# SURVIVABILITY SYSTEMS MED-ENG"





// PRODUCTS CATALOG

SURVIVABILITY SYSTEMS



## SURVIVABILITY SYSTEMS

Med-Eng<sup>®</sup> protective equipment, specialized tools and crew survivability solutions are trusted in over 100 countries worldwide. For over 30 years, Med-Eng has been pioneering research into blast effects on the human body, and has shared that knowledge with frontline personnel and program managers to improve operator safety. This experience, and a relentless commitment to research, development and performance testing is the strength behind new and integrated solutions that are best in class.



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PROTECTIVE GEAR



## EXPLOSIVE ORDNANCE DISPOSAL TOOLS

Med-Eng<sup>®</sup> provides integrated systems designed to protect against blast, fragmentation, impact and heat. Our Personal Protective Equipment has been developed with direct input from end users and is based on knowledge and validation gained from over 600 live blast tests. For EOD/IEDD, Tactical and Demining operations, our Med-Eng Suits, Helmets, Visors and Hand Protectors have set the industry standard for 30 years. Med-Eng also offers purpose-built Dryers to help maintain your equipment.



#### TAC 6 // protective suit

A highly versatile, modular, lightweight protective suit for Tactical & SWAT teams, Bomb Technicians, Military EOD Operators and Deminers

- Protects against blast and fragmentation in 'non-permissive' environments where it is not possible or practical to wear a full scale bomb suit
- Modular components can be added or removed to meet specific operational and protective requirements
- Integrates with tactical and combat helmets and the Med-Eng TAC Visor System
- High Mobility: Lightweight ergonomic design lets users run, walk, climb, bend, lift and reach more easily
- Police & Law Enforcement Applications: EOD / SWAT integration, search, dog handlers, suicide bomber scenarios
- Military Applications: Dismounted IEDD, Airmobile IEDD, route clearance, demining, UXO, search, suicide bomber, dog handlers
- Configurable: Users add/remove modular protective components as needed



## TAC VISORS

Med-Eng's line of four new TAC Visors provides full facial protection against fragmentation to front line personnel.





PATENTED



### EOD<sup>®</sup> 9/9A

#### // AUTOMATED SPEECH RECOGNITION, HELMET CAMCORDER AND LIVE STREAMING VIDEO

The Automatic Speech Recognition (ASR) system provides voice-activated control of the EOD® 9/9A Helmet features to keep the user's hands free for other tasks, such as carrying tools. Through voice commands, the user can operate the:

- Ventilation & Turbo
- Lights
- Demister
- EAS Volume

The EOD Helmet Camcorder (shown here) and the new Live Streaming Video are integrated into the EOD and breathing apparatus visors, and carefully set to the optimal vertical viewing angle based on Human Factors Engineering. They provide reliable high definition video for use as evidence, conducting forensic investigations and reviewing both training exercises and live operations.



Providing the industry's highest degree of protection and flexibility for EOD and CBRNe missions, and the world's first EMC Class A helmet for EOD/IEDD operations.

## **EXPLOSIVE ORDNANCE DISPOSAL TOOLS**

Med-Eng® offers a wide array of specialized tools for semi-remote explosives disposal and tactical operations. The HAL series of Hook And Line systems are widely deployed by law enforcement and military units worldwide and are trusted for their quality and operational capabilities.



HAL KITS // HOOK AND LINE Comprehensive system of recommended core tools to successfully conduct EOD/IEDD semi-remote handling & removal tasks. Versatile, highly reliable and designed to perform essential Hook and Line functions: move, attach, anchor, reach, manipulate, handle and access.



### **GENERAL SERVICE** // GS KIT

· A comprehensive set of core kit tools to successfully conduct EOD/IEDD semi-remote handling & removal tasks





#### ENERAL SERVICE LITE BACKPACK KIT G // GS LITE KIT

A baseline capability, covering all the essential Hook & Line functions

· Lightweight, portable and tactical semi-remote rigging kit with the capabilities of a core Hook & Line kit



## HAL TACTICAL

- · A set of Modular Equipment Packs that allow users to purchase and deploy the precise tools needed for use in Tactical, SWAT, Dismounted IEDD, Route Clearance or other challenging operations
- · Hands-free leg pouch enables excellent mobility. Optional specialty modules include:
- Advanced Clamp
  - » Visibility
  - » Basic Reach
  - » Guidance
  - » Multi-Tool
  - » Demining
  - » Grappling Hook





## HAL SPECIALTY KITS Med-Eng® offers specialized Hook and Line Kits to supplement a core HAL Kit and

provide mission-specific capabilities:



**VEHICLE ACCESS KIT** 



**1 LINE TRIPOD** 



**BUILDING KIT** 



LIGHTWEIGHT TRIPOD



ACCESS KIT



HEAVY DUTY KIT



SURVIVABILITY SYSTEMS

ARMOR

COMMUNICATIONS

DUTY

BIKE

FIREARMS ACCESSORIES

LESS

PROTECTIVE GEAR

FORENSICS

APPAREL APPAREL

ARMOR SYSTEMS

## MULTI-MISSION ROBOTS AND SEARCH EQUIPMENT

Med-Eng<sup>®</sup> offers two robot platforms and a suite of search and detection kits for bomb disposal squads, tactical teams, military units and security agencies. These provide the operational capabilities to locate and manage an array of hazardous threats and target items ranging from suspicious packages, explosives and contraband to Vehicle-Borne IEDs (VBIEDs).





### SEARCH KITS

 Specialized kits to locate, access, inspect, record and remove contraband materials or evidence



### DETECTORS

 Used in the location and recognition of prohibited, hidden or targeted materials



## MIRRORS

 Tools and mirrors for searching hard-to-reach areas in police and military operations



### **SCOPES**

 Electronic scopes to detect explosives, contraband or other materials in buildings, ports and elsewhere. Ideal for police, border security and military purposes



## DIGITAL VANGUARD

Midsized and multirole robot for Tactical, Search and Explosives Disposal missions.

- Ascends/descends 45 degree stairs. Able to climb
  on public transit buses and commercial aircraft
- Auxiliary port and telescopic arm deploy an array of equipment including disruptors, cameras, electronic countermeasures, X-ray equipment and CBRNe sensors
- Records video and stills; 3 standard cameras and an optional fourth IR or disruptor camera
- Provides two-way audio communication for missions such as hostage negotiations
- Telescopic and articulated arm with 6 axes of movement
- 2 independent firing circuits
- Variable speed control and excellent lifting capability
- · Compact storage for small response vehicle

#### DEFENDER // ROBOT

Large and exceptionally strong robot to deal with a variety of high threat tasks.

- Sophisticated system with heavy lifting capability and a very powerful weight to strength ratio
- Titanium frame can deploy X-ray systems, explosive charges and multiple disruptors
- Disruptor mounts have integrated dual lasers for accurate point of aim and judgment of target distance
- Six cameras, including video and still photo.
- Six-wheel drive to traverse rough ground, stairs and train tracks
- Four secure firing circuits
- Hydraulic arm and claw assembly
- Rotating turret
- Encrypted wireless control with GPS
- Environmentally sealed for post-blast and CBRN washdown
- Narrow enough to pass through most residential doors
- · Military grade Safety System



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## CREW SURVIVABILITY

Prolonged exposure to high temperature operating environments significantly reduces the effectiveness of crew and electronics in military and law enforcement vehicles. Similarly, military vehicles must protect occupants from the dangers of large scale blast incidents in combat. Med-Eng applies a Crew-centric approach and years of experience in blast effects and design engineering to provide customized and battle-proven Blast Attenuation Seats and Micro Climate Systems to protect against these threats.

## MICRO CLIMATE SYSTEMS // COOLING / HEATING SYSTEMS

The temperatures inside military and public safety vehicles can exceed the cooling capabilities of a vehicle's air conditioning system. This can cause serious and even fatal heat stress to occupants and the failure of mission-critical electronics.

Med-Eng® has fielded thousands of customized Thermal Management systems for military vehicles, and has developed solutions for the unique requirements of First Responder vehicles. The circulated chilled liquid architecture provides a safe, robust-and-reliable, and cost effective means of cooling personnel.



**EPIC Electronics Cooling** 



**PCU Portable Refrigerant Units** 



LCG Military Vest



**ALCU Auxiliary Liquid Chillers** 



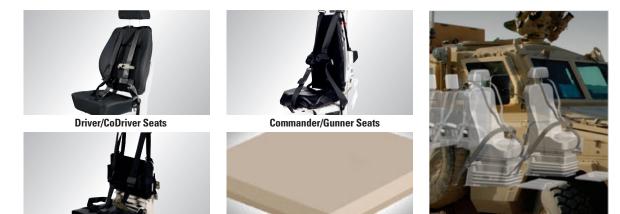
**PLCU Portable Liquid Chillers** 



**Custom Solutions for Remote Locations** 

## BLAST ATTENUATION SEATS // VEHICLE CREW PROTECTION

Med-Eng patented Blast Attenuation Seats isolate drivers, commanders and troops from the effects of Improvised Explosive Devices (IEDs), mines and sudden impacts. Each customized seating solution is developed using a combination of technical experience, computer modeling and Human Factors Engineering. This approach optimizes performance, comfort and functionality, and is validated through Drop Tower and Pull Testing, as well as live blast testing wherever possible.



Tactical Vehicle Seats





Please contact us to discuss your specific operational requirements so that we may provide a solution that will protect your team from these threats.

ARMOR

COMMUNICATIONS

DUTY

BIKE

FIREARMS

LESS

PROTECTIVE GEAR

TRAINING GROUP