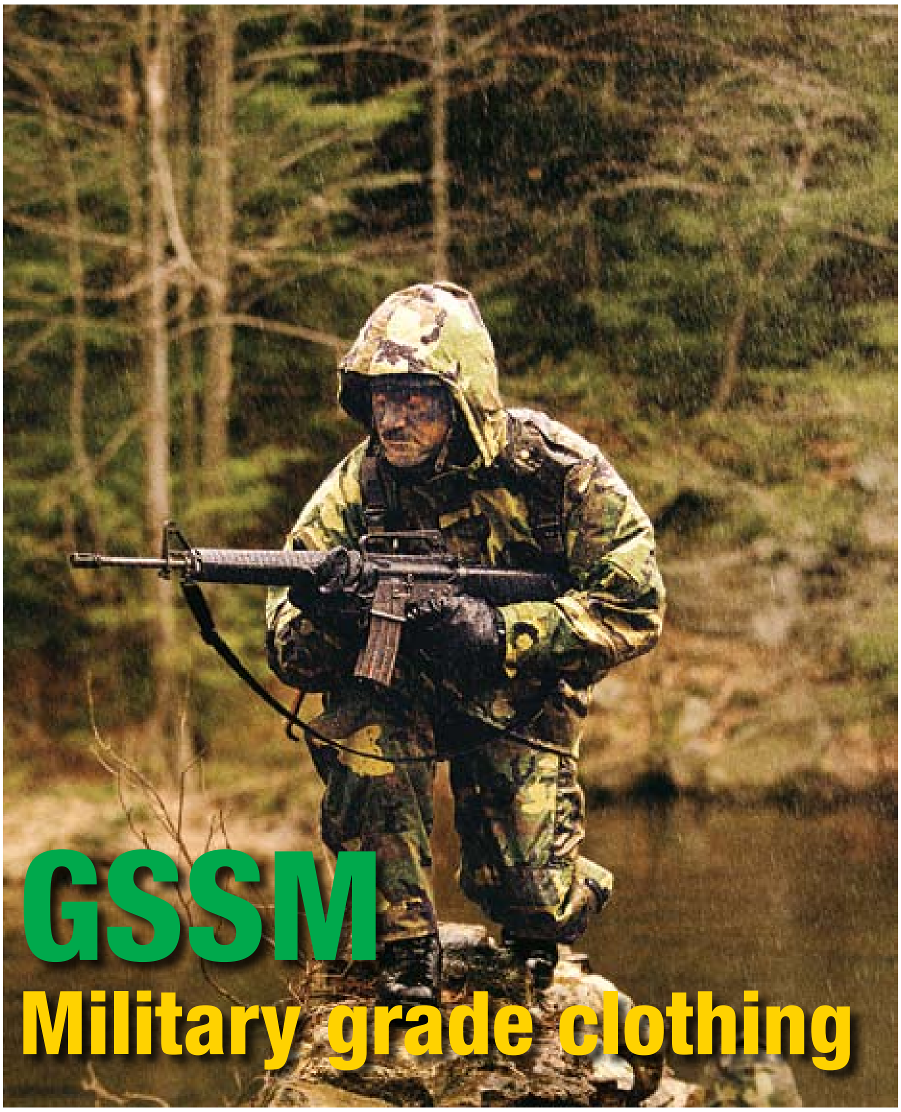

GSSM Military grade clothing

Global Safety Solutions & Management (GSSM) has shifted its focus in recent years, from its beginnings - when it produced safety vests and reflective clothing - into a very specific market, providing specialised rainwear and chemical splash garments. Dawn Adams reports.

For the past ten years, GSSM has met strict and demanding tendering programs to secure contracts with the Australian Defence Forces for its specialised product range. This tendering process has ensured the firm's quality control has been under regular scrutiny and has been developed to meet the highest standards.

Striving for perfection

"There are strict performance criteria and a lot of requirements in relation to certain specifications and the delivery of product," says Steve Harrison, Product Manager, Sales and Marketing. He stresses the importance of perfection for the military, especially in the demanding conditions experienced by the troops.

"Quality control is essential; there can be no faults in equipment in the field," he says. "If the wearer is in the jungle, he can't simply change to a different garment."

GSSM was established in the early 1980s by owner/director Dennis Mahony, who first developed garments for the mining industry using a specialised reflective tape. "Dennis reflective garments were used in underground mines in Wollongong and it quickly spread throughout the country, resulting in a national standard being introduced" Harrison says.

Fit for purpose

GSSM moved its attention to a new product area, developing specialised rainwear and chemical splash garments. The first military contract for task-specific rainwear was secured in 1995. From there, the firm has continued significant research and development in Australia, creating new products for the Australian and international markets.

Harrison details the intricate process of developing garments which are "fit for purpose" and "task specific". Rather than present a finished garment to military or industrial clients, the company more often presents an idea that can be developed in a collaborative manner with the client, to ensure it is designed for a particular use and is suitable for certain conditions.

"Concept to design to delivery of the product is a long process and can take up to twelve months," he says.

"Our process is to sit down with a customer and see if our product is of interest, but the current design may not be fit for purpose." Upon agreeing to work together, the lengthy process will include the development of prototypes, further consultations that lead to product changes, and the fulfillment of extensive testing requirements to secure internationally recognized certifications.

Global standard R&D

GSSM actively seeks out those certifications as it strives to meet an agreed set of standards, while aiming for a higher level of excellence. The results have led to the firm developing a global business, exporting to all markets worldwide. Harrison names several locations where company representatives have recently promoted the firm's range, such as Dubai, USA and India, and says the company will be presenting products in Dusseldorf at A+A in 2009.

"We compare very well globally in relation to research and development work in our sector," he says. While he acknowledges the lengthy process involved in creating a new product, Harrison is convinced a specialised company like GSSM can introduce changes more rapidly than many of its larger counterparts. "We target a specific market segment that allows us to concentrate our efforts on that area and we get a very good feel for what we do," he says.

Harrison offers some insight into discussions that could take place, for example, during collaborative efforts to produce rainwear for military use. Considered an important element is the level of comfort in various conditions, such as an extremely humid environment that might be experienced during a military operation or a rescue situation.

Features which GSSM suggests for added comfort include breathable membrane liners and tough liquid-resistant outer layers. The breathable membrane allows moisture to escape, providing high levels of comfort for the wearer during arduous conditions. Collaborative efforts in developing this range for set purposes have led, for example, to a request that GSSM make changes to the garment design to incorporate specialised zippers with a backing to the liner for chill-proof or storm-proof garments to ensure no leakage occurs.

"The cut of any product won't change much in relation to sizing, but we can make certain adjustments and changes that will improve the overall performance of the garment in relation to its task-specific operational needs," Hanson says.

Planning for all extremes

"We need to imagine the most extreme weather conditions that troops might face, from dust storms to torrential rain, when considering the design specification. This equipment must meet rigorous requirements."

A different set of challenges become evident when the firm collaborates over the requirements for chemical splash garments.

"With chemical splash garments, we try to improve the protection level to make sure chemical splash doesn't get to the wearer's skin," Harrison says.

"For example, we've designed a change to the hood to protect the head and face with a protective cover over the safety helmet." This cover is designed to ensure that a splash from above does not travel down the back of a garment onto the wearer's skin.

"Imagine if there was a pool of water and you dropped a large stone into it," he says.

"You cannot predict in which direction the splash will go. There will always be some liquid droplets you can't see, that could end up on your skin."

Another GSSM innovation has been to include reinforcement in the knee area of its AirTec Chemical Splash Suit, after noticing damage to the knee area during loading and unloading of certain chemicals. "When kneeling while opening and closing valves, chemical residue may be present, so we built reinforcements in the knee because they have a pressure point," he says.

Also developed was a specialised cuff at the ankle to ensure protection against chemicals that splash up. Harrison notes the key markets for these garments are military and industrial, due to concerns about aviation jet fuels and requirements for flame resistance and anti-static properties. A specific garment designed with anti-static properties is now in demand for military refueling areas.

Well positioned

Meanwhile, Harrison is convinced the company is well placed to withstand the current global financial crisis, being assisted by the manufacturing strategies they have put in place over the last few years. "We have full control of our manufacturing process, which ensures maximum quality control and also allows us to export globally and to be competitive in all markets," he says.

GSSM's factory maintains rigorous quality control measures, through recognised independent certification, and ensures its fabric suppliers have the same quality control measures in place. "We work with Australian and European fabric suppliers who follow these guidelines strictly." Harrison says.

Moving forward, the company intends maintaining regular contact with fabric suppliers to ensure the latest advances can be incorporated into its range. The potential for future growth is evident as the company planning to explore export growth for its new military purpose garments, while Harrison also points to the breadth of industries seeking its new chemical splash garment range. "Liquid chemicals are in everything from food processing to steel, garment and textile manufacturing," he says, suggesting a continuing demand from any entity that transports chemicals as well.

"We are well positioned for the future."