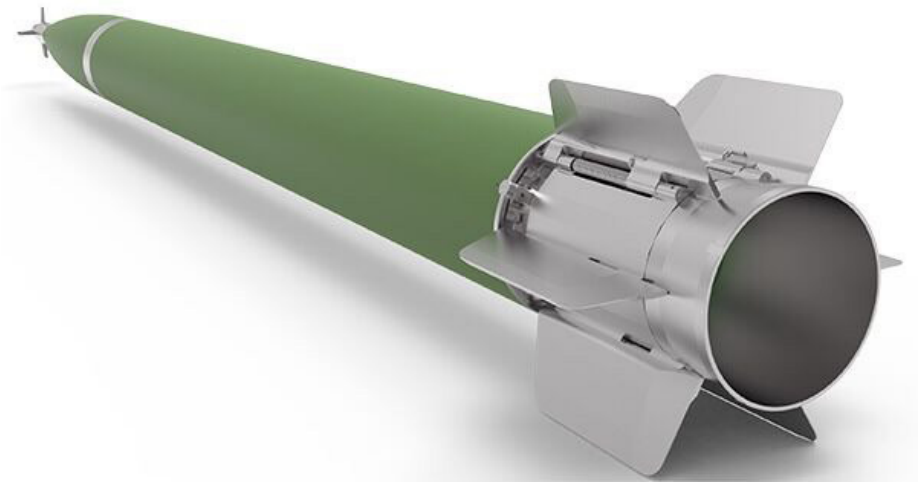
262 mm, 70 km UNGUIDED ROCKET

Artillery rockets



General characteristics:

262 mm unguided rocket is intended for launching from modular multiple launcher rocket systems, including Orkan-Luna quadruple rocket launcher in inventory of the Serbian Armed Forces as well as Tamnava and Shumadia modular multiple launching systems, developed by Yugoimport SDPR.

Rockets are intended for engaging of wide range of surface targets including concentration of manpower, lightly armored vehicles, air defence systems, artillery systems, fortified areas, various material targets etc.

Rocket has the range of 70 km with CEP of approximately 400 m. It consists of solid propellant rocket motor and two types of warhead.

The first warhead type is high explosive - fragmentation, containing steel balls providing high lethal radius and effect on variety of targets. The warhead is equipped with impact or proximity fuse.

The other option for the warhead includes thermobaric explosive providing high blast effect and keeping also high fragmentation effect. This warhead is particularly effective against manpower and fortified targets.

Basic rocket specification:

1. Caliber	262 mm
2. Length	4400 mm
3. Weight	400 kg
4. Weight of warhead	140 kg
5. Weight of rocket motor	260 kg
6. Fuze type	Impact or proximity
7. CEP at maximum range	aprox 400 m
8. Maximum range	70 km
9. Propellant type	Composite rocket propellant
10. Warhead type	Unitary HE (blast/fragmentation)

The propulsion group of the 262 mm rocket consists of one propellant grain rocket engine to overcome resistance within the launch tube and achieve rocket acceleration. The main role of the engine is to overcome resistance within the launcher tube and to provide initial acceleration to the rocket. The rocket engine is designed to maintain and further accelerate the rocket, until the end of the boost phase.

The rocket engine is a part of the propulsion group that accelerates the rocket after the initial resistance in the tube has been overcome, up to 1,250 m/s at the end of the boost phase.

The main parts of the rocket engine are:

- Front (forward) closure;
- Combustion chamber;
- Rocket engine igniter;
- Propellant grain;
- Nozzle;
- Fins assembly.

The propellant is cylinder-shaped, with inhibited outer surfaces. The rocket engine chamber is made of high-quality steel using the high-strength or flow forming technology. The propellant grain consists of two types of propellants in order to achieve neutral burning despite its cylindrical shape. The propellant is a pyrogenic type of grain activated by an electrical impulse from the electrical circuit of the launcher.

All metal surfaces of the rocket engine are protected against corrosion.

The fins assembly consists of the fins holder and 4 aerodynamic surfaces. The fins are wrap-around type, and when folded, their outside diameter is smaller than the rocket caliber. They open up automatically once the rocket leaves the launch tube.