

# British Army's SOURCE VIRTUS Soldier System

VIRTUS is the integrated combat and protective gear developed by SOURCE for the UK MOD to meet the challenges and needs of the modern infantry soldier

**In January 2015 the British Army awarded SOURCE the contract for VIRTUS, the world's first integrated soldier system, after months of exhaustive trials and tests. The SOURCE VIRTUS SOLDIER SYSTEM has been proven in lab and field experiments to improve the cognitive and physical performance of the combat infantryman under the most demanding conditions.**

The Virtus Soldier System comprises 7 subsystems. The integrated design of the different components results in a significant improvement to the physical and mental performance of the infantry soldier, his mobility, agility and survivability in complex combat missions.



## The world's first dynamic weight distribution system DWD

In today's theatre of war, the infantry is expected to operate with gear weighing from 66 lbs up to his full body weight. The Dynamic Weight Distribution (DWD) system enables the individual to dynamically transfer weight between the shoulders and the hips, varying the distribution to delay the onset of fatigue and improve comfort and agility.

The soldier on-the-move is able to easily regulate the weight distribution via the ultra-light Spine - from 100% load on his shoulders to 100% on the hip-belt, and anything in between - while maintaining full flexibility and freedom of movement. This dynamic weight distribution capability not only mitigates against potential back injuries it also improves comfort, reduces the perception of the weight carried and allows better ventilation & thermal control.

Extensive field trials have shown the DWD to reduce the perceived burden on a soldier during long hauls, improving

the ability to adapt to the mission and terrain. The system connects to the soldier's vest or pack, switching between gear is fast and easy, especially with the latest series of modifications for the UK customer.



## SOURCE Scalable tactical vest (STV)

All Virtus protective gear can be scaled to the demands of the mission - eliminating unnecessary weight. Our Scalable Tactical Vest (STV) allows for rapid response, using minimal number of parts, cleverly designed to allow the soldier to quickly and easily scale up or down according to different threat levels and missions.

Building on our proven human factors integration capabilities, Source have produced a novel sizing regime that enables us to cover the range of 5th to 95th percentile of male and female UK Army user population with only 8 sizes. Our patterns and materials do not only provide anatomically correct coverage, but also a comfortable fit.

The Scalable Tactical Vest (STV) is also fully in line with US Army Technical Statement of Needs (TSN) for the SPS TP system. The front ballistic insert covers the torso from the suprasternal to the omphalion (navel) and is cut inward 1 inch from the anterior scye (armhole) on the torso. The back ballistic insert covers the torso from the C7 vertebrae to the omphalion.

The smart design allows for full scalability. The single textile vest scales up to 4 different configurations: from a concealable vest to a full-up tactical vest with side and extremity protection. A soldier reconfiguring his Scalable



Tactical Vest from a Plate Carrier to Tactical Vest or vice versa takes less than 3 minutes, without help. As there is one textile vest for all 4 configurations, the DWD and the MOLLE pouches attached to the vest stay intact.

Donning and doffing the vest can be done either over the head (when helmet is off) or from the left shoulder (when helmet is on). The STV design represent a complete new approach of fitting the vest to the user waist circumference with no Velcro front closure. Infinite buckle/strap adjustment allows easy fine tuning to avoid any restriction to normal breathing.



Thanks to the Quick Release System developed for the STV, the soldier can remove the torso vest with front, rear, side plates, DWD and protection of the extremities in less than 5 seconds - and reassemble his gear within 30 seconds. The Scalable Tactical Vest remains in one piece after the quick release is activated. The DWD is quick released by the same mechanism keeping the hip belt on the soldier. Essential ammunition & fighting gear are kept on his hip belt ready to go.

Protection for the extremities is quickly and easily integrated into the system and provides full integration of the pelvic protection and the lower back protection with the hip belt providing continuous back protection.

Last but not least, the Virtus MOLLE pouches use a unique assembly mechanism which is 20% lighter and 50%

Virtus STV and protective gear is fully adaptable to threat and mission while providing improved fit and functionality

faster to assemble when compared to traditional standard issued MOLLE pouches.



#### Meeting the demands of the mission

The groundbreaking "SOLDIER AS A SYSTEM" philosophy, created by SOURCE, allows the gear to be scaled to the demands of the mission - eliminating unnecessary weight. Protective gear can be adapted to the threat level, packs are available in different sizes according to soldier's mission.

The integrated design results in significantly improved physical performance for the infantry soldier, enhancing mobility, agility and survivability in complex missions. ■

#### ABOUT SOURCE

SOURCE was founded in 1989 by Yoki Gill and Daniel Benoziliyo and now employs more than 200 workers. SOURCE has always been a groundbreaker pushing for genuine innovation and creating new standards.

SOURCE Gear is designed by soldiers and much of its key personnel are officers in IDF elite forces. SOURCE products are used by armed forces, professionals and athletes around the globe.