officeinsight™ 8.1.05

Carnegie Environmental Tour

by Lauren Weinberg

Interface Europe

This past May, I joined about 30 interior designers, architects, and sales representatives from across the US for a once-in-a-lifetime adventure: **Carnegie Fabrics'** fourth annual **Environmental Tour**. Our group, which included professionals from **Gensler, NBBJ, TVS, Perkins & Will, SOM,** and many other firms, visited some of the greenest manufacturers in Europe to learn about what makes a product truly sustainable. We were joined by a number of representatives from Carnegie, including **Cliff Goldman**, the company's president and the driving force behind its dedication to sustainability.

This year's tour stopped at **Interface Europe** in Scherpenzeel, The Netherlands, a division of the American carpet manufacturer; **Création Baumann**, a textile company in Langenthal, Switzerland, which distributes its products through Carnegie in the US; and **Rohner Textil** in Heerbrugg, Switzerland, famous in green design circles for its Climatex Lifecycle fabrics, which Carnegie also uses. Along the way, we also managed to explore Amsterdam, visit the **Vitra Design Museum**, hang out with some sheep, and enjoy elaborate traditional meals everywhere we went.

The trip wasn't all fun and Swiss drinking games, however. Each company gave us an exhaustive tour of their manufacturing facilities that demonstrated how their environmentally conscious practices distinguish them from their competitors. Well…to be honest, the trip *was* all fun, too much to describe in one article. This week, I will discuss our visit to Interface Europe; look for my account of the rest of the trip in future issues.

Arriving in Amsterdam early on a Sunday morning, we immediately fanned out for a few hours of sightseeing. By the time we reconvened for lunch, many of my fellow travelers had been to the Anne Frank House or the Van Gogh Museum; others strolled around, window shopping and admiring the centuries-old houses along the canals. In the afternoon, we toured the city by bus, stopping at architectural landmarks such as **Meyer and Van Schooten's** shoe-shaped ING House and Borneo-Sporenburg, a neighborhood full of dazzling contemporary housing designed by the likes of **MVRDV**.

The next day, we went to Interface Europe's manufacturing facility in Scherpenzeel, which is about an hour's drive from Amsterdam. We received a warm welcome from **Ton van Keken**, Senior VP of Operations, Interface Europe; and **Claude Ouimet**, Senior VP of Marketing and Marketing Strategy, Interface Flooring Systems. Mr. van Keken recounted the history of Interface Europe, which now has annual sales of approximately $200 million and 900 employees. The division has other factories in Craigavon, Northern Ireland; and Shelf, England. Most of Interface Europe's revenue – about 67% – comes from corporate clients, but as in North America, markets such as education and healthcare are growing steadily.

Before the Dutch segment of the company was acquired by its American parent **Interface, Inc.** in 1988, it was known as **Heuga** (pronounced "YOO-gah"). Founded in 1924 by P. J. van Heugten, Heuga originally made saddle covers for bicycles and cycling gloves. In 1958, it began making Heugafelt, the world's first carpet tile. Instead of synthetic fibers, the product was made from animal hair, mainly pig bristles. The Scherpenzeel factory still produces about 2.1 million sq. yds. of Heuga brand hair tiles each year, which may be ordered in North America. (The Dutch have fond memories of the old hair tiles, but most of their raw material now comes from goats and cows. I found the concept odd at first, but the tiles are an excellent flooring solution: warm, elegant, and available in a range of gorgeous colors.)

The Scherpenzeel facility also produces 11.5 million sq. yds. of Interface tufted modular carpet and 250,000 sq. yds. of Intercell raised floors annually. About 350 people work there and the factory operates 24 hours per day, six days each week!

Our tour of the Scherpenzeel administrative building and factory demonstrated that Interface Europe is on what Americans would consider the cutting edge of green building. Designed by a Dutch architect, the facility is primarily constructed from prefabricated concrete and sustainably harvested pine wood. It has *no air conditioning* – just natural ventilation – and a "natural garden" that requires very little maintenance. Lighting

Amsterdam: Houses

Amsterdam Bridge

ING House

is controlled by motion sensors and the level of light outdoors. (The interiors of the administrative building were among the brightest and most cheerful I have ever seen.) The facility utilizes only renewable energy, including solar power, and prominently displayed meters tell visitors how much electricity the plant is using by the hour, week, and year. It even promotes social sustainability: all of the artwork on the walls was created by patients at a local facility for the mentally ill.

The Scherpenzeel plant is an effective marketing tool as well as a pleasant environment for its employees. In addition to embodying Interface's commitment to sustainability, it illustrates how clients might use Heuga and Interface tiles (and omits them in some areas to highlight the Intercell raised floors). A different carpet is used in each office to show the breadth of the collections and its name is cleverly listed next to the door along with the occupant's!

We also stopped by the testing lab, where we saw machines that imitate the effects of footsteps and chair casters on carpet, as well as devices that test its colorfastness and flammability. Every part of the Scherpenzeel complex seemed more cheerful than comparable facilities in the US; even the factory floor was clean and airy.

Interface Factory

After exploring the plant, we met **Ed Blamey**, who has been Interface's European Sustainability Director for more than a year and a half. Mr. Blamey told us about the company's **2020 Vision** – founder **Ray C. Anderson's** determination that Interface become completely sustainable by 2020 – and the methods it is using to achieve that goal. In addition to "closing the loop" by recycling the nylon used in its carpets more efficiently, through measures such as the **Lightfoot Program**, Interface is reducing its toxic emissions; relying more and more on renewable energy and resource-efficient transportation; and eliminating waste through **QUEST (Quality Utilizing Employee Suggestions and Teamwork)**. According to Mr. Ouimet, the company wants to ensure that "today's customers become the suppliers of tomorrow." He told us about Interface's experiments with **Cargill Dow's** corn-based PLA fibers, noting that they could eventually make the company's products compostable, like Rohner's Climatex Lifecycle fabrics.

Our visit concluded with a lecture by **Niels Peter Flint**, a Danish designer who now primarily lives and works in India. Mr. Flint founded the green design advocacy group **o2 International** and now runs **Experience Design Lab** (www.exdl.com - the site is currently under construction). He exhorted designers to "radically rethink" the way they approach projects. Although green design has a great deal of support in Europe and is advancing in North America, Mr. Flint warned that it cannot counteract the developing world's rapid adoption of our own consumerist "bad habits." After his sobering presentation, our group departed for Schiphol Airport, lost in thought, but eager to see how Création Baumann is addressing these issues.

For more information about Interface Europe, visit www.interfaceeurope.com. For more information about Interface's sustainability initiatives, visit www.interfacesustainability.com. For more information about Carnegie Fabrics, visit www.carnegiefabrics.com. ▲

Interface Factory:Caster Testing

Création Baumann

The second stop on Carnegie Fabrics' environmental tour was **Création Baumann**, a textile manufacturer with whom Carnegie has had a marvelous and productive relationship since 1974. Based in Langenthal, a large town outside Zurich, Switzerland, Création Baumann was founded in 1886 by **Friedrich Baumann**, who thought the region's plentiful fields and ample water supply would support his linen business. His great-grandson Philippe Baumann, the current head of the company, explained that, at the time, linen was a big business: a bride was expected to bring twenty kilograms of textiles to her new household! By 1960, however, Création

Baumann had stopped producing linen and began developing furnishing fabrics instead. Today, it has more than 7,000 items in its product range, which are distributed in 22 countries. The US represents about 11% of the company's market; Switzerland and Germany each represent another 20% and Japan is in fourth place, "another growing market."

Création Baumann is the largest supplier of high-quality fabrics in Switzerland and its products have been used at the Giorgio Armani store in New York, the Metropolitan Museum of Art, Dolce & Gabbana in Milan, and the Louvre; it is currently working on a job for Renzo Piano in Bern, Switzerland. Mr. Baumann explained that his company believes in protecting the environment because he and his employees have such strong ties to Langenthal. His own children play in a river that contains treated water from Création Baumann's factory, so he must make sure his business practices are as safe as possible. "We want to reconcile efficiency with ecology," he stated, adding that sustainability and higher profits do not have to be incompatible; one can support the other. In recent years, the company has reduced its water usage by an impressive 20% and has started reusing grey water for cooling purposes. Since textile manufacturing requires so many resources – in order to prepare

one kilogram of cotton, for example, a factory will need to consume 200 liters of water – Création Baumann's environmental strategy has an important impact on the region.

I was therefore surprised to discover that Mr. Baumann does not want to use the company's commitment to sustainability as a marketing tool. Indeed, although most or all of the designers on the tour were already admirers of Création Baumann's collections, they were not aware of the manufacturer's green credibility. Mr. Baumann seemed unfazed. "In ten years, every company will be required to do what we're doing," he predicted, noting that Création Baumann will be ahead of the game.

Dr. Heiner Zimmermann, an Austrian scientist, spoke to our group about Trevira CS, a polyester fabric used by Création Baumann. Dr. Zimmermann suggested that Americans are biased toward natural fabrics, particularly cotton, even though they are not necessarily best for the environment. He claimed that cotton, which still accounts for 50% of fabric production worldwide, has been responsible for excess soil fertilization, groundwater pollution, and water consumption.

Since it must be finished with resins, cotton cannot be recycled. Wool contains pesticides and the dyes used on it contain heavy metals, Dr. Zimmerman added. It must be treated with toxic flame retardants and finished with resins; again, recycling it is impossible. Many of the designers on the tour said that Dr. Zimmermann's presentation forced them to reconsider their own stance on "natural" versus "synthetic" products. Whichever type of fiber they use, the 200 employees at the Langenthal headquarters are in touch with every step of the textile manufacturing process because of the facility's unusual vertical integration. Création Baumann has an in-house design studio, winding shop, dye shop, twisting mill, weaving mill, print shop, and finishing shop.

"This helps us be more innovative [and] have more know-how about textiles," said Mr. Baumann. I was struck by the company's conviction that sustainability involves issues such as noise pollution and quality of life for employees and customers. We split up into small groups to explore the factory and I found it to be pleasant, well-lit, and virtually free of any fumes. In this sense, it reminded me of Interface Europe's cheerful headquarters in Scherpenzeel, and Mr. Baumann said the facility is also supposed to reflect the values of the company that occupies it.

As **René Hofmann**, the company's Product Manager for Systems, showed us around, he pointed out the places where the factory is producing waste and showed us how Création Baumann treats it, explaining that runoff is tested frequently and rigorously. Until Mr. Hofmann broke down the steps in the manufacturing process for us, and we saw the amount of materials used first-hand, I had no idea how much of an impact textile production has on the environment. It was a sobering experience. Fortunately, Création Baumann is demonstrating that there are endless opportunities to reduce waste at every step, whether it is by changing the sampling process or the very materials used.

Our visit to Création Baumann ended with an exciting presentation by **Eliane Ernst**, Director of Product Management for the "creation baumann" line, who described how her staff creates new collections that are fresh and original, yet true to the spirit of the company. For example, one of its classic fabrics, Palazzo, was recently reinvented in Trevira CS as Ponte. It may feel slightly different, but the new fabric looks almost identical and is washable and flame retardant. Other new products were much more fanciful.

As Ms. Ernst held up various avant-garde fabrics that are in development, one could tell that she and her colleagues have as much passion for their work as

The Group at Création Baumann

The Group at Création Baumann

any fashion designer lauded in Vogue. The enthusiasm the designers on the tour showed for her fabulous samples reminded me

that aesthetics are an important component of sustainability, too often forgotten: if your design makes someone happy, they will make every effort to preserve and reuse it.

Naturally, after a long day of studying weaving and dyeing methods, we needed some refreshment. We had a delicious Swiss dinner that night in the Emmenthal region, a landscape so beautiful that we could only break into songs from "The Sound of Music." But we had only reached intermission…Zurich, the Vitra Design Museum, and Rohner Textil awaited!

For more information about Carnegie Fabrics, visit www.carnegiefabrics.com. For more information about Création Baumann, visit www.creationbaumann.com. ▲

Vitra/Rohner Textiles

After our visit to Création Baumann, Carnegie Fabrics' Environmental Tour continued with a "free day," during which the designers split up to explore Zurich on their own or visit the renowned **Vitra Design Museum** (www.design-museum.de) in Weil-am-Rhein, Germany. The museum, which was designed by Frank Gehry, hosts temporary exhibitions and features a permanent collection of furniture by Charles and Ray Eames, George Nelson, Alvar Aalto, and other designers who had an important influence on the Vitra (www.vitra.com) corporation. It was curated by Vitra CEO **Rolf Fehlbaum** and opened in 1989.

Susan Watts, IIDA, of SpaceCraft International, said she was particularly impressed by Zurich's "sensitivity" to pedestrians and realization that when it comes to architecture, "old" doesn't mean "bad." She compared it to Atlanta, where she grew up and currently lives, noting that the Swiss city has much greater density and integration of different socioeconomic groups. "I know this is more [typical of] European culture as a whole," she added. "The United States misses out on this in many cities. Partly from our culture, mostly from our way we developed our communities."

The next day, it was on to **Rohner Textil**, where the group met with CEO **Ivo Forster** and toured the company's mill in Heerbrugg, Switzerland. Ms. Watts observed that factories in Europe seem to be much more integrated into the community than their American counterparts. "[They're] just another part of the 'human eco-system.' They don't . . . hide them or give them crummy-looking buildings." (This was certainly true of Création Baumann, which invites local residents to its facilities on a regular basis. During our visit, we spotted a high school class and a senior citizens' group.) Ms. Watts concluded, "In turn, it seems that these manufacturers understand and embrace the idea that they, to live [and] work in this same community, must . . . give back to it," in part through sustainable processes.

This kind of commitment was what led Rohner to develop its wildly successful **Climatex Lifecycle fabric** – which Carnegie now distributes – with the help of Designtex and **McDonough Braungart Design Chemisty** (www.mbdc.com). The Environmental Tour participants had a unique opportunity to hear about this collaboration from **Michael Braungart**, the German co-founder of MBDC, himself. Many of the designers agreed that Dr. Braungart's presentation was a major highlight of the trip. "I came away converted," said Jonelle Vance of JMA Architecture Studios in Nevada.

In the early 1990s, Rohner was finding it difficult to dispose of its fabric trimmings, which the Swiss government classified as hazardous waste – leading one to wonder why the fabric itself was considered safe for upholstery, as Dr. Braungart and his partner, William McDonough, point out in their 2002 book *Cradle to Cradle: Remaking the Way We Make Things.* Designtex commissioned MBDC to create an environmentally friendly fabric that would be made by Rohner. The result, *Climatex Lifecycle*, was made from a mixture of ramie (a plant fiber) and wool that was free of toxic dyes and safe enough for compost. When inspectors came to Rohner to test the water leaving the factory, they found that it was free of pollutants – in fact, it was as clean or cleaner than the water entering the facility. In 1996, Rohner called on Dr. Braungart again to help develop a more flame-retardant version of Climatex Lifecycle, called Climatex Lifeguard FR, which replaced the ramie with a beech-wood-based cellulose fiber, but which retained the original's green properties and could still be used as a "biological nutrient."

The designers on the Environmental Tour reported that they were fascinated by their first-hand look at Rohner, which presented yet another solution to the challenge of creating green products. **Cliff Goldman**, the president of Carnegie Fabrics, explained that the trip is intended to illustrate the variety of options available, rather than suggest that

Climatex Lifecycle Fabrics

there is one “right” way to achieve sustainability. “The real eye-opener for many of the designers is that we don’t offer any black and white answers,” he said. “Instead, we teach and talk about process, show different approaches to the same end goal and teach them how to effectively ask the right questions and measure the validity of the answers they receive.”

Several members of the group said that, in the months since their return to the US, they have already changed the way they evaluate products. Becky Ward of TVS Interiors in Atlanta said she was left with “big questions” about materials such as vinyl. Ms. Vance, who called the trip a “life-changing” experience, said her office is “revamping [their] entire library.” Ms. Watts said that she and her colleagues “are implementing a ‘green policy’ in as many finish selections as we can [and] requesting further study by our manufacturers when we cannot find [a product] that meets our sustainable requirements.”

The tour ended with another fun-filled evening as the group visited the Appenzell region for a traditional Swiss dinner, complete with Alphorn accompaniment. Everyone returned home more determined than ever to educate clients and co-workers about green design, more aware of the factors one must consider in promoting it, and more hopeful that the US can follow Europe’s example. We also realized that designers from New York to Indianapolis to San Francisco have the same concerns for the future of our environment, and in just a few days the group formed bonds that should last a very long time. And if our memories of the trip start to fade, there are plenty of incriminating photos to help us remember.

Vitra Design Museum

For more information about Rohner Textil, visit www.climatex.com. For more information about Carnegie Fabrics, visit www.carnegiefabrics.com. ▲

Carnegie

110 North Centre Avenue
Rockville Center, New York 11570
T: 516.678.6770
F: 516.678.6846
mail@carnegiefabrics.com