

MILAN Anti-Tank Missiles

The MILAN (*Missile d'infanterie léger antichar*, "Light anti-tank infantry missile" in French) is an anti-tank guided missile that was accepted into service by 1972.

The MILAN Anti Tank Missiles was in the news recently on March 19 when the Defence Ministry of India signed an undertaking Bharat Dynamics Limited (BDL) to supply the Indian Army with the 2T variant of the MILAN at the cost of Rs. 1188 crore. The BDL is designing MILAN under licence from a French firm.

This article will further give details about the MILAN Anti-Tank Missiles within the context of the Civil Service Examination.

Background of MILAN Anti-Tank Missiles

The MILAN was jointly developed by France and West Germany during the 1960s. It entered into service as an anti-tank weapon and soon became the mainstay antitank weapon for NATO, used by most of the alliances's individual armies

The MILAN 2 variant, which entered service with the French, German and British armies in 1984, utilizes an improved 115 mm HEAT warhead. The MILAN 3 entered service with the French army in 1995 and features a new-generation localizer that makes the system more difficult to jam electronically.

Description of MILAN Anti-Tank Missiles

The MILAN Anti-Tank missile consists of two main components:

1. Launcher
2. Missile

It uses a semi-automatic command line of sight (SACLOS) command guidance system. The SACLOS is a method of missile command guidance. This guidance system involves the operator having to continually point a sighting device at the target while the missile is in flight. Electronics in the sighting device and/or the missile then guide it to the target.

The MILAN missile tracks the target through a tail-mounted infrared lamp or an electronic-flash lamp, depending on the variant. Since it is guided by wire by an operator the missile will not be affected by radio jammer or flares.

Its drawbacks include:

1. Short range

2. Exposure of operator
3. Danger of overland powerlines.

Further characteristics of the MILAN Anti-Tank Missile is given in the table below:

Specification of MILAN Anti-Tank Missile	
Mass	16.4 kg
Length	1.2 m (3 ft 11 in)
Diameter	0.115 m (4.5 in)
Warhead	Single or tandem HEAT
Detonation mechanism	Upon contact
Engine	solid-fuel rocket
Wingspan	0.26 m (10 in)
Operational range	200–2,000 m (660–6,560 ft); 3,000 m (MILAN ER)
Maximum speed	200 m/s (660

Variants and Operational History of the MILAN

The following variants of the MILAN missile are in use today:

- **MILAN 1**: Single, main shaped charge warhead (1972), calibre 103 mm
- **MILAN 2**: Single, main shaped charge warhead, with standoff probe to increase penetration (1984) – see photo to right, calibre 115 mm
- **MILAN 2T**: Single main shaped charge, with smaller shaped charge warhead at end of standoff probe to defeat reactive armour (1993)
- **MILAN 3**: Tandem, shaped charge warheads (1996) and electronic beacon
- **MILAN ER**: Extended range (3,000 m) and improved penetration

Most of the variants of the Milan Anti-Tank missiles has been used by armies of the world in many conflict zones throughout the years most notably during the Falklands War, the Gulf War and also the recent civil war in Syria were a coalition of the western forces supplied the Kurdish Peshmerga and the Syrian Free army to help in their fight against ISIS

