



Cooling Technology Key to Innovative Wool Sock

Beth Wright August 4, 2016

Active particle technology from US-based Cocona Inc, which comfort by managing the body's ideal core temperature, is to feature in performance Merino wool socks from Point6.

According to the Colorado-based companies, combining Merino wool, one of the top performance fabrics in the outdoor industry, with 37.5 nylon creates a higher level of performance sock that delays the onset of sweat, dries faster, increases comfort, and helps control odour.

"Wool is Mother Nature's miracle fibre, thanks to moisture, temperature, and odour controlling properties," says Peter Duke, Point6 CEO. "Bringing 37.5 technology fibre into the mix elevates wool's benefits to a whole new level."

The Cocona technology, marketed under the brand name 37.5 (the body's core temperature in degrees Celsius), permanently embeds active particles at the fibre level to capture and release moisture vapour.

Not only do these particles increase the surface area of traditional fibres by over 300% but, by actively responding to body heat, they use infrared energy from the body to accelerate the vapour movement and speed up the conversion of liquid to vapour, significantly increasing drying rates.

Cocona adds that managing the microclimate next to the foot extends the user's comfort range and improves cooling. According to a study by the Department of Physiology at the University of Colorado, by changing from a wicking shirt to a 37.5 shirt, athletes extended their performance and reduced their core temperature build-up.

Now, this same technology can be found in socks.

Point6 has collaborated with scientists from Cocona to perfect the combination of 37.5 particles with nylon. By layering the 37.5 nylon between 100% compact spun New Zealand Merino wool, Point6 can make a sock that maintains a comfortable level of humidity by delaying the onset of sweat and drying faster, even during high-intensity exercise.

The active particles in patented 37.5 fibre are permanently embedded in the nylon fabric of the socks and will not wash out. These active particles provide 800% more surface area to the fibre, while providing a "unique driving force" to remove moisture vapour.

Naturally derived from coconut shells and volcanic sand, the particles capture heat from the body's infrared energy to speed evaporation and significantly reduce dry-time.

Point6 will introduce nine styles powered by 37.5 technology for spring 2017, plus several tactical styles that are being developed for the military.

Cocona's 37.5 technology will also feature in the first apparel products from Mission Athletecare aimed at helping athletes maximise their peak performance.

Launched in 2009 by a group of elite, world-class athletes including Serena Williams, Dwyane Wade, Drew Brees, Carli Lloyd and David Villa, Mission unveiled its first line of innovative EnduraCool instant cooling towels in 2012. The new Mission VaporActive collection powered by 37.5 technology will include men's compression shirts, underwear and socks.