

Living up to the promise



With a thorough system for product testing, **WL Gore** assures customers that only the best performing textiles and manufacturers will make the grade

ADVANCES IN PROTECTIVE

A clothing over the last ten years have resulted in many more providers promoting a huge range of different textiles, designed for different end uses.

It can be a mind-boggling process trying to evaluate a mix of solutions that promise superior quality at ever-reducing prices. In any market, it's important that garments are fit for purpose, but when it comes to emergency responders, there is no room for compromise on performance.

Promises of quality and performance are one thing, but proof is another. Untested, cheaper garments that are manufactured in uncontrolled conditions can compromise performance and result in injury.

As manufacturer of the famous high performance waterproof, breathable, durable Gore-Tex and Crosstech fabrics for the emergency services and military, Gore operates a comprehensive quality assurance programme. That process starts in-house with product testing and extends throughout the supply chain to ensure that garments manufactured with Gore fabrics meet stringent performance standards.

DETAILED UNDERSTANDING

Gore associates are experts in their field and have a detailed understanding about the environment that a garment will be worn in, taking into account the way it will be worn and all the environmental factors that may affect comfort and protection.

Starting with the promise that the garment must be 'fit for use', the company uses an integrated development chain to ensure that its products live up to their performance promise.

Gore's own test labs are comparable to those of an independent institute and, in many cases, the company has developed specific test methods where previously no standardised tests existed.

To start with, every aspect of the product's real-world use is examined in detail to inform the design and engineering process. It's important that protective clothing is functional and comfortable and Gore designers will advise manufacturers on potential innovations like special closures and waterproof collar solutions.

In any garment the weakest point for entry of



Gore product testing involves a variety of simulated environments – including heat and wind – to ensure garments perform well for the emergency services

water is the seam. Even the highest performing fabrics cannot guarantee that the wearer will remain dry if critical points are ignored. Gore has developed its own proprietary Gore-Seam tapes and seam sealing technology to ensure the integrity of its garments.

Only manufacturers licensed by Gore can use the seam sealing technology and they must complete the necessary competency certifications before manufacturing commences.

Companies that make Gore products must

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..... comply with Gore manufacturing standards, which require the manufacturer to comply with specific quality levels for machinery used in the manufacturing process. Gore specialists provide recommendations to production sites to ensure standards are met and implemented, at which point the manufacturing plant receives a Gore license. Certification is audited and reviewed on an annual basis.

Manufacturers that are licensed by Gore can rely on the company's ongoing

support. Gore specialists advise and train management and staff at the manufacturing site on the use of machinery and assist in the optimisation of the manufacturing process. Regular site tests ensure that high quality is consistent and samples are regularly taken from the production line for comparison against the original prototype garments.

Every Gore product has to satisfy a stringent testing regime before it is made available to the market. Gore has developed climate chambers and rain towers to simulate a variety of environmental conditions. Mannequins are fitted with sensors at critical points such as zips, neck, sleeve and seams to detect the slightest amount of moisture where any area of the clothing is not waterproof.

When it comes to specifying protective clothing for first responders, Gore's stringent process for quality assurance ensures that buyers can have absolute confidence in the integrity of the Gore garment and that it is completely fit for purpose.

If your assessment has identified a specific risk from blood-borne pathogens, then Crosstech fabrics will deliver the solution, while keeping the firefighter dry and protected from heat and flame. Crosstech fabrics far exceed competitive products in test laboratories and in the field.

The Crosstech family of products also includes garments with Airlock Spacer Technology, part of the UK's Integrated Clothing Project solutions, which uses revolutionary technology to create an insulating air cushion. The result is a garment that can be around 20 per cent lighter, creating greater freedom of movement for the wearer.

Crosstech fabric is used in structural firefighting ensembles and specialised urban search and rescue suits, as well as boots and gloves.

If your risk assessment has not identified blood-borne pathogens as a specific risk, then the range of Gore-Tex fabrics will provide a durable, waterproof, breathable solution that delivers protection far in excess of laboratory test standards. Gore-Tex fabric is also available with Airlock Spacer Technology variant in structural firefighting garments, boots and gloves.