

## Fabric: Performance

# Green is the new black

*Performance brands look to increase sustainable practices*

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**HIGH POINT** — At a time when demand for performance fabric continues to peak, consumer awareness and desire for environmentally friendly products across the board also continue to grow, pushing performance brands across the category to think and market “green.”

“Everyone is trying to be conscious when it comes to environmental issues,” said Chari Voehl, Covington Fabric & Design’s vice president of design. “So that is translating into the general consumer trends toward natural, recyclable products that use less materials and less energy. It’s a demand, so it is something that performance fabrics can’t ignore.”

### Reduce, reuse, recycle

The Sunbrella brand was introduced to its parent company, Glen Raven Inc., with an extended life-cycle story, making the brand initially “green back when green was just a color” before even beginning sustainability movements within the company in the

1960s, according to several representatives with the company.

“The expense of the Sunbrella product, quite frankly, drove some of the early waste savings that occurred in our facilities,” said Randy Blackston, vice president of operations at Glen Raven. “A lot of our early work was developing waste systems to basically have a higher percentage of product that was actually going to market.”

Nowadays, Sunbrella is looking to further reduce waste, power and water consumption through a variety of programs in all its manufacturing facilities.

For power, Sunbrella has looked to solar energy to meet new demands, building solutions such as a 1-megawatt solar array at its Anderson, S.C., plant, which supplies enough energy to power 105 homes and is designed to power 100% of the lights at the 1 million-square-foot facility.

In the water reduction category, Glen Raven Asia has reduced processing water consumption by 12,500 tons annually and recycles 60% of wastewater with its onsite



Revolution Fabrics uses polypropylene fabrics, which is created by “upcycling” leftovers from oil refinement.

wastewater treatment system.

“We track everything — kilowatt hour usage, water density usage and waste density — and we are constantly looking at water efficiency and reducing energy use,” said Kelsey Herring, an environmental and sustainability engineer with Glen Raven.

To combat waste, Sunbrella has actively sought new ways to reduce initial created waste, and the company has been successful in going landfill free in many facilities.

“It’s not about recycling more,” said Blackston. “It’s about removing things like cardboard from our stream, even though it’s a recyclable product, and looking at using returnable plastic containers to minimize the amount of cardboard we’re recycling.”

In addition to its traditional material reducing programs, five years ago, the company also be-

gan a program called “Recycle My Sunbrella,” which provides homeowners and business customers with a path to recycle their acrylic materials. To obtain recyclable materials, Sunbrella developed a partnership with the South Carolina Vocational Rehabilitation organization, which receives and sorts mailed and shipped returned materials for recycling. From there, Sunbrella uses in-house processes to upgrade reclaimed fibers so it can produce high-quality fabric again.

Sunbrella’s processes for waste-free production have been streamlined after years of implementation, and the company is now able to bring facilities up to the company’s standards within months, as the company did when it acquired Sunbury, whose facilities were landfill free within a few months.

### Vertical strategy

At Revolution Fabrics, waste reduction has been a key part of the company’s environmentally friendly movement, too.

“We’re about 95% landfill free. It’s a part of the company’s ethos, so we have worked to grow that, and continue to try and make that a bigger part of the company.”

To do so, the company has made moves to recycle and repurpose vertically. Fabric cones are recycled, salvage waste fabrics are sold to the noise control and insulation industry, and the company has even purchased a custom bagging machine that molds bags closer to the product, to help cut down on plastic waste by almost 35%.

The 5% of leftover waste at the company, Gibbons said, comes from things such as food scraps from their cafeteria, and even that they are looking to minimize.

“We are always looking for new technology to help us further our environmentally sustainable goals,” Gibbons said. “We start with an upcycled yarn, so it’s important to be transparent about our environmental practices.”

The “green product” Revolution Fabrics starts with, according to Gibbons, is the company’s material of choice: polypropylene fabrics.

“Revolution fabrics use polypropylene, which is a byproduct of oil refining and natural gas processing, and before it began being used in fabrics and other products in the 1960s, it was burned off and discarded,” Gibbons said. “So by using it now, we’re starting with a low-impact product because we’re essentially upcycling something that would otherwise have been thrown away.”

Polypropylene fabrics, which are sometimes called olefin fabrics, according to Gibbons, also require less energy and water to make because it is not grown somewhere and then shipped like a natural fiber and it produces little waste. The fabrics also do not require chemical washes to achieve their performance cleaning abilities and durability, so Revolution Fabrics do not come in contact with PFC chemicals, which, according to Gibbons, have been linked to harmful health effects.



A Glen Raven employee works on Sunbrella fabrics in one of the company’s zero-waste facilities.

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#### Upcycled durability

Covington Fabric & Design makes use of polypropylene materials, too, according to Voehl and the company's senior vice president of sales and marketing, Tom Bruno.

"Olefin is an indoor/outdoor product that we've been using longer than some of our other kinds of performance fabrics, so we have been taking advantage of a green material that has no added chemicals for awhile," said Voehl.

In addition to the polypropylene fabrics, Bruno said, Covington also uses immersion dyes on natural fibers that meet a variety of quality standards, and he credits much of the company's sustainable message to the durability of both of those products.

"We've created the Covington Easy Clean brand to address the needs of a highly active lifestyle at home that will remain easy to clean and durable, extending the life of the product. That is a big part of our environmentally friendly story."

Crypton Fabrics also puts an emphasis on its product durability as a key part of its environmental impact.

"When it comes to sustainability, one of the things we're

most proud of is extending the useful life of fabric, which can be quantified based on manufacturers' data on greenhouse gas emissions avoided, less landfill and less water consumption," said Jack Eger, Crypton Fabrics' senior vice president.

Third-party certifications are also a key part of Crypton Fabrics' environmentally friendly practices, as Eger said the company "actively seeks out" vetting through standards such as its Greenguard Gold certification, its NSF/ANSI 336 Facility Validation from SCS Global Services and its membership with the Sustainable Furnishings Council.

All of Crypton Fabrics' certifications come through its manufacturing processes, which feature things like Crypton C-Zero, developed to meet no-fleuro-technology requirements for the contract market, and programs like its ongoing recycling program for manufacturing remnants.

#### 'Clean chemistry'

Richloom Fabrics Group bases its environmentally friendly practices on a "plant-based clean chemistry performance story," according to Nolan Mitchell, Richloom Fabrics Group's vice president of upholstery sales and merchandising, relying on clean chemicals and clean products as a large part of their environmentally friendly practices.

"In addition to being plant based, this chemistry is PFC Free, PFOA Free and PFOS Free," Mitchell said. "We have adopted best environmental practices as set forth by the American Chemistry Council while meeting the most stringent standards of restricted substance lists."

Al Fresco Functional Fabrics keeps things local, and green, by keeping its production in the United States.

"We base all of our production in the Carolinas, from the actual yarn to the weaving process," said Al Fresco Functional Fabrics' President Todd Nifong. "We don't outsource, so we lessen our impact with things like carbon emissions."

In addition to keeping shipping impact low, Nifong said keeping production of the fabric nearby geographically also allows the company to manage more closely everything that goes into manufacturing.

"There are some inherent environmental impacts with any kind of production, but by keeping our process close, we are able to work with our suppliers through the whole process to reduce our environmental impact along the way."

#### Into the future

Looking at the future of environmentally friendly and sustainable practices in the performance fabrics industry, the



This is a sample of Crypton Fabrics' performance pieces from the Pattern Play collection by Stacy Garcia.

suppliers agree that consumer demand for it will remain, so they are all looking to increase in-house practices and marketing.

"We are not hiding anything in our process," Gibbons said about Revolution Fabrics' marketing. "We want people to find our product and realize it is the most environmentally friendly upholstery fabric on the market through research, so we try to provide a jumping-off point through videos and explanations of our processes and through links to outside research and other information."

For Revolution Fabrics, consumer awareness has grown, and the company has received positive feedback on its efforts to educate and plans to grow that initiative alongside its other, direct environmental efforts.

"We will work to decrease our already low numbers," Gibbons said. "We'll get that 5% of waste down to 1% and then maybe find new transportation methods that cut down even further on our use of power and fuel when we ship our domestic product. During all of that, we'll continue to update our customers because transparency will continue to be the most important thing in the future."

Sunbrella has similar goals and has plans in place to continue to shrink its energy and water use as well as bring all of its facilities up to new standards. In the next three years, Glen Ravens plans to reduce total ener-

gy consumption by 10%.

At Crypton Fabrics, exploring new and experimental fabrics is the trend Eger sees moving forward with environmental awareness and sustainable practices.

"The high-end fashion textile industry is currently experimenting in interesting ways with textile technologies," Eger said. "Fascinating things are happening globally including experimental use of a wearable 'paper' and applying synthetic biology to the use of plant root structures as potential fibers. The finishing of many of these new-age textiles is also eco-conscious, using natural dyes, laser surfacing and efficient ultrasonic construction."

Ultimately, most suppliers predict, any changes made in the future will need to be done with customer awareness and an ethos of responsibility at the forefront.

"There is a pressure on suppliers to push information down to consumers about how the product was created, so we are now providing more product information than ever before and testing our product more and more. That will continue to be important," Nifong said.

"We see eco-friendly products on the rise across the board, from the foods we eat to the clothes we wear," said Mitchell about Richloom Fabrics Group's goals. "So, we will work with the belief that what you sit on should be no different." 



Covington makes the three fabrics on the left from 100% solution-dyed polypropylene. The five fabrics below have been treated with Covington High Performance Easy Clean finish.

