

Compression apparel is fast becoming ubiquitous among top performance athletes, but with more and more companies launching compression clothing aimed at the more casual athlete, is this a trend that will continue to grow?

Comfortable compression



According to Australian underwear and base-layer company Equemen, compression garments improve the wearer's core alignment, core stability and core temperature. When the skeleton is correctly aligned, the company says, the bones support the weight of the body with minimal stress. This means that muscles hold very little excessive tension and enables them to efficiently initiate and sustain movement. Proper core alignment also facilitates oxygen flow for enhanced energy.

Such are the claims of many compression garment manufacturers, and many sportswear brands believe that compression clothing can enhance athletic performance. Earlier in the year, New Zealand-based sportswear brand Canterbury launched its new 'Mercury'

compression garments at the ispo international sports trade show in Munich, Germany. The garments, which contain Invista's Lycra Sport fabric, were designed to be worn during training, competition and recovery.

At the launch of the products, Chris Stephenson, CEO of Canterbury, said the garments "showcase the high quality and toughness of Canterbury's technical products". "Working with Invista over the last year has ensured that our garments withstand the harsh conditions athletes face on the rugby field, allowing us to develop a compression range that challenges our targeted competitors," he said.

Beauty and performance

In many respects, compression apparel is where the aspirations of beauty and athletic performance collide. Italy-based bodywear

New Zealand brand Canterbury launched its Mercury compression line this year, which will be worn by Springboks wing Bryan Habana in September's Rugby World Cup.

 Canterbury

company Sensitive Fabrics launched its 'Fit' fabric at the July Interfilière in Paris, which it says can be used as a shapewear fabric to "model and refine the body line and the silhouette's control". It is not, however, suggested for "specific compression garments" – such as athletic performance apparel. Toray of Japan presented its new compression fabric, "With It", at the Outdoor show in Friedrichshafen this July. It claims support for the musculature during movement and reduces muscle vibration. Unlike 'Fit', however, 'With It' makes no claims of enhancing the wearer's silhouette.

Can it be that these companies have missed a trick in failing to point out that compression garments can enhance both the look and performance of the wearer's body – or is it simply that different fibre compositions and fabric constructions offer different compression properties? It is, after all, the construction of a fabric, rather than its elastane content, that alters its compression abilities.

For Swiss performance textile fabric producer Eschler, combining beauty and performance was a logical step. Eschler claims that its easyShape range, also launched at Interfilière, "merges its expertise in the field of lingerie with the experience of producing highly functional performance sportswear". "The elastic fabrics not only create a beautiful silhouette, they also deliver top wearing comfort with fantastic moisture management, hygienic properties and high durability," says Eschler.

Comfort and functionality

With the aim of going one step further in the possibilities of compression fabrics, Toray believes its new With It fabric combines "compression and comfort in a totally new concept". Starting with the claim that athletes in the past had complained of compression garments being "uncomfortable, tight and unnatural feeling", Toray says its new compression fabric makes such clothing accessible and useful for not just high performing athletes, but also for "hobby athletes" and fitness training purposes. Toray claims that an "innovative and special manufacturing design" enables it to produce such comfortable compression wear. "The base layer can expand in a 360-degree radius with equal stretch in length and width, which was never before possible," says Toray. Compression abilities aside, it is the fabric's further functionalities that Toray is claiming sets it apart from other compression fabrics – as well as giving it the slogan 'soft compression wear – comfort like never before'. "Additional advantages are excellent moisture management, built-in UV protection of 50+ and a great natural



Toray claims its With It compression fabric enhances athletic performance and at the same time is comfortable to wear.

 Toray

feeling on the skin," says Toray.

Christoph Ebert of German research firm Science to Business, which recently conducted a study into Toray's With It fabric, says it is difficult to scientifically prove the performance enhancing benefits of compression wear. "Many brands making compression garments use slogans such as 'higher, faster, further' to aim their products at high performance athletes, but it's very hard to find the right methods to prove the effects," he says. "What we did was ask the wearers very systematically about the effects they felt – how they felt when they wear a compression shirt and when they don't wear one.

"What we could prove were the very good functional aspects of the compression material. It's not too warm, not too cold, and doesn't feel wet. Focussing on outdoor sports, most athletes don't wear a shirt for a one hour training session – they wear a shirt for ten hours. So the main point of the fabric is the combination of the functionality as well as the compression effect."

Mr Ebert also believes that Toray's new fabric will be more appealing to athletes who would otherwise prefer not to wear compression apparel. "Many high performance athletes don't want to wear such pressure clothing," he says. "The point with With It is you can wear it easily, and you can wear it all day in the mountains."

Toray's first commercial partner to use With It fabric is Swiss brand Kjus (founded by Norwegian ski racer and Olympic champion, Lasse Kjus), which will introduce a range featuring the compression fabric in summer 2012. 