WHAT CONSUMERS ARE SAYING

57% PREFER COTTON-RICH ACTIVEWEAR

60% SEEK OUT MOISTURE MANAGEMENT FEATURES IN ACTIVEWEAR

61% DESCRIBE COTTON ACTIVEWEAR AS BREATHABLE

45% WILLING TO PURCHASE COTTON ACTIVEWEAR THAT WICKS MOISTURE AND DRIES FASTER
TRUE PERFORMANCE. NOT MARKETING HYPE.

Designed to keep you cooler and dry faster, TransDRY® technology combines the comfort of cotton with moisture wicking performance that rivals any competitive fiber in the market. So check that one off the list on race day. Cotton activewear is one item you won’t have to worry about performing—cotton is as technically advanced as any fiber in the activewear market. The best part is, after the medals are won, cotton will wash clean of odors and be ready to go for the next challenge you face.
WHAT IS TransDRY® TECHNOLOGY?

TransDRY® technology for cotton is a patented, high-performance moisture management application that allows fabrics to wick and spread perspiration as well as, or better than, most high-tech synthetic fabrics. You get the comfort and softness of your favorite cotton t-shirt along with wicking and fast-drying performance.

Cotton yarns are treated with a special process to make them water-repellent. The repellent yarns are blended with the right amount of absorbent cotton yarns to create channels for the movement of moisture. As a result, TransDRY® fabrics do not become over-saturated during exercise and have a lower overall absorbent capacity that mimics that of polyester and nylon.

Since the TransDRY® technology starts at the yarn stage, the possibilities to engineer moisture management fabrics are endless. The technology provides effective moisture management performance in a variety of product categories. What’s more, the superior performance gets better throughout the life of the garment.

• BOTTOMWEIGHT FABRICS
• DENIM
• HOME TEXTILES
• SEAMLESS AND CIRCULAR KNITS
• SOCKS
• SWEATERS
• WOVEN SHIRTING
MOVEMENT OF MOISTURE WITH TransDRY® TECHNOLOGY

EXAMPLE: PONTE DI ROMA COTTON FABRIC

UNTREATED COTTON moves moisture to the outside of the fabric.

SWEAT

SKIN

MOISTURE VAPOR IS released away from the body and into the atmosphere.

SWEAT IS ABSORBED and moves quickly through the fabric.

TransDRY® COTTON YARNS

MOVES MOISTURE TO THE OUTSIDE OF THE FABRIC

FABRICS CAN BE CONSTRUCTED TO move moisture horizontally, vertically, or from the skin side to the outside of a fabric better than top-performing synthetic fabrics.
Many synthetic fabrics become over-saturated and retain moisture next to the skin, causing a wet, clammy sensation during exercise. TransDRY® fabrics can be constructed to move moisture from the inside of the garment to the outside, in both horizontal and vertical directions depending on fabric construction. This movement of moisture can be quantified using industry standardized test methods.
Double Knits - Accumulative One-Way Moisture Transport Index

Denim - Accumulative One-Way Moisture Transport Index

Measuring the Movement of Moisture - AATCC 195


Neutral Rating: Obtained when fabric is equally wet on inside and outside of fabric.

Positive Rating: Obtained when fabric transfers moisture to outside of fabric.
Traditional cotton fabrics absorb moisture rapidly and can quickly become saturated retaining as much as 20-40% more moisture than synthetic fabrics. However, cotton fabrics treated with TransDRY® technology redefine what we normally think about cotton fabrics becoming so wet. Cotton actually can dry faster than or as fast as competitors in the market – by absorbing less moisture and spreading it at a faster rate, allowing it to evaporate quickly.
• The unique construction of absorbent and repellent yarns in TransDRY® fabrics reduces the overall absorbent capacity of the fabric.

• Channels are created that allow for greater movement and spread of moisture. The spread over a larger surface area allows for quicker evaporation.

• The quicker evaporation of sweat, coupled with the natural breathability of cotton, does two things. It keeps the wearer cooler and it keeps the wearer drier.

• The TransDRY® technology allows fabrics to dry faster. Because TransDRY® is flexible across many product categories, dry time may vary based on formulation, fabric construction and finishing process. But don’t worry, it’s durable throughout the lifetime of the garment.

BODY TEMPERATURE COMPARISON

94° 92° 90°
Polyester Shirt  TransDRY® Cotton Shirt

START 10 MIN. 15 MIN. 20 MIN. 25 MIN.

Controlled wear test study by Central Michigan University

TransDRY® TECHNOLOGY KEEPS YOU UP TO 2 DEGREES COOLER.
ENHANCED PROTECTION.

Now you can take moisture management one step further. TransDRY® technology can be combined with other chemical and mechanical technologies to achieve the ultimate active garment for all climates and sports.

ANTIMICROBIAL

Sweat is odorless, but combined with textiles it creates an environment for odor-causing bacteria to grow. While research shows cotton washes clean from odors compared to synthetics, TransDRY® technology is compatible with antimicrobial technologies for an extra layer of protection. Applied at various stages, these products include yarns embedded with or topical treatments of recycled silver salts and topical treatments that combine silver, copper and zinc.

UV BLOCKER

TransDRY® fabrics treated with a UV blocker perform similar to sunscreen, protecting from harmful Ultraviolet (UV) rays and prevent long-term damage from too much exposure. The UV blocker technology is applied at the fabric stage and can be combined with the dye step. The technology has been proven to last through multiple home launderings. Combined with TransDRY® technology, wearers can enjoy the comfort of wicking properties and protection from the sun.
VENTILATING

TransDRY® technology is designed to keep you cool. But if you like a little more breeze, cotton fabrics can also be engineered to offer ventilation. TransDRY® knit fabrics can be constructed using dissolvable yarns or through fabric construction by intentionally skipping stitches to create ventilating pockets in the fabric. TransDRY® woven fabrics can be designed to ventilate through open weave structures, such as a Leno weave. Lasering technology is also an option to achieve ventilation.

INSULATING

In many outdoor conditions, athletes need warmth and protection from the elements with moisture wicking performance. Cotton fabrics, such as a single knit jacquard blister, can be uniquely engineered to increase loft and trap air, significantly improving the overall insulating capacity of cotton. Coupled with TransDRY® technology, these cotton fabrics offer a warm and dry microclimate to enhance performance.
Performance is only one aspect to consider when making fiber decisions for activewear products. The impact on the environment is important too.

Cotton is a natural fiber produced directly from a plant by Mother Nature herself, not from a barrel of oil like other competitors in the market. The natural cotton fiber biodegrades in soil and wastewater at a much faster rate than polyester and is considered the safest choice for the environment. The real challenge is microplastic pollution on the environment especially rivers, lakes and oceans.

Choosing the right performance fiber for your activewear lets your consumer focus on the beauty surrounding them, not what they are wearing on the trail.

It is common for moisture management chemistries and finishes to contain fluorinated compounds in order to repel moisture. The finish formulas often contain perfluorooctanoic acid, or PFOA. Issues surrounding PFOA have been investigated by the U.S. Environmental Protection Agency (EPA). Standard perfluorinated molecules contain 8-carbon chain structures (C8) that do not break down quickly in the environment and there has been an industry-wide effort to find alternatives.

TransDRY® technology provides two options: a C6 finish that contains a shorter carbon chain structure and fluorocarbon-free finish. Performance is not sacrificed with these two alternatives - moisture management testing standards are still able to be met while providing a more environmentally-friendly solution.

74% OF CONSUMERS SAY COTTON ACTIVEWEAR IS MOST SUSTAINABLE, COMPARED TO ONLY 13% WHO SAY THE SAME FOR POLYESTER AND NYLON ACTIVEWEAR.

COTTON DEGRADES 99% MORE THAN RECYCLED POLYESTER AFTER 84 DAYS IN A COMPOST ENVIRONMENT.

COTTON DEGRADES 95% MORE THAN POLYESTER AFTER 250 DAYS IN WASTEWATER.

TransDRY® COTTON IS 97% BIOBASED CERTIFIED BY THE USDA BIOPREFERRED® PROGRAM.
WE CAN ENGINEER A SOLUTION FOR YOU.

TransDRY® is a patented technology for cotton owned by Cotton Incorporated. We work with suppliers around the world to implement the technology within existing supply chains and we make it easy for brands and retailers to use the technology on cotton products.

Marketing Resources Available for Use and Inspiration:

- Hangtags and other point-of-sale collateral
- Knit and woven fabric developments
- Licensed technology logo on products that meet fabric performance criteria
Cotton Incorporated Global Offices:
• New York, NY, USA
• Cary, NC, USA
• Mexico City, Mexico
• Osaka, Japan
• Shanghai, China
• Tsim Sha Tsui, Hong Kong

TransDRY® Technology Suppliers Available In:
• Bangladesh
• Canada
• China
• Colombia
• Dominican Republic
• Guatemala
• Hong Kong
• India
• Indonesia
• Japan
• Mexico
• Peru
• Portugal
• Singapore
• South Korea
• Taiwan
• Turkey
• USA
To feature the TransDRY® technology and logo on your products, contact your Cotton Incorporated account representative.

Learn more at cottonworks.com