

## The History of Silver as an Antimicrobial

The use of silver for its medical and therapeutic benefits dates back thousands of years. In fact, the Romans were the first to publish and document the “magical healing” powers of silver when used to cover wounds. Further, Cyrus the Great, in 5th Century BC, would only let his troops go to war if they carried water in silver vessels - something he knew would keep the water supply clean and safe. It is somewhat humbling to know that a Persian king touted the benefits of the active ingredient in X-Static®.

Roman intuition proved to be correct. Modern Western medicine recognizes silver as the most effective antimicrobial agent, natural or otherwise. At the turn of the century, silver was actually considered the first antibiotic - silver foil was used as a wound dressing. Today, silver is used for its broad spectrum antimicrobial properties in healthcare products ranging from bandages to burn care treatments to catheters - almost any product where infection control is critical. The majority of Americans are first exposed to silver at birth, when silver nitrate eye drops are used to prevent infection. Silver is also widely used for industrial applications, most notably drinking water filters and swimming pool filtration systems.



X-Static® fiber has a layer of pure silver permanently bonded to the surface of a textile fiber. The process is such that the fiber, with its silver layer, retains traditional textile and tactile characteristics. It can be used in knits, wovens and non-wovens as either a filament or spun yarn. X-Static® offers all the benefits known to be inherent to pure silver, only in a new format: a textile fiber.

In the world of hosiery and apparel products, the fiber is uniquely suited to meet several specific needs. Some of the benefits of X-Static® are:

**Antimicrobial** - eliminating odor causing bacteria and athlete's feet fungus

**Anti-Odor** - inhibits growth of bacteria and fungi & neutralizes ammonia & denatured proteins

**All- Natural** - 100% safe and non-toxic, containing no chemicals

**Thermodynamic** -Regulates temperature: cooler in the summer, warmer in the winter. Heat conductive body heat is distributed and conducted to the outside air, and heat reflective body heat is reflected back to the skin.

**Anti-static** - It has very high electrical conductivity

**Therapeutic** - Less discomfort thanks to the high conductive performances

X-Static® is available in **Comfort Ag Prosthetic Socks, Comfort Ag Foot Socks, Comfort Angel Prosthetic Socks, Comfort AFO Liner Socks, Comfort Seamfree Silver Diabetic Socks, Comfort Silver Liner Sheath, and X-Silver Shrinker.**

**Comfort Products, Inc.** was the first manufacturer to include X-Static® in products for orthotics and prosthetics in the United States. This innovation is yet another of many firsts for Comfort Products. Comfort continues its tradition of providing the highest quality products with the latest innovations to the orthotic and prosthetic community.



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# CoolMax®

CoolMax® has been specifically engineered to keep you dry and comfortable through proprietary four channel fibers developed by DuPont. When the body perspires, CoolMax® moves moisture quickly away from the skin to the outer layer of the fabric. It then dries that moisture faster than any other fabric available on the market today.

In moisture management and breathability tests vs. competitive fibers, CoolMax® is proven to have the fastest drying rate, the quickest and most efficient movement of moisture away from the skin, and the best breathability. Even cotton, which absorbs and retains 14 times more moisture than CoolMax®, and polypropylene, which does not wick moisture away from the skin, cannot compete with CoolMax®.

Garments made with easy-care CoolMax® fabrics are washable, dryable, stay soft, and are non-chafing. They also resist shrinking, odors, and mildew. CoolMax® performance fabrics also help regulate body temperatures to keep you cool.

Tests were conducted on CoolMax® fabrics at the ETH Institute for Biomechanics in Zurich, renowned as a world leader in the science of human development. These tests demonstrated that muscles kept at optimum temperature improve performance and delay exhaustion. Wearing garments with CoolMax® reduces the energy required to cool the body core, increasing performance and endurance.

CoolMax® is available in **Ag Prosthetic Socks, Ag Foot Socks, Angel Prosthetic Socks, Bio-Wick Prosthetic Socks, AFO Liner Socks, Double Lay-R Diabetic Socks, and BraceMate Body Sleeves.**

## CoolMax® plaited with X-Static®

When CoolMax® is plaited with X-Static®, a unique blend of materials is achieved that allows for the qualities and benefits of both to be fully recognized and enjoyed. Plaiting the X-Static® involves knitting the product so that all of the silver is placed on the inner layer allowing for the silver to be worn directly against the skin. This allows the wearer to receive the maximum benefit from the silver. Products that use CoolMax® and X-Static® provide the ideal combination of materials for circumstances where excess perspiration, odor problems, dermatitis, rashes or fungus may be present.

**Comfort Products, Inc.** was the first manufacturer to combine CoolMax® with X-Static® in products for orthotics and prosthetics in the United States. This innovation is yet another of many firsts for Comfort Products. Comfort continues its tradition of providing the highest quality products with the latest innovations to the orthotic and prosthetic community.

CoolMax® with X-Static® plaiting is available in the **Ag Prosthetic Sock, Ag Foot Sock, Angel Prosthetic Gel Sock, and AFO Liner Sock.**

Call today for more information on items from Comfort Products that contain CoolMax®, X-Static®, or a combination of both.



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