

127MM BALLISTIC EXTENDED RANGE (BER) AND GUIDED LONG RANGE (GLR)

OTO VULCANO is a family of unguided (BER) and guided (GLR) ammunition for the 76mm, 127mm naval guns and 155mm land artillery systems.

OTO VULCANO 127mm ammunition is conceived to give the 127/54 C and the OTO 127/64 LW Leonardo Defence Systems Naval Guns the capability to meet any present and future requirement for Precision Naval Fire Support and Long Range engagement of Surface Targets. OTO VULCANO 127mm BER maintains the anti-air role as well.

OTO VULCANO 127mm rounds capitalize on new and emerging technology based upon a fin stabilized airframe with canard control for terminal guidance; mechanical interfaces are the same as standard 127mm ammunition.

OTO VULCANO 127mm available rounds are:

- Ballistic Extended Range (BER) unguided multirole ammunition with multi function programmable fuze
- Guided Long Range (GLR) ammunition with IR sensor for anti-ship role

- IMU+GPS autonomous guidance for precise NFS actions (a Semi Active Laser sensor can be fitted as option)

All the systems needed to operate OTO VULCANO 127mm ammunition are integrated into the OTO 127/64 LW Control Console and no mechanical modification to the OTO 127/64 LW gun is required.

OTO VULCANO 127mm is fully compatible with inservice OTO 127/54 C guns with the addition of a module with the functions of:

- Programmer for ammunition's fuze and guidance system
- Mission Planner and Executer for Naval Fire Support both in stand-alone mode and in interaction with ship's Network Centric Systems with the role of choosing firing solutions, selection of ammunition, definition of trajectories and firing sequences, ballistic computations etc

Firing OTO VULCANO 127mm ammunition does not affect the barrel life.

OTO VULCANO 127

DESIGN GUIDELINES

- Sub calibre airframe
- Fin stabilised
- Ballistic flight, no additional propulsion
- IMU + GPS guidance system, gliding phase
- Insensitive Munition (IM)
- Possibility of Terminal Guidance (InfraRed-IR, Semi Active Laser Sal)
- Minimisation of engagement cost

AMMUNITION CONFIGURATIONS

BER (Ballistic Extended Range)

Unguided multipurpose ammunition

- Up to 60Km range
- Multifunctional Fuze
 - Altimetric
 - Proximity
 - Time
 - Impact/delayed impact
- Notched HE warhead

GLR (Guided Long Range/IR)

- Up to 80Km range
- Autonomous IMU+GPS guidance
- IR Terminal guidance
- Precise anti ship firing
- Notched HE warhead

GLR (Guided Long Range) Guided ammunition for NFS

- Up to 100Km range
- Autonomous IMU+GPS guidance
- Precise shore bombardment firing
- Notched HE warhead
- SAL terminal guidance(optional)

Ship integration

Any equipment to operate Vulcano ammunition is integrated into gun control cabinet including:

- Guidance Control Unit
- Programming device for ammo initialization
- Digital interface with ship data transfer system

