



*Dynamit Nobel Defence*

# ***Counter Mobility***

***CONCEPT OVERVIEW***



*We focus on cutting-edge technology*



## **HISTORY IN COUNTER MOBILITY**

*DND has an outstanding history in developing, producing and delivering terrain shaping obstacles and counter mobility products. DND has transferred this experience, know-how, technologies and concepts into the 21st century to support land-based operations, and provide products and their tactical collaboration in order to solve key tasks in military operations.*

*Adequate solutions to disrupt, turn, fix and block mechanized formations are decisive elements on the battlefield. Essential in the past, crucial today and game-changing in the future.*



**SIX DECADES OF EXPERIENCE IN  
COUNTER MOBILITY SOLUTIONS  
TRANSFERRED TO THE 21ST CENTURY**

### **WIDE RANGE OF EXPERTISE**

- Bottom attack effectors
- Side attack effectors
- Top attack effectors
- Delivery means
  - Hand-emplaced
  - Automated laying
  - Ground-based scattering
  - Rocket-based scattering
  - Helicopter-based scattering
- Dynamic & networked counter mobility systems
- Warheads & charges for combat engineer applications
- Training aggregates for counter mobility systems



## AT2+ REVIVAL OF A LEGACY

### NEXT GENERATION AT2+

Revision of the proven legacy AT2 anti-tank munition

- Programmable scatterable anti-tank munition with digitized controls & sensors (multi-sensor suite)
- Effective under the whole width of a tank
- Outstanding warhead performance of > 140mm RHA
- AT2+ comes with six feet that automatically set it up into operational position
- Robust and hardened against different types of clearing systems

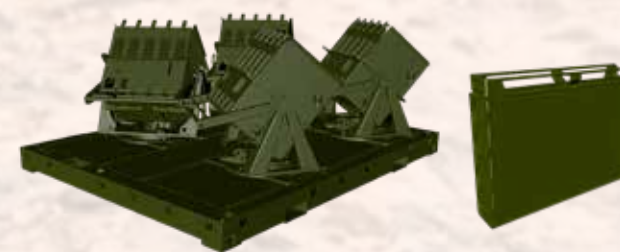


## AT2+ MEANS OF DELIVERY



### GROUND-BASED DELIVERY BY THE MODULAR SCATTERABLE ANTI-TANK SYSTEM SKORPION 2

- SKORPION 2 is a modular system with quick, easy and safe integration on various vehicles (wheeled, tracked, uncrewed)
- Dispenser system based on dispenser units that are mounted directly on the mobility platform or installed on a modular container platform in 10 ft, 15 ft or 20 ft with ISO668 twist lock interface
- SKORPION 2 provides a situation-oriented, rapid emplacement of an artificial obstacle within minutes
- SKORPION 2 emplaces well-structured obstacles with adjustable shape and density in a fully automated manner
- SKORPION 2 includes a command & control device with an interface to a BMS to ensure flawless reporting
- Key component of the SKORPION 2 is the dispenser unit that accommodates up to five AT2+ magazines (four dispenser units fit on a 10 ft container platform)
- AT2+ magazines serve as disposable launch-, transport-, and storage containers for 20 AT2+ (four launch tubes, each loaded with five AT2+)



### HAND-EMPLACEMENT BY THE SINGLE TUBE DISPENSER SYSTEM BOBCAT

The remote activated BOBCAT is a highly mobile and flexible system for scattering AT2+ munition. Due to its remote activation, BOBCAT provides a simple and fast method to block critical infrastructure or terrain without hindering own troops. If BOBCAT is not activated the system can be recovered and redeployed.

The single system consists of:

- Two AT2+ launch tubes (each holding five AT2+)
- Base plate with a control unit

Four single BOBCAT systems can be connected to a modular 360° dispenser system (resulting in an obstacle of 200m x 200m)

### OTHER TYPES OF DELIVERY MEANS FOR AT2+

- Rocket-based scattering - AT2+ tube (with two to five AT2+) integrated into a rocket warhead
- Helicopter-based scattering - dispenser unit for AT2+ magazines integrated into helicopter





## OFF-ROUTE ANTI-TANK C<sup>2</sup>ATS 90 & C<sup>2</sup>ATS 110

### THE COMMAND & CONTROL ANTI-TANK SYSTEM "C<sup>2</sup>ATS"

is a smart long-range off-route Anti-tank system to turn, fix, disrupt and block enemy forces in open terrain, gaps or narrow spaces. C<sup>2</sup>ATS is based on DND's qualified and in-service hand-held Anti-tank weapons (RGW110 HEAT/HESH-Tandem and RGW90 HEAT/HESH). The anti-tank weapon is mounted on an adaptable tripod and connected to a sophisticated sensor suite. Primary function of the system is to automatically destroy enemy combat vehicles from the side according to defined criteria for detection and discrimination. The suite of sensors is scanning for vehicles entering the area observed by the system. When the potential target meets the programmed criteria, the system calculates the optimum firing time and triggers the projectile. The system can additionally be triggered manually, in which case the decision to trigger always rests with the soldier.



## C<sup>2</sup>ATS

- Proven effectors to fight advanced MBTs
- SAPIR sensor (Sensor-Activated Passive InfraRed)
- Range of operation beyond 100m
- Programmable laying time of up to 45 days (full temperature range)
- Various modes of operation e.g. collect-it-later (reuse) or man-on-the-loop
- Programmable target counter & target discrimination
- Tripod & camouflage adaptable to terrain and environmental conditions



### INTEGRATION OF COUNTER MOBILITY SYSTEMS INTO THE DIGITAL BATTLESPACE

The digitalization of counter mobility solutions aims at the simplification and automatization of the planning and the reporting of artificial obstacles. Highly effective situation-oriented obstacles, situational awareness and an effective use of scarce resources are key achievements.

Network integrated laying systems, dispersion systems, munitions and surveillance solutions are able to boost efficiency, speed and control to a next level.

- Software-supported obstacle planning
- Digital integration of obstacles and delivery means
- Fully automated reporting
- Obstacle visualization via BMS interface
- Optimization of command, control and surveillance



### TRAINING AGGREGATES - TAILORED TO THE SYSTEM

Broad toolbox of training aggregates for the various counter mobility systems

- Tactical trainer
- Training simulator
- Reusable and/or disposable training munition
- Reloadable magazines
- Weight dummies

Training and services are adapted to the individual customer needs.



### DIFFERENT KINDS OF CONVENTIONAL ATMS & OTHER TYPES OF COUNTER MOBILITY EFFECTORS

- Simple hand-emplaced Conventional ATMs for open and covered emplacement
- Conventional ATMs prepared for automated laying systems for open and covered emplacement
- Warheads and key components for Conventional ATMs
- Effector integration solutions into UxS







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## ***Dynamit Nobel Defence GmbH***

*Dynamit Nobel Defence GmbH (DND) is a German medium-sized defence company. DND is a direct successor of the former Dynamit Nobel companies belonging to the Alfred Nobel Group. We look back at more than 60 years of experience in the development and production of protection technologies, counter mobility systems and shoulder-launched weapons for anti-tank, anti-armor, and multipurpose uses. Today, we are a full system supplier and global technology leader, trusted by German and international armed forces and services worldwide.*

*DND is located in Burbach, within an industry-rich region ca. 100 km north of Frankfurt. Our premises cover 1.000.000 square meters with 260 buildings designed for high technology development, manufacturing and testing of our product range. Our more than 450 professionals are committed to provide our customers more than just the most reliable state-of-the-art products and services – we strive to provide maximum technology and unmatched effect on target.*

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