



100% Cotton Moisture Management

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ABSTRACT

Moisture management often refers to the transport of both moisture vapor and liquid away from the body. Moisture vapor can pass through openings between fibers or yarns. In the case of cotton or other hydrophilic fibers, the fiber can serve as a buffer by absorbing moisture vapor and adding to the comfort properties of a fabric. This study is an example of ongoing research and development at Cotton Incorporated related to moisture management. Results indicate that it is possible to create a whole spectrum of performance properties on 100% cotton for different activities in a wide range of environments.

KEYWORDS: cotton, moisture, moisture vapor transmission, MVT, recreational performance apparel, RVT

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There is much hype in the market about fast-drying fabrics. In general, all flat or non-raised surface fabrics when saturated will dry at the same rate, independent of fiber type. Fabrics used in athletic and recreational end uses should have the ability to transport moisture to the fabric surface for

evaporation. There are very few, if any, 100% cotton garments that are advertised as recreational performance apparel for athletic activities. Consequently, research and development is ongoing at Cotton Incorporated to develop such garments to allow cotton to participate in this market.

For cotton fabrics and, therefore, garments to offer the performance desired for athletic endeavors, innovation and enhancement of the cotton fabric must take place.

Innovation is today's catch phrase. The consumer wants something different, and the industry must respond. Innovation is also known by many other names such as high-tech, intelligent textiles, nano-technology, and functional finishes.