

## ORSM11 Concept III / Hohenstein / Textile Insight Seminar (Partial) Transcript

### **Introduction: Emily Walzer, Editor, Textile Intelligence Magazine:**

- [Quoting David Parkes, Concept III Textiles]: Textiles are the driver – textiles are the starting point for all products. It allows designers and developers what they want to achieve
- A key ingredient of advanced textiles is comfort. With new technology from Hohenstein we can test for that and be analytical
- Clothing physiology – is the focus of Andreas Schmidt:

### **Dr. Andreas Schmidt, Director of Function and Care and the Hohenstein Institute:**

- A constant balance between heat loss and heat production, comfort is never the result of just one textile feature
- Why is comfort important? It is not only to feel well, but to support physical and mental fitness comfort of [the wearer]. Textiles also give you protection from the environment comfort is not a luxury it is essential
- Skin sensory discomfort creates a distraction and can affect performance
- The aim is to balance the relation between heat loss and heat production – both metabolic heat and the environmental heat
- Designers and developers need to ask: What do you want to achieve with your textiles?
- Comfort is never the result of just one construction parameter: its the fiber materials, yarn construction the construction of the clothing system all these parameters need to be constructed and optimized the for purpose you want to achieve.
- How can comfort be assessed objectively? There are 4-5 standardized tests [ASTM]
- There are two parts for testing comfort skin sensorial properties with human test panels. How does the textile feel on your wet skin – i.e. number of contact points between wet skin and textile and how fast water is absorbed, and: the surface or roughness of the textile, and the stiffness of the textile
- With human being test and we are able to correlate it.
- Measuring comfort with wearer trials – Hohenstein uses climatic chambers and varies the tests with different exercises, temperatures and humidity. They take all the results together and correlate them.

### **Steve Richardson, Director of Material Development, Patagonia:**

- We don't market our products as comfortable, but our customers do expect that our products will be comfortable when they use them
- To test our products we put our ambassadors and athletes out in extreme conditions
- New yarn technologies and finishing allow for new levels of protection in hot and humid weather. And sun protection. Salt water is challenging because you get abrasive issues.
- User perception is a very important factor in comfort. Studies show that if you can take an action to impact your comfort, you're going to become be more comfortable even if none of the conditions change. So when we are designing a garment we take that into account and put in features like pit zips users to adjust their comfort.
- We are seeing new WPB that have new levels of breathability
- Durability is a very important aspect of Patagonia products and materials

- Comfort also requires peace of mind. Have to feel good about what you're using. As our planet is warming as resources are becoming scarcer including our most precious resource, fresh water. The planet is becoming more crowded. If we don't start addressing some of these issues with our products, we're all going to become uncomfortable very quickly.
- @Patagonia we use low impact materials such as recycled polyester from plastic bottles. We adopted organic cotton. Since 1996 we've only used organic cotton and are still a leader in that.
- We use sustainable wools. We now can produce non-shrink wool fabrics processed without chlorine. We use wools from non-museled sources.
- We are now pursuing a new type of wool that is sustainably farmed through the Nature Conservancy's Sustainable Grasslands Project. It will do for the World supply chain what organic cotton has done for the cotton supply chain
- With our Common Threads program keeps products from going to the landfill. We will be able to take back all our products. Consumers can now return their products to Patagonia to recycle, upcycle, downcycle, or repurpose that product to prevent that product from going to the landfill.
- Transparency is also a really important part of sustainability. We all need to learn from one another. Engage in dialogue. Our footprint Chronicles are for open discussion and engagement in dialogue about our products and how we can improve them.
- All these things, designing products that are functional, durable, sustainable, allows us to find comfort in unexpected places and some unexpected environments.

**Dr. Sam Moore, Managing Director, USA, Hohenstein Institute America, Inc.**

- The next year is going to be brilliantly exciting with the merging of the Eco Index (<http://www.ecoindexbeta.org/content/about-project>) and the Sustainable Apparel Coalition ([file://localhost/\(http://www.apparelcoalition.org/about\\_us\)](file://localhost/(http://www.apparelcoalition.org/about_us))) Similar metrics and similar tools and make measurements in transparency that really puts us all in a great spot for all the improvement that we need to make.
- This train is on the track and going to run fast its going run open, for everybody to participate. It is wildly exciting how much progress and how much open information is going to be available to all companies large and small and how that's going to accelerate the network building that is going to occur in this industry in the next several years.
- Sustainability is now a mainstay, sustainability is a verb. it's a verb! Its not an end. It's a verb. We're all going to be working in this changing environment we've got and becoming more sustainable means more action, more testing, and more science and merging that into building really quality products that our customers love to wear and keep for ever.

**David Parkes, Founder, CEO of Concept III Textiles:**

- Trends: What's emerging, What's happening, What's selling, What's important.
- Things are changing rapidly in our industry.
- This is what has defined us and made us different to other elements of the textile business. We have standards that we have mastered and have made us different to the rest of the t[textile] industry - this is the DNA of our industry this is why we have been successful and during a difficult economy our industry is successful today.
- We should remember that this industry has always been focused on innovation and taking advantage of the differential that the textile provides in design and styling, the great marketing of brands and a high quality and sustainability and accountability...this is the DNA of our industry this is why we have been successful during a difficult economy our industry is successful today.

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- In apparel, Design is becoming and more and more and more important and the responsibility of the design community is becoming greater because so many products are similar and they are defined as different by the design.
- Euro designers have the opportunity because of Euro price points to make fascinating garments with wonderful trim treatments and bring to the market over there unique product to the market - which we need to try and simulate here.
- Our problem in the outdoor industry and possibly in our economy is this focus on price and cost all the time, whereas in Europe they look at things a little bit differently. Garment design is of great importance and developing and in emerging and is becoming more important.
- What is happening in the inside of the garment?. We always look at the outside of the garment. The inside of the garment tends to be boring. That is changing. You will see linings more interesting treatments
- The growth of prints – inside the garment rather than outside and expressions in linings
- Textures and surface interest always important on the outside, becoming far more important on the inside. Pattern work, design work, texture.
- Merino wool, natural fibers. Merino is certainly becoming more important, particularly in blends for pricing. Lenzing fibers have been doing tremendous work with blending their fibers with natural fibers
- Shape wear, as I call it. In base layer, active and performance applications. subtle shaping for performance and comfort, not for constriction. Its going to become a much bigger story particularly in base layer and activewear
- Lighter weight bonded and laminated products particularly in wovens - a big trend. More sophisticated laminating techniques. Lighter weight wovens in both nylons and polyesters certainly to be tracked
- 3 final points: trends I see emerging with my customers:
- No question, the sustainable story has been talked about for 15-20 years but is now really taking a grip. The concern over water and energy conservation are two features that are going to become a very important part of the supply chain. Textile companies are focused on it dramatically. A really important emerging trend. We know about plastic bottles and all these other things, but this focus on saving energy and saving water consumption is going to be a big big part of textile development I believe over the next 5-10 years.
- Pricing: everyone knew prices were going up last year but that trend is stabilizing. Prices are stabilizing and the world economy will force that to happen, I don't think we'll see prices going up.
- Sourcing dynamics: The most interesting fascinating and exciting dynamic is that things are happening in the USA. If we can approach this intelligently and without emotion and really address what we can do in the USA, I believe over the next 5 years you're going to see textile products come back to the US. You may not see garment production - that will be in Central America. I know of one major one major operation in Asia who has said they will have a textile operation in the USA in 4 or 5 years from now.