

Italian company **Tonello Garment Finishing Technologies**, also exhibited a range of machinery at ITMA for 'creative finishing', which include both automated processing for garment washing and dyeing, and laser finishes. The Laser Blaze process is able to reproduce the effects of wear and tear on jeans, as we have seen, in any way desired, customised through its software.



Tonello - Denim by Premiere Vision

Tonello's *G1 N2 Nitrogen Dyeing Machine*, offers eco friendly washing and dyeing by allowing the dyeing process to be carried out in a nitrogen atmosphere, thereby drastically reducing the use of chemical products, ensuring a cleaner and safer work environment and guaranteeing substantial economic savings as well as improved stability in the dyeing process.

'Waterless' dyeing is another new technology, which dyes fabric with absolutely no water at all, being taken up by big sports brands including Puma and adidas. Branded *DryDye* and developed by the **Yeh Group** in Thailand, *DryDye* fabrics are dyed using only CO2 and high pressure, a form of dyeing which lowers chemical inputs, reduces energy and dye stuffs, and uses no water at all.

Wikipedia says 'Sustainability' is the capacity to endure. For humans, sustainability is the long-term maintenance of well being, which has environmental, economic, and social dimensions, and encompasses the concept of stewardship, the responsible management of resource use. In ecology, sustainability describes how biological systems remain diverse and productive over time, a necessary precondition for human well-being. Long-lived and healthy wetlands and forests are examples of sustainable biological systems.

THE SUSTAINABLE ANGLE – FUTURE FABRICS EXPO

A small, but really useful exhibition recently held in London, showcased a selection of over 400 fashion fabrics, made from natural and man-made fibres, which have a lower environmental impact at the core of design and production, suitable for mid and high-end fashion brands. Sourced and curated by the **Sustainable Angle**, a non-profit organisation supporting projects, which aim to lower the environmental impact of industry and society, the approach to selection was to show a high quality and luxury fabric offering. Fabrics were chosen according to quality, which demonstrated an on going commitment to improved performance across the supply chain, from fibre cultivation to the finished product, addressing environmental principles

established with the Centre for Sustainable Fashion (at London College of Fashion) around issues to do with water, waste, energy and biodiversity.



Sustainable Angle

The aim of the event was to show "that it is possible to make high fashion clothes with fabrics that have a lower environmental impact and demonstrate that the old image held that sustainable fabrics not suitable for high fashion, is simply not true," said Nina Marenzi, Director of the Sustainable Angle.

Included in the selection were: recycled polyesters; innovative blends of natural and organic fibres cotton; linen and hemp; bi-product fish leather; organic cotton lace; 100% local British wool; recycled selvedge denim; and post consumed, coffee ground fabric (S.Cafe). Cellulose based fabrics (made from eucalyptus and beech trees) such as **Lenzing's** lyocell fibre *Tencel* were prominent, from **Bossa Denim**, which combines fibres including recycled cotton, *Tencel* and linen, aiming to reduce water use. **Arvind Mills** in India is producing its own brand of lyocel Birla Exel and **Bhaskar Industries** produces both *Tencel* and *Excel*

Wholly natural fibres ranged from organic wools, organic cottons, linen and hemp. Organic wool is produced by **Cornish Organic Wool**, with certification at every stage, and also by Scottish mill **Ardlandish**. Manufacturing closer to



Sustainable Angle

home, **Dashing Tweeds** use British and internationally sourced wool, while using GOTS certified dyes and processes. **Holland & Sherry** include wool from their Scottish Merino flock – the only UK Merino there is. And, in the production of natural dyes, **Ecotintes** have developed natural dyeing processes minimising environmental impact, and **Tintoria di Quaregna** has developed a natural dyeing process using only dry herbs.