



Arjun MBT MK-1A

Why in News

Recently, the Prime Minister of India has handed over the indigenously developed **Arjun Main Battle Tank (MBT) MK-1A** to the Indian Army.



Key Points

▪ About:

- **Launch:** The Arjun MBT Project was initiated by **Defence Research and Development Organisation (DRDO)** in 1972 with the **Combat Vehicles Research and Development Establishment (CVRDE)** as its lead laboratory.
- **Objective:** To create a "state-of-the-art tank with superior fire power, high mobility, and excellent protection".

▪ Features of the Arjun Tank:

- The Arjun MBT is equipped with an indigenously developed **120mm main rifled gun** with **Fin Stabilised Armour-Piercing Discarding Sabot (FSAPDS)** ammunition.
 - **FSAPDS** is capable of destroying all known tank armour up to direct shooting range.
- It also has a **computer-controlled integrated fire control system** with stabilised sighting that works in all lighting conditions.
- The secondary weapons include a coaxial 7.62-mm machine gun for anti-personnel and a 12.7-mm machine gun for anti-aircraft and ground targets.

▪ Mk1A and MkII:

- The development of Arjun Mk1 was followed by improved variants - Mk1A and MkII.
- Arjun Mk1A, which features improved **firepower and transmission systems**, completed the final integration tests in 2019 and was cleared for production.
- The Arjun MkII variant is a light-weight **Futuristic Main Battle Tank (FMBT)** with electro-optical sensors and high-power lasers.

▪ Features of Mk-1A:

- The Mk-1A version has 14 major upgrades on the earlier version. It is also supposed to have **missile firing capability** as per the design.
- However, the biggest achievement with the latest version is **54.3% indigenous content** against the **41% in the earlier model**.
- The newly developed **Kanchan** modular composite armour gives all-round protection to the tank from anti-tank ammunition.

- Kanchan has been manufactured by **Defence Metallurgical Research Laboratory (DMRL)** - a DRDO Laboratory.

Defence Research and Development Organisation

- DRDO works to establish a world class science and technology base for India and provides India's Defence Services decisive edge by equipping them with internationally competitive systems and solutions.
- DRDO was established in 1958 after combining Technical Development Establishment (TDEs) of the Indian Army and the Directorate of Technical Development & Production (DTDP) with the Defence Science Organisation (DSO).
- DRDO works under the administrative control of the Ministry of Defence, Government of India.

[Source: IE](#)

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