## tradeandindustry

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**Design and Fabrics** 

## pay-off comes from investing in development

and the truth is just as Vivian Wood said - "buy less, choose well, make it last" There is an escalating demand for fabric developers now their area of work is seen as a leading side of a brand's appeal. Brands are waking up to how so similar product looks as designers regularly transfer between companies, working with fabric salesmen who will offer every part of their portfolio to any interested party. Only by investing the time to request further developments of the fabric converters will brands ever develop something unique to their company.

Places that are right at the very coalface of our business are where mind and matter meets. It happens that ISPO is still the main show for at industry level where some of the fabric developers and manufacturers are found individually in the main Halls, although they mainly group in C1 & C2. There is an added appeal in these two halls as fabric forums with presentations happen alongside the exhibitor booths. The more interesting focus for Fabric Developers is at Performance Days, a twice a year event in Munich's MTC World of Fashion. Just how relevant Performance Days has become is that the next-up happening is to Munich's messe. PD, as people now call it, is THE exhibition to attend – for both the fabric brand and a fabric developer. There are other fabric sourcing shows, some in the main city of Bavaria too, but this exhibition has risen to become the desired place to be and be seen. Before PD the show that offered the most for the sports industry was Premier Vision. There are two main reasons for the rise of Performance Days: its timing of April and November that matches phases in the design year, and being a Show without the distractions of marketing support. Each stand is a shell-scheme and the only gathering is the Oompah band party on the evening between the two days - free beer until the crates run out. What Performance Days delivers is a relatively low cost Show for both brands and the visitors and uninterrupted time for continual conversations about the product, as opposed to big brand marketing. A restricting factor as the exhibition has grown in appeal is the space of the venue itself, at each of the last four years it has expanded the floor-space. PERFORMANCE DAYS Team (left to right): Lena Weimer, Marco Weichert, Lisa Lechner and Stefanie Sacherow A year ago it filled available room, with now taking it to a Messe version they can expand to 300 stands or so. At the separate booth groupings the visitor finds an area with both a fabric showcase, Workshop Rooms and conference area. Similar fabrics are grouped at comparison tables, choices being Base-layers, Insulation, Two layer waterproof, and others with this offering opportunity for direct comparison of the fabric for feel and weight. This sees a themed set of presentations delivered, in April 2017 the topic was Biodegradability with the headline presenter being the acclaimed designer Christopher Raeburn, of the Re:Made collection. This autumn's show featured Thermoregulation. Visitors once found the single day visit was fine, but as the show has expanded - a year ago, just over 100 stands and 1000 visitors; the last show saw nearer 200 brands & 2000 attendees. Performance Days has now become so busy that it would be difficult to cover the event in one day, which means designers and developers will hmake pre-booked appointments to chat to stands. to enhance maximum performance Thermoregulation, theme this time, sees many in the trade considering the subject just to be about insulation and whether new product keeps you warmer for less, or has better breathability than existing materials. On the day though the presentations broadened the subject to how to keep skin temperature to remain as close to 37 deg to enhance maximum performance. The roll of nature was examined with how hairs on the skin react, why perspiration occurs, and the roll of vasoconstriction vs. vasodilation. Having established the baseline, further presentations went onto detail smart materials and how biomimicry could be applied. Perhaps the area that received the most encouragement was that of natural and synthetic materials working together to create a buffering zone. It's about extending the project that Primaloft has with Gold Blend to one that might include wool as it has properties than show heat absorption and feedback like a Phase Change Material. More attention is being paid to Flocus and wool these days as the natural fibres offer more than originally thought. Certainly current laboratory test methods do not encompass all the benefits that natural materials offer: everybody knows merino works great as a base-layer, yet somehow it always comes last when compared to synthetics. As to the detail of fabric development it becomes easier if it's sub-divided into groups of attention. Fabric is normally divided into natural and synthetic, but there is now the Bio-synthetic group, seeing plants can provide the same elements as nylon and polyester. Further to this are issues of dyes and finishes, but now the majority of work is subject to influence from BlueSign (the original Swiss Environmental Auditing service from the turn of the Millennium) or nowadays the Sustainable Apparel Coalition, launched five years

ago, along with specific attention for footwear and other arenas. Perhaps the biggest area of interest is that prompted by problems. All of this decade the worries about fluorine chemistry have led to the development of PFC-free Durable Water Resistant finishes. There has been much progress made towards the durability of the new formulations - some of it in the chemistry, some of it in the application methods - where the water-rejecting qualities have been outstanding, but they fail in oil resistance. This latter category means that sweat, suntan lotion, grass stains and the like will all result in the DWR being compromised, however with regular maintenance - such as washing in nondetergent soap, rinsing a second time, a quick tumble dry - the DWR's lifespan can be considerably extended. The incoming problem is that of micro-plastics, which come off synthetic garments during the laundering process, that the media seems to be making out to be the worst side-effect ever. Textiles in garment use produce less micro-plastics than the wear from tyres, but more than the cosmetic industry; the biggest single source of micro-plastics in the ocean is from the breakdown of the Great Pacific Garbage Patch, the next biggest is the wear-off of marine emulsion paints. durability - measured in three forms It pays to remember the danger is mainly from the chemicals that stick to the fragments of plastics - a solution needs to contain the chemicals that are already in the sea. Not all natural textiles break down - wool does not degrade in the sea - but all textiles get worn by repeated washing. Perhaps the more important question is one of the overall footprints, with everything measured by carbon/ energy used, waste produced and the amount of water consumed. It is well known that re-manufacturing a garment produces more footprint than the chemicals to make the garment more durable. Durability is measured in three forms: physical durability is well accepted for sports garments, emotional durability is now the bigger influence, such as how long a garment is loved and worn for, along with fit durability, after all so many garments will not adapt as your body-shape changes - obvious with children outgrowing garments. Looking closer within the topic of developments of fabrics and finishes currently being initiated in the sports industry we see the majority of attention is to lighterweight fabrics with fabric deniers of below 10 now easily possible, that even as a 3 layer-waterproof. We know that 7 denier yarns are windproof and can weigh 19 gms/ m<sup>2</sup>. These yarns being used are also becoming stronger and the medium term future will see elements of Graphene used. The subject of body odour is becoming more important and there are essentially two ways to solve it: silver or chemicals. The former is what has been used throughout time, but the small particles do not bind well to the fabric, which detach and enter the water system; whilst the latter produce more side-effects associated with synthetics. The natural way to fresher smelling clothing is to use wool: the finest merino can be used in the warmer temperatures, or the possibility of silk in hot climates. In wool the 'no-pong' factor is at least three times as long as untreated garments New ways of weaving nd bonding fabrics are being developed; in the near future there will be multi-layer fabric that has been woven together - hence no line of stitching to fail. The other factor that advances in this area produce is the elimination of adhesives so delamination problems will be avoided, and remembering that glues generally are chemicals based. In insulation there have been developments to create a wool ball that can be airfilled, like Down feathers, whilst this latter with a hydrophobic treatment is still the outstanding weight for warmth filling Progress towards better recycling is also a consumer desire, although the footprint for the end-of-life of fabrics is less than 5% of the overall amount. To facilitate this it is better not to have fabric mixes and blends, like polycotton – although there has been progress in this area to separate the components too. The subject of Design takes greater influence these days as so much product appears to be the same with just feeling it is the only indication of the quality of materials used. As so much purchase by consumers has become virtual, when combined with junior designers swapping brands on a regular basis this leads to product that looks identical. Some brands just deconstruct the category leader's product and re-assemble it, so negating the role of the designer altogether in favour of a production co-ordinator and a fabric specifier. What a designer can and does do is bring a genuine story to the product; this is normally reflected in a much cleaner design that is more fit-for-purpose, than the safe garment that seems to appeal to as many people as possible. In a world where the homogenous approach has become unpopular as people want to stand out from the mass, it is surprising that some design still follows this direction: unless it is part of the race to be the lowest cost provider, of course. The influence of good design also determines so much of the emotional durability of the product. If there are concerns about preserving resources for future generations then the mantra must be to design as Vivian Westwood declared "buy less, choose well, make it last" Charles Ross



