

## **AVePS**

Active Vehicle Protection System  
Protection of medium and heavy armored vehicles  
against RPGs and ATGMs



# System Characteristics

AWiSS (standoff protection system) was the first generation of DBD's Active Protection System. After successful demonstration of the system in 2006, a change in military requirements for asymmetric warfare led to AVePS which differs from its predecessor in the following respects:

- quick reaction time <<400ms
- low system weight <350 kg for light armored vehicles (1 launcher)
- system weight <500 kg for heavy armored vehicles (2 launchers)
- 4 countermeasures per launcher
- single-cartridge design for countermeasure grenades
- expanded list of engageable threats: HHAT (hand-held anti-tank weapons) such as RPGs (rocket propelled grenades), ATGMs (anti-tank guided missiles) incl. top attack
- limited energy consumption <1.5kW
- volume to be installed under cover <80 liters
- operation over the entire military temperature range
- fully compliant to NATO standards
- adaptable to existing and future vehicle control systems
- significantly lower collateral damage through use of blast effectors
- lower system price for light vehicles due to single-launcher option



Single-launcher configuration for light vehicles



Easy and fast reloading procedure

Two launcher configuration for heavy vehicles



## **AVePS is a modular, launcher based active protection system providing unique mission relevant features:**

### **Protection for light and heavy armored vehicles**

through modular system design and light weight launcher

### **High system safety**

through combination of physically independent data sources

### **High survivability**

due to large stand-off distance from interception point

### **Protection against top attacks**

due to hemispherical coverage of sensors and effectors

### **Multi-hit capability** from one side or different directions

due to extremely low system reaction times

### **Operational in all relevant weather and dust conditions**

through combination of radar and infrared sensors

### **Easy reloading by tank crew under field conditions**

due to easy-to-handle effector cartridges

### **Minimized ILS requirements**

through easy storage and exchange of spare effectors

### **Threat trajectory tracing and detection of firing position**

through use of sensor suite data for counterfire control

2006



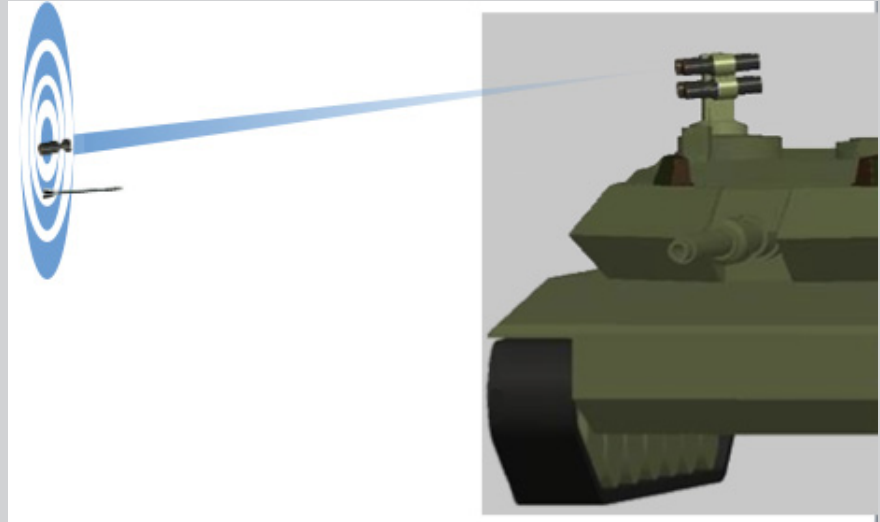
Autonomous defeat of approaching Milan-2 ATGM by fragmentation grenade using AWiSS launcher

2010



Autonomous defeat of approaching HHAT (Panzerfaust 3) by blast grenade fired from new AVePS launcher. AVePS was integrated into the German armored personnel carrier "Fuchs". In this trials campaign, AVePS also successfully defeated RPG-7.

## **AVePS growth potential: Defeat of KE penetrators by blast effector**



The penetration performance of a KE penetrator can be strongly reduced through the concentrated blast effect of a DBD grenade tilting the penetrator. This countermeasure is applied at a few meters' distance from the vehicle within its heavily protected frontal arc to withstand the residual kinetic energy of the KE penetrator.

We would be very pleased to support you in case you have any questions concerning our products or technologies.

**Diehl BGT Defence GmbH & Co. KG**  
Fischbachstraße 16  
90552 Röthenbach a. d. Pegnitz  
Germany  
Phone: +49 911 957-2474  
Fax: +49 911 957-2108  
E-mail: [info@diehl-bgt-defence.de](mailto:info@diehl-bgt-defence.de)  
[www.diehl-bgt-defence.de](http://www.diehl-bgt-defence.de)