



Milipol 2023: GORE-TEX Professional presents technological innovation for military combat boots

New EXTRAGUARD upper technology is tough yet lightweight - and stays that way even in extreme wet conditions

Putzbrunn (6. November 2023) - GORE-TEX Professional (Gore) introduces EXTRAGUARD, an upper technology for military combat boots that for the first time combines the advantages of a robust upper with those of lightweight, flexible, and breathable textiles. It paves the way for the production of an entirely new class of GORE-TEX combat boots for general infantry and special forces. Like all GORE-TEX combat boots, they are durably waterproof, breathable and flame retardant. However, they are not only lightweight - they remain so even after long periods in wet, muddy terrain and dry quickly afterwards.

EXTRAGUARD upper technology for GORE-TEX combat boots will be showcased for the first time at Milipol in Paris, Nov. 14-17, 2023, at the GORE-TEX Professional Booth 5 C110.

The challenge: Military forces need robust, waterproof, and breathable footwear that reliably protects them during dangerous missions in all weather conditions and over varying terrains. Conventional military combat boots tend to be heavy and not very comfortable. Moreover, with increasing product life, the water-repellent impregnation wears off over time: the upper material becomes heavier and heavier the longer the boots are exposed to wetness. It often takes many hours to dry them out again after use. If the boots have to be worn again whilst wet, this can draw heat from the body - resulting in cold feet.

It is light, stays light and dries quickly

EXTRAGUARD uppers set a new standard for combat boots: when dry, they are 40 percent lighter than dry leather of the same thickness. Because EXTRAGUARD uppers absorb less moisture from the outside, they remain lightweight and dry significantly faster even in prolonged wet conditions. In addition, EXTRAGUARD uppers are flame retardant.

Combination of EXTRAGUARD upper and GORE-TEX Bootie

The EXTRAGUARD upper reveals its full benefits when in combination with the GORE-SEAM® Tape and the GORE-TEX bootie. The EXTRAGUARD upper itself consists of three layers: a highly abrasion-resistant and flame-retardant outer protective layer, a functional layer for physical protection, and a construction inner layer with low water absorption. During the manufacture of GORE-TEX combat boots, it is sealed with GORE-SEAM® Tape so that moisture cannot penetrate through the seams. The upper is integrated into the boot with the GORE-TEX Bootie inside, which is waterproof and breathable. The GORE-TEX Bootie construction ensures that the boot is permanently waterproof, even if the water-repellent impregnation has worn off or the upper material is damaged.

Comfortable fit, easy cleaning, robust protection

In the field, the GORE-TEX combat boots prove themselves from the first minute: they are comfortable from the start, do not need to be broken in and remain dimensionally stable. The robustness offers reliable protection against sharp objects, common chemicals, and moisture. Care is simple, they can simply be sprayed clean with water. Specific care products are not necessary. Even after months of wear in wet environments, they remain permanently waterproof and breathable, not only meeting but exceeding the required values according to EN ISO 20345/347.

Result of years of research

"EXTRAGUARD upper technology is the result of years of research and close collaboration with defense forces around the world" explains Martin Pfister, Product Specialist Defense Footwear at GORE-TEX Professional. "Initial feedback from military field tests in a variety of challenging terrains confirm our lab results in the real world."

Gore revolutionized the outerwear industry with waterproof, breathable GORE-TEX Fabric more than 40 years ago and remains a leading innovator of performance apparel. Gore fabrics products provide comfort and protection in challenging environments and in everyday life, enabling wearers to safely and confidently achieve and experience more. From hiking in downpours to defense operations and fighting fires, Gore's deep understanding of consumer and industry needs drives development of products with meaningful performance advantages. gore-tex.com and goretexprofessional.com

About Gore

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