

from blanks to embellished fashion

A California Apparel News special section

AM4U Unveils Demand-Activated Manufacturing Technology

Next in Print:

Advances Bring Digital Printing to the Forefront

Vintage Surf Culture

Brothers Marshall Looks Back to the '80s and '90s



Next Level apparel

Direct:

3128 E Harcourt St. R. Dominguez, CA 90221 0:310.631.4955 F: 310.631.6097



Distributors:



Piscataway, NJ www.evatees.com

Bodekand Rhodes

HOME OF LITTUACIUB

Pennsylvania, California, Florida, Massachusetts, Michigan www.bodekandrhodes.com



MCCREARY'S TEES

Phoenix, AZ www.mccrearystees.com



Gainesville, VA www.accinfo.com



Alabama, Florida, Texas, Puerto Rico www.tsfsportswear.com



Salt Lake City, UT www.saltlakecity activewear.com



San Diego, CA www.mission imprintables.com

www.nextlevelapparel.com



LA MARKET
COOPER BUILDING
SUITE 639

PROJECT
LAS VEGAS
BOOTH 8133

ASHLEY@MONROWATTIRE.COM



Fast Fashion, Custom-Made

AM4U UNVEILS DEMAND-ACTIVATED

MANUFACTURING TECHNOLOGY BY DEIDRE CRAWFORD

When I was invited to view a demonstration of a new apparel manufacturing technology at California Polytechnic State University in Pomona, I wasn't sure exactly what to expect. I assumed it would be a clunky piece of machinery accompanied by a PowerPoint presentation and possibly a few sample products of what the machine could produce. What I didn't expect was a full bodyscan and a custom-made garment designed from scratch and shipped to my office, all in less than four hours.

Bill Grier, the founder and chief technology officer of Critical Mass Manufacturing, teamed up with Styku virtual body-scanning, Tukatech Ap-

parel Technology, AIMS apparel management system and Eton Systems to launch a project aimed at directly connecting consumers to manufacturing, or "demand manufacturing."

The project is titled AM4U, which stands for "Apparel Made for You."

The companies came together with Cal Poly Pomona's Apparel Merchandising and Management program to work on the project, hoping to find a solution to waste and overproduction in the apparel industry.

Grier and Bud Robinson, a Cal Poly Apparel Merchandising and



SUPPLY CHAIN: Eton has developed a new conveyor system to improve mass customization.

Management Advisory Board member who formerly served as president of Levi Strauss International and executive vice president of Gap Inc., had invited me to see the debut of their latest innovations.

"You're the star of the show today," Grier said, ushering me to my place in front of a scanner amidst a host of film crews capturing the process.

I took my spot in front of the depth scanner, a slim, black Microsoft Kinect camera that was mounted to a pole to capture my full-body image. I held still, and it scanned my body, within minutes creating a 3-D avatar based on my proportions and displayed on a computer screen.

I was told to pick out the color and style of the shirt that was going to

be created for me, while an assistant modeled my virtual shirt selections on my avatar on-screen. I wanted to see what the technology was capable of, so I chose a combination featuring a turquoise body with blue camouflage sleeves and a gold university seal on the front

"Remember, what you choose on the screen is what it's going to look like in person," I heard someone yell from the back, likely questioning my fashion choices.

The assistant recorded my selection online and then sent it off to Critical Mass, located 25 minutes away in Rancho Cucamonga, to be manufactured. Once the fabrics were dyed at Critical Mass' lab, the material would be driven to the university and cut and sewn together to make the garment. (When the project launches to the public, the fabric dyeing and manufacturing will all be done in one location.)

"We're at one hour and 17 minutes!" Grier yelled across the room after receiving a phone call from his factory updating him on the progress.

The excitement from the team was palpable as they anxiously waited to see their labor come to fruition in the form of their first customer-ordered, custommade and custom-designed shirt.

The material arrived in less than three hours—breaking earlier records—and the team began cutting and sewing, keeping an eye on the clock. Shortly afterwards, the garment was completed and shipped to my office, totaling fewer

► AM4U page 10



MADE FOR YOU: Cal Poly Pomona is building a model plant designed for mass customization.



Colorful. Style. Choices.

The best blank T-shirts. One national supplier.







Vintage Surf Culture

THE BROTHERS BEHIND BROTHERS MARSHALL DRAW INSPIRATION FROM SURF DAYS IN THE '80S AND '90S. BY SARAH WOLFSON

Los Angeles—based surf-apparel brand Brothers Marshall communicate their California style and "Valley pride" in their clothing line. Trace Marshall and his brothers, Chad and Derek James, take inspiration from childhood photos, where they were "decked out in '80s surf apparel," and memories of frequenting the Malibu beaches when they were kids. "We were very lucky growing up. We never did summer camp or anything like that. The beach was our camp," Trace said.

The brothers of Brothers Marshall share creative and sales responsibilities, while Trace Marshall leads as designer and marketing director. As the former co-owner of the clothing line Warriors of Radness, Trace Marshall's surf reputation catapulted his own line, where he produces "100 percent authentic surf gear."

At Warriors of Radness, co-owned by Freshjive's Rick Klotz, Marshall "learned technical design skills and the history of Los Angeles that helped in the process," he said. Moving forward and "starting a family-owned business felt natural and fitting considering our background. As children, we woke up at 6 a.m. and our father drove us to First Point, where we 'shredded' all day," he said.

With a good sense of humor, a genuine appreciation for surf culture and a seasoned design aesthetic, Trace and his brothers decided to pursue their own beachwear company in late 2011. To kick start their line, they collaborated with Vans Vault on two canvas and snakeskin sneaker styles—the LX Spectator and the Slip-On LX Deconstruct. The shoes sold out quite quickly, motivating Brothers Marshall to collaborate on future projects, including an American flag-themed surfboard fin for Captain Fin, which is emblazoned with the words "These colors never run on 9/11" against a patriotic backdrop. And there are more collaborations in the works. "We are about to launch a collaboration with the

headwear company The Ampal Creative. ... should be handsome," Trace Marshall added. The five-panel camp caps, dubbed the Brothers Marshall X Ampal, have a colorful, vintage surf print and a French-terry brim. Slated to premiere this summer, the caps can be preordered now through Ampal Creative's webstore.

"We have had some great opportunities to collaborate with great brands and people," Marshall said. "All these collaborations happened naturally, which I feel is important. We weren't really selling anything in the U.S. marketplace under [Brothers Marshall] at the time, but these companies loved our radical vibes and asked us to create for them.

The Brothers Marshall collection features graphic tees, tanks and sweatshirts with a vintage sensibility—think surfer/skate font, paired with the illustrations with a very '80s feel. The lightweight tees come in faded pastels and grays. Graphics are paired with mottos that read

"Cali Hoale From the Valley," or "Shred It." Their staple surf 'dude' caricature is branded on the back of most of the shirts. "There is a vintage feel in our work, but it's more of a vintage attitude or motto of life that was lost somewhere in the mid '90s," Marshall said. "The '80s and early '90s was a very special time at the beach—where it was all about having a good time—not taking [life] too seriously. It was all about surfing."

The collection will add full cut-and-sew pieces for Spring 2013. To set themselves apart from exiting surf brands and make their line distinct, the line will feature a mix of authentic surf function with contemporary fashion, Marshall noted. "People say 'function over fashion.' Why not both?" he said. "There is a crazy thing going on right now in the surf/fashion industry, which we call 'Surfashio,' and we have two types of individuals: 'core bros' and 'poser bros.' Poser bros are people that just became surfers and are trying to overcompensate their lack of ability in the water, [coupled] with horrible equipment and dysfunctional garments. The other, core bros, have the functional equipment, but it was designed poorly. My goal is to combine the two. I want to use amazing 50-way stretch, NASA-developed waterrepellent fabrics."

Still, the brothers aren't interested in "jumping on a trend or fashion train." "Do you think getting barreled feels any better with a Thom Browne blazer on?" Marshall said. "We are just trying to capture that feeling and spread the aloha [vibe] through our garments so that maybe one day, some kid from Middle America will take a vacation out to Malibu and feel what we feel every day."

The brothers are looking to create pieces that will work in and out of the water, Marshall said. "Surfing will take a lot out of your garments, so quality and technology is very important. When surfing in the '60s exploded, surfers were responsible for a lot of the advancements in garment construction," he said.

Surf apparel has evolved with the experimentation of new fabrics and functionality of pieces, but the economy has also affected this change, he continued. "There is going to be a huge shift in the surf industry over the next five to 10 years—it's already happening," Marshall said, predict-





ing an end to the "big-box brands." "Everything is transforming— from retailers to even producing goods locally here in the U.S. I'm just so excited to be involved in it right now."

Wholesale price points for T-shirts start at \$15. Brothers Marshall is currently being sold at Mollusk Surf Shop, Val Surf, Thalia Surf Shop, American Rag and Captains Helm.

Later this summer, the brothers plan to launch an online show, "The Brothers Marshall Surf Show," and have a few "dream" collaborators and guests in mind, including Wu-Tang Clan, sketch comedy filmmakers Tim and Eric, and "King of the Hill" animator Mike Judd.

For more information, email *scottythe-salesdude@brothersmarshall.com*.



The Brothers Marshall collection seeks to capture the authentic surf culture of Malibu in the '80s and '90s. Pictured are the "100% Authentic Surfwear" T-shirt, the signature surfer lightweight tee and the "Cali Hoale From the Valley" tee.



Next in Print

ADVANCES BRING DIGITAL PRINTING TO THE FOREFRONT BY DEIDRE CRAWFORD

Until about two years ago, American Apparel didn't do much printing, and when it did, the vertical manufacturer used outside vendors.

But when the company began introducing more printed hoodies, dresses, baby clothes and T-shirts, including its "Legalize" collection (T-shirts featuring logos such as "Legalize LA" and "Legalize Gay"), its printing needs—and equipment—expanded.

Today, the Los Angeles-based compa-

ny uses both screen printing and Brother International's GT541 and GT782 digital inkjet printers.

"We recognize the future with digital inks and digital technology, and we also appreciate and use screen-printing technology," said Robert Lopez, American Apparel's print-studio manager. "Depending on the cost of the ink and the job, we'll use [screen printing] for large runs if it's cost effective, but we like the soft hand of digital printing. American Apparel does

DIRECT TO GARMENT:

Brother International launched a new series of smaller, cheaper digital inkjet garment printers in October, which have replaced their earlier GT541 and GT782 models.

very soft fabric, and that's what it's known for, and we want the prints to reflect the brand of the company."

The debate over screen printing versus direct to garment is still ongoing, but advances in digital inkjet printing appear to be closing the gap between the two.

Brother's digital inkjet printers are making waves in the apparel industry with their ability to print on 100 percent cotton. The printers have proven especially popular with California buyers, who often use them for printing on T-shirts, according to Matthew Rhome, an accounts manager for Brother.

California is the company's largest market for the printers, and with all of its T-shirt and apparel manufacturers, the city of Los Angeles is almost No. 1 nationally, ranking right behind the state of Florida, he said.

Brother launched its first digital inkjet garment printer in 2005, which could only print on light-colored fabrics, followed by a second digital printer two years ago, which could print on both dark and light fabrics. While the company is not allowed to release detailed numbers, it has more than 3,000 of these units currently in the field. Rhome said.

Its new GraffiTee series, which debuted in October and replaces the earlier GT541 and GT782 models, is a smaller, cheaper digital inkjet printer, which retails for \$22,000, compared with \$55,000 for the previous models.

Rhome showcased the new series at the Texprocess trade show in Atlanta in April and said he was "swamped" with interested buyers.

"I've never been to a trade show with such a good response," he said. "Compared to any show I've done in five years, that one was the best."

The digital printer can print on both 100 percent polyester and 100 percent cotton, with a special water-based ink formulated for cotton printing. Another bonus is that it can also print on dark-colored cotton fabrics, Rhome explained.

"It's big time; it really is. It has really

changed a lot of things—from the small guy who wants to start a business in his garage, all the way to large international companies that are buying this machine for multiple reasons," he said.

Smaller companies are using the digital printers as a replacement for traditional screen printing, and larger companies use them as a sampling device in their art department for brainstorming without having to spend the time or money to set up the screens or films one would need with screen printing, he said.

The digital inkjet printers also print detail at a much higher quality, printing at roughly 1200 dpi, compared with about 70 dpi for screen printing, which works better for printing photographs or detailed art, he explained.

However, screen printing still remains cheaper for large runs, and ink for screen printing tends to be about 70 percent less expensive than Brother's ink for digital printing, Rhome noted. Another drawback Association of Textile Chemists and Colorists] test that we use as a benchmark for testing, and we come in about the same as water-based screen-printing inks in terms of quality and durability," he said.

American Apparel's Lopez maintains that screen prints can be slightly more durable than digital but disputes that digital printing will wear off prematurely.

"That means it wasn't cured right," he said. "Here, we have quality control that just does quality control, and curing is done by the operators. The last person checks the color and design and color-fastness."

Printing on some of the looser weave fabrics in the market could cause a digitally printed image to fade, but American Apparel produces shirts known for their tight weave and ability to hold color, Lopez said.

One advantage to screen printing is that it can provide richer, brighter hues for particular colors, Lopez said.

"It's a fast way to get an image—designers come up with something new and put it on a garment before we decide whether to kill it. We can produce a sample within the hour and decide if we're going to make it or not. As far as sampling, you can't beat it."—ROBERT LOPEZ

is that currently, with polyester, digital printers can only print on light-colored fabrics, as opposed to both light and dark fabrics with cotton.

Some screen printers question the durability and longevity of digital prints.

"I've been in business for more than 30 years, and direct to garment is not perfected as of yet," said Dave Pohar, owner of New Way Silk Screen Printing in Los Angeles. "It's only good for about 50 washes. ... If you wash it, it will wash out."

Pohar's company prints T-shirts, sweatshirts, shorts and pants using a four-color direct silk-screening process.

"Direct screen printing will stay in unless you use schlock ink," he said.

Rhome noted that Brother is the only company in the market that both manufactures its own print heads and formulates its own inks, and because they're a matched pair, they provide good printing results that last. They also use pigment, which he says provides more durability and less fading than dyes.

"We test with an AATCC [American

"For matching Pantone colors, you can't beat it," he said. "With screen printing, you can get brighter colors because you can mix colors by hand, but there's only so much control you have with digital inks because they're CMYK—they just use yellow, cyan, magenta and black to mix colors. ... As far as using a primary color, like red or blue, you can't do that with digital—only with silk screening."

American Apparel also uses digital printing for photographic prints or more intricate art because of the detailed, high-quality prints, as well as using it for sampling in-house designs.

"It's a fast way to get an image—designers come up with something new and put it on a garment before we decide whether to kill it. We can produce a sample within the hour and decide if we're going to make it or not," Lopez said. "As far as sampling, you can't beat it."

It's something the company is looking forward to experimenting more with, he said

"Digital can go a lot further," he said. "It's just scratching the surface."

DECORATED APPAREL

RESOURCES

Alstyle Apparel and Activewear is an industry leader, designing, manufacturing, and distributing high-quality blank apparel. Alstyle offers apparel in a variety of colors and fabrics for men, women, juniors, and youth. Alstyle also offers a private-label program, allowing companies to build their own brand. This features tear-away labels and relabeling services for sewn-in or heat-sealed labels. Alstyle recently opened a new manufacturing facility in Aqua Prieta, Mexico, that features state-of-the-art manufacturing processes. Alstyle has a "quick-turnaround" philosophy, placing their distribution centers strategically across the country. Locations include Anaheim, Chicago, Atlanta, Dallas, Philadelphia, and Toronto. www.alstyle.com

Buhler Quality Yarns Corp. ensures the highest-quality products backed by environmental sensitivity and around-the-clock support throughout your supply chain. Our distinctive portfolio offers Supima, MicroTencel®, MicroModal®, Supima Outlast, and various blends, all certified by Oeko-Tex 100, which ensures they are safe for all applications. Additional yarns include Siro Spun and fashion slub yarns in Supima and Supima MicroModal; all offer comfort, durability, and strength. Bring your product to market backed by decades of experience, dependable industry relationships, and unsurpassed technical support. (706) 367-9834 or www.buhleryarns.com

Launched in 2007 as a basics label, Monrow has quickly risen to the top. The ever-growing brand now produces 11 collections a year, which include much more than your average basics. In addition to their women's collection, a collaboration with Amber Valletta, Monrow recently introduced Monrow Men's, Monrow mini, and Monrow Classics, a return to the essence of label, offering the "classics" (tees, sweatshirts, sweats) in an array of 16 colors, all year long. Though designers Michelle Wenke and Megan George are constantly inspired by the world around them, their passion will always lie in Monrow's fundamentalsquintessential wardrobe staples with attention to fit, fabric, technique, and innovative prints. This unparalleled quality and in-depth knowledge of design and manufacturing detail is what makes Monrow a front-runner in the world of contemporary apparel. www.monrowattire.com

Next Level Apparel delivers the latest fashions with superb quality, incorporating innovative fabrics that are heavenly soft at a value that is second to none. Our outstanding color palette, up-to-date styles, and fit continue to define us as one of the leading suppliers of fashion blanks in the U.S. market. The addition of a distribution network brings the hottest brand in the market to your doorstep. Next Level Apparel is committed to the highest standards in every aspect of our business. From manufacturing to customer service and shipping, every individual is dedicated to delivering our top line of versatile fashion basics at an outstanding value with the highest level of quality and service. www.nextleve-language.com

So Cal Blanks is a manufacturer, importer, and wholesale distributor of premium men's and women's garment dye and piece dye fashion blanks. All our blanks are produced with the finest quality ring spun combed cotton fabrics to ensure our garments have the soft feel, the right fit, and are second to none. We offer traditional in-stock color blanks along with our custom garment dye blanks. We offer over 15 colors to choose from of our traditional in-stock blank program for both men's and women's fashion styles. We can also custom garment dye blanks to any Pantone colors to help make our customers' brands unique. So Cal Blanks also offers numerous specialty wash options for customers looking to be on a higher level than the rest of the market. We stock plenty of inventory and offer quick production times on all custom dye and wash orders. From the highest quality of blanks to our customer service, So Cal Blanks is dedicated to the highest standards in every aspect of our business Please call (310) 965-9776 or visit www.socalblanks.com.

This listing is provided as a free service to our advertisers.

We regret that we cannot be responsible for any errors or omissions within Decorated Apparel Resources.



RACING THE CLOCK: During a demo of the AM4U project, the team raced to deliver a custom-ordered, custom-designed and custom-made T-shirt.

AM4U

Continued from page 4

than four hours from the time my body was scanned until the garment was designed, ordered, manufactured and shipped.

Critical Mass' Grier said the AM4U concept represents a huge shift for the apparel industry.

"It's switching supply and demand to demand and supply," Grier said.

Grier has developed a new process for dyeing fabric that operates with digital printing, does not require any liquids, and enables him to dye, print and imprint only the amount of fabric needed, all on one machine, with a quick turnaround. This process eliminates overestimated production runs and excess inventory, he explained.

"There are no minimum [orders], so you can change on the fly and produce every garment separately and at manufacturing speeds," Robinson added.

By producing only the amount of apparel that's sold, retailers can avoid losing money on excess production and no longer have to depend on cutting labor to reduce costs, which could help bring textile jobs back to the United States, Grier explained.

"High-profit production apparel creates a high enough margin to return the jobs and industry back to the U.S.," he said.

In addition to speeding up



FINAL PRODUCT: In all, the process from body scan to shipment of the finished product took less than four hours.

manufacturing and reducing excess production, companies also save time by not having to stop manufacturing to clean the dye presses, he explained.

"We can provide high-speed manufacturing and manufacture 6,000 tops a day, and we don't have to stop to clean the machines."

Digital printing also allows customized orders to be manufactured without inventory—a "zero-inventory production system." The entire inventory of a 10,000-square-foot warehouse can fit on one CD in the form of virtual merchandise, Grier said.

Currently, the apparel industry uses less than 2 percent digital printing, according to Lee Newsom, a Cal Poly Apparel Merchandising and Management Advisory Board member who is involved with the project.

With made-to-order manufacturing, customers who possess scanning technology, such as a Kinect camera, can design and buy custom-made apparel online from home and have their merchandise delivered to their doorstep.

The group's goal is to have a garment made in four hours or less from the time the order is placed online and have it delivered within three days.

AM4U expects to offer roughly 20 different styles and color options that can be customized

by customers or retailers and ordered online and manufactured one at a time, Robinson said. Currently, the print and dye technology only work with man-made polymers, such as nylon and polyester, and the system is six to eight months out from launching to the public for orders.

Cal Poly Pomona brought in a scanning technologist from Kansas State University five years ago, which is also when they met Grier and became aware of his work in demand-activated manufacturing.

The school is building a model plant with the complete supply chain, including a new conveyor system developed by Eton Systems to accommodate mass customization.

"A quicker unit-production system reduces production time from days to hours and hours to minutes. It can do one unit at a time, and each unit can be tracked as an individual item," explained Per Bringle, president of Eton's U.S. support operations.

Peter Kilduff, the chair of Cal Poly Pomona's Apparel Merchandising and Management Department, said the project is part of his larger vision for the university.

"We wanted to build the technology here," he explained. "Scanning and mass customization in apparel manufacturing is part of the future, so we need to be a part of that."

Apparel News Group



Sixty-eight years of news, fashion and information

EXECUTIVE EDITOR

FASHION EDITOR

N. JAYNE SEWARD SENIOR EDITOR DEBORAH BELGUM

RETAIL EDITOR

ANDREW ASCH TECHNOLOGY EDITOR

EDITORIAL MANAGER JOHN IRWIN

CONTRIBUTING WRITERS CHRISTIAN CHENSVOLD RHEA CORTADO CLAUDIA SCHOU DENA SMOLEK

CONTRIBUTING PHOTOGRAPHERS

BEN COPE VOLKER CORELL JOHN ECKMIER RICHARD KNAPP FELIX SALZMAN MICHAEL SCHMIDT

WEBMASTER

WEB PRODUCTION IAN BRAMLETT

SOCIAL MEDIA COORDINATOR JENN KOLU

CREATIVE MARKETING DIRECTOR LOUISE DAMBERG

DIRECTOR OF SALES AND MARKETING

TERRY MARTINEZ ACCOUNT EXECUTIVES

DANIELLA PLAT AMY VALENCIA

ACCOUNT MANAGERS LYNNE KASCH MARION METCALF

SALES & MARKETING COORDINATOR BIANCA WESTCOTT

CLASSIFIED SENIOR ACCOUNT EXECUTIVE

CLASSIFIED

ACCOUNT EXECUTIVES
ZENNY R. KATIGBAK
JEFFERY YOUNGER

CLASSIFIED ACCOUNTING MARILOU DELA CRUZ

SERVICE DIRECTORY ACCOUNT EXECUTIVE JUNE ESPINO

PRODUCTION MANAGER KENDALL IN

ART DIRECTOR

DOT WILTZER PRODUCTION ARTIST JOHN FREEMAN FISH

PHOTO EDITOR

JOHN URQUIZA

CONTROLLER

CREDIT MANAGER

RITA O'CONNOF

PUBLISHER/ GENERAL MANAGER MOLLY RHODES

MNM PUBLISHING CORP.: CO-CEOS TERI FELLMAN CARL WERNICKE

PUBLISHER/CHAIRMAN/CEO MARTIN WERNICKE 1922-2000

PUBLISHED BY MNM PUBLISHING CORP. APPAREL NEWS GROUP

Publishers of: California Apparel News

EXECUTIVE OFFICE

California Market Center 110 E. Ninth St., Suite A777 Los Angeles, CA 90079-1777 (213) 627-3737 Fax (213) 623-5707 Classified Advertising Fax (213) 623-1515

www.apparelnews.net webmaster@apparelnews.net PRINTED IN THE U.S.A.





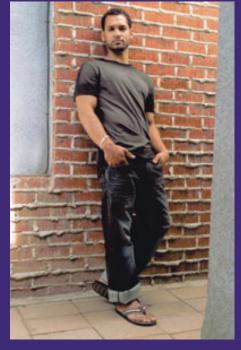




B L A N K S www.SoCalBlanks.com

Premium Mens & Womens Blanks
PFD * Piece Dye









REVEALING A GREENER PROCESS



MicroModal® fabric — now with Edelweiss technology

After pulling back the curtain on the industry's desire for more eco-conscious materials, we present a smaller carbon footprint for a product that you've already come to love. Thanks to an O2-based technology for all MicroModal® products, get the luxury, grace and comfort you want and the greener future we all deserve.







US Supima Cotton is superior in length, strength and finenessforever achieving a high-quality product. Dedicated to conservation and carbon neutrality, it is preferred by luxury brands for its comfort and durability.



Lenzing Micro TENCEL® offers strength, softness and comfort. Made from FSC-certified pulp on a closed loop processor and certified by the Oeko-Tex® Standard 100, Micro TENCEL® moves moisture and reduces bacterial growth.

Lenzing MicroModal® with Edelweiss technology is the ideal fiber for flexible, graceful clothing. Thanks to Edelweiss technology, it's now more sustainable, biodegradable, and renewable, while retaining its soft and brilliant properties.

