The Mk 38 Mod 3 Machine Gun System (MGS) from BAE Systems: Setting the standard for shipboard defense against small, fast, and agile surface threats.

Now equipped with both the 25mm M242 Bushmaster main gun and option for a coaxially-mounted 7.62mm Mk 52 Mod 0 automatic chain gun to cover all mission needs, the stabilized, remotely controlled Mk 38 MGS further enhance the proven capability in defending against multiple surface threats.

The Mk 38 Mod 3 MGS incorporates the service-proven TOPLITE electro-optical sensor integrated with a state-of-the-art fire control system to optimize effective engagement of enemy targets in all weather conditions, day or night.

**Weaponry** – The main weapon is the proven 25mm M242 Bushmaster cannon with 2.5-km range and selectable rates of fire. The co-axially mounted 7.62mm chain gun upgrade provides the capability to accurately engage threats while in port and/or close to port.

**Lethality** –
The Mk 38 MGS fires all U.S. NATO Standard 25-mm by 137mm ammunition with adjustable rates of fire up to 180 rounds per minute and 168 ready rounds on-mount. The Mk 38 MGS can also fire the co-axially mounted 7.62mm gun with adjustable burst times with a rate of fire of 570 rpm with up to 750 ready rounds on-mount.

**Command and Control** – The integrated fire control system provides independent gun and TOPLITE gimbal stabilization and superior optics including the forward looking infrared radar with three fields-of-view, a low contrast, low light level color day camera, and an eye-safe laser range finder.
Survivability – The Mk 38 MGS provides for crew-safe conditions with a remote operation console located in the Combat Information Center, on the bridge, or other protected ship areas.

Adaptability – The Mk 38 MGS is the U.S. Navy’s ORDALT choice to upgrade the Mk 38 Mod 0/1 25-mm machine gun. The system can be applied to a wide range of different ship classes and platform designs of 50 tons or greater displacement.

**Specifications**

- **Weight (with gun, w/o ammo)**: 2,300 lbs/1,042 kg

- **Weapon station**
  - **Train**: ± 15° to ± 165° adjustable to any value in range
  - **Elevation**: -20° to +40°

- **Electro-Optical Fire Control System** (relative to mount)
  - **Train**: ± 165°
  - **Elevation**: -20° to +85°

- **Gun type**: 25-mm M242 Bushmaster, 7.62-mm Chain Gun Mk52 Mod 0

- **Ammunition feed**: Dual feed for main gun, single feed for the 7.62-mm gun

- **Ammunition capacity**: 168 ready rounds main gun, 750 rounds for 7.62-mm gun

- **Rate of fire**: 5 rates from single to 180 rpm max for main gun and up to 570 rpm for 7.62-mm gun

**Personnel requirements**

- Remote: 1
- Ammunition loading: 2

**Operability tests and scheduled maintenance**

- **(average daily)**: 6 minutes
- **Ammunition reloading time**: 5 minutes
- **Availability (inherent/predicted)**: 99.9% *

*Based on mission-critical MTBF of 1,441 hours and MTTR of 1.2 hours