

5-Inch 62-Caliber Mk 45 Mod 4 Naval Gun System



BAE SYSTEMS

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The 5-Inch (127-mm) 62-Caliber Mk 45 Mod 4 Naval Gun System from BAE Systems is in U.S. Navy service worldwide and is ready to significantly enhance Naval Surface Fire Support (NSFS) and overall mission performance. Keyed to the land attack mission, Mk 45 Mod 4 major upgrades include a 62-caliber barrel, strengthened gun and mount subsystems, advanced control system enhancement, and a reduced signature, low maintenance gun shield.

Lethality - The combat-proven Mk 45 Naval Gun provides ships with an effective weapon for anti-surface, strike, fire support, and anti-air warfare missions using the full range of U.S. Navy 5-inch ammunition.

Command and Control - Fully stabilized automatic aiming, combined with rapid system response to Gun Computing System commands, ensures the gun delivers maximum accuracy.

Survivability - The Mk 45 Mod 1 configuration is the only naval gun system in the world (larger than 30 mm) to have passed the

U.S. Navy's stringent MIL-STD-901 barge shock test. The Mk 45 Mod 4 is designed to MIL-STD-901 shock requirements. Throughout its continuing evolution, design experts at BAE Systems have optimized Mk 45 naval gun system resistance to shock loading by continually applying lessons learned from the latest in transient finite structural analysis technology as well as extensive shipboard and barge shock test evaluations.

Sustainability - BAE Systems applies over 35 years of Mk 45 experience, with life cycle support to over 250 shipboard applications in the U.S. Navy and 10 fleets worldwide.

Extended Range - U.S. Navy development tests have proven Mk 45 Mod 4 supports the higher breech pressures and associated requirements to fire extended range conventional projectiles more than 20 nautical miles, and to handle and fire extended length/extended range munitions more than 50 nautical miles.

SPECIFICATIONS

Loading-pointing-operation: Fully automatic

Ready service complement: 20 Conventional rounds
10 Extended range munitions

Muzzle velocity of service round: 823 m/sec (2,700 ft/sec)
(Conventional round)
1051.56 m/sec (3450 ft/sec)
(Extended range munition)

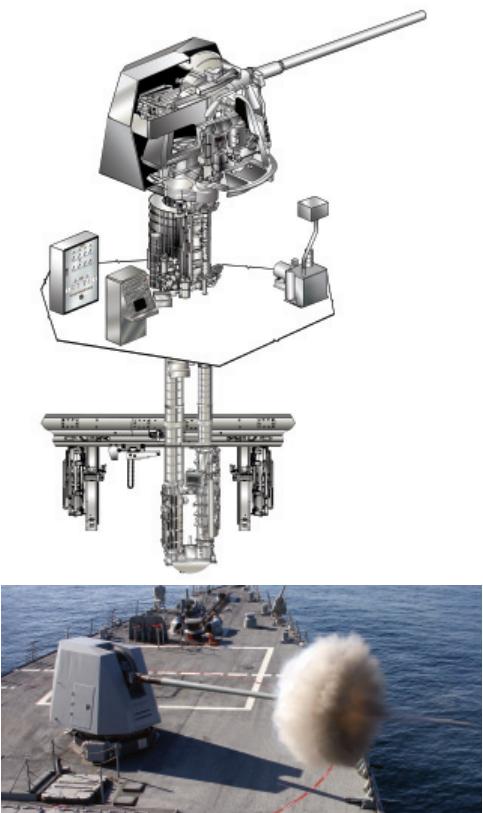
Gun System Weight
(w/o fluids/lower hoist): 24,389 kg (53,770 lb)

Train:
Preset limits +170 deg from stow
Velocity 30 deg/sec
Acceleration 38 deg/sec²

Elevation:
Preset limits -15 deg, + 65 deg
Velocity 20 deg/sec
Acceleration 31 deg/sec²

Ship power supply: 440 volts 60 Hz 3 ph

Maintenance and availability:
Operability tests and scheduled maintenance (average daily) 1.6 hours
Regunning time 1.0 hour
Availability (inherent) 99.6%



FOR MORE INFORMATION CONTACT:

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BAE SYSTEMS

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