

## Turning Performance to Perfection.

From research and development to testing and certification – our services for textile performance.



# **Training Contents.**

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Our services at a glance.

Comfort ..

Reliability .....

Fit .....

Freshness HOHENSTEIN

**Sustainability** 

Improvement

Textile materials for sports, outdoor and athleisure must perform their function while boosting - and not hindering performance. Team up with Hohenstein and take advantage of our 75+ years of research, cross-functional expertise and international reputation. We'll work together to make your textiles perform.

**Textile Innovations – Fascinating Opportunities** We are passionate about ensuring that new products come to market reliably and safely.

Innovation Focused – For over 75 Years We are visionary problem solvers offering innovative and tailored services; textile specialists setting new trends and standards; industry partners with a culture of knowledge sharing, sustainability and close relationships - worldwide.

We are an internationally recognized and reliable partner who will guide you through the whole process. With decades of experience and a wide service spectrum, we are one source for everything you need: from product development to certification, commercialization and point-of-sale communication.

Success – Up Front We provide customized education, training, research and development, measurement, analysis, inspection and audit services. Use Hohenstein's worldwide network to avoid costly mistakes as you develop new products and expand abroad.

Ever shorter product cycles require speed, flexibility and reliability. Our streamlined processes and state-of-the art labs help you get to market faster. Our trusted labels and certifications help you communicate with your customers.

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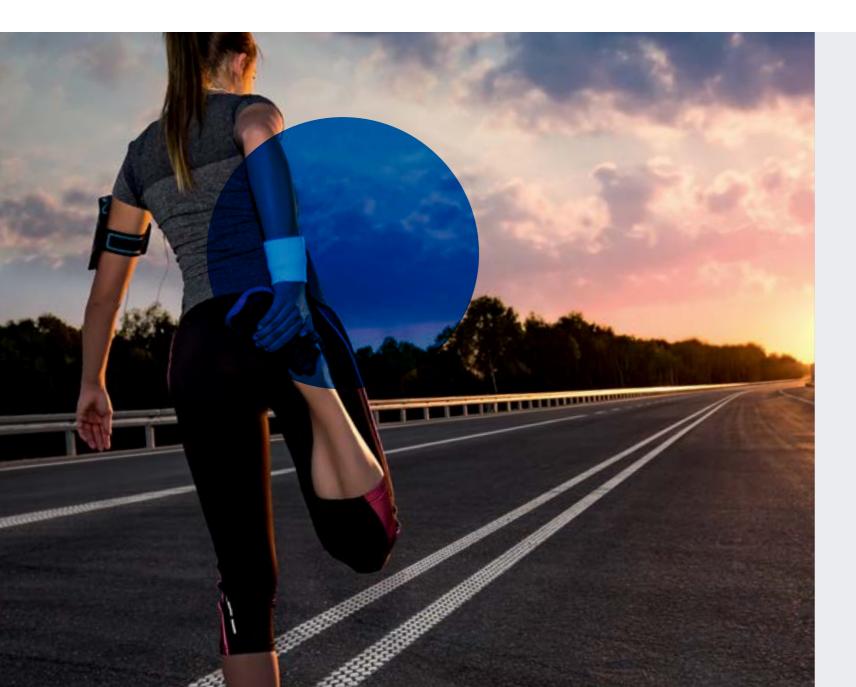
#### **Talent Wins Games – Teamwork Wins Championships**

#### Full Service Expertise - In One Partner

#### Fast Markets – Fast Results

# Don't Let It Bother You.

We perform for comfort.



### **Market Challenge**

Comfort is a top priority and directly related to the performance of functional products. A perfect balance of function, design and performance is required to keep athletes and customers focused on their activity, not their gear.

#### **Our Expertise**

Use our unique expertise and fully equipped comfort lab to identify the critical parameters for evaluating product performance and optimizing your product development process.

- Quantitative thermophysiological comfort (heat and moisture) measurement and the assessment of textiles and clothing using the Hohenstein Skin Model, WATson, thermal mannequins, microclimate sensors and validated human subjects in climatically controlled environments (temperature, rain, wind, heat load)
- Analysis of fiber material, yarn and fabric construction, finishing, garment making and layering

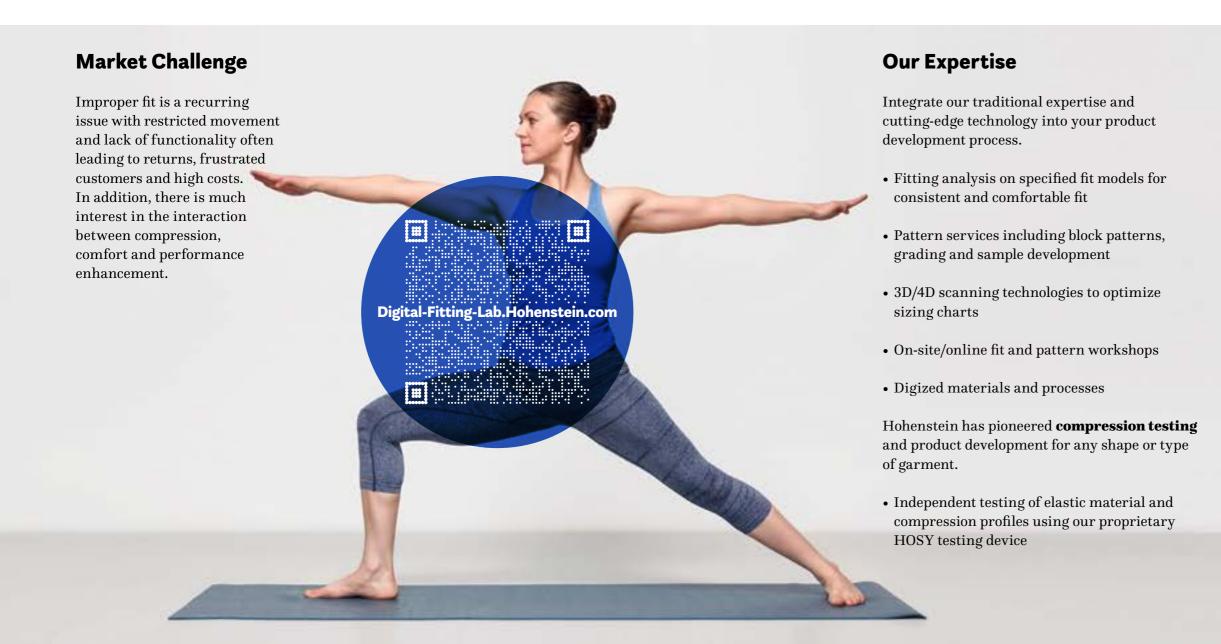
- Testing of clothing for breathability and thermal insulation
- Performance analysis of cooling and heating textiles
- Evaluation of skin sensorial properties including wet cling, surface index, and contact points
- Range of motion testing for garments
- Hohenstein Quality Label tool for communicating performance to customers

## **Your Results**

A streamlined design process for comfortable and innovative performance apparel that leads to loyal customers.

# Fitness Starts with the Fit.

We perform for fit.



- Simulation of compression during movement
- Development of shaping effects using scientific methods
- Integration with 3D/4D scanning for precise body measurements
- Testing for selection of best material and construction for performance preservation and comfort

#### **Your Results**

Guidance through every phase of development to create a signature style, meet market norms and effectively integrate compression for increased consumer satisfaction. Speed, quality and consistency - regardless of the manufacturer facilitated by optimized patterns. Customer confidence in the fit and performance of your product – every time.

# No Compromises – No Defeats.

We perform for functionality.

#### **Market Challenge**

Whether on the job or on the slopes, your customer wants gear to keep them protected from the elements, safe from their sport and focused on the activity at hand.

### **Our Expertise**

We provide the knowledge and tools to identify materials that work better – no matter what the conditions on your playing field.

- Verification for protection against wind, rain and soil
- Testing and comparison of cut resistance, noise reduction, abrasion resistance, visibility and overall garment strength
- Reliable UV protection rating before and after subjection to real use, using UV STANDARD 801

#### **Your Results**

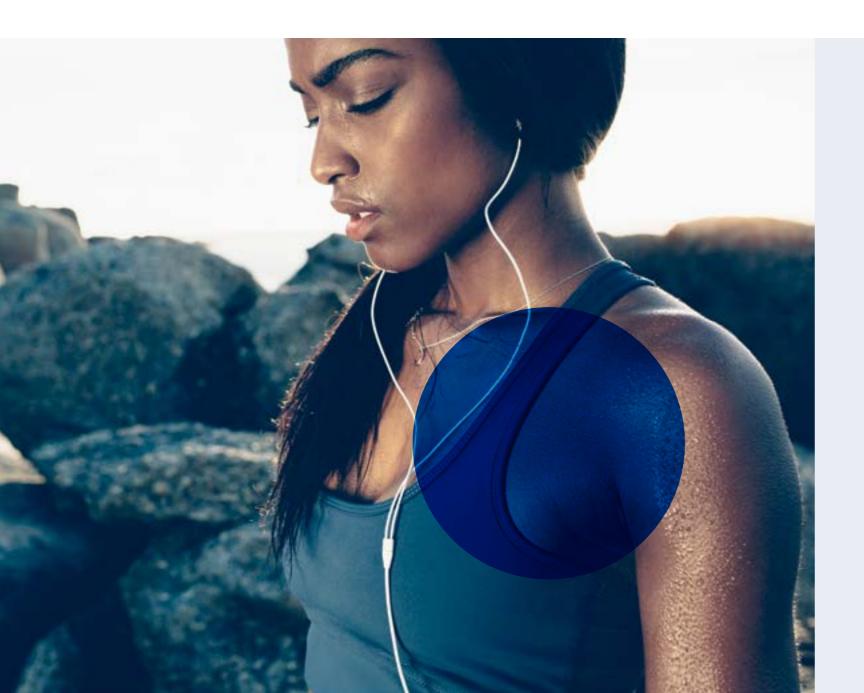
Validation of supply chain claims for peace of mind that you chose the best technology for your application. Independent verification of claims for happy customers.



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## **Renew Your Senses.**

We perform for freshness.



#### **Market Challenge**

Your customers don't want to feel self-conscious when wearing your product. Everyone wants a long-term, sustainable way to keep clothes first-wear fresh. Since the answer is different for every application, you need a partner to help sort through the options.

#### **Our Expertise**

Our team has been researching textile freshness for decades and developing advice for absorbing, eliminating, washing away or disguising signs of use and abuse.

- Analysis of odor binding and elimination
- Practical evaluation of antimicrobial effectiveness
- Evaluation of scented textile technology
- Expertise in consumer safety and claims

Hohenstein supports you in optimizing the care of textile products to achieve a long life and a low environmental impact.

- Analysis for home and commercial laundering and professional dry cleaning
- Support in developing appropriate detergents
- Process optimization for washing and reprocessing

## Your Results

Verified product claims and customers who feel good in your product, with every use as good as the first.

# A Victory for People and the Environment.

We perform for sustainability.

#### **OEKO-TEX®** System

As a founding member of the OEKO-TEX® Association, Hohenstein supports companies along the textile value chain in product stewardship and sustainable management.

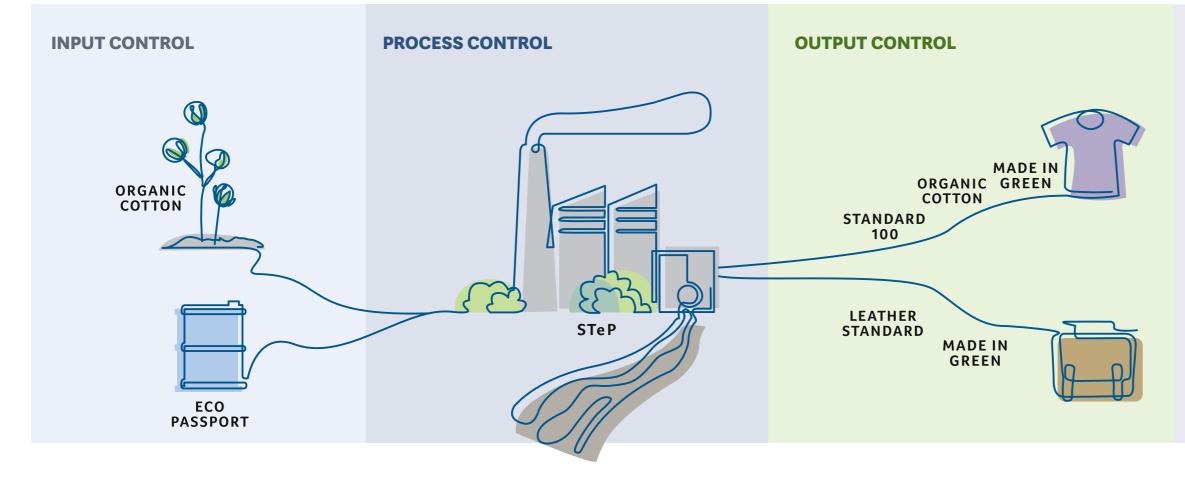
#### **Market Challenge**

Sustainability means something different to everyone – buying products that are safe for your family and the environment, tracing where and how a product was made or knowing that a product's end of life might contribute to a new beginning. The common thread is that consumers and suppliers want to do the right thing and need clear, easy ways to do so.

#### **Our Expertise**

We continuously aggregate consumer and regulatory trends to help you comply with laws and stay ahead of the market.

• Screening, identification and quantification of genetically modified (GMO) cotton



- Biodegradability assessment to determine loss of mass and toxicological soil impact
- Testing for harmful substances on textiles, leather, and other materials
- Wastewater analysis and microfiber quantification for compliance and development

#### **Your Results**

Protection of your customers. Protection of the employees and the environment where your product is made. Protection of your brand reputation. Knowledge of your product's end of life. Independent verification and traceability throughout the supply chain that can be transparently communicated to consumers.



# **Good Isn't Good Enough.**

We perform for improvement.



### **Market Challenge**

Consumers need an easy way to identify what products to trust. Companies need accurate and complete instructions for their suppliers. Everyone needs a way to compare products between suppliers and brands.

#### **Our Expertise**

For smooth implementation, consistent manufacturing and clear expectations, we help you define specifications and communicate with your supply chain.

- Goal refinement and descriptions for technical performance
- Defined material requirements, production details and parameters

For proving your claims, we provide support and communication tools.

- Hohenstein quality labels for credible, concise communication with consumers
- Data and scientific support for validation of claims and substantiation of marketing language

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#### **Your Results**

Clear communication with your supply
chain of accurately defined requirements
for easier quality verification, greater
supply chain efficiency, reduced workload
and lower costs.

Clear communication with customers for the easy identification of products they can trust.



## Your Partner for Textile Expertise.

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