

Pinaka Multi-barrel Rocket launch system is a vital component of the offensive operations conducted by the Artillery regiment of the Indian Army. This article briefly throws light on the Pinaka MBRL, its specifications and its manufacturers.

Aspiring civil service candidates need to have a broad understanding over the topics covered under Indian Defence Technology, in the [IAS Exam](#).

## Pinaka MBRL - Introduction

The Pinaka multi-barrel rocket launcher (MBRL) is an important indigenous project aimed at providing the army with firepower superiority that would reduce casualties to soldiers in war.

1. Pinaka multi-barrel rocket launcher (MBRL) was developed by Armament Research and Development Establishment (ARDE), an important arm of Defence Research and Development Organisation (DRDO). ARDE is located in Pune, Maharashtra.
2. DRDO started developing Pinaka in the late 1980s, as an alternative to the multi-barrel rocket launching systems of Russian make, called the 'Grad' and 'Smerch', which are still in use.
3. The Pinaka MBRL system is mounted on a Tatra truck for mobility.
4. Pinaka was initially developed with a range of approximately 40 Km and the recent version of Pinaka has an extended range of 70 to 80 Km.
5. Pinaka MBRL can launch 12 high explosive rockets in 44 seconds.

### Pinaka MBRL - Past Success

1. Pinaka multi-barrel rocket launcher (MBRL) was successfully used during the Kargil war in 1999, neutralising enemy soldiers and positions on Mountain tops.

### Pinaka MBRL - Different Variants

1. Pinaka Mk-1, Range of 48 km (30 mi)
2. Pinaka Mk-I Enhanced, Range of 60 km
3. Pinaka Mk-II, Range of 90 km
4. Pinaka Mk-III, Range of 120 km (It is still under development)

### Pinaka MBRL - Manufacturers

Although the Pinaka MBRL was designed and developed by DRDO, to meet the requirement of armed forces, there are partner companies that developed important subsystems and components. The list of manufacturers are given below

1. [Defence Research and Development Organisation \(DRDO\)](#)

2. Ordnance Factories Board (OFB)
3. Tata Power Strategic Engineering Division
4. Larsen and Toubro (L&T)

## Pinaka MBRL - Details of Pinaka Battery

The [Indian Army](#) generally deploys a battery that has a total of 72 rockets. A battery of six launchers can neutralise an area of 1,000 m × 800 m.

1. Each Pinaka battery consists of six launcher vehicles
2. Each Launcher vehicle has 12 rockets
3. There will be 3 replenishment vehicles
4. Two Command Post vehicle (one stand by) with a Fire Control computer

The Indian Army has plans to operate a total of 16 regiments of Pinaka by 2022 and increase this to 22 within the next 6 years as the older Grad MLRS regiments are retired.

### Relevant Links

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