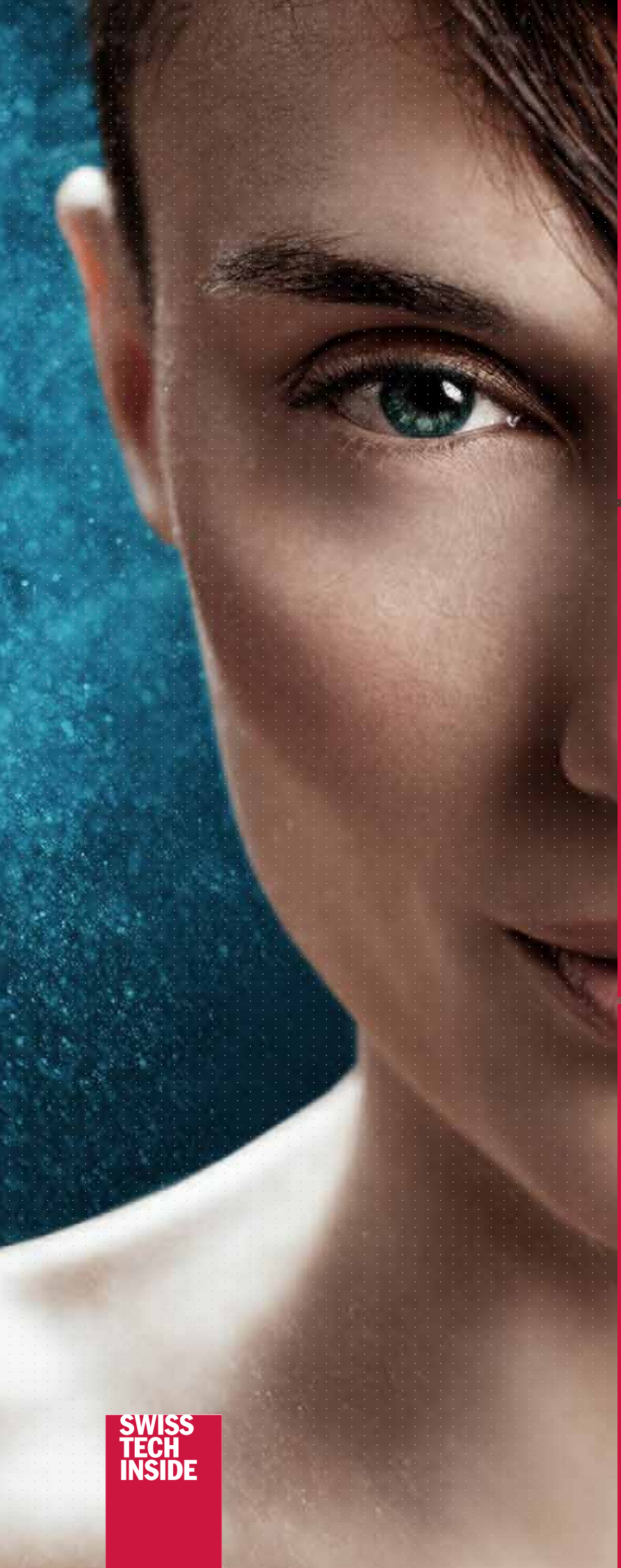


HEIQ SMART TEMP

Activated cooling – cools you just right

Intelligent thermoregulation triggered by body heat

- **Keeps you cool and comfortable**
- **Revolutionary dynamic cooling technology**
- **Cooling is activated by rising body temperature and deactivated once your cooling is complete**
- **Up to 2.5°C/4.5°F cooler fabric temperature (depending on fabric weight and composition)**
- **Exceptional efficiency and durability (100% cooling performance up to 40 washes)**
- **Independently tested as safe for the skin**
- **Complies with EU REACH, US TSCA, JP METI, CN IECSC, KR KECL, ZDHC and most RSL regulations, bluesign approved and OEKO-TEX conform**
- **Applicable and customizable to fit any fiber type: natural, synthetic and blends**

What does it do?
HeiQ Smart Temp is a revolutionary textile technology that provides fabrics with the ability to interact with body temperature and dynamically respond to body heat. The cooling function is activated when you are hot and sweaty and deactivated once cooling is complete, which ensures optimal comfort and performance.

What is it for?
Consumers rate thermoregulation as value-adding technology.[1)] HeiQ Smart Temp is specifically designed for next-to-skin textiles, bringing a new level of thermal comfort to clothing and hosiery. It also brings a special comfort to home textiles such as bed linen and mattress ticking.

1) Shoppers interested in thermoregulation technology:
- *65% for activewear*
- *55% for home fabrics*
- *48% for casual wear*
- *32% for business wear*

(Source: Cotton Inc.)

Differentiate.
Innovate.

HeiQ Smart Temp
Activated cooling

Like a second skin

Clothes provide shelter and protection for our bodies. The downside is that clothing can compromise our ability to regulate our body temperature and that overheating will affect our physical performance and well-being.

HeiQ's dynamic cooling technology HeiQ Smart Temp complements the body's natural thermoregulation process – just like a second skin – to achieve an enhanced dynamic cooling effect.

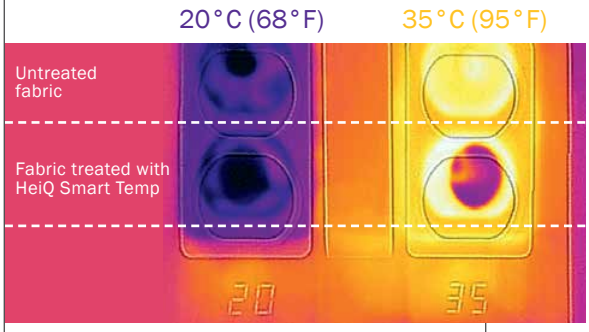
Visualizing HeiQ Smart Temp's cooling effect

By utilizing the HeiQ demo tool and visualizing with a handheld infrared (IR) camera the infrared emission of untreated polyamide and polyamide treated with HeiQ Smart Temp, the dramatically enhanced cooling effect of HeiQ Smart Temp at increased skin temperature becomes apparent.

HeiQ offers the following test methods for your textiles:

- Adaptive dynamic evaporation test
- DSC test*
- FLIR thermal test*
- Sweating manikin test*
- Sweating torso test*
- User wear trial
- Water drop test (AATCC 79)
- Vertical wicking test (M&S P136B)

* Testing offered at cost



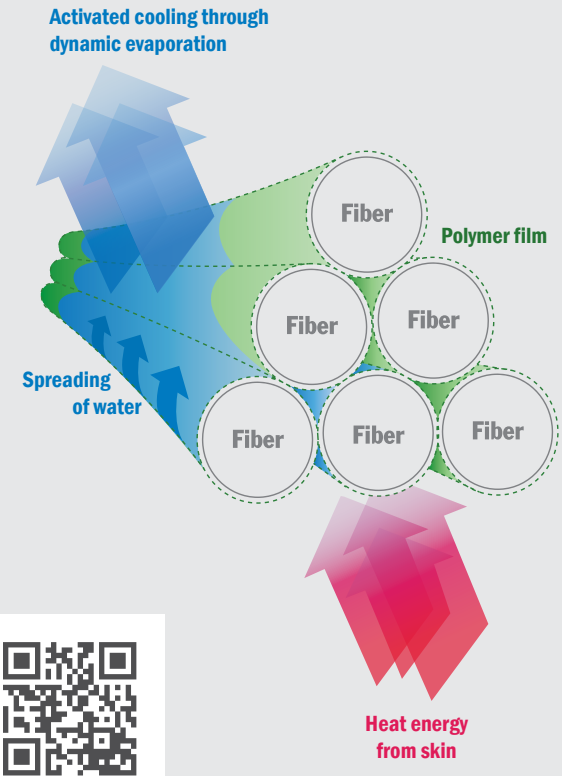
The bluish violet circle on the lower right side fabric shows the dramatically enhanced HeiQ Smart Temp cooling effect.

HeiQ Smart Temp demo tool

Vaporizing energy action to provide optimal thermal comfort

Innovative hydro-functional polymers (patent pending) developed by HeiQ is a unique responsive material that changes its properties in response to rising temperature, dynamically evaporating moisture to complement the skin's natural ability to regulate body temperature for an activated cooling effect. As long as the body is hot, it supplies heat and sweat which is used by the fabric to achieve prolonged cooling. When body heat lowers, the cooling effect decreases as the level of sweat is reduced.

During cool conditions the polymer has a high affinity to moisture, and in warm conditions the affinity of the hydro-functional polymer to water is reduced as it solidifies. This responsive dynamic moderates the moisture transport and resulting evaporative cooling properties of the treated fabric. Compared to untreated fabric, the greater dynamic evaporation rate of fabrics treated with HeiQ Smart Temp provide outstanding thermal comfort for the wearer.



Watch the video!

ZDHC

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OEKO-TEX® CONFIDENCE IN TEXTILES STANDARD 100

bluesign® SYSTEM PARTNER

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