SYDOR TECHNOLOGIES

SINGLE STAGE GAS GUN

COMPLEX MEASUREMENTS—CRITICAL RESULTS

FEATURES

- Compatible with multiple caliber projectiles
- Optional barrel-mounted velocity sensors
- Optional gas boosters

APPLICATIONS

- Ballistic Gel Testing
- Ballistic Impact on Vehicle Armor
- Ballistic Resistance Testing
- Dynamic Impact Imaging
- Impact Testing for Body Armor
- Vehicle Armor Penetration Testing

ABOUT THE SINGLE STAGE GAS GUN

The Sydor Gas Gun is a single-stage high performance and high pressure test system that obtains high velocities by using a fast acting shuttle valve which releases a set volume of gas (typically Helium). Users adjust the gas pressure prior to firing to obtain the desired projectile velocity.

Projectiles or fragments are loaded by removing the quick release barrel. An over-center lever catch locks the barrel after loading, and the gun is ready to fire. The standard configuration is designed to accommodate 7.62 mm rounds for NATO (STANAG 2920) Fragment Simulating Projectile (FSP) firing.

Other calibers can easily be added from 0.22" through to 12.7 mm rifled and up to 42.2 mm (eg Golf Balls) with smooth bore barrels.

Firing is accomplished electrically, to allow for remote operation and providing users with a safer environment. For added user safety, the unit can easily be connected to the firing circuit through door interlocks.

An optional Gas Booster is available to optimize the use of the helium gas. For larger projectiles at slower velocities an optimized configuration has an integrated fiber optic velocity sensor on the barrel with a protection plate around the muzzle.

PRODUCT SPECIFICATIONS

- Barrel: 7.62 mm as standard, larger available for higher velocties or larger projectiles
- Gas: Standard helium bottle (not included) at up to 300 bar - for lower velocities, other gases may be used
- Velocities: Up to 800 m/s with 17 grain FSP, barrel length and gas pressure dependent
- Firing: Electrical 24 VDC via solenoid
- Other Required Items: Barrels, sabots, laser mount, booster system, tools & spares

VELOCITIES

Projectile	Barrel Length (mm)	Rifled	Approx. Bore Size (mm)
2 Grain RCC	775	Yes	5.56
4 Grain RCC	775	Yes	5.56
16 Grain RCC	1000	Yes	7.62
17 Grain RCC	1000	Yes	7.62
64 Grain RCC	770	Yes	12.7
14,g mm Custom Projectile[2]	1000	Yes	14.5

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