 meter of SDN fabric processed. (For a typical 250,000 linear meter fabric program this is the same amount of CO2 that could be produced if you drove a car for five years.)

The study was conducted by a third party environmental consultant in cooperation with three separate, independent dyeing and finishing mills, all authorized Cordura fabric producers: Dae Hyun in Korea, HuaMao in China and ChangHo in Taiwan. ●

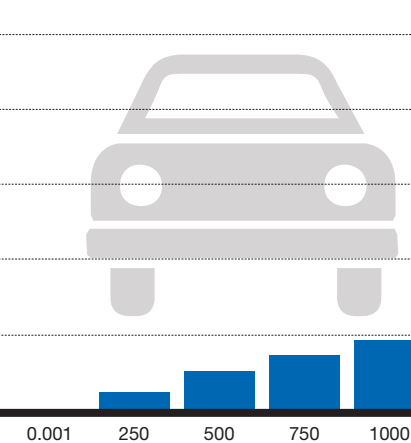
Avoided CO2 Emission-Tons

Metric tons of CO2



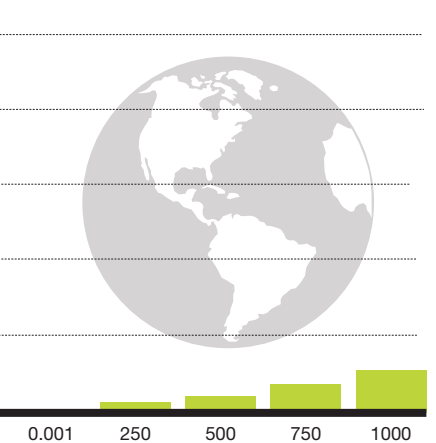
Equivalent CO2 Auto Emissions

Number of Years Driven



Auto Trips Around The Planet

Number of Trips



Source: Independent study data July 2013

REPREVE®

#TURNITGREEN

HELPING TURN RECYCLED PLASTIC BOTTLES INTO COOL STUFF



JOIN THE MOVEMENT



learn more at repreve.com

Color is steeped in symbolic meaning that is different in every culture. Cultural color importance and meanings are well documented and there are some great trend services that can work many years in advance of product launch.

Voice of Color

1. Aquamarine

2. Scuba Blue

3. Lucite Green

4. Classic Blue

5. Toasted Almond

6. Strawberry Ice

7. Tangerine

8. Custard

9. Marsala

10. Glacier Gray


Recently I was speaking with a friend about the current global socio-political climate being polarized and increasingly divergent. I said that I bet we will see more fractured and oppositional palettes and prints and a large focus on “cozy” and “comfort” campaigns come forward. My friend said he had never heard of socio-political issues influencing trend like that before. And I thought, “What a great idea for an article!”

A simple definition of “trend” is to turn or revolve, and it comes from the Middle English 1598 AD meaning to extend in a general direction, follow a general course, to veer in a new direction, to show a tendency or a shift to “opinions trending toward conservatism.”

My thinking is that at the core of things are individual needs and wants. The question then becomes how to get ahead of the curve and predict the future. One way is to look at what is influencing and driving society. This process of thinking really started to become an industry practice in the late 1950s.

These days every industry is able to define its market potential, current saturation and the major sources influencing its

business. There are established graphs and curves that track the percent of society that adopts early and those who are influencing the next big group. There is also a trend curve that can show when the last “new” thing is peaking and when the market is ready for the “new new” thing to be launched. After all, product development is a calculated risk assessment.

Color is an additional factor. Color is steeped in symbolic meaning that is different in every culture. Cultural color importance and meanings are well documented and there are some great trend services that can work many years in advance of product launch. A good forecaster can adjust for nuances as it nears the launch date. The biggest part of the forecast adoption is in its relevance and validation. This is really where that layer of socio political influence can turn a trend forecast on its ear. At decision making time all the educated guesses are validated against buy in and the over all health of the bottom-line.

You can start simply to understand trend by looking at the headlines and how people are reacting to them. When the largest amount of homes

in America’s history are under foreclosure you might guess that people are looking for things like stability and fun on a budget. How does that translate to your market? Earth tones with a pop of super bright color perhaps. Things like a washing machine can be red or blue to make a staple and needed purchase more fun. Men’s work pants in khaki or navy blue might have bright striped pocket bags or zippers that make the basic, needed pant more fun for the wearer. As times get tough the sweatshirt needs to be softer, for the wearer and more huggable, because we all need a hug when times get tough.

When it comes to color, and enjoying color, I’d recommend to keep the complex stuff fun and relevant for the makers as well as our consumers. ●



Colleen Ahalt-Eagle is a senior level material and color management expert currently working as a consultant for

Walter Wilhelm Associates. She is knowledgeable in fiber, textile and garment design and development, having executive experience at several activewear brands as well as teaching at the university level.

Pantone’s Top Color Picks For Spring 2015

Pantone Color Institute recently released its top 10 Spring color picks for the men’s and women’s markets. The leading colors — Aquamarine, Scuba Blue, Lucite Green and Classic Blue for women, and Dusk Blue, Glacier Gray, Treetop and Classic Blue for men — were based on consumer social media behavior.

“Being constantly barraged by text

messages, cell phones, e-mail and all of this technology 24/7, cooler colors speak to creating a kind of a quiet zone. They are a place to get away from it all, an escape button that, literally, we can push. It’s also kind of a freeing, open air. It’s just a natural aftermath for a crazy world,” Pantone executive director Leatrice Eiseman stated. “To have the four

top colors in the cool range spoke to something everyone is looking for— that real cool, relaxing stop-the-world-I-want-to-get-off kind of thing.”

The top 10 list also identified a blurring of the lines between genders when it comes to color. Both lists showed preferences for Classic Blue and Glacier Gray as well as Toasted Almond, which

ranked fifth for women and men. Eiseman attributed the appeal of these colors to overworked and sleep deprived Americans. “There is nothing in either palette that is so shockingly bright that it’s overwhelming,” Eiseman said. “When we are sleep-deprived, we don’t necessarily want to be whacked back into ‘take a look at this’ — you want to kind of enter it gently.” ●



EPSON QUALITY AND RELIABILITY. NOW IN A DYE SUBLIMATION PRINTER.

The Epson name has long stood for the very highest standards of print performance, quality and reliability. Now we're putting our expertise into an exciting new suite of garment printers. Designed exclusively for dye sublimation transfer printing with specially formulated Epson inks, the all-new SureColor[®] F-Series delivers superior print quality along with the world-class service you've come to expect from Epson. The new Epson SureColor F-Series. Better performance. More profit. To learn more, visit proimaging.epson.com



Epson SureColor F6070 - 44"
\$8,495*



Epson SureColor F7070 - 64"
\$19,995*

*MSRP, before rebates. Please check with an Epson Professional Imaging Authorized Reseller for actual price as dealer prices may vary. EPSON and SureColor are registered trademarks and EPSON Exceed Your Vision is a registered logomark of Seiko Epson Corporation. Copyright 2013 Epson America, Inc.

Pattern Comes into Play with a Colorful Punch

An array of prints and patterns liven up garments and gear for the season ahead as the active/outdoor market takes more cues from lifestyle fashion. An emphasis on eye-catching visual appeal dominates collections for Spring 2015 with bold designs that further differentiate traditional outdoor apparel and accessories from today's crossover approach to performance products. New looks range from digital print 100 percent lightweight merino wool dresses to rugged floral polyester jackets for men. Watercolor prints for run apparel, and floral patterns for boardshorts vie for attention with modern camo and colorful geometrics. And whether knits or wovens, naturals or synthetics, the latest textiles are up to the task of colorful decoration. But it's all in good fun, giving outdoor some playful bounce heading into next year. ●



Party Time: Two different takes on casual prints go together side by side.



Gramicci: A Moroccan-influenced pattern sets this skirt apart.



Athletic: A basic sports bra and tights combo is not so basic anymore.



Adidas Outdoor: Subtle patterning gives these men's boardshorts sophistication.



Brooks: A watercolor print elevates this women's performance run top.



Ticla: This up tempo print is perfect for a summer music festival camp out.



Athletic Recon: A modern camo with an urban edge for men's gym wear



Hyperbola: Florals on a dark background for a new kind of rugged look.



Ibex: A digital print adds depth to 100 percent merino wool fabric dress.



Classic: A mash-up of color and print on men's shorts shown at DuPont.



Darn Tough: Anything goes when it comes to color and print for socks.



Emu: A new collection of slip on styles for Spring '15.

 **drirelease**[®]

WHAT POWERS YOU?



 **drirelease**[®] drirelease.com

drirelease[®] powers hundreds of the world's premier brands. With inherent moisture management, everlasting wicking and quick drying capabilities, it's no wonder the best brands choose *drirelease* patented technology.



New Partnerships and Product Developments Enhance Jeans Market.

A Round Up of Denim Developments



Smarty Pants: Intelligent Denim jeans combine the latest technology and a sleek, fashionable fit.

Silvadur Offers a Fresh Take on Jeans

Dow has partnered with DL Denim for the launch of a new line called Intelligent Denim. The collection features Silvadur Intelligent Freshness Technology that protects denim from odor causing bacteria that can build up on jeans. According to the company, consumers can wear the denim longer, with fewer washings, and be confident their jeans are fresh.

The Intelligent Denim jeans are part of the DL1961 Premium Denim Fall/Winter 2014 range. "Over the past several months, teams from DL Denim and Dow extensively tested Silvadur's performance on denim," said Karel Williams, global strategic market-

ing manager for Dow Microbial Control. "The results validated Silvadur's ability to consistently provide durable odor control in denim products, which enables DL Denim's customers to wear their jeans longer and wash them less."

DL Denim is launching the Intelligent Denim Men's line this month, and will follow up with a Kids launch in mid-October and a Women's line in early January.

"DL Denim has carved out a reputation for incorporating the latest technology advances into their products," said Williams. "Their use of Silvadur is a great example of how a progressive apparel manufacturer can use progressive technology to differentiate their products in the marketplace."

DL is a premium denim brand with distribution in Nordstrom, Saks, Bloomingdales and over 500 specialty retailers the United States.

Collaborating for a Perfect Fit — Virtually

American Jean Company and triMirror met via independent Kickstarter campaigns and realized a unique collaborative opportunity was to be had by joining forces. Execs at triMirror modeled into 3D the American Company's Men's Straight Leg Jean in Natural/Red Selvedge made from 100 percent raw natural redline selvedge denim. With triMirror, individuals can "try on" American Jean Company men's jeans using an avatar custom to their size and shape, virtually eliminating the guesswork out of online shopping.

Cone Denim Announces the Next Evolution of Stretch

Cone Denim has unveiled the enhanced stretch of Level II SGene yarn technology. Developed under the direction of Cone's R&D incubator, Cone 3D, Level II expands the collection and takes SGene's stretch performance to the next level using Cone Denim's patented dual-core spun yarns.

Cone Denim's innovative



Custom: American Jean Company denim fit by triMirror technology.

dual-core stretch and recovery SGene technology was originally introduced in denim fabrics in 2007. The technology was patented in 2012. Level II SGene takes the evolution of stretch to the next level using yarns that contain spandex and filament polyester covered with cotton providing a soft cotton hand and appearance.

"We spin our dual-core yarn in-house to high quality standards," says Allen Little, director of product development for Cone Denim. "Every element of the Level II SGene technology is engineered for maximum quality and performance, and the filament component is designed and produced specifically for SGene Yarns. To create these patented yarns, we insert the spandex component using a method that maximizes recovery and optimizes stretch, which is then wrapped in a cotton covering and spun to provide a soft cotton hand and natural appearance." ●

Clarino
MICROFIBER LEATHER
EST. 1964

**We didn't invent leather
we just made it better.**

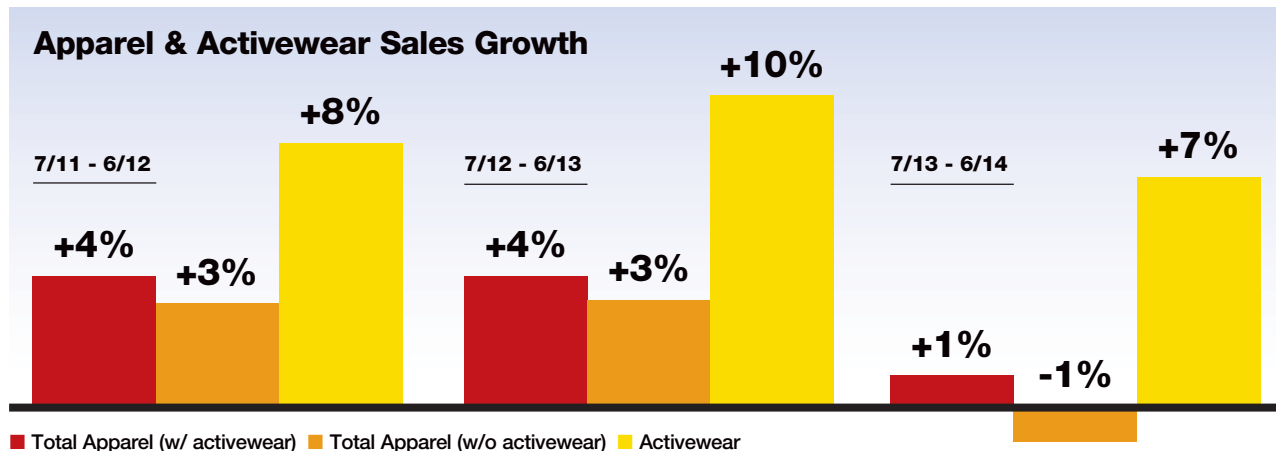
ClarinoMicrofiberLeather.com



Activewear Growth Sets Pace

Growth in activewear buoyed the total U.S. apparel market in the 12 months ending June 2014 (July '13 - June '14), helping total apparel sales reach \$206.3 billion, a one percent increase over the prior year, according to global information company The NPD Group. Activewear sales accounted for \$33.7 billion, representing 16 percent of the total apparel market, and have played a significant role in the overall success of the total apparel market over the last two years.

The top three primary uses for activewear are Casual/Every Day Use, Athletic/Sport/Exercise, and School. While use of activewear in Athletic/Sport/Exercise declined during the 12 months ending June 2014, School



use experienced growth.

“Activewear is booming, with sales growth exceeding that of the apparel market as a whole, and it’s because consumers are wearing activewear not only to the gym, in the gym, and from the gym, but they are working out,

going out, and even hanging out in activewear,” said Marshal Cohen, chief industry analyst, The NPD Group. “Consumers are drawn to its comfort and versatility, and the fact that it still makes a fashion statement. Activewear, by nature, also evokes a sense of athleticism

and wellbeing, which only adds to its appeal.” ●

Channels include Department Stores, National Chains, Mass Merchants, Specialty Stores, Off-Price Retailers, Mfr. Owned Stores, Direct Mail/E-commerce, and Warehouse Clubs.

Source: The NPD Group, Inc. / Consumer Tracking Service 2011-2014



Fortress Mitts with



**Unrivalled Performance
Unmatched Durability
Unlimited Possibilities**

superfabric.com



got my back. slytechprotection.com

Designed by two-time Olympic Champion, **Ted Ligety.**

@SuperFabric + @slytechprotect

photo // agence zoom

Reports from Around the Industry on Business and Personnel Developments.

Suppliers Extend Opportunities in New Markets

Garmatex Debuts IceSkin Cooling Fiber Technology

Garmatex Technologies Inc., headquartered in Vancouver, BC, has announced the launch of IceSkin technology, an advanced cooling fabric designed to help wearers function in extreme weather temperatures by regulating body temperature.

IceSkin uses natural jade minerals, in combination with Garmatex's CoolSkin quick dry microfiber filaments, to harness the cooling effects of the body's



Garmatex IceSkin golf shirt for men.

perspiration and optimize comfort by lowering the skin's surface temperature. Sunrays reflect off the jade minerals to deflect thermal energy away from the body, thus enhancing the cooling process as well as offering a high rate of UV protection.

According to the company, unlike the majority of technical fabrics that use a natural sweetener found in gum to produce a cooling effect, Garmatex IceSkin takes a leap forward in cooling comfort, made possible through an embedded fiber technology: a multi-layered, three dimensional knitting process that is uniquely engineered to ensure the cooling effect remains permanent for the life of the garment.

Currently available in Garmatex

branded golf shirts and towels that showcase the technology, Garmatex ultimately plans to sell the fabric to leading apparel and medical brands.

Sympatex Partners with Polygiene

Sympatex Technologies and Polygiene, a leading supplier of odor-blocking treatments, have partnered to produce eco-friendly laminates that are permanently, and sustainably, odorless. Polygiene Permanent Odor Control (POC) Technology provides long-lasting freshness for apparel, accessories and footwear.

According to the company, the Polygiene treatment is applied to the inner side of the Sympatex three-layer laminate, or the Sympatex liners. The active ingredients of Polygiene neutralise body odor by stopping the growth of bacteria that create odors. In combination with the compact hydrophilic, bacteria-proof Sympatex membrane, bacteria won't stand a chance. The development of body odor on apparel and equipment is stopped permanently.

The environment is also protected: The skin-friendly treatment is based on natural silver salt, which is extracted from recycled silver. When garments have been treated with Polygiene they stay fresh longer and have to be washed less often. Due to reduced washing cycles, Polygiene increases the life of Sympatex laminates in a sustainable way, reduces the water consumption and protects the environment. Just as the "guaranteed green" Sympatex membrane, Polygiene is bluesign approved and Oeko-tex Standard 100 certified.

Tencel a Pick for Knits

Lenzing's Tencel is finding a niche within knitted fabrics. The creations range from jersey and flat knitwear of 100 percent Tencel through to blends with natural or synthetic fibers. Two special types



Lenzing's Tencel featured for women.

of Tencel are available for knitted fabrics. Type A100 is used for synthetic blends and wool Type LF is applied in cotton blends. These two knit types are available in micro variants for particularly fine knitted fabrics.

37.5 Launches Global Sales Force

37.5 has appointed a group of industry veterans to focus the company's sales, marketing and merchandising efforts across North America and Europe. The team will report directly to Scott Branscum, EVP, of the Boulder, CO firm.

Previously, 37.5 technology was marketed under the Cocona brand name, as the original active carbon particles were derived from coconut shells. The technology has since been expanded to use additional natural materials.

"As we continue to manage the growth of our patented technology and provide marketplace distinction for brands, our corporate philosophy is anchored on the concept of partnership building," stated Branscum. "Our global sales organization also reflects a new commitment to world-class customer service," Branscum adds.

The following appointments have been made: Sebastiaan van de Loo, Austria, Germany and Switzerland Account Director;

Geza Maklary, Eastern Europe and Benelux Account Director; Edouard Liffraan continues as France, Portugal and Spain Account Director; Davide Berrone, Italy Account Director; Anders Wennergren continues as Scandinavia Account Director; Liam Gallagher, UK and Ireland Account Director; Tim Rogers, U.S. East Coast Account Director; Gordon Roe continues as U.S. Midwest Account Director; Dave Bywater, U.S. West Coast Account Director.

SIA Releases 2014 Snow Sports Market Intelligence Report

The recent 2014 Snow Sports Market Intelligence Report covers the ups and downs of the 2014/2014 season that included severe drought in the Sierras, polar vortex events that brought arctic cold as far south as Texas and afforded excellent snow conditions in the Rocky Mountains.

These are a few of the highlights:

- 2013/2014 was a \$3.6B season, up seven percent in dollar sales and up four percent in unit sales, despite the drought in California.
- Sales of action cameras were up 10 percent in units sold to 121,000 cameras and up 20 percent in dollars sold to \$41 million.
- More girls bought snowboard equipment this year; junior girls snowboarding equipment sales grew 37 percent in units sold and 36 percent in dollars sold.
- Alpine insulated tops sales were up 13 percent in dollars sold to \$529 million and up eight percent in units to more than 3 million units sold.
- Sales of women's specific cross country equipment increased 32 percent in units sold and 28 percent in dollars sold to over \$6 million.
- Apparel accessories including gloves, baselayers, headwear, neck gaiters, etc. increased seven percent in units sold and 11 percent in dollars sold to \$664 million. ●

American Textile Company Celebrates Success

The ongoing revival of the domestic textile industry in the Southeast got a boost recently with the expansion of facilities at the American Textile Company. Hundreds of government officials, community leaders and partners attended a grand opening at the expanded 418,000 square foot state-of-the-art facility that produces a variety of bedding products. The Manufacturing and Distribution Center in Tifton, GA currently employs 200, and American Textile expects to hire 100 more in the next three years.

Elected officials praised the company for bucking industry trends and growing employment and sales with a strategy to

manufacture and ship most items from four strategically located sites in the U.S., and for its focus on innovative sleep products, some of which were previously manufactured and shipped from Asia.

“The expansion of American Textile Company in Tifton solidifies the fact that South Georgia continues to be a great place for business,” said U.S. Rep. Austin Scott, R-Ga. “I applaud the company’s efforts to not only expand within the United States, but to continue its investment in the Eighth District and to create jobs in the state of Georgia.”

Brian Marlowe, President and CEO of the Tifton-Tift County Chamber of Commerce and

the Tift County Development Authority, estimates that the American Textile plant’s economic impact since 2011 is \$75-80 million.

“American manufacturers have traditionally faced difficult decisions when balancing cost considerations with the desire to produce in America,” said Lance Ruttenburg, president and CEO of American Textile. “Now, consumer demand for American-made products, coupled with rising freight costs and overseas wages, has made it financially viable for companies to expand in the United States. We’re thrilled to be a part of this resurgence of the textile industry in the Southeast and have found Tifton to be the perfect fit for us.” ●



Grand Opening: American Textile Chairman Reid Ruttenberg cuts the ribbon in celebration of the new manufacturing and distribution center in Tifton, GA.

CoolVisions®
dyeable polypropylene
is revolutionary,
innovative and
profoundly
different.

- Colorful • Cottony soft • Lightweight and comfortable
- Moisture management • Durable • Breathable
- Thermally insulating • Stain resistant
- Environmentally friendly

Contact: Susan McGreal
Global Sales/Marketing Manager
Tel: 850-710-3663, Mobile: 636-578-8999
or susan.mcgregal@fibervisions.com

All-Performance
CoolVisions®
dyeable polypropylene

Metamorphosis – A profound change in form from one stage to the next in the life history of an organism.

www.cool-visions.com

IN THE MARKET | FOOTWEAR

A Focused Materials Show Attracts Elite Designers and Developers. **By Emily Walzer**

Where Feet Come First



Choosing color trends for next season.

“There is a lot going on with printing on textiles and here we can find suppliers who can do the whole upper,” said Jen Hutchinson, senior product manager for footwear, socks, outdoor accessories for Dick’s Sporting Goods. “There’s also a lot going on with leather in terms of hide prices and being here we can find out what’s current.” Her colleague Andy Mirkin, associate product manager for footwear and socks, added, “Also when it comes to synthetics, you have to have performance properties like waterproofness and breathability, so we’re looking at

those materials, too.”

All of that and more was on display at the New England Apparel & Footwear Material Show, held recently in Danvers, MA, a short hop from Boston. “We have about 115 vendors here with attendees consisting mainly of product developers, materials people, factories and freelance designers,” explained show organizer Hisham Muhareb. “This is not a flashy show, it is down to earth business to business dealing. It is really well focused for material people,” explains Muhareb, who also hosts a west coast version in Portland, OR that draws double the number

of exhibitors.

Color, print and shine were key footwear material trends at the September Show. What was once the domain of the performance category is now crossing over into every category as textiles with bright hues and eye-catching patterns were highlighted throughout the exhibit hall. There is also more crossover with apparel happening, as lifestyle fashion filters down to footwear.

Two other noteworthy trends are comfort tech and lightweight performance. This is evident not only in the fabrics themselves but construction methods, too, as

Color, print and shine were key footwear material trends at the September Show. What was once the domain of the performance category is now crossing over into every category as textiles with bright hues and eye-catching patterns were highlighted throughout the exhibit hall.



Super cool, colorful upper from Clarino.



Fabrications with shine was a key trend.



Concept looks from Kuo Yuen Tannery Co.



Mogae Textile was consistently busy.



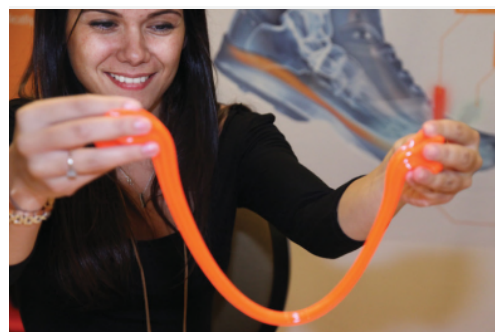
High-performance treatment from Sympatex.



Product managers from Dick’s Sporting Goods.



A wide range of styles from OrthoLite.



d30 foam that hardens on impact.



A post-production DWR application.

well as insole and sole product development. These properties hold true for a range of end use target markets including athletic, tactical and military.

“People come here to look for new tech, properties like breathability, anything that is added comfort and has a consumer focused benefit,” said Glenn Barrett, Ortholite CEO. The Wrentham, MA company highlighted two new foams, one with high-rebound properties and another that is eco-friendly. “Comfort is the driver, and is expected,” said Barrett. “Footwear has to deliver comfort.”

Today’s footwear also has to

offer versatility, functionality and street appeal. For example, Sunnlyte offered a very colorful, very sophisticated array of reflective materials, in addition to laser films and special effects films. “This is not your traditional reflective,” said Paul Lo, general manager of the company, with manufacturing in Taiwan and China. Sunnlyte does glass bead reflective, microprism, and holographic non-reflective. Also featured was a reflective thread woven into fabric.

Also important on the visual side are metallics, foils and transfer prints. “Color is certainly of interest to designers, but they are also looking for hidden details with subtle texture and surface interest,” stated Matt Ready, TR Consulting Services. “We are also seeing apparel blending over to footwear in terms of stretch and no-sew type technologies.”

Certainly functional technology remains a priority. Exhibiting for just the second year, d30 makes an innovative foam that is based on a “non Newtonian fluid” technology for superior impact performance. The product has made inroads in the motorcycle and electronics markets and is now focusing on footwear as well as athletics. “We have a great tech story for developers, as well as a branded ingredient story,” said Melanie Baez, d30 account manager.

Other standout products exhibited include: Clarino nonwoven microfiber materials; friction free technology from Sheehan; Faytex cooling fabric; Never Wet, a super hydrophobic product for post-production application; and technically sophisticated plastic injection sole designs from Framas.

Show director Muhareb is optimistic about the materials industry. “This business is not going anyway any time soon. Materials are a touchy-feely business; it’s not something you’re going to buy on the Internet like a VCR.” ●



Innovative reflective films from Sunnlyte.



Asian factories had a strong presence at the Show.

IT'S WHAT'S INSIDE...

ORTHOLITE® PROPRIETARY FOAM TECHNOLOGY KEEPS FEET COOLER, DRIER, HEALTHIER, AND HAPPIER. THE WORLD'S LEADING BRANDS TRUST ORTHOLITE TO DELIVER THE HIGHEST LEVEL OF CUSTOMER SATISFACTION.

- BREATHABLE
- MOISTURE-WICKING
- ANTI-MICROBIAL
- LONG-TERM CUSHIONING

Ortholite®
comfort from the inside out

ortholite.com

Fabric-Forward, Contemporary Looks Designed for Transit. **By Emily Walzer**

Modern Mobility

Textiles that provide comfort over the long haul – whether that’s a cross-continent adventure or an afternoon of mountain biking – are being championed by brands ushering in a new generation of lightweight, versatile products for individuals on the go. Fabrications combine high-performance, with low-maintenance, and highlight blends that provide functional essentials such as quick dry, UPF, stretch and weather protection properties along with durability and drape. Also key for Spring '15: the latest looks achieve modern mobility with clean lines and sophisticated styling.



Kitsbow: Modern Mountain Biking

The Henley-inspired women's All-Mountain Jersey is a combination of nylon, merino wool and spandex for temperature regulation and a soft hand.



Charlie Cronk
Kitsbow co-founder and designer

“Apparel should function so well you don’t notice the product.”

“I’ve had a lot of time in the saddle to think about what I like and what I don’t like to wear while mountain biking,” says Kitsbow co-founder and designer Charlie Cronk. “There is a lot of great clothing for road cycling regarding fabric and fit and visual appeal, but I felt a sense of dissatisfaction with the clothing available for mountain biking specifically. The road kit I used just didn’t withstand the jagged rocks, snags, falls, abrasion, etc., and I wanted to change that. Plus my understanding of tailoring leveraged into what we do.”

What Cronk and co-founder Zander Nosler have done since launching Kitsbow in 2012 is elevate not only the level of tailoring and attention to technical detail for mountain bike apparel, but also raise the bar in terms of functional fabrication and upscale style. In a sport known for

loose-fit, youthful-looking menswear basics, Kitsbow, headquartered in Larkspur, CA, stands out for its sophisticated performance textiles and modern aesthetic.

“If you spend good money on a bike, a big part of that is because you like the quiet it affords from its high-quality performance. Your apparel should afford the same silence, functioning so well that you don’t notice the product,” explains Cronk, who spent 13 years designing and developing product at Levi’s. “The greatest thing you can hear from customer feedback is the clothes disappear.”

For fabrics, Kitsbow opts for high-end, technical outdoor textiles. For example, shorts are made with Schoeller DrySkin and shirts feature a Cordura nylon exterior with merino next to skin. Schoeller’s Nanosphere and coldblack technologies are also used in Kitsbow products.

Wool is sourced from New Zealand and Australia. However, a new U.S. capsule collection is in the works with garments sewn in San Francisco using domestically sourced wool. Also new is a women’s range in addition to mountain bike accessories. The Kitsbow line has grown to now include approximately 30 items.

“In terms of fabric, we looked to other sports like rock climbing for functionality,” says Cronk, who wanted textiles that offer high abrasion-resistance, but also allow freedom of movement.

In terms of aesthetics, Kitsbow addresses an enthusiast serious both about the sport as well as garment selection. “There’s lots in the market targeting the rad guy, the bro,” Cronk explains. “While mountain biking may still be a young sport, compared to traditional activities like skiing, it’s been around for over 30 years. We wanted apparel that addresses a more grown up sensibility, based not so much on age, but attitude.”

Kitsbow garments are subtle hues, mostly grays and blacks and blues. The fit is trim; there’s no excess material to flap around while riding and the look works equally well on and off the bike.

Attention to detail is evident in pocket placement. Back pockets on Kitsbow garments are away from the seat, and placed where the body is naturally slightly concave so stowed items practically disappear.

“Mountain biking clothing has its roots in denim pants, flannel shirts, insulated jackets, work boots,” says Cronk. “I wanted to bring that idea of classic menswear—the jean, the plaid button down, the boots—to Kitsbow and broaden that theme to create tailored mountain bike specific apparel.”

Price is also a factor. A complete Kitsbow outfit can run upwards of \$500. Kitsbow products are mostly available online with a just handful of brick and mortar shops. Says Cronk, “Compared to owning several pair of shorts you’re just ho-hum about, ours is the short that you’ll absolutely love and is guaranteed built to last.” ●

Bemis Sewfree® bonding lets you design, create and construct in ways that sewing can't. Our two new collections make finding the right solution easy and intuitive. Lightweight Breathable focuses on ways to enhance comfort and permeability – including Flowfree™, a breakthrough advance for performancewear. And High Visibility features ways to stand out, showcasing customizable, stretchy-for-real Graphic Reflective Stretch film. Escape the constraints of cut and sew and leave your limits behind.

bemisworldwide.com

HOW INCREDIBLE IS MADE

 **BEMIS**
Let's make amazing.

The Beebe Company: Modern Bike Accessories



Silas Beebe
Owner

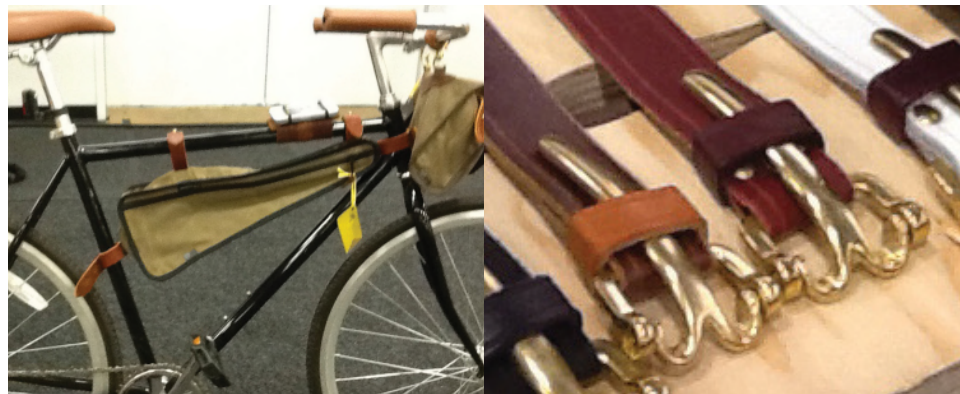
“We are trying to make products that will be just as useful and beautiful years down the road - products that stand the test of time, stand against disposable cheap products from Asia, and stand up for jobs in the USA.”

The Beebe Co. puts a modern spin on cycling with innovative, textile-driven bike accessories. “We use classic U.S.-sourced materials like heavy duty 18-ounce Martexin waxed filter twill and leather, but in combination with modern materials like grippy silicone webbing where it can provide a helpful feature,” states Silas Beebe, the fifth generation owner of The Beebe Co., a Portland, OR-based company since 1884.

Two years ago, after 13 years working as an industrial and footwear designer, Beebe revived his family’s company continuing its heritage of domestic sourcing and manufacturing, while focused on blending the best of old and new. Bike accessories were his initial launch; belts and other leather goods have since followed.

Beebe builds on the brand’s theme of “Water & Trend Resistant” by keeping the style timeless and ensuring the line merchandises consistently by using two colors of 18 ounce filter twill from Fairfield: ranger tan Martexin waxed and black DWR treated.

“I love heavyweight twill because it not only lasts forever, it helps the bags



Leif Weather Proof Bike Frame Pocket and Beebe Accessories.

hold their shape beautifully. And the waxed twill ages gracefully in concert with the leather,” Beebe says. “We are trying to make products that will be just as useful and beautiful years down the road - products that stand the test of time, stand against disposable cheap products from Asia, and stand up for jobs in the USA.”

After spending many years going to China for clients, Beebe was eager to design useful and classic-looking accessories for modern technology that could be easily made in his hometown of Portland.

“Sourcing in the USA is definitely more tricky. The main problem is a

lack of selection - we simply don’t have nearly the variety of textiles, colors, and hardware I was used to in footwear design,” Beebe explains. “With the resurgence of made-in-the-USA, the best domestic suppliers (like Fairfield textiles and Horween Leather) and sewing factories are seeing so much demand there is often a backlog. For them it’s a good problem to have, of course, but further limits the selection or stretches delivery times by months.”

Beebe mentions Ohio Travel Bag as a favorite supplier as the company he says has made it easy to try new ideas with a huge selection of hardware and unparalleled service. ●

Toad & Co: Modern Travel



Kate Larramendy
Design Director

While Larramendy advocates today’s synthetics as “getting so sophisticated in terms of look, feel and functionality,” she believes hybrid fabrications are here to stay.

These days it’s easy to think of travel as a sport, what with running through airports to make a tight connection, or enduring a train ride that alternates between stifling heat and blasting air conditioning, or the workout of lugging an over-stuffed backpack from one destination to the next. And just like today’s trend in sports, travelers no longer want to dress in a uniform. As a result, the once popular safari-style travel costume has been packed away, and designers are defining new ways for today’s globetrotters to dress in contemporary comfort.

For Spring ’15, Toad & Co offers a capsule collection dedicated to modern travel. The aesthetic is “cleaned up,” says design director Kate Larramendy, yet the lightweight breathable garments are performance based. Highlights include Tencel blends with mechanical stretch, versatile polyester double knits, and lightweight woven constructions. Her criteria for travel wear include

functionality, convenience and style.

For instance, the new Transito Skirt is a blend of 65 percent Tencel/30 percent nylon/5 percent spandex. The double knit fabric stands up to a busy day on the road with its hefty dose of Tencel also adding an element of contemporary eco chic. The garment also features a low profile, front zip passport pocket.

The men’s Travel products also combine performance with good looks. The Rover short uses the company’s



Striped Transito skirt

Polyvore fabric that takes advantage of three types of polyester yarns including one that adds a tricky mechanical stretch and makes this chameleon fabric cool again. Men’s shirts feature a lightweight woven fabrication consisting of a blend of 51 percent nylon/49 percent Tencel Sun that protects from UV rays and dries in a flash.

While Larramendy advocates today’s synthetics as “getting so sophisticated in terms of look, feel and functionality,” she believes hybrid fabrications are here to stay. For instance in addition to Tencel, Larramendy also makes good use of organic cotton, and an S Café polyester that uses a technology based on coffee grinds to generate moisture wicking performance.

“Comfort is critical,” states Larramendy, whose design vision has consistently advanced the company’s unique, textile-savvy approach to outdoor apparel over many years. And she continues to help guide the firm forward under its new name. ●

Advanced FluorineFree™ WATER REPELLENT



888.404.4042 | bolgerohearn.com



OdorArmor™

ADVANCED ODOR PROTECTION

STAY FIT, STAY FRESH

Odor Armor™ is High capacity, durable absorbing textile finish that absorbs and locks in a wide variety of odors including environmental odors and body odors.



Born in the USA, Really?



TEXTILE RULES AN OVERVIEW

In July, Texworld hosted a seminar dedicated to “Textiles and the Federal Trade Commission” presented by Robert Frisby, an attorney with the FTC. The afternoon event covered: Discussion of the FTC Rules on textile labeling and advertising, which include disclosure requirements regarding fiber content and country of origin; as well as the recent amendments to the Textile Rules effective on May 5, which update and clarify certain provisions, allow certain hang-tags that do not disclose a product’s full fiber content, and revise the text of continuing guaranties. Also, a summary of the requirements of the FTC’s separate rules addressing care labeling, wool products and fur products.

The seminar was held on Wednesday, July 24, 2014 at 4 p.m. and a video of the presentation is available online at: <http://media.lenzing.com>

Recent reports from the Boston Consulting Group (BCG) indicate that consumers are willing to pay between 10 and 60 percent more for American-made products, driven by both quality and patriotism, and that global economics increasingly favor domestic manufacturing.

Made in America was certainly a point of discussion and representation at Outdoor Retailer in August. “A lot more people at this show are talking about Made in USA,” said Judy Amabile, president, Polar Bottle, based in Colorado. Amabile participated in an educational forum on trends and challenges within the Made in USA category.

The forum was produced by the Outdoor Industry Association (OIA) Made in America Working Group. Launched in 2013, this Working Group now has over 150 members.

In addition to Amabile, other presenters at the Made in America forum included: Harry Kazazian, CEO, Exxel Outdoors; David Petri, VP marketing,

Farm to Feet; and Jay Eckhardt, attorney, Stoel Rives. About 75 people attended the afternoon session during which the executives offered some good tips and takeaways on domestic manufacturing.

For example, Kazazian suggested that brands start small, and continue to make product offshore if that is the established business. “While building your USA product offering, source the best raw materials and be efficient,” said Kazazian. His company has a bi-coastal presence with a 250,000-square foot, state-of-the-art sleeping bag factory and an Eastern Distribution Center located at Excell Outdoors headquarters in Haleyville, AL, in addition to corporate and design offices and Western Distribution Center based in Los Angeles. The company also maintains factories in China.

Amabile started her family business 20 years ago, well ahead of today’s “make local” trend, and from the get-go put value around safety and ethical employee practices. She noted that advantages of having her Boulder business manufacture locally include inventory control, high quality and customer responsiveness. She added that while her company has continued to be profitable, “we don’t make a big margin.”

Nester Hosiery launched the Farm to Feet sock collection just three years ago using domestically sourced wool and production at the company’s North Carolina knitting facility. Petri urged audience members to “challenge your suppliers to source domestically. Make local is something we can all connect with.”

Portland, OR based lawyer Eckhardt counsels his clients around Federal Trade Commission rules and regulation. “Do your homework about your supply chain,” Eckhardt

stated. “Risks come from making unqualified claims.”

Claims & Clarification

Eckhardt, a member of the OIA Made in America working group, also participated in an Outdoor Retailer seminar titled “When to Wave the Made in USA Flag,” focused on knowing proper labeling in accordance with the Federal Trade Commission. His fellow presenter was Julie Ensor, the Federal Trade Commission’s “Made in America” attorney.

Ensor quickly made the point that these days as the trend of domestic manufacturing continues to grow, terms like “Produced in,” or “Created in,” or “Born in,” or “Manufactured in,” are increasingly being used when promoting goods and executives need to be aware of FTC rules about claims and labeling.

“Anytime you label or advertise you need to be able to substantiate the claim being expressed and implied,” said Ensor. “And be aware of how a reasonable consumer understands that claim. What is the consumer taking away?”

She outlined differences in an Unqualified Claim and a Qualified Claim. To be eligible for the former, “all or virtually all” of the product must be made in the U.S. and the company must be able to prove that the product is “substantially transformed” in the States. She also advised that advertisers be aware of how far back in the supply chain contained foreign content.

With a Qualified Claim, “the information should be clear, prominent and understandable,” said Ensor, who also cautioned companies about using the phrase “see our website for details,” instead of a more direct explanation of the product. ●

For details: <http://business.ftc.gov/legal-resources/2188/36>.

SEE WHO YOU KNOW.

PLATINUM SPONSORS



SPONSORS



EXHIBITORS (AS OF 9/19/14)

- | | | | |
|-----------------------------------|-----------------------------|------------------------------|---------------------------------|
| 1000 Mile Sportswear | EvoFit | Lole | Shefit |
| 180s | Expert Brand | lucy activewear | SHOCK ABSORBER Sports Bras |
| 2XU | Farm to Feet | Marathon Printing, Inc. | Shock Doctor |
| 3 Dots Design, Inc. | Feetures | McDavid, Inc. | Sigvaris, Inc. |
| A4 | FITLETIC Sports LLC | Medi-Dyne Healthcare | Skechers |
| Active Angelz | FITS | Merrell | SKINS |
| Addaday | Fitsok | MIO Global | SKLZ |
| Adidas | Fivesse | Milestone US Inc. | Skratch Labs |
| Airia AB | Fleet Feet, Inc. | Mission Athlete Care | Smartwool |
| Allied Steel Fabricators | FlipBelt | Mizuno | SOLE |
| Alii Lifestyle (by Active Angelz) | FootBalance System, Inc. | Moji | Soleus Running |
| Altra Running | FreeWavz | Momentum | Sparkly Soul |
| Amphipod | FuelBelt | Montrail | Spenco Medical |
| AMPLA | Fun Source | Moving Comfort | SPiBelt |
| Arctic Ease | Garmin | MPG | Spira |
| Armpocket | Gatorade Endurance | Mueller Sports Medicine | Sport Science |
| ASICS | Generation UCAN | MYLAPS Sports Timing | Sport Suds |
| Augusta Sportswear | Glukos Energy | NAAWK | Sporteer |
| Auria, LLC | GoMotion | Nathan Performance Gear | Sporting Innovations Group, LLC |
| Avex | Gore Running Wear | Native Eyewear | Spree Sports |
| Avus Design, LP | Greenlayer Sports | New Balance Athletic Shoe | Stable 26 |
| BackJoy | GU Energy Labs | Newline A/S | Strassburg Medical |
| Balega Sports | Hammer Nutrition | Newton Running | Stunt Puppy |
| Belle Core | HB Tune/In The Zone | Nite Ize | Sugoi Performance Apparel |
| BIC Bands | Headsweats | Nuun Hydration | Superfeet |
| Black Diamond | Healthy Kids Running Series | Oberto Brands | Sure Foot Corporation |
| blueseventy | Hickies | Oiselle Running Inc. | Sweat X |
| Boa Technology | Hickory Brands | On | Sweaty Bands |
| BOCO Gear | Hidden Bay Sports | One Up Bands | Swiftwick |
| Body Glide | Hoka One One | OOFOS | tasc Performance |
| Bondi Band | Honey Stinger | Orange Mud | Telic |
| BONKGEAR | Huma Energy Gel | Osmo Nutrition | Tenex Health |
| Brooks Sports | Hygenic Performance Health | Pearl Izumi | The North Face |
| BSX Athletics | ICE20 | PocketFuel | The Soze Group |
| Bud Buttons | Icebreaker | Polar Electro | The Stick |
| CamelBak | Icebug | PowerBar | Thorlo |
| CEP Compression Sportswear | Imex packaging | PowerICE | Thule |
| Chicks In Charge | Impact Canopies USA | PowerStep | Tifosi Optics |
| Chronotrack | Inflatable Images | prAna | Tiger Tail USA |
| Clif Bar | ING Source, Inc. | Premium Sportswear Logistics | Timex Group USA |
| Colosseum Athletics | Injinji | Pro-Tec Athletics | TomTom |
| Coolcore-Dr. Cool | INKnBURN | PROBAR | Topo Athletic |
| Correct Toes | Inov-8 | Pulse On North America | Trigger Point Performance |
| Craft | Isagenix | Puma North America | Trigger-Pin! LLC |
| CTR by Chaos | J Wedge | RAD Roller | Ultimate Direction |
| Currex GmbH | Jabra | Red Fox Wireless | UltraAspire |
| CW-X Conditioning Wear | Janji | Reebok | Under Armour |
| Darn Tough Vermont | JayBird | RICS Software | Vespa Power Products, LLC |
| De Soto Clothing | Jelly Belly-Sports Bean | ROLL Recovery | Vibram |
| DeFeet International | Joovy | Ronhill/Hilly | Virtual Event Bags |
| Destination Races | Kahtoola | RTPR, LLC | Vivobarefoot |
| Dow SILVADUR | Karhu | RunGuards | W.L. Gore & Associates |
| Dr. Scholl's | Kinesio Holding Company | Runner's World | Wahoo Fitness |
| Drymax Technologies Inc. | Knuckle Lights | Running Skirts | Wigwam |
| EC3D Sports | KT Health, LLC | RunSignUp | Wrightsock |
| Endure Jewellery | Landway | RUseeN Reflective Apparel | X Racewear |
| ElliptiGO | La Sportiva | Salomon | Yaktrax |
| Endevr | Lalo Footwear | Sauce Headwear, LLC | yurbuds |
| Enell, Inc. | Leisure Trends | Saucony | Zamst |
| Epic Bar | Leslie Jordan | Saxx Underwear | Zensah |
| EveryMove | Lija | Scott Sports | zFlo |
| Evinco Sports, LLC | Living Essentials, LLC | Sensoria Inc. | Zoot Sports |

THE RUNNING EVENT® 2014



THE PREMIER CONFERENCE AND TRADE SHOW FOR RUNNING SPECIALTY RETAILERS / DECEMBER 2-5, 2014 • AUSTIN CONVENTION CENTER / AUSTIN, TX

Raising the Bahh



“I’m not a big fan of throwing ‘Techno’ in front of something to make it ‘better’ but you are seeing the category evolve.”

**JOSE FERNANDEZ,
PRESIDENT, GLOBAL MERINO**

Wool continues to dominate textile conversations as suppliers advance year-round wearability and extend end use applications for this natural fiber. Key to these developments are the innovative blends entering the market that are sparking new ideas from a variety of suppliers that look to enhance wool’s inherent performance, comfort, and versatility. Aesthetics are also an important factor in wool’s momentum with the latest looks displaying a more sophisticated, wider-ranging color palette as well as some lively digital prints.

Talk about Spring 2015 collections often now includes a handful of new buzzwords. Phrases such as “techno-wool,” and “cool wool” are popular, along with “summertime wool” and “seasonless wool.” But no matter what the tag line, this new crop of lightweight,

visually appealing, functional fabric effectively raises wool’s reputation within the active outdoor and lifestyle marketplace.

It will be interesting to watch how the category evolves from here. For the moment, however, wool shows staying power. Outdoor apparel is a \$3.8 billion market, according to Leisure Trends, with year to date sales slowing to just under two percent. Currently, wool may account for a small portion of the business, with sales around \$500 million, but it is growing at a quicker clip.

Demand is being fueled by a variety of resources. The wool specialists continue to up their game bringing newness with tech as well as lifestyle features like softness, stretch and drape. Suppliers known for synthetics add to the buzz; Polartec, Cordura and Schoeller, for instance, all have new wool ranges.

In addition, industry brands defined by wool products have launched Spring ’15 items that stretch wool’s use from hard-core athletic to everyday casual. For example, Icebreaker’s Cool-lite technology is a merino/Tencel blend used in active silhouettes and Ibex has a new sport line based around Weightless Wool (W2) which has merino wrapped around a nylon core. The construction boosts durability without sacrificing wool’s natural breathability. Ibex also debuts digital print designs on casual dresses and tops. SmartWool offers White Wool targeting the athletic/running hosiery market as well as a lifestyle collection showing off an array of lightweight colorful wool fashions. And Nester includes a friction free technology in a selection of the merino Farm to Feet sock offering for the season ahead.

The Blend Trend

The real action is in creative wool blends. For example, Duckworth debuts a 38 percent merino/50 percent recycled poly/12 percent Modal blend resulting in a super-lightweight yet performance-oriented VaporWool. ABMT, represented by Concept III, offers a handful of MerinoEdge products including MerinoEdge Luxe that consists of merino blended with luxury fibers like Modal, Pima cotton, Tencel, silk and cashmere and focuses on female athletes and studio apparel.

Burlington’s new MerinoFX collection features performance and sustainable blends that incorporate Cordura certified yarns, Supima cotton, flax, and Tencel along with plaid fashions made from 100 percent merino.

“Companies are trying to distinguish their wool products from others,” comments Jose Fernandez, president, Global



Merino. “The conversation has changed: A decade ago it was, ‘Why wool?’ Now it is, ‘Why your wool?’” He adds, “This simply means we all need to be better ‘technologists’ when working with merino. I believe this is good for our category and good for the market.”

Global Merino offers a wide array of constructions, blends, and finishes—all with the express purpose of meeting specific performance attributes.

“Our position is that we, as a technical textile supplier (who happens to use Merino as a key ingredient), need to identify the performance requirements for a given activity then engineer a fabric that meets those requirements,” comments Fernandez. “We just happen to do it with Merino wool.”

The Wool/Synthetics Connection

“Alone, wool and synthetics each have their own advantages and disadvantages, but together, with the right mix and construction, Polartec Power Wool maximizes the performance benefits of each,” explains Allon Cohne, Polartec global marketing director.

Polartec Power Wool is constructed as a bi-component knit with a polyester exterior and merino wool interior, and is available in primary next-to-skin styles, form-fitting stretch styles, and patented High Efficiency grid styles that offer maximum breathability, compressibility and the highest warmth per fabric weight. Fabrics can range from 33 percent to 50 percent wool blend.

The material keeps the skin dry through three complimentary mechanisms: higher breathability via wool’s movement of moisture in a vapor state, designed touch points on the interior to draw sweat away, and a broad surface area on the exterior for rapid drying.

Cordura’s new Combat

Wool is available in multiple merino wool and nylon 6,6 constructions including knits, baselayers, laminates, and double weaves from Chia Her, a mid-layer knit fabric from Chang-Ho Fibre Corporation, sock styles from Xialu, as well as twill, canvas, ripstop, dobby and stretch woven constructions from Burlington Industries. A unique collaboration with designer Alex Valdman highlighted the launch of the collection. Valdman designed innovative apparel pieces featuring Cordura Combat Wool in both a multi-purpose jacket and pant.

Says Cindy McNaull, global Cordura brand and marketing director: “These Cordura Combat Wool fabrics are perfect for the growing consumer need for fashionable yet functional apparel that can transition seamlessly from work to play and everything in between.”

In addition to working with Cordura, Burlington’s Merino FX collection includes 100 percent merino and merino blended technologies in various weights and constructions across of variety of styles and advanced performance. “Merino wool is often overlooked as a year-round and versatile fiber,” says Tom Aubrey, product development manager for Burlington. “The very thing that makes wool warm in winter makes it cool in summer, and the natural give and elasticity of wool fibers yields to the body’s movement, making them incredibly comfortable, wrinkle resistant and longwearing.”

Burlington’s worsted wool heritage dates back to 1954 and centers on the wool expertise of the Burlington Raeford brand, named after the plant where it was first produced. ●

When you’re protected by
PUR THREAD
 go ahead:

BRING ON THE FUNK.



Introducing PurThread,
 a new era in antimicrobial textiles.

WORKS HARD.

With powerful EPA-registered antimicrobial silver infused into the core of PurThread, you can get funky without the fear of *getting funky*. Even after 100 industrial washings—or an epic night on the dance floor—PurThread never stops working to keep fabrics free from mold, mildew, fungus, and funk-causing bacteria. So don’t just look fresh—be fresh.

PLAYS NICE.

Developed with manufacturers and designers in mind, PurThread’s powerful antimicrobial protection blends easily with other yarns, dyes well, runs smoothly, and requires no special handling by the manufacturer or consumer.

PurWhite | PurBlack | PurColor
 www.purthread.com | 800.673.5939



Cleaner, Greener Denim



On Board: Prosperity Textile at Denim by PV



Sustainability remains at the forefront of the denim industry, as season after season the industry tries to improve upon its environmental footprint. At the same time, the denim industry has the hard task of recreating new looks on such a traditional favorite fabric. With years of water usage, combined with an abundance of chemicals to get the desired look and finishes down to

from consumers must ensure fair pay and safe working conditions.

Cotton & Hybrid Blends

With authentic-look denim dominating the trends for Fall/Winter 15/16, cotton has always been an integral part of the process. When cotton prices spiked in 2010, the denim industry had no choice but to embrace alternative fibers in delivering blended cost

commodity.

As with other sectors of the textile industry there is an increased collaboration between companies, and this is particularly beneficial starting at the fiber stage. Tencel and Invista have teamed up to work through the value chain to bring super soft denim with enhanced performance to the consumer. Denim manufacturers including Tejidos Royos (Spain), Orta (Turkey) and ADM (Pakistan) have introduced collections for the season that offer an ultra soft hand feel and good recovery by incorporating Tencel and Lycra dual FX with cotton. The enhanced softness combined with the shape retention is pushing denim into a 24/7-comfort product for the consumer.

Recycled synthetics also offer an alternative fiber source, with Cone Denim (USA) a pioneer in this sector with its Cone Denim's Earthspun denim consisting of recycled plastic bottles. What is quite unique about Earthspun is that dependent on the color of bottles used, the recycled yarn gives raw denim a cast whether it is green, blue or beer bottle

Indigo, denim's ubiquitous base tone continues in force for the season, but chemical companies are also pursuing a more sustainable direction at the dyeing stage.

the stories of rivers being turned indigo blue, the industry has in the last few years turned itself around and environmental efforts are ongoing.

The finishes still come through, but this time the focus is on ozone washing and laser finishing to get the desired look. Denim isn't just under pressure from the sustainability standpoint, compliancy is also an issue, as buyers source from the best-priced garment producing hubs, but at the same time through pressure

effective denim fabrics to the manufacturers. Despite today's cotton price being stable, the industry continues to research and develop alternative sources to enhance this hybrid legacy. It isn't just for differentiating denim but the fact the denim industry needs to explore new options, to develop alternative sources. With water scarce and potential arable land growing cotton crops combined with a growing global population, cotton could once again become an expensive



Decision-Making: Buyers attending Denim by PV Barcelona study the latest looks.

brown. This in turn reduces the finishing process and is the reason why Levi's has incorporated it into its Waste Less range.

Calik (Turkey) has an exclusive collaboration with Crailar Flax for developing denim. Requiring 99 percent less water than cotton, fabrics made with Crailar Flax are as soft as cotton, contain better wicking properties, less shrinkage and enhanced durability. It also has enhanced dye uptake resulting in using less indigo and less chemicals.

Cotton does continue to be integral and while organic cotton still features in the denim sector, it is positioned at a premium price and limited availability. Conventional cotton is still the mainstay, but many mills and denim brands have signed up to the Better Cotton Initiative (BCI), a not-for-profit organization that works through the complex cotton supply chain from cotton growers through to retailers in ensuring better cotton production. Working directly with cotton growers, BCI shares the latest sustainable techniques in ensuring a better harvest with reduced water and pesticides, reducing the

environmental impact of cotton production and improving the livelihoods of cotton farmers.

Dyeing & Finishing

Indigo, denim's ubiquitous base tone continues in force for the season, but chemical companies are also pursuing a more sustainable direction at the dyeing stage. Archroma's Advanced Denim technology through yarn dyeing allows mills to reduce water consumption by up to 92 percent, 87 percent of the usual cotton waste can also be avoided and up to 30 percent can be saved in energy costs compared to traditional denim processes.

A true denim aficionado would only buy a raw pair of jeans, never washing them and waiting for the denim to take on the inherent look that raw denim can eventually achieve, but this can take years, and these denim lovers are few and far between. In today's fast paced society the consumer wants that end result now and they aren't prepared to wait, this is why finishing is such a major factor on the denim scene. With a long history of chemical and water abuse, the

launderers and finishers in denim have cleaned up their act in delivering a stronger sustainable message, but more importantly managing to maintain the finishes the consumer wants.

One company who is offering an alternative is Jeanologia (Spain) providing unique laser systems that can mimic a denim finish in minutes onto a new raw denim base. The company developed the original technology 20 years ago; anticipating the change the denim industry would take. The system is simple, the design programmed into the computer, the jeans placed on a mannequin. The simplest of details from whisker effects through to aggressive finishes are created without any water and purely through laser technology.

Martelli Lavorazioni Tessili (Italy), a leading denim dyer and finisher has launched a brand-new platform, D.ECO.R, dedicated to a low-environmental impact through technical and creative solutions. The company continues to promote eco-friendly solutions including ozone washings and laser processes that reduce water usage and chemicals significantly. The company's Ice Finishing, produced on an internally modified machine uses a process where ice is produced from recovered CO₂, resulting in a very similar finish to traditional washings.

With water conservation a priority, N-Denim from Candiani (Italy) is an eco-friendly dyeing process involving nitrogen that accelerates the penetration of indigo in the yarns. A saving of 33 percent of water consumption is achieved compared to traditional processes and avoids hydro sulfites, caustic soda and fixation agents resulting in fewer chemicals for a cleaner, eco-friendly dye process. Tavex (Spain) has launched ACQUASAVE, denim fabrics that reduce the water consumption to zero through the dyeing process.

WHAT'S TRENDING IN DENIM

FALL-WINTER 15/16

Authentic cotton denim

Authentic look comfort and superstretch denim for men and women

Super soft touch and lighter weights

Hybrid blends – alternative synthetic and cellulosic

Sustainable processes at all levels of the denim textile chain – saving water and energy

Color not so hot – denim gets back to its darker roots

Tone-on-tone prints replace traditional jacquards

Wash down looks

Lustrous coatings

Knitted denim moves closer to the authentic woven offering while woven denim mimics interlock structures for super soft finish and fit

Textured/broken weaves

Photo: Louisa Smith at Denim by PV



Defining Looks from Première



PATCH IT UP



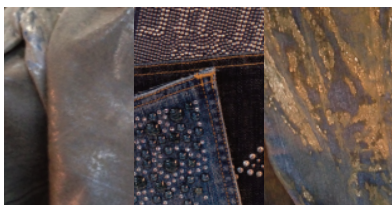
Inspired by the 'make do and mend' ethos, rips and tears achieved through distressed finishing are patched with mechanical or hand stitch effects exposed for added detail.

DOUBLE TAKE



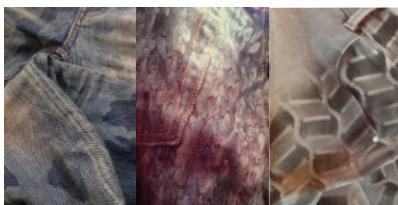
Super soft with comfort fit, today's knitted denim is deceptive, mimicking the structure and finishes of traditional wovens, inspiring weavers to produce denim so soft it appears knit.

GLAM TIMES



Lacquered and coated denims feature in gloss or metallics gleamed in all-over or irregular application, with old gold metallic prints enhancing already distressed denim bases.

SURFACE GAMES



Treatments range from simple broken weaves to innovative 3D finishes achieved through lasering or printing effects. Eco-friendly print effects offer softness with decorative appeal.



Eco-Friendly: Waterless finishing using lasering by Jeanologia.

Stretch

Comfort stretch and super stretch continue to be an indelible trend season after season, the use of spandex is essential in getting that fit, whether it is super skinning or just a comfort aspect. Hyosung creora offers a wide range of spandex for the denim market in delivering fit and shape, but they are also working earlier down the supply chain with the spinners in ensuring higher productivity with the inclusion of creora LUMINOUS to make high-quality core spun yarn. At the spinning stage defects within the spun yarn can be checked for and eliminated by using an UV light source, lowering the risk of quality problems and improving productivity.

Stretch denim isn't just confined to the womenswear sector; men's stretch denim is now growing. It is a growth market as men realize the benefits and comfort of stretch denim and no longer believe it to have a feminine connotation, which is clear from the denim mills' branding as a more masculine approach is taken.

ISKO (Turkey) continue in the development of their XMEN'S range, denim designed with invisible super-power flexible technology that also can work with their new finishings. A new sub concept specially conceived to satisfy the increasing trend for men's spray on skinny, big in the younger end of the market, offers flat fabrics with clean character and high elasticity levels.

Fitness Denim from Tavex (Spain) is purely for men, a comprehensive range of fabrics from 11 ¼ to 12 ounce available in a multitude of shades, appearances and finishes. Comfort and flexibility feature in this male designated collection with fabrics the principles of fitness, flexibility, agility, resistance, recovery, variety and intensity.

Cosmetic And New Generation Comfort

Function and performance are featured with performance coatings, antibacterial denim through to denim blended with FIR nylon yarns. Emanate the FIR yarn normally associated with activewear and intimate apparel applications has launched its

yarn technology into denim, resulting in enhanced skin smoothing benefits and a sense of wellbeing.

Tavex is one of the first denim mills to produce FIR denim commercially through their Denim Therapy brand, presenting Svelt for the season. Svelt is an exclusive fabric with cosmetic properties that improves the look of orange-peel skin, toning and softening the skin, perfect for the continuing trend for super skinny jeans.

Nilit has also incorporated their Nylon 6,6 product Breeze cooling technology into denim, resulting in a proven cooling effect, and excellent dyeability for cool comfort for all seasons. Plans for the company's Heat yarn are also in development in bringing a thermal aspect to denim.

As for the future of denim, it looks to continue on a sustainable path, improving an eco footprint of the past through heightened technology combined with creativity. These developments will enable future generations to understand just what it is about denim that has had us all hooked, generation after generation. ●

TRENDS | RECYCLING HOLLYWOOD-STYLE

The Latest Efforts by Celebrities Places Recycling Plastic in the Limelight. **Taryn Hipwell**

NEWLIFE
will.i.am
#Ekocycle

REPREVE
Lauren Conrad
#TurnitGreen

BIONIC YARN
Pharrell Williams
#rawfortheocean

Eco A-Listers

The first time I sourced recycled plastic bottle fabric was 17 years ago at the Fashion Center Information Kiosk in New York City. Times have changed, with recycling plastic made popular by mass media in the last five years. But the trend these days is celebrities promoting positive replacement for petroleum-based synthetics. Here's a quick rundown of celebs who, for different reasons, are drawn to the recycling cause.

1.

will.i.am of the Black Eyed Peas has joined efforts with Beatriz Perez, VP, chief sustainability officer, The Coca-Cola Company, to launch EKOCYCLE. This brand initiative is designed to help consumers understand that plastic and metal waste can be turned into wearable, usable products. Brand partnerships include adidas and Studio EKOCYCLE Beats by Dr. Dre Headphones. Most recently the partners launched the 3-D Printer EKOCYCLE Cube, which gives consumers an opportunity to make custom-designed art and accessories from plastic bottles at home.



www.ekocycle.com

2.



For the past five years Suzy Amis Cameron's organization Red Carpet Green Dress (RCGD) has challenged designers to create a red carpet worthy dress to be worn by a celebrity at the Oscars. The point is that when asked to share with the media what they are wearing, the celebrities will enthusiastically respond, "Recycled plastic bottle fabric!" instead of giving the traditional response of the designer who made the dress. This year RCGD formed a partnership with EKOCYCLE to create the first ever tuxedo made using NEWLIFE recycled polyester filament yarn. "Each year we seek to address a different piece of the sustainability fashion puzzle," said Samata Angel, RCGD campaign director. "The re-utilization of plastic waste was an interesting element." She adds, "With any material, through studying it and trial and error you can ultimately understand its properties better."

3.

"As a designer, making greener choices has to be easy, inspiring and fun," says Lauren Conrad, who has designed items in the BlueAvocado XO(eco) collection featuring Repreve recycled polyester yarn from Unifi. "If the XO(eco) collection keeps millions of disposable bags and plastic bottles from landfills and oceans, then we have successfully designed a timeless fashion statement," states Conrad.



4.



Pharrell is a musician, designer and creative director of Bionic Yarn. He recently co-designed the G-Star RAW "RAW for the Oceans" collection. The "Denim from Recycled Ocean Plastic" line launched earlier this month. Tim Coombs, co-founder of Bionic, explains in a social media video that you can take "low-grade plastic and make it into high performance yarn." He adds that the manufacturing process "minimizes the use of natural resources while recycling plastic waste from the ocean." According to the company, the goal of Bionic Yarn is to match or exceed pre-existing performance standards of traditional fabric.

Products include: DPX, recycled plastic materials intertwined with hemp, cotton or wool; and HLX, a blend consisting of recycled ocean plastics, high tenacity or stretch filament core, and natural or synthetic fiber helix. ●



THE SUSTAINABILITY MACHINE

DRIVING INDUSTRY CHANGE THROUGH COMPLIANCE, CHEMISTRY & COMMUNITY

“Recent developments are about ways to harmonize sustainability in the supply chain.”

Martin Cieslik, Hohenstein Textile Testing Institute

Creating a transparent textile supply chain is a lofty goal. The complexity of producing modern day apparel is mindboggling, with factories located in every corner of the world, workers speaking a myriad of languages several time zones apart and with geopolitical upheaval, trade regulations, and the whims of fashion often keeping the whole kit and caboodle in a constant state of flux. Consider that one line of men’s dress shirts, for just one season, can use upwards of 80 different factories spread across 20 countries. No wonder obstacles abound. Add to this fragmented system issues concerning social compliance, fair trade policy, health/safety requirements, and the task of attaining comprehensive transparency in our supply chain is daunting.

And yet the textile community is focused on achieving sustainability from fiber to finished product—and doing so in the near future. The year 2020 is often cited as the “deadline” or “cut off” for meeting a new level of sustainable production. Commendable? Absolutely. Challenging? Without a doubt!

In a recent Textile Exchange report, executive director LaRhea Pepper, states, “Transparency requirements highlight the need to understand supply chains starting with raw materials and fiber production.” She lists many critical factors being addressed by the textile industry and notes significant strides accomplished. However, Pepper also makes this essential point: “There is no

turning back. Business models are changing, pushing the textile supply chain in a new direction.”

Indeed, after years of a somewhat scattershot approach to sustainability, during which businesses and organizations launched a variety of independent strategies and studies, the industry is at a turning point. Now, a more unified approach to environmental and social responsibility is taking shape. Increasingly efforts include partnerships, collaboration and defining a common eco language.

“Recent developments are about ways to harmonize sustainability in the supply chain,” says Martin Cieslik, manager business development, Hohenstein Textile Testing Institute.

He and many other executives are driving change by creating community within a cleaner, greener textile industry. This is particularly evident in innovative eco-friendly chemistries and chemical management tools that go beyond conventional means, in addition to the creation of universal standards to support company claims of sustainable materials and production methods. In both these cases, developments forge a deeper understanding of the global supply chain and aim to bring sustainable solutions to scale.

Much progress has been made just in the last five years. Who would have envisioned, for instance, a whole new category of fluorocarbon-free chemistry or a Responsible Down Standard, for that matter? And yet the eco to-do list remains lengthy. The year 2020 looms in an all-too-near future. ●

“Social compliance is a two-way street. You must understand practical challenges.”

Avedis Seferian, president & CEO, WRAP

STANDARDS AS CHANGE AGENTS

Expectations of community behavior are helping to unite (sustainability) efforts and drive change, according to Dr. Sam Moore, managing director of Hohenstein Institute of America. “We need to re-create a sense of community, but this is a whole lot more difficult now compared to when 850 factories were located within the state of North Carolina,” Moore said.

So how to unite? “Through certification and verification,” stated Moore.

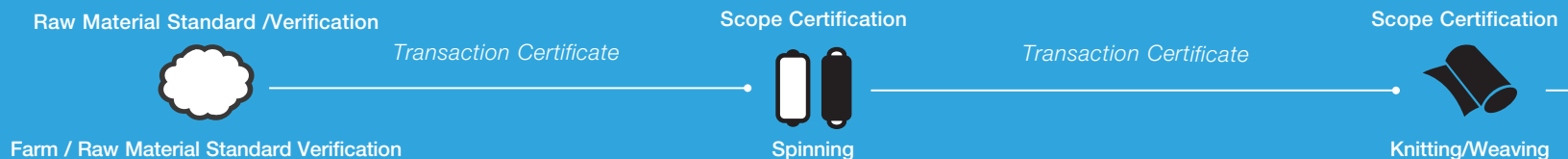
Moore was a panelist on a recent TexWorld USA seminar that offered an inside scoop on made-responsibly garment production. Joining Moore were other industry execs dedicated to creating community via universal textile standards, including Anne Gillespie, director of Integrity, Textile Exchange; Sandra

Marquardt, Global Organic Textile Standard (GOTS) representative in North America; and Avedis Seferian, president & CEO, WRAP (Worldwide Responsible Accredited Production).

“Given the scenario of fragmented supply chain and processes in different continents, different languages, and different laws, how do you partner to have manufacturing done ethically?” Seferian asked the audience. “We engage with the facilities to build relationships, and believe two key solutions are education and collaboration.”

Seferian suggested that executives should look for a factory that has a management systems approach. “Go in with your eyes open, know as much as you can about a factory. Does the factory have systems in place to anticipate problems, for instance, and see if the commitment comes from the top.”

Certificates Along The Supply Chain: Each buyer in the supply chain only needs to check SC and TCs of the supplier(s)





He stated that turnover is a big issue in factories. “At a basic cut and sew factory the global average is 30 percent turnover,” explained Seferian. “What that means is a whole new work force every three years.” In Bangladesh, it is even higher, with an eight percent monthly turnover. “That’s a whole new workforce every year in a Bangladesh factory,” said Seferian, who stressed that audits are not enough. “Social compliance is a two-way street. You must understand practical challenges. There is a disconnect between sourcing folks and compliance people. You need to build partnerships.”

Gillespie, who has been at the forefront of textile sustainability for the past two decades, agreed that forging alignment is key to future progress. She identified a need to have a common language and common expectations to get parties in sync.

“I am a strong believer in standards as a means of driving change and the ultimate tool for bringing the industry together and setting common expectations,” stated Gillespie. “Also, the more alignment between parties, the more we keep to one clear message, and the more we can keep costs low.”

To emphasize how the industry has evolved through partnerships, Gillespie added, “At Textile Exchange we’ve gone from focusing on growing organic cotton to the big issue of global collaboration and shared tools.”

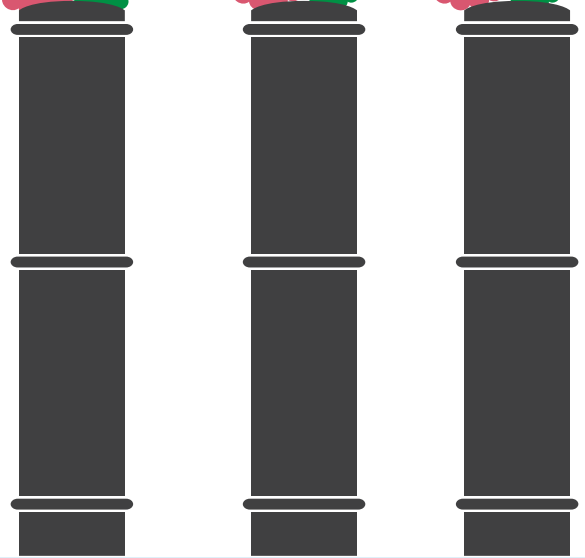
The Certification Connection

The International Oeko-Tex Association, founded more than two decades ago by independent textile research institutes, including the Hohenstein Institute, is also going forward with innovation that is more universal in scope. For example, the organization has just introduced MySTeP, a robust, secure database application that houses textile manufacturers’ information related to its sustainable operations. (MySTeP complements STeP by Oeko-Tex certification, which launched last year and is a comprehensive certification program for brands, retailers, and manufacturers from all sectors of the textile supply chain who want to validate their sustainable production in a transparent, credible, and clear manner that is consistent country to country.)

The brand new MySTeP is a tool designed to help textile product companies and their suppliers collaborate more effectively. The program makes it easier for executives to manage their supply chain and work with partners worldwide.

“MySTeP is a management tool, not a sourcing tool,” explains Martin Cieslik, manager business development, Hohenstein Textile Testing Institute. “It allows executives to go deep into their supply

The year 2020 is often cited as the “deadline” or “cut off” for meeting a new level of sustainable production. Commendable? Absolutely. Challenging? Without a doubt!



Scope Certification



Dyeing / Finishing

Transaction Certificate

Scope Certification



Sewing

Transaction Certificate

Certified / labeled product



Brand / Retailer

Source: Global Organic Textile Standard (GOTS)



STEPS TO IMPLEMENT BEST ENVIRONMENTAL PRACTICES OF FLUORINATED DWR PRODUCT:

1. Raise environmental awareness with all employees
2. Follow advice of the Safety Data Sheet (SDS) and Technical Data Sheet (TDS) for the product
3. Use the product only if necessary to obtain effects desired
4. Use only what you need: work with the chemical supplier to set the amount
5. Mix only what will be used in the scheduled run
6. Schedule runs to avoid bath changes; batch changes waste liquors
7. Reuse/recycle residual liquors/surplus of liquors if this can be done without jeopardizing quality; consult your supplier
8. Maintain all equipment in excellent working condition and conduct periodic operations audits
9. Optimize drying and curing conditions in the stenter frame
10. Dispose of chemicals appropriately
11. Consider additional opportunities to minimize waste and emissions

Source: Global Industry of FluoroTechnology

chains without having to do their own research.” Additionally, managers can look at their certified facilities as well as compare and contrast within the industry.

“These programs give the ability for textile suppliers to achieve a greater level transparency, and work in harmony within the supply chain,” said Cieslik.

The Global Organic Textile Standard (GOTS) International Working Group is also advancing community and has recently released Version 4.0 of the worldwide recognized standard for the processing of textiles made from at least 70 percent (label grade “made with organic”), respective 95 percent (label grade “organic”) certified organic natural fibers.

For companies, GOTS certification means an increased competitive advantage in addition to effective supply chain management. It helps them develop their business case for sustainability. First of all, they have a “pull effect” on the worldwide supply chain, and secondly, they have a “push effect” toward end consumers. “They are making themselves into real agents of change regarding sustainability in the textile industry, and securing their company’s long-term success at the same time,” Claudia Kersten, GOTS marketing director, stated in the company’s 2013 Annual Report.

After the number of facilities becoming certified to GOTS in 62 countries worldwide surpassed the 3,000 mark in 2012, it remained stable in 2013 with an increase to a total of 3,085 certified facilities. A decrease in Asia, which was partially caused by the trend of concentrating the placement of GOTS orders with certain already-certified facilities, was overcompensated by a huge increase in Europe. A total of 109 new facilities were registered in Germany (+ 66 percent), Austria (+ 14 percent) and Switzerland (+ 27 percent). An increase of 73 percent with 33 new facilities was registered in Portugal, 13 percent increase in Italy, and 12 percent in France.

Outside Influences Jump-Start Change

Beyond internal efforts, the panelists agreed that outside influences are responsible for major changes. “Manufacturers are in a decision-making role, and brands are the biggest drivers,” stated Marquardt, who gave as an example Whole Foods instituting new standards in the food business. “When a retailer speaks, clients jump,” Marquardt added.

The role of the activist has also emerged lately. “They are very powerful and push change,” said Gillespie, who mentions Greenpeace, PETA and 4-PAWS as groups that sparked conflict which resulted in new standards. For example, when PETA released a provocative video showing sheep meusing, “I started getting calls and all the big players (in the wool industry) started jumping,” said Gillespie.

Last, but far from least is the role of the Internet. “The modern communication era is doing the driving,” says Seferian of WRAP. “Essentially because it is risky not to do something as this will be broadcast around the world via the web.” Compared to even the recent past, Seferian says that these days, “the world knows about events as they are happening. There is no place to hide, and there is no time to spin. You have to be proactive in managing your supply chain.”

He stressed that the problems of social responsibility and sustainable manufacturing are not new. “But the ability to talk about them and the speed in which the news travels globally – that is new,” said Seferian.

On this point he and the other panelists believe that’s reason for companies to view sustainability as an investment. “You have to think of efficiencies gained, the reduction of risk, and that if you don’t do something about traceability and transparency within your supply chain, it will come back to hurt you,” Seferian stated.

Indeed, that is the true cost of compliance. These days and in the future, without adhering to standard and obtaining certifications, companies won’t get business. ●

HOW RESEARCH IS DRIVING CHANGE: CHEMISTRY & COMPLEXITY

Textile companies have been on a tear recently developing environmentally sound products based on new, green chemistries. This has been particularly the case within the category of Durable Water Repellency (DWR), leading to the introduction of a new lexicon of sustainability speak including PFOA-free, PFC-free and Fluorine-free. Greenpeace is often mentioned as being responsible for fueling the speed and determination to move to eco-friendly chemistry, and for sure the activist group has played a major role in seeing a switch from long-chain C8 chemistry to newer C6 short-chain chemistry enter the marketplace. But of course there are other factors influencing business internationally. One that might be surprising is how Norway is driving change.

Earlier this year, Norway became the first European country to introduce legislation that bans

the sale of products and textiles containing PFOA. According to Norway’s Climate and Environment Ministry, the determination of limit values for “individual parts of a solid product” will be based on the definition of the term “article” as stated in article 3 of the REACH regulation.

“This is an important measure to eliminate the use and release of a substance we know has serious health and environmental harmful effects,” said Marit Kjeldby, deputy director environment directorate, upon introducing the ban, which took effect June 1.

Norway’s ban on the manufacture, import, export and selling of consumer products and textiles containing PFOA is now in effect. Although after consultation with industry, it has been agreed that a transitional period allowing the import and sale of products manufactured before June will last until January 2018.

The point is that Norway is the first, but

 TENCEL®



Lenzing AG, A-4860 Lenzing, Austria

The fiber brand for natural performance

TENCEL® offers optimum moisture management and the very best climate and skin properties for natural peak performances in sportswear. This fiber is made from wood and is thus 100 % from Nature.

Find out more at: www.lenzing.com/tencel-active

www.lenzing.com/tencel


LEADING FIBER INNOVATION

FEATURE

certainly not the last, to adopt sustainability measures and the textile community is well aware that to succeed going forward, both for the good of the planet, and the good of the bottom line, eco-friendly products are a must.

Gore Fabrics Division sustainability leader Bernhard Kiehl added, "Gore's strong focus over the years on Life Cycle Assessment has shown the single most effective means of reducing the environmental impact of a product is to maximize its lifetime. Durable performance is indispensable if functional jackets and footwear are expected to have a long lifetime. For this reason it was of major importance to us that we were able to eliminate PFOA from our raw materials with-

out compromising on the performance people have come to expect from our products."

Developing green chemistry that does not sacrifice performance has been extremely challenging. There is some controversy within the industry that oil repellency has been compromised with short chain chemistry. However, for many end use applications, water repellency and a high standard of environmentally responsible manufacturing is what matters most.

Here is a rundown of some of the latest efforts from textile companies. (Please note: This category is changing rapidly, and this list may not include all

textile suppliers currently offering green chemistry. Checking with your supply chain partners is suggested.)

Bolger & O'Hearn: Altopel F3 is the company's fluorine free water repellent technology. The company has recently become a bluesign system partner.

Burlington: Durapel Eco is an environmentally engineered finish that provides water repellency free of fluorocarbon compounds. Durapel Eco replicates the "Lotus Effect" producing an inherent coating that creates repellency in the

same way that Lotus leaves repel dirt and rain droplets. The Durapel Eco fabrics are bluesign certified.

Cotton Incorporated: In partnership with Archroma, has produced a fluorine-free version of its durable water repellent Storm Cotton, which it says can significantly accelerate the timeline for phasing out fluorine-based textile treatments on cotton fabrics. Storm Cotton uses Arkophob wax-based encapsulation technology from Archroma. According to the companies, the new eco option can dry up to 40 percent faster than untreated cotton.

DuPont: Working with its partner Huntsman, DuPont has moved its entire portfolio, including Teflon Shield and Clean, to environmentally sound short-chain chemistry. DuPont has worked with key industry groups including the Sustainable Apparel Coalition, the Chemicals Group, the Outdoor Industry Association and the European Outdoor Group, to drive the industry toward more sustainable apparel products.

eVent: The development of a patented C6-based oleophobic treatment of the ePTFE membrane used in eVent waterproof fabrics will be in production in 2015. Additionally, the eVent membrane received Oeko-Tex 100 certification last year, and it is sourced using PFOA-free resins. Customers can choose C6-based DWR finishing treatments from the company's supply chain partners.

Schoeller: Launched in 2012, ecorepel is a high-performance DWR product without any fluorocarbons. This high-tech, odorless finish transfers natural water repellence to textile surfaces and doesn't affect the hand or the breathability of the fabric to which it is applied and is completely fluorocarbon free.

Sympatex: The Sympatex membrane is 100 percent recyclable, bluesign certified, is PTFE-free and PFC-free and is certified to the Oeko-Tex-Standard 100. The technologies and procedures are based on the principles of ecological responsibility and sustainability with a special focus on the optimal carbon footprint.

W.L. Gore: At the end of last year, the company completed a project to eliminate perfluorooctanoic acid (PFOA) from all raw materials used in the manufacture of its weatherproof functional fabrics. This move affects all membranes and DWR treatments for the whole range of fabrics used in rugged outdoor apparel, lifestyle garments, footwear, casual wear and work wear. Since autumn/winter 2013/14 over 50 per cent of the total volume of consumer laminates produced by Gore has also been bluesign certified. ●

DEFINING BUZZWORDS

PFOA

A synthetic acid, which, in the textile industry, is primarily a by-product of other chemicals used in the manufacture of water and oil-resistant products. It is an unintended by-product of some "long-chain" (C8) fluorine-based water and stain repellent fabric treatments.

PFC

A long chain perfluorinated compound that has been used to confer hydrophobic, stain-resisting properties to fabrics.

GLOBAL DYNAMICS = TEXTILE SUPPLY CHAIN IMPACTS

Global Trends	Textile Supply Chain Trends
Climate change	Increased public and private activism
Increase in China's middle class	Move away from China sourcing due to rising labor costs
Water scarcity	Develop systems to reduced water consumption in fiber production and processing
Water Quality Chemical regulations	Inequality reducing between countries; Product demand grows outside of major economies
Convergence of ideas across countries	Prohibition of child labor/ubiquity of denim
Social networking	Transparency in the supply chain
Exposure of animal welfare issues	Increased activism directed at brands

Source: Textile Exchange

INSIGHT

ON SUSTAINABILITY

More than ever, the textile industry is driving change through innovation and commitment to sustainability. All along the supply chain, from green chemistry to eco-based technology to consumer awareness programs, the latest textile developments are advancing environmentally responsible processes and products as suppliers continue to invest in sustainable solutions. These on-going efforts are succeeding in several new and exciting ways. A greater degree of transparency is being achieved as companies comply with global regulations. Water conservation is a priority and today's products now require less water both in manufacturing and laundering. The environmental benefits of these water-saving innovations are big, especially when you consider the typical small load of laundry uses as much as 40 gallons of water per wash cycle.

Further, today's textiles are not only high quality and high-performance, but good for the planet. In other words, new environmentally sound fabrics don't compromise on functionality and durability. And this is especially attractive to brands looking for ways to connect with eco-conscious consumers that want performance apparel fit for their active lifestyle. The five firms profiled on the following pages are taking environmental concerns to a higher standard by helping to usher in a new generation of sustainable ingredients and finished goods and increase eco responsibility to the entire worldwide marketplace.

Schoeller® ecorepel® technology	40
Unifi®	42
Cotton Incorporated	44
DuPont™ Teflon® Fabric Protector	46
Noble Biomaterials	48

To better understand today's sustainability lexicon, we've compiled a handy, mini-glossary to help keep you engaged in the current eco conversation.

WHAT DEFINES ECO TODAY

Certified organic material, selected natural and recycled fibers, man-made biodegradable and optimized synthetic fibers.

Fabrics made according to social and transparent standard such as Fair Trade, labor and reporting standards.

Optimized dyeing and finishing processes, natural dyes, and environmental management systems.

AN ECO ALPHABET

SAC: Sustainable Apparel Coalition

SWG: Sustainability Working Group

CMF: Chemical Management Framework

HIGG Index: A tool for apparel that evaluates material types, products, facilities and

processes on a range of environmental and product design choices.

LCA: Life Cycle Analysis

ZDHC: Zero Discharge of Hazardous Chemicals

ecorepel®: Environmentally-Sound Durable Water Repellence

Schoeller® ecorepel® technology



WHO WE ARE

Schoeller Technologies offers smart and innovative textile technologies for various needs for any industry that requires textiles. It is a subsidiary company of Schoeller Texil AG established in 1868. Since 2000, Schoeller Technologies has been active globally licensing its innovative finishing and focused on the development of textile technologies that are made available to production partners in the form of patents and trademarks.

Schoeller's innovations make textiles smarter. Water repellence, UV ray protection, quick dry, warmth gathering from the sun, Schoeller Technologies products are universally applicable. Schoeller technologies have received numerous awards internationally and are featured in premium brands around the world. The focus of every development is on sustainable, environmentally conscious and responsible manufacturing. Yet, innovation is the driving force. Schoeller Technologies constantly works on innovative, future-oriented and beneficial projects within the R&D department. Even complex advances from the areas of information technology, electronics, bionics, chemistry and physics are made applicable for the entire textile industry.

Textile technologies from Schoeller are successfully applied to performance clothing, upholstery, equestrian blankets and any area in which highly functional textiles are needed. Schoeller Technologies grants licensees the usage right and provides support in technical matters, marketing and distribution.

TO LEARN MORE:

www.schoeller-tech.com

Scan this QR code to watch an ecorepel® video.



AS THE LINES BETWEEN SPORTS AND FASHION CONTINUE to blur, textile technologies that deliver performance properties are becoming common in lifestyle products. At the same time, mainstream awareness of the ecological aspect of functional fabrics is now more relevant as today's consumers are increasingly focused on achieving a higher degree of sustainability in their everyday lives.

As a result, Schoeller Technologies' durable water repellent textile technology, ecorepel®, is gaining attention. Launched in early 2012, ecorepel® is a high-performance DWR product without any fluorocarbons.

An ecological textile finish, ecorepel® biomimics the protective function found on the feathers of waterfowl. ecorepel® has a water and mud repelling function based in modified paraffins that are in honeycomb-like chains that wrap around the fibers. This reduces the surface tension of the textile so that water and mud simply run off the face of a garment. This high-tech odorless finish doesn't affect the hand or the breathability of the fabric to which it is applied and is completely fluorocarbon free. With ecorepel® any garment can have a similar function as it provides water and rain resistance as well as durability.

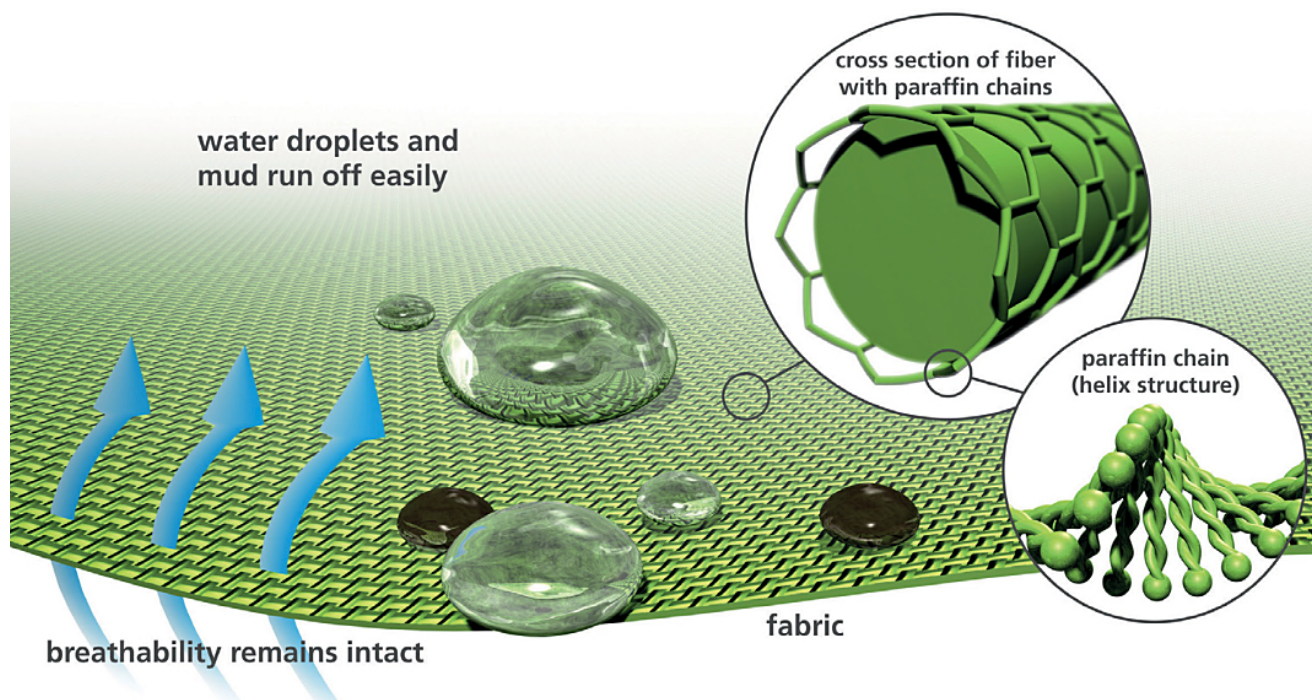
A Consistent Emphasis on Eco

A leader in textile innovation, Swiss-based Schoeller has always emphasized ecology and sustainability in its product developments. In fact, the world's most stringent ecological standards as defined by bluesign® began in Schoeller in 2001. The bluesign® standard is built on 5 pillars: consumer protection, wastewater, air emissions, occupational health & safety and resource productivity. Schoeller was involved to a major extent in the establishment of this standard and was the first textile manufacturer worldwide to obtain certification.

Consumers are increasingly aware of the impact on the environment of the products and businesses they use. As a result, they are looking for



Inspired by nature, ecorepel® renounces the use of fluorocarbons.



An odor-less, high-tech finish, ecorepel® technology transfers natural water repellence to textile surfaces.

products that offer transparency, have high-value and high-quality, and are environmentally considered.

The influential Greenpeace-Detox Campaign and the recently published study titled “Chemistry of any Weather” confirmed Schoeller’s on-going efforts and work towards the production of environmental-sound fabrics and ingredients. In 2013 recognized industry brands committed to a path of PFC-free textiles sparking demand for fluorocarbon-free DWR products in the marketplace. Already serving various customers with ecorepel® within the textile industry, Schoeller Technologies has broadened its reach from high-function sport- and outdoor brands to fashion and lifestyle brands using the ecological textile finish.

Sustainability and Functionality Together

While efforts have been made in the textile industry to provide alternative solutions to PFC finishes, representatives from companies in the active outdoor segment have raised concerns about the performance capability of these new chemistries. Specifically, there have been objections to the fact that PFC-free textile finishes lack oil repellency. Thus, the question many in the industry are now asking is, “Can function and sustainability co-exist?”

Hans Kohn, COO of Schoeller Technologies believes the answer is “yes,” with ecorepel® a viable alternative to PFC-containing finishes.

“It is true that in comparison to PFC-containing finishes, PFC-free alternatives don’t show any oil repellent properties. Nevertheless ecorepel® shows excellent results in terms of durability and wash resistance, that can in fact be compared to other finishing technologies containing PFC,” explains Kohn.

“We offer different performance levels to our customers and in the end the customer has to decide which one is most suitable,” states Kohn. “As DWRs in most cases are used in combination with laminates, membranes or coatings, the PFC-free performance for average users can be regarded as more than sufficient.”

Making the Switch to Eco

With the textile industry driving change through its commitment to environmental initiatives, opportunities are more available now than ever before for brands to implement green technologies. However, challenges do exist going forward. Kohn notes, for example, that long development times will make it difficult to change an established supply chain system.

Another concern with switching to eco-friendly DWR’s is the lack of awareness in some areas. Says Kohn, “Ecological awareness in production countries is not well established.”

He also mentions the fact that mills need time to change their production processes and will need to deal with technical issues. “Small brands do not often have the power to influence mills when it comes to matters of production processes,” Kohn adds.

Schoeller Technologies can help brands deal with these challenges. The company supports brand partners making the switch to ecological textiles, such as ecorepel®, with expert technical service as well as offering consultancy in the fabric development phase. In addition, Schoeller offers a quality control and approval processes for ecorepel® finished products to ensure performance.

Further, Schoeller provides strong marketing and sales support for brands looking to advance sustainability. ■

UNIFI Sustainability: An Integrated Approach

UNIFI.

THE MAKERS OF REPREEVE



WHO WE ARE

Unifi Manufacturing, Inc. is a leading producer of multi-filament polyester and nylon yarns and related raw materials. The company provides innovative, sustainable and global textile solutions for customers at every level of the supply chain.

With the growth of the REPREEVE® recycled brand of fibers, Unifi has become a global leader in offering transparent and certifiable textile products, while continually developing new capabilities of being a total sustainable solution.

Since the opening of the REPREEVE Recycling Center, Unifi has recycled over 2 billion plastic bottles in the making of REPREEVE chip and fiber. Demand for REPREEVE has led to an earlier than expected expansion in 2014, less than 4 years after opening, including additional state-of-the-art recycling technology and increased capacity to 70 million pounds annually.

Unifi is headquartered in Greensboro, NC

TO LEARN MORE

www.Unifi.com
www.Repreve.com



Turning Brands Green



HIGH PERFORMANCE PLANET

The North Face Denali fleece jacket offers amazingly lightweight climate protection. From recycled plastic bottles.



RIDE THE WAVE

Quiksilver is making men's boardshorts green with REPREEVE, for this over-the-top eco-conscious consumer. Out of the landfills, into the ocean.



KICK IN THE PANTS

Youth-oriented, action sports brand Volcom makes it eco with REPREEVE. The perfect pair to go with the V.Co-logical series of graphic tees, also made with REPREEVE.



Creating A Movement

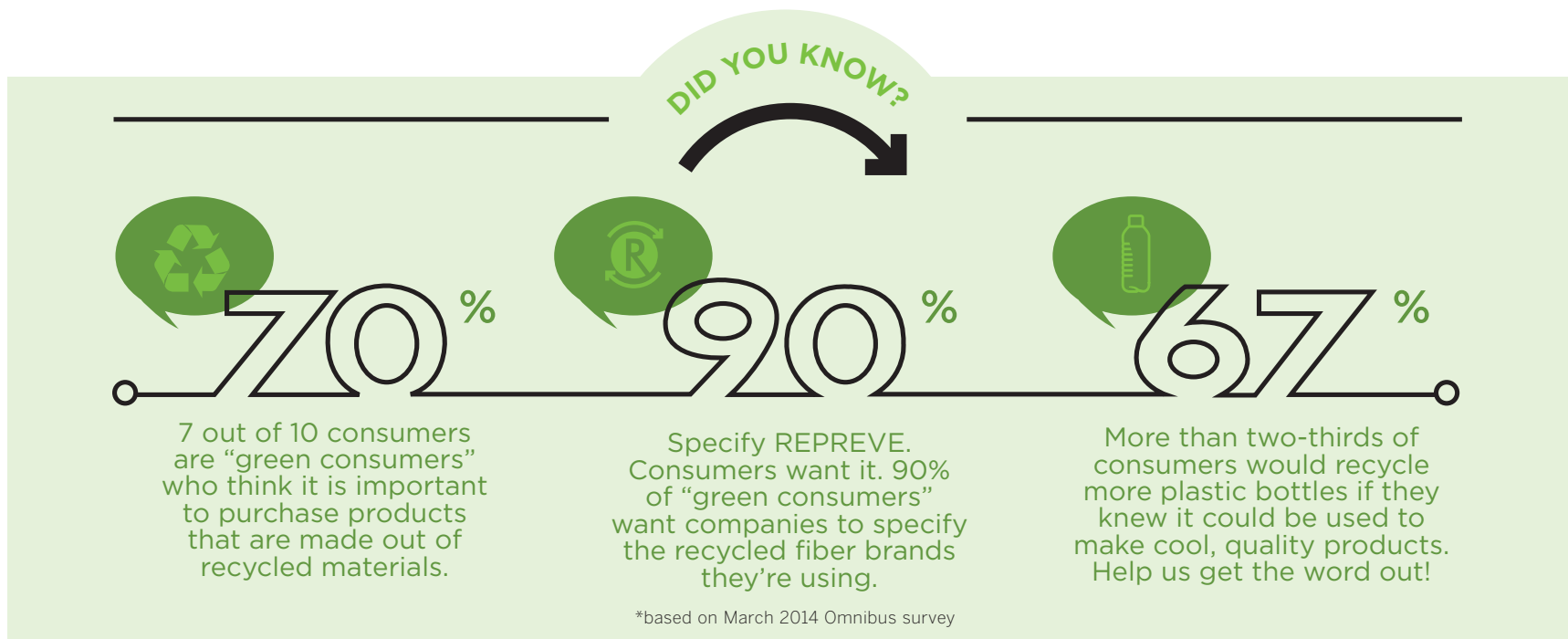
Through the #TurnItGreen initiative, REPREEVE's mission is simple – to create awareness about the cool stuff that can be made from recycled bottles, and the importance of recycling. We strive to create engaging consumer activations by using REPREEVE based products and the REPREEVE green color. Our latest activation is helping to turn the Detroit Lions and Ford Field green, encouraging fans to MAKE THE SMART THROW by recycling their plastic bottles all season long. REPREEVE is also working with Feld Entertainment, producers of Marvel Universe Live!, to let attendees of this live entertainment show know that we can all be Super Heroes for the planet...by recycling plastic bottles.



REPREEVE helped to turn the 2014 Winter X Games green. From beanies to banners – over 100,000 bottles were recycled.



This season, REPREEVE is helping to turn the Detroit Lions and Ford Field green. Encouraging fans to Make The Smart Throw by recycling plastic bottles.



Measure for Measure: Cotton & Water Scarcity

Cotton Incorporated



WHO WE ARE

Who we are: Cotton Incorporated is the research and marketing company for U.S. cotton growers and importers. Established in 1970 as a not-for-profit company, its mission is to increase the demand for and profitability of cotton. The company meets this straightforward mission by identifying efficiency and best practice opportunities along each link of the global cotton supply chain, and through global marketing efforts aimed at consumer and trade audiences.

As a company dedicated to providing research and intelligence to the global cotton industry, Cotton Incorporated has offices in strategic textile centers around the world: Hong Kong, Mexico City, New York, Osaka and Shanghai, with the World Headquarters based in Cary, North Carolina. The Cary facility is a state-of-the-art research center that performs or oversees the development of innovations in agricultural practices, fiber processing and analyses, textile chemistry, spinning, weaving, and fabric engineering; and provides in-depth crop, market and consumer marketing analyses to stakeholders. The company also creates and disseminates seasonal surface and color trend directions, and is aggressively researching commercial product uses for the entire cotton plant.

TO LEARN MORE:

Cotton Incorporated
6399 Weston Parkway
Cary, NC

(919) 678-2200

www.cottoninc.com

GLOBAL TEXTILE BUSINESSES ARE PROACTIVELY scrutinizing the impact of water within their supply chains. The examination is motivated by conscientious efforts to reduce the environmental footprint of operations; and to mitigate potential risks water scarcity could pose to the production of goods. In this way, water is environmental capital to be invested wisely for maximum benefit. For textile businesses, cotton can yield a strong environmental return because it is a drought-tolerant plant that produces a large volume and range of product ingredients with each annual cotton harvest.

Cotton has been erroneously portrayed as a water-intensive crop by some; an assertion that is not supported by scientific facts. Among important cotton facts to know are:

1. Globally, cotton accounts for roughly 3% of the world's agricultural water, while providing roughly half of the world's textile fiber;
2. Cotton is actually a drought-tolerant crop; a characteristic that allows it to be grown on every continent except Antarctica, and to thrive in regions where other crops would wither; and
3. In regions that cannot support traditional food crops, cotton is an essential cash crop that can be exchanged for food, healthcare and education.

All of these attributes also help reduce cotton's water risk. Due to the wide geographical distribution of cotton production, it is highly unlikely drought conditions will occur everywhere cotton is grown in the same year.

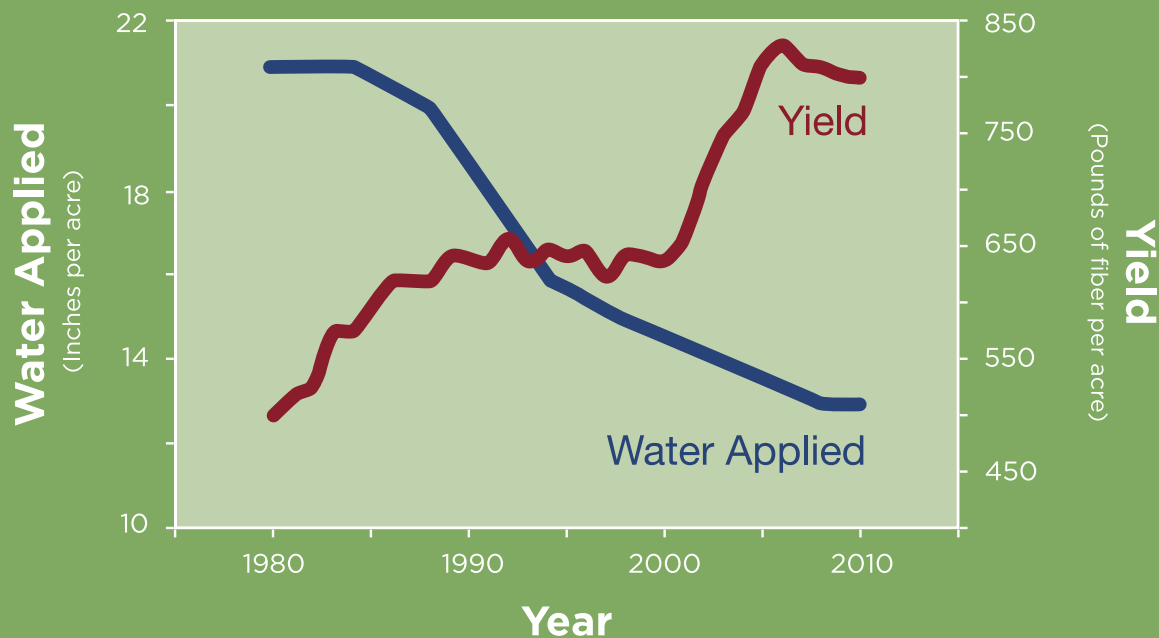
How Did Cotton's Water Use Become Misunderstood?

Some observers that witnessed cotton thriving in water-limited regions erroneously concluded that cotton was the cause of the water challenges. The tragic depletion of the Aral Sea is a famously false example of cotton's water use. In the 1960s, the Soviet government decided to divert large volumes of the Aral Sea's water to transform the surrounding desert into fertile farm land that would grow a range of crops, including cotton. Unfortunately no limits on water withdrawal were put in place and water use rapidly exceeded the recharge rate for the lake. The resulting disaster was one related to poor water policy, but not intrinsic to cotton's water needs.



For every pound of cotton fiber, a cotton harvest also provides 1.5 pounds of protein-rich cottonseed.

Cotton Irrigation Relative to Yield



Cotton provides a strong return on water investment due to the innate drought-tolerance of the cotton plant, increasingly efficient water management in cotton production, and the fact each harvest yields food and fiber.

U.S. cotton growers have reduced irrigated water applications while increase fiber production.

More Cotton With Less Water

Scientific discovery and advancement have enabled cotton crops to produce more fiber with less water. Over the past two decades, cotton growers in the United States have reduced irrigated water applications by 40%, while increasing the amount of fiber by 30%. To put cotton's water use into context, consider that over the course of one year, an acre of land used to grow cotton uses less water than if the same acre were used to grow a grass lawn. On average one acre of cotton can produce enough fiber to make: 301 jeans; or 348 bed sheets; or 966 bath towels, or 1,703 men's tee shirts.

Cotton plants use water to produce more than textile fiber. Each cotton harvest also provides protein-rich cottonseed that can be pressed into a trans-fat-free cooking oil that is deemed "heart healthy" by the American Heart Association. Cottonseed can also be used as a livestock feed supplement, contributing to the availability of beef and dairy products for a growing population.

Measuring the Metrics

The growing awareness of the world's limited water resources has resulted in numerous water measurement tools from sustainability organizations. These are designed to help businesses evaluate the environmental impacts of water used to make products. The broad categories of these tools include water scarcity models, water footprints and life cycle assessment techniques. Curiously, for agricultural-based products such as cotton fiber for apparel and home textiles, measurements developed by irrigation experts are typically not utilized; although irrigation is almost always listed as the largest water use component in the water footprint of agricultural crops.

Many of the existing water metrics attempt to make the complexities of

water behavior easier to understand, but these earnest efforts can oversimplify and inadvertently obscure essential facts. A case in point is the definition of water consumption: water that leaves a watershed and is not returned to the same watershed. This seemingly straight-forward definition has led many sustainability organizations to categorize all irrigation water as "water consumed." In reality, the fate of irrigation water is much more complex.

Some irrigation systems, both by design and at times by poor management, result in a portion of the irrigation water leaving the field as runoff to streams, or to recharge groundwater. The water that appears to be "consumed" either leaves the field through evaporation from the wet soil surface, or passes through the plant in the form of transpiration — similar to perspiration in human beings. The two processes are often referred to together as "evapotranspiration". Water that leaves the field as evapotranspiration rises up, condenses into clouds and ultimately returns as rainfall.

Does evapotranspiration account for a significant return of water to a watershed? That is a difficult question to answer in general; however, in a specific 2013 study researchers demonstrated that irrigation in California's Central Valley increased precipitation over the Colorado River Basin, corresponding to approximately a 30% increase in the stream flow of the Colorado River.

Today there are a range of indexes and scales to help textile businesses assess the impact of water scarcity on their supply chains. These are important and helpful tools, but their value and utility depend as much upon what they measure, as upon what they ignore. Cotton provides a strong return on water investment due to the innate drought-tolerance of the cotton plant, increasingly efficient water management in cotton production, and the fact each harvest yields food and fiber. ■

DuPont™ Teflon® Fabric Protector: A More Sustainable Alternative

DuPont™ Teflon® Fabric Protector



WHO WE ARE

DuPont Fluoropolymer Solutions is a leading producer of fluoropolymers and other fluoroproducts, with the industry's top brands. In 1938, DuPont scientist Dr. Roy J. Plunkett discovered the world's first fluoropolymer, which is one of the most valuable and versatile materials ever invented. In addition to their use in textiles, fluoropolymer-based products play a critical role in providing cable and internet service, generating clean and renewable energy, manufacturing more efficient and reliable cars, making mobile communications devices, and designing safe buildings, ships and aircraft.

Forty-five years ago, DuPont introduced stain protection for textiles, today known as Teflon® fabric protector. Fabrics with Teflon® fabric protector can require less washing, lower wash and dry temperatures, less energy and less wear and tear. Teflon® fabric protector keeps textiles looking newer longer, and that can mean less impact on the planet.

TO LEARN MORE

DuPont Chemicals & Fluoroproducts
Chestnut Run Plaza 702
974 Centre Road
Wilmington, DE 19805

Asia Pacific: +886 2 2514 4412
Europe/Middle East/Africa +33 1 41 97 45 59
North America: 302-996-7926
Latin America: +55 11 416 68 380

www.teflon.com/enhanced
www.capstone.dupont.com

The Journey Toward Safer Alternatives

Buckle up, people. You're in for quite a ride as chemical suppliers and regulators in the US and around the world continue the transition away from long-chain fluorinated durable water-repellent (DWR) finishes to safer, more environmentally friendly short-chain alternatives.

"The time to change is now," says Robert Buck, technical fellow at DuPont. "The door is closing on long-chain DWR products. Brands and fabric suppliers need to make the move to alternatives such as the new, approved short-chain technologies."

DuPont is dedicated to creating products that can be used safely by workers and consumers, and have reduced impact on the environment. DuPont has worked with key industry groups including The Sustainable Apparel Coalition (SAC), the Zero Discharge of Hazardous Chemicals (ZDHC) Group, the Outdoor Industry Association (OIA) and the European Outdoor Group (EOG), to propel the global industry toward more sustainable products and processes. Working with its partner Huntsman, DuPont has launched the Teflon® Shield and Clean product portfolio based on short-chain technology.

What Is Short-Chain Chemistry?

Traditionally, DWR finishes used to make apparel repel water and resist grease, soil and other stains have been made with long-chain fluorinated compounds, often referred to as "C8." However, some long-chain compounds have been found widely in the environment and questions have been raised about their impact.

In response, leading chemical suppliers of fluorinated technologies have committed to cease manufacture of long-chain products. Concurrently, global regulators are putting in place regulations to prevent future manufacture and use of long-chain products. The long-chain products are being replaced by short-chain alternatives that have an improved environmental and toxicological profile and still provide the high performance needed in consumer goods.

"Imagine a string of pearls with eight pearls on it," says Buck. "Now, we have one that has six, and we have figured out how to make that deliver the required performance. Just by taking those two 'pearls' away, it changes the toxicology and overall environmental profile of the products



Repels
water



Repels water
oil and stains



Releases
ground in stains



Absorbs
moisture

DuPont technology is durable and "advanced care for a better planet."



White Sierra Trabagon pants.

in a really positive way, and it is an advance in sustainability. This is a really important step for us.”

DuPont, in collaboration with the industry groups mentioned above and the FluoroCouncil, a global organization representing fluoro-technology companies, has devised a list of 12 questions for brands and retailers to ask their suppliers as the industry transitions from long-chain to short-chain chemistry. Among them: What is the chemical supplier name? The fluorinated DWR product trade name? The DWR product’s technology platform? Is it based on long- or short-chain technology? What are the short-chain alternatives with similar performance? (For the complete list, go to fluorocouncil.com)

DuPont™ Teflon® Fabric Protector is the Solution

The DuPont™ Teflon® fabric protector Shield and Clean portfolio is based on short-chain chemistry that cannot break down to PFOA in

the environment and that offers similar product performance to the long-chain predecessors.

DuPont™ Teflon® fabric protector offers compelling environmental benefits to the consumer. It forms an invisible molecular shield around fibers that keeps apparel, outerwear, bedding and upholstery resistant to rain, stains and blemishes, without impacting the look, feel, color or breathability of the fabric. It repels liquids, dust and dirt, which reduces the amount of washings needed. Ground-in stains can be removed with lower water temperatures, using less detergent and reduced drying times. As a result, the fabric looks newer longer while helping to lower the impact on the environment.

DuPont Customers Have Made the Switch

Two DuPont customers, White Sierra and 5.11 Tactical, have led the industry and now incorporate DuPont™ Teflon® Shield and Clean products into their apparel offerings.

“White Sierra is always looking for opportunities to build brand awareness,” says Michael Kunz, Vice President of Operations at White Sierra. “In partnership with DuPont we added this more sustainable finish technology to two of our top-selling styles — our Trabagon rain jackets and the men’s Trail convertible pant. Switching from long-chain to short has not compromised the performance of our garments. It’s the greener alternative.”

5.11 Tactical, which manufactures apparel for law enforcement, firefighters and military professionals as well as outdoor enthusiasts, averages 3.5 million yards of fabric treated with Teflon® fabric protector per year, and 90 percent of its woven tops and bottoms have a Teflon® finish. “We’re big supporters of our suppliers taking action to be more environmentally friendly and run a more sustainable supply chain,” says David Hagler, Vice President of Apparel at 5.11 Tactical.



1.



2.

Innovation and Sustainability are the Future at DuPont

DuPont is a leading advocate in driving the industry toward sustainable products and processes. DuPont is committed to sustainable growth through innovation that reduces the impact of DuPont products along the value chains where they are used. It is a member of the Sustainable Apparel Coalition and DuPont is committed to the system change the SAC is working to create in the global apparel, home textiles and footwear industry.

Among the exciting innovations in the pipeline: a new water repellent technology that is manufactured with renewably sourced, non-fluorinated raw materials and is highly durable. As we said, Buckle up! ■

1. 5.11 Tactical Stryke pants. 2. White Sierra Youth Trabagon jacket.

X-STATIC and XT2: Sustainable Solutions to Odor Control

Noble Biomaterials



WHO WE ARE

Noble Biomaterials, Inc. is a global leader in bacterial management solutions. The company develops, manufactures, and markets advanced antimicrobial technologies designed to eliminate odor and reduce infections. It has more than 200 global licensees for products in the medical, defense, industrial and consumer markets. The company's headquarters and manufacturing facilities are located in Scranton, PA, with offices in Europe, Asia and South America.

TO LEARN MORE:

Noble Biomaterials, Inc.
300 Palm Street
Scranton, PA 18505 USA

Toll Free: +1 (877) 978-2842, (877-X-STATIC)
Tel: + 1 (570) 955-1800
Fax: + 1 (570) 955-1801

E-mail: info@x-static.com
www.noblebiomaterials.com
www.x-staticperformance.com

SINCE 2003, NASA ASTRONAUTS WORKING ON THE International Space Station have been able to wear the same shirts and underwear for as long as a month at a time without worrying about body odor, thanks to a silver-based antimicrobial technology called X-STATIC in their clothes and underwear.

Made by Noble Biomaterials, X-STATIC provides odor-control and antimicrobial properties that naturally inhibit the growth of

the bacteria that cause body odors. X-STATIC's bacteria and odor-mitigation properties have been especially useful in outer space, where water is scarce, laundering a luxury and astronauts need to function together comfortably in a close, cramped environment.

Throughout the entire textile supply chain, there is an increased push for sustainable products and manufacturing practices, fueled in part by consumer demand.

Here on planet earth, X-STATIC's same anti-odor, antimicrobial properties are proving to be beneficial to the greater global environment. Added to performance wear, for example, X-STATIC and its sister product, XT2, help reduce the need to launder athletic and performance wear, and this is no small issue. With water scarcity

a growing problem in many parts of the world, and the typical small load of laundry using as much as 40 gallons of water per wash cycle, the potential sustainability benefits are significant.

Water scarcity is just one reason why sustainability is becoming a key driver in the textile industry. Throughout the entire textile supply chain, there is an increased push for sustainable products and manufacturing practices, fueled in part by consumer demand. In response, the entire textile supply chain, from brands to manufacturers to retailers, has begun searching for new, environmentally friendly processes and materials.

Noble Biomaterials is responding in a number of ways. For example, said Jeff Keane, CEO, the antimicrobial and odor-control properties of X-STATIC and XT2 are starting to reshape consumer behavior by encouraging less laundering, which reduces the use of fresh water.

This is because odor is the primary reason people with active lifestyles launder sportswear. A few years ago, Keane's company surveyed roughly 35,000 people to determine the leading reason why people wash their active wear. "We thought it might be soiling," he said, "or hand and feel, but it's actually odor. You go for a workout



From lab coats to performance wear, safe, silver-based technologies from Noble Biomaterials reduce odor and microbial growth.

or to your yoga class, or whatever it is,” he explains, “then take off that shirt and if it smells, you wash it. But if it doesn’t smell bad, you will wear it again before washing.”

Water Savings Without Sacrificing Odor Control Performance

With XT2, which incorporates silver into polyester or nylon during the fiber extrusion process, “we are finding that consumers will reuse a garment 3.5 times before washing,” said Keane.

This not only saves water. Washing will degrade fabric fibers, so the addition of XT2 can extend the usable life of a garment, reducing textile waste in landfills.

XT2, which is fully dyeable, is used extensively in a wide variety of performance wear, from running apparel, to hiking clothes, to yoga wear. Since smell is not as much of an issue, sportswear can often be worn throughout the day after a workout.

This, said Keane, is important because surveys have found that after that walk, that run, or that yoga class, consumers want to be able to wear the same item to have coffee with a friend, or to pick up the kids, or meet friends for a drink at the end of the day.

The addition of XT2 to performance wear also prevents a problem called perma-odor, which refers to that lingering stink in athletic wear

that can’t be washed out. Since you can’t wash out the smell, these garments are thrown away before the actual threads have worn out.

Sustainable Steps Going Forward

The company is taking other steps that support the industry’s drive for increased sustainable practices. Used in medical garments such as scrubs and lab coats, X-STATIC provides a form of antimicrobial protection against viral and bacterial cross contamination that does not involve harsh chemistries.

In addition, 85 percent of the silver used in X-STATIC and XT2 is a byproduct from the mining of other ores, such as lead. The company is also using recycled silver, and has plans to use 100 percent recycled silver by 2016. The company is also moving toward a goal of using 100 percent recycled polyester and nylon. Meanwhile the company has been designated as a bluesign partner, and XT2 will soon be designated as certified bluesign product.

But whether medical or performance wear, Noble Biomaterials is committed to delivering high performance in a sustainable way. “We certify every item and we guarantee that these technologies will work in the finished product for their intended use,” states Keane. This gives the company’s brand partners increased confidence in the greater marketplace. ■

Finding the Right Fit



offered by the same brand. To help consumers navigate this, Wang is on a mission to create standards through the supply chain and bring analytics into the equation. “Alvanon is more than a mannequin maker. We are showing there is a lot of science in fashion as well,” the exec said.

Balancing Brands

When Dr. Kenneth Wang (Janice’s father) started Alvanon in 2001, he did so under the premise that anatomies of mannequins on the market were incorrect. Some forms were based on measurements compiled from as far back as World War II, when the hourglass figure was prevalent. (Today the hourglass shape represents less than 10 percent

technical skills, others are sending the wrong message, according to Wang. When it comes time for student collections, some “professors tell their students not to do it themselves, but to send it out to be sewn,” she said. To right that wrong, the Hong Kong-based exec works training both students – and professors – at schools including Parsons The New School for Design and Fashion Institute of Technology.

With Wang’s emphasis on learning, Alvanon launched a fashion industry support and continuing education program called the Fashion Fit Movement in May 2014 where the firm donates fit tools and consultancy services to designers, associations and businesses rebuilding their local production efforts. Through the Council of Fashion Designers of America’s Fashion Manufacturing Initiative, Alvanon donated mannequins (which can run from hundreds to thousands of dollars per form) and blocks to upscale pattern service Werkstatt. “Pattern making is very experiential. You can only learn it by doing,” said Wang.

So with the donated forms, which Werkstatt founder Tina Schenk finds to be “very accurate and life-like in proportion and posture,” the exec provides a service to clients including Alexander Wang, Coach, Calvin Klein Collection, and hopes to teach apprentices in the future. Trained in men’s custom tailoring in East Germany, the exec would like to work in conjunction with schools to “provide a more comprehensive education to students wanting to gain technical skills,” Schenk said. Wang is working with execs and associations in London and Hong Kong, where Alvanon has offices, to help

“People say it is very difficult to implement standards and procedures in what is seen as an artistic industry, but that is not particularly true.”

Werkstatt owner Tina Schenk received a range of high-end dress forms from Alvanon. “Janice has been all around amazing and so supportive in every way,” commented Schenk.



When a prestigious Italian designer was having problems selling garments in China and Japan, the executives put a call into Alvanon Inc., a company known for its expertise in apparel sizing and fit. While the designs were on the money, the fit was all wrong. So much time had been put into the creative aspect of the garments that something so obvious had been overlooked – the fit model. The brand had been using a Caucasian model, causing the dimensions to be inaccurate for Asian consumers. It seemed to be an obvious blooper, yet stranger things have happened in a fashion industry lacking uniform standards.

“If you make a pen, that goes to a micron of tolerance or else it’s off spec. In apparel, there is no such thing,” said Janice Wang, CEO of Alvanon. In fashion, a person can be different sizes in garments

of women). Kenneth started acquiring body information from scanning and measurement, a practice that Janice and her two brothers – Jason, COO, and Jonathan, director of R&D – still practice at Alvanon today, even after Kenneth’s passing in 2010.

Alvanon sells regionally-based mannequins representing a vast range of target demographics, in addition to custom forms, blocks (a basis to create the best-fitting style pattern for the form) and consulting services. Having worked in the family business, as well as in banking and wholesaling, “I have done every part of the supply chain,” Wang said. “I want to share my expertise. It should not be that you just go to Walmart and buy a garment. People don’t know how things are made. Skills get lost,” she explained.

Creative Counseling

While some universities are able to turn out students with



bring manufacturing back to those areas.

Educating Emerging Designers

Recognizing that designers are often thrown into starting their lines without formal training in business, Wang started Alvanon's Global Mentoring Program

in 2013, which awards new designers with two mannequins and five hours of consulting each month for two years. Designer Carrie Parry, known for her tailored pieces cut and sewn in the United States, was a recipient. Before Alvanon, "I was having a lot of issues with ease of motion

and fit in garments," said Parry at a May 2014 Meetup group in New York City's Garment District. Alvanon helped Parry zero in on her target (age 30+, active, female), scale down the number of models for each fit, cut her line from a full collection to focus on tailored shirts and re-launch her line direct to consumers via her website. "I no longer had to pin shirts back to make them look good online," she said. A new round of the mentoring program is slated for 2015.

"All of this (giving) came out of my father's legacy," said Wang, adding, "This industry has supported this family for three generations. There is something there that you need to be grateful for and return." ●



Janice Wang is on a mission to create standards and bring back analytics. "Alvanon is more than a mannequin maker; there is a lot of science in fashion as well."

THIRD ANNUAL TRENDSETTERS ISSUE

We've identified people that are leading the industry in ways that are new and directional. They are elite not only in their design talent and textile savvy, but seem to possess an innate ability to interpret what's coming next in the marketplace. *Textile Insight's* 2014 Trendsetters show an aptitude for creating products and businesses before others catch on to the trend.



Issue Date: Nov/Dec 2014

Ad Close: October 27

To advertise, contact Jeff Nott, Publisher 516-305-4711 or your account manager.

www.textileinsight.com

Name Game



“We saw this as a way for an ingredient brand to show more than a swatch of fabric.”

CINDY MCNAULL, GLOBAL CORDURA BRAND AND MARKETING DIRECTOR

In a world where performance apparel is a plenty and there are tons of technologies to choose from, it can be challenging for a textile firm to stand out. To add value and cut through the clutter, some fiber companies are putting their own names in lights for all customers to see.

Execs at DuPont have decided to take its strongest consumer brand – mostly known for use in cookware – and extend it into clothing. “We said, ‘Why can’t we have Teflon branded apparel?’ It communicates performance,” commented Ella Rabil, licensing brand manager for DuPont. To ensure that consumers make the connection, DuPont did some testing. “It showed that consumers would allow us to stretch the brand to workwear or anywhere stain repellency is required,” the exec said.

DuPont worked with private

label manufacturer Old Toledo Brands for the holiday season rollout, which will take place on Amazon.com (the two are in talks regarding promotional activities). Garments include denim and canvas bottoms; flannel shirts and jackets/outerwear ranging in price from \$39.99 to \$99.99. If the collection sells through well, future plans include school uniforms for kids. “We’re trying from a licensing standpoint to expand the use of the brand across multiple categories in a bigger way,” said Rabil.

Demonstrating Versatility

Instead of the usual fabric header samples which Cotton Incorporated uses each season to showcase its new technologies, the firm recently decided to create two apparel collections with its Fabricast line of development fabrics. “It’s a great way to take our development concepts and

merchandise them in a lookbook and garment samples,” said David Earley, senior director of supply chain marketing at Cotton Inc. When shown recently at Outdoor Retailer, fabrics “really came to life in garment form and attracted much more attention,” the exec added. The approach proved helpful with industry execs who may have problems envisioning what a fabric will look like in garment form.

Working with sourcing firm Vertical Source, Cotton Inc. developed both a Men’s Training and Women’s Yoga Apparel Collection for 2014. Women’s looks include a plated single jersey Yoga Bra with TransDRY and Wicking Windows moisture-wicking technologies, a Loose Après Pant finished with Wicking Windows and a technical slub jersey, single knit cropped Cover Up Top finished with water-repellent Storm Cotton. In men’s training, “we wanted to show really technical and eye-catching fabrications that demonstrate that cotton is not just for basics,” said Earley. A Sleeveless Training Tee with TransDRY has technical design features including bonded shoulder seams and reflective adhesive tape, as described in the lookbook which will be shared with accounts in direct meetings and in tradeshow, as well as through the firm’s Cotton University website. The garments themselves are not commercially available.

Creating Crossover

To create a set of technical crossover pieces for the millennial generation, Invista tapped designer Alex Valdman—who is known for his progressive urban cycling pieces at Giro, Levi’s and now Rapha—with the Cordura x Alex Valdman Collection. Appropriate for lifestyle, adventure or everyday wear, the trouser and jacket feature stretch and double weave Cordura Combat Wool fabrics,

THE RUNNING & FITNESS EVENT FOR WOMEN

running
cardio
indoor cycling
cross-training
swim
yoga
dance
cycling
strength training
SUP
trail

Returning to Chicago next summer!



June 29 - July 1, 2015

Navy Pier & W Chicago Lakeshore

Mark your calendars now. Join us in Chicago for the business-to-business event designed to focus retailers and brands on the most powerful consumer in the market place.

Conference Presentations



Networking



Trade Show



Sunrise Fun Run



Demos



For more information, contact: Jeff Nott / 516-305-4711 / jnott@formula4media.com
Or your account representative.

FORMULA4
MEDIA, LLC

Updates on 2015 speakers and trade show happenings: therunningandfittnesseventforwomen.com



DuPont: Teflon shirt



DuPont: Teflon outerwear

“We’re trying from a licensing standpoint to expand the use of the brand across multiple categories in a bigger way.”

ELLA RABIL, LICENSING BRAND MANAGER, DUPONT

which blend Invista nylon 6,6 fibers with merino wool. The pieces were showcased at Outdoor Retailer in August.

“These are fashion pieces that still carry the DNA of the brand,” said Cindy McNaull, global Cordura brand and marketing director.

While not yet commercially available, licensees have approached with interest. “We saw it as a way for an ingredient brand to show more than a swatch of fabric. By saying this could go into these applications, we don’t have to wait for the supply chain to pull it through. It activates a little quicker,” said McNaull.

Accelerating Development

Taking the fabric-to-garment transition one step further, textile manufacturer Voormi uses the brand’s full namesake apparel line as a direct-to-consumer branding vehicle to introduce new textiles and technologies to the marketplace while also pursuing licensing agreements with other brands. “We saw textile and apparel not as an industry of fast-paced innovation. Our goal was to try and change that and accelerate development of textiles,” said Timm Smith, marketing director at Voormi.

For Fall/Winter 2014, the

brand is launching several new jackets and skiwear with proprietary blends of wool, polyester, and nylon — all manufactured and created in the USA through Rocky Mountain Merino Wool, a sister distribution company. The women’s High-E Series Drift Jacket features the brand’s warmest DWR-treated proprietary Surface Hardened thermal wool.

Through the Co-Lab initiative, Voormi also works with other brands to promote its own fabrics. In July, Voormi announced a Co-Lab project with outdoor firm

Fishpond to create thermal mid-layers for remote access, high alpine fly-fishing. Garments created in the collaboration carry a Voormi Fishpond Co-Lab label or hangtag. Both brands work together on marketing.

“There are all of these new channels opening. The old model of stuffing the supply chain is disappearing,” said Smith. As a result, the exec sees more component branding in our future. Extreme importance needs to be placed on creating consumer pull, “otherwise cheaper goods will just be substituted,” he said. ●



VOORMI apparel



Cotton Inc. concept garments

“It’s a great way to take our development concepts and merchandise them in a lookbook and garment samples.”

DAVID EARLEY, SENIOR DIRECTOR OF SUPPLY CHAIN MARKETING AT COTTON INC.

A New Collection Combines Lifestyle Trends while Showcasing ITG Capabilities.

Apparel from the Hendry Bishop collection

Re-Thinking Fabrics for Menswear

International Textile Group, Inc., (ITG) is introducing Hendry Bishop, a one-stop shop collection of fabrics targeted to modern men's lifestyle brands and specialty apparel. The collection comes from the collaborative efforts of the Burlington and Cone Denim product development teams bringing together expertise in worsted wool, cotton, synthetics, and fabric constructions.

The collection is slated for a Fall 2015 launch. Samples are available for immediate viewing.

"Fabric shouldn't limit clothing but rather open up endless possibilities for people to carry forward their lifestyle to any occasion," said Gary Kernaghan,

executive vice president global business development. "We designed the Hendry Bishop collection to transcend preconceived definitions of the past and open new styling and design options that fit today's lifestyles."

Getting designers to re-think fabrics in new ways is central to the creation of the collection. "We want designers to see all that we offer and say to themselves, 'I never thought to use fabric in that way,'" explains Kernaghan. For example, traditionally worsted wool is thought of for suiting, but the Hendry Bishop collection inspires using worsted for a contemporary barn jacket or for an activewear garment for golf.

Similarly, denim is thought of for jeans, but could be used for variety of other applications.

"We are using fabrics to trigger the creative process," says Kernaghan, who hopes the company's New York Showroom will become an incubator for designers' ideas.

The Hendry Bishop collection is akin to a bespoke tailoring approach. It becomes something unique to the customers.

"Today's consumer wants his clothing to make a statement about how he lives his life, not be defined by other people's ideas of what is appropriate clothing," said Peter Baumann, senior vice president merchandising, Burlington Menswear. ●



Insightful.

Reaching over 50,000 readers combined.
Put our insights into your action plan.



learn more: www.formula4media.com
subscribe: store.formula4media.com
advertise: 516-305-4711

Prioritizing Eco Performance



Eco Collaboration: A member of the Taiwan Textile Federation meets with executives from Nau to exchange views on environmentally preferred fabrics.



The Taiwan Textile Federation (TTF) arranges trade missions to connect Taiwanese mills and U.S. brands with the aim to promote business. They usually focus on the west coast market as the Taiwanese mills are a good fit to performance and outdoor brand requirements that are based there. The TTF sponsors booths at Outdoor Retailer in Salt Lake City, the Outdoor Show in Friedrichshafen, and hosts a show in Taiwan called TITAS. The TITAS show this year is October 15-17 in Taipei.

The Taiwan Textile Federation (TTF) arranges trade missions to connect Taiwanese mills and U.S. brands with the aim to promote business. This year's trade mission included outdoor, active and golf brands and retailers. In addition to fabric targeting cooling, performance with a cottony hand, and PFC free water repellencies, brands also requested environmental certifications as a prerequisite for doing business. One retailer, REI, advised they would only do business with bluesign Systems partners. Other brands announced target dates for switching to mills that had specific environmental schemes.

According to Brian Chuang, business development manager from Tai Erh Enterprises, "Nowadays more brands, especially in the U.S., are asking for environmental credentials. The EU used to be strict, but now the U.S. is imposing more requirements although it depends on the market."

Chuang also noted a big difference between brands attending Texworld and brands at Outdoor Retailer. "The variety of brands visiting Texworld are broader, more fashion oriented and less technical.

The OR brands are stricter and have higher standards commonly requesting environmental schemes like Oeko-tex, bluesign and in some cases Restricted Substances Lists (RSL). "Many brands understand that it's impossible for any one mill to have every standard," noted Chuang, who added that prior to this trip brands would often accept an equivalent, so REI's bluesign requirement was a surprise.

The trade mission mills met with Nau, an industry leader when it comes to sustainability. Jaime Bainbridge, Nau's product director, noted that Taiwanese mills are proactive when working with environmentally preferred fabrics and quite willing to take a conventional fabric and reinterpret it into more environmentally responsible fibers and finishes.

All the mills participating in the trade mission have the ability to provide readily available environmentally preferred fibers and comply with most common certifications.

Eco Innovation & Commerce

When it comes to environmental innovation or new certification schemes it gets more difficult. Many of the hot trends don't necessarily translate to environmentally friendly options.

For example, space dyed yarns are not currently available in a recycled version. "The most progress on the environmental profile of textiles would be a DWR treatment that performs like the old carbon 8 products but uses no PFCs. C6 chemicals are just a stop gap right now," said Bainbridge. Wideplus, a woven and knit mill, participated in the trade mission. Johnny Su, VP sales, confirmed the need for environmental credentials, "U.S. brands are consistent in requesting bluesign and Oeko-tex but we also get requests for meeting regulations for air and water pollution."

However, when asked about

the HIGG Index most mills were unfamiliar. Su joked, "I've never heard of HIGG but know Haagen Dazs! But seriously, if we want to do business in the U.S. we need to follow the regulations."

Su continued, "Complying with regulations can be difficult especially for the dyeing mills where there is the biggest risk for pollution of air and water. The problem is that most brands are requesting low prices and high quality, which makes it very tough."

Dye houses that have their own wastewater treatment plants have different processes and maintenance issues than those without. Mills that have environmental certifications have to go through audits. These steps costs money, so asking that your mills provide you with all the environmental assurances and low prices defies logic; however it is not uncommon.

According to Chuang, many Taiwanese mills own weaving or knitting, but partner with outside dyers and finishers with high quality standards. "The mills would use the same partner dyers even if a brand doesn't require a specific environmental standard. Suppliers are more aware of sustainability and have high standards and expectations of themselves," Chuang explained.

The fact that there are multiple standards means that suppliers must work with a variety, adding operating costs. Su said, "bluesign mills have to pay higher prices for dyestuffs and chemicals. We pay handling charges to get bluesign certification. For us to cover our costs we need to charge the customers a share in the yearly cost of using bluesign mills."

Moving to a more sustainable textile supply chain will require each link to work together. It's time to get everyone involved if we want to build on the progress that's already been made. ●

University of North Texas Research Introduces Bark Cloth to U.S. Market. **By Kathlyn Swantko**

New Interest in an Ancient Textile



Artist: Natalie Macellaio exploring the structure of raw bark cloth.

There is a little-known renewable textile that has been produced for more than three centuries, which is generating new interest in the U.S. across a variety of industries. The fabric is bark cloth, which is produced in Uganda and has progressed from its ancient applications as the cloth of kings into innovative adaptations for the 21st century.

With the help of the University of North Texas (UNT) and Lesli Robertson, senior lecturer in fibers in the College of Visual Arts & Design, bark cloth is being introduced into the U.S. market. Working with Oliver Heintz and Mary Barongo-Heintz of Bark Cloth, Ltd., Germany, a cultural exhibition, “Material Evolution: Ugandan Bark Cloth”, curated by Robertson, was organized. The exposition showcases bark cloth as a new “green” material that is the basis for a wide range of textiles and composites. The fabric is manufactured in a low-energy, partly CO₂-emission-free process, for such applications as home furnishings, wall coverings, apparel, fashion accessories, footwear, and automotive interiors.

Bark cloth is a textile made from the inner bark of the Mutuba (fig) tree by the Buganda people, who live in the southwest area of Uganda. Historically, bark cloth

prospered throughout the Buganda kingdom until the nineteenth century when Arab caravan traders introduced cotton cloth. In 1999, bark cloth production resumed through the cooperation of small-scale organic farmers. In recent years, the production of bark cloth has been encouraged and promoted in the Buganda kingdom, and has become recognized among the Baganda community as a sign of their specific political and cultural traditions.

The Production Process

During the wet season, the bark is stripped from the Mutuba tree, and is soaked in boiling water for a few days. The Mutuba tree is wrapped in banana leaves after the bark is stripped, to protect the tree from the sun and make it ready for harvesting again a year later.

Through an arduous, five-hour, labor-intensive process, the bark is beaten with different types of wooden toothed mallets, and stretched to make the texture soft and fine. The finished piece measures about 2.3 meters by 2.5 meters—about four times its original width. Although terracotta is the natural color of bark cloth, the fabric can be dyed white, black, and a variety of bright colors.

“Tests have shown that bark cloth is durable for upholstery and wall covering applications, and it

mimics the toughness of leather. A variety of finishes can be used to provide additional versatility,” explains Robertson. “Today, the fabric is also being made in lighter weight versions for apparel. These lightweight fabrics are achieved through additional beating, using specific types of mallets.”

Robertson is working with the UNT engineering department to focus on expanded possibilities for bark cloth as a viable new textile. Since there is a growing resource of organic farmers interested in the production of bark cloth in Uganda, there is little concern about meeting increased demands for the fabric. While Robertson

is mainly concerned with the design and art applications and advancing the cultural traditions of the Ugandan people, her collaboration with engineering could result in a significant future potential for bark cloth.

For more information on the University of North Texas’ involvement with Bark Cloth contact Lesli Robertson, lesli.robertson@unt.edu or 940-565-4125. ●

Kathlyn Swantko, president of the FabricLink Network, created TheTechnicalCenter.com for Industry networking and marketing of specialty textiles, and FabricLink.com.

The Networking Sites for the Textile Industry

Fabriclink

FabricLink.com

Trade-to-Consumer

The
Technical
Center

theTechnicalCenter.com

Trade-to-Trade

**Check out the opportunities to effectively
get your message out!**

Think Globally, Sew Locally: Denver Knits Together a Garment Trade



Ralph's Power Sewing Machines has been in a low concrete block building lying in the industrial area surrounding Denver's football stadium for over 40 years. It sports a modest sales floor that shares space with a few mid-century wood paneled offices; the repair shop is across the small parking lot out back. The interior décor can only be described as "painted" with the odd Juki calendar on a wall staring out into space above the rows of sewing machines. However unassuming it appears at first glance, rest assured that Ralph's is the touchstone of the garment trade in Denver and beyond; the business provides the needed mechanical support,

intellectual reference, and community connection.

Ralph's is an analog place. Fax tones are often heard and receipts always involve multiple copies and register tapes, all neatly stapled together. Stacks of paper occupy every horizontal surface while white boards and corkboards and fields of post-it-notes line the office walls. The giant version in the sales office chronicles, in the four major dry erase colors, the sewing machines that are coming, leaving, and on layaway. My name was up on that board for a while, in green ink.

Out the front door and around the corner is the Parts

Department, which is the beating heart of the place. Mechanics, who always look a little stressed out, pace and wave hand-written requisition forms, while disembodied voices call out eight digit numbers from the deep queue of shelving. They say there's upwards of a million parts back there. Customers are given one narrow aisle behind a row of bright, clean glass display cases from which to watch the activity. We happily wait our turn while squeezing past one another puzzling over the shiny mechanical baubles and stately cones of industrial thread. Patrons often engage in idle conversations or listen in on someone else's problems like babushkas over a backyard fence.

When it's your turn—to present your challenge, ask for advice, or request a part—it doesn't matter; the people who work at Ralph's listen carefully and actually try to help you. The staff is a stalwart ally in the insanely complex world of needle, thread, foot and folder.

A couple of years ago Ralph's accomplished what political committees, corporations and the bastions of higher education in our area had been unable to do; the company gave birth to a community apparel design center.

Next door in a nearly identical building is the Denver Design Incubator. Consisting of mostly one good-sized room with an assembly of sewing machines situated around a big cutting table; the DDI has the same Midwestern sensibility as the enterprise that supports it. It is administered separately from Ralph's and has its own non-profit status and board of directors, but physically and emotionally it remains close to the business.

For a modest monthly fee anyone can join and get access to the tools and mentorship needed to sew a broad spectrum of goods. The DDI website says it best:

"DDI is a space for people to build their skills from concept to production as they develop commercial apparel or accessory lines. Our goal is to foster marketable, profitable, and sustainable fashion companies right here in Colorado.

The best part of DDI is our collaborative community — this is a space where we share knowledge, lend a hand, and give feedback. Some are just starting out; others are established movers-and-shakers — and that's what makes our community unique."

When the whole USA reshoring wave began to swell a few years ago, Ralph's didn't sit and stew and wonder what they should do, they acted. They began the long process of creating customers from scratch and steeled themselves for the investment to do so. The payoff is obvious when you see the guys from the machine shop grilling hot dogs with the DDI dressmakers or when reading articles in the local paper about the hip Denver sewn goods scene. From backpacks to fast fashion, the Mile High City is exploding with small-scale start-ups. Ralph's has knitted together a varied sewing industry that will grow, and in turn hopefully support another 40 years of business.

Ralph's formula for success is simple; build community and forge relationships. They get it. People make clothing with sewing machines, not the other way around. Pretty good for a bunch of folks still using filing cabinets. ●

PERMANENT ODOR PROTECTION IS
NOW **DYEABLE**

XT2[™]
PLAY MORE. STINK LESS.[™]

WHAT COLOR DO YOU WANT?

XT2[™] is not a finish or treatment; therefore the silver will not wash out or wear off and lasts the life of the product. XT2[™] is completely dyeable giving brands the freedom to include it in product where color is an important driver - opening the door to endless design opportunities.



PURE SILVER. SUPERIOR PERFORMANCE.



*EPA regulated products containing X-STATIC[®] solely protect the finished product itself from microbial growth and odor. Any public health claims related to X-STATIC[®] products are expressly limited to products regulated by the FDA and do not apply to products regulated by the EPA.



“

**THE FABRIC PILLED HORRIBLY
I HAD TO EXCHANGE IT DON'T
BUY THIS ONE IT SMELLS OF BODY
ODOR I HAD TO RETURN IT I AM
NOT IMPRESSED WITH THE QUALITY
OF THIS FABRIC AT ALL FABRIC
RIPPED ALMOST IMMEDIATELY**

**BRING BACK
THE COTTON**

**I WOULD NOT RECOMMEND I CAN
STILL SMELL THE ODOR THE FABRIC
LOOKS CHEAP DISAPPOINTED IN THE
FABRIC IT SMELLS LIKE IT TOOK A
CHEMICAL BATH JUST NOT WORTH IT
ITCHY FABRIC THIS PRODUCT USED
TO BE MADE WITH 100% COTTON**

”

REPLACE COTTON AND YOU MAY HAVE TO REPLACE CUSTOMERS.

Research told us that over half of all consumers would be dissatisfied if cotton were taken out of their favorite clothing. Now they're starting to speak up. The good news is, 56% of consumers say they're willing to pay more to ensure their T-shirts and denim jeans stay cotton rich. So if you're thinking of replacing cotton to keep your costs down, you may want to think again. After all, there's a reason cotton is the fabric of our lives.

cottoninc.com

AMERICA'S COTTON PRODUCERS AND IMPORTERS. Service Marks/Trademarks of Cotton Incorporated. © 2013 Cotton Incorporated.
Source: The Cotton Incorporated *Lifestyle Monitor*™ (www.CottonLifestyleMonitor.com)

