

# BRUTUS 155MM MHS

(Mobile Howitzer System)

HYBRID SOFT RECOIL HOWITZER & MOBILE AMMUNITION SUPPORT VEHICLE

The Brutus 155MM MHS directly supports the mission of field artillery to destroy, neutralize or suppress the enemy.

This innovative system re-purposes existing cannons, fire control equipment, basic issue items and vehicles to deliver enhanced firing capabilities, mobility and reduced crew vulnerability.

By leveraging fielded cannons, existing ballistics kernel and reusing the fielded prime mover, the "time to field" is significantly improved.

Additionally, reduced testing, commonality of parts, reduced maintenance needs and limited training requirements all result in an affordable and sustainable solution – backed by the global lifecycle support from AM General.

# REVOLUTIONIZING

THE DELIVERY OF FIRES

Mobility
Survivability
Lethality
Maintainability
Reduced Manpower



# BRUTUS 155MM MHS

#### (Mobile Howitzer System)

## **Mobility**

The Brutus 155MM MHS greatly increases artillery batteries' responsiveness and provides significant enhancements to emplace, shoot, displace and maneuver over traditional towed howitzer systems. It features the off-road mobility to keep pace with its supported maneuver units and enables the firing units to deliver timely and responsive direct and indirect fires.

### **Survivability**

"Shoot and scoot" capability enables rapid displacement after firing that greatly enhances the survivability of the crew from counterfire or attack drones. Firing batteries and platoons can emplace, fire and displace before enemy units can find, fix and return fire.

#### Lethality

An advanced digital fire control system featuring enhanced navigation, integrated muzzle velocity radar and improved sighting/targeting capabilities greatly enhances lethality. The system can provide precision fires in a fraction of the time of traditional towed howitzer units. The 155MM cannon delivers high explosive rounds at a range of up to 18.75 miles.





## **Maintainability**

The hybrid hydro-pneumatic soft recoil system greatly reduces the number of components compared to traditional towed cannon systems (250 vs. 2,500). With 90% fewer parts, maintenance is greatly simplified, and repair is accomplished at the lowest level. The elevation and direction system incorporates a simplified design that significantly increases reliability.

#### **Reduced Manpower**

Crewed with 5-7 personnel, based on mission needs, the system frees up personnel who are normally required to emplace, fire and displace a towed howitzer. The system enables fielding of additional howitzers without increasing manpower, which results in even greater lethality.

Weapon System	155 mm Mobile Hybrid Soft Recoil Howitzer
Caliber	155 mm (6.10 in.)
Length	25 ft. (7.6 m)
Width	8 ft. (2.44 m)
Height	11 ft 6 in. (3.5 m)
Total System Weight w/wea (no ammunition), stabilizer	•
M776 Cannon w/Breech	3,700 lb.
Cradle/Recoil Mechanism	1,170 lb.
Total Tipping Parts	4,870 lb.
Top Carriage Group	1,500 lb.
Total w/o Fire Control	6,370 lb.
M171A1 Telescope Mount	75 lb.
M17A1 Fire Control Quadra	nt 8.5 lb.
M137A2 Panoramic Telesco	pe 24 lb.

MG9000 Digital Fire Control System 13 lb	
Crew Requirements	5-7 personnel (extreme conditions: 5 personnel)
Cannon	155 mm, M776
Projectile Travel	200 in.
Caliber	39
No. of Grooves	48
Muzzle Brake Double Baffle	250 lb.
Breech Block	Screw Block
Recoil Mechanism	Hydro-Pneumatic, Soft Recoil
Carriage	Aluminum Alloy
Traverse limits	6,400 mils (360°)
Elevating limits	89 to 1,173 mils ( -5° to +72°)

Temperature Range	Lower Limit -40°F (-40°C) Upper Limit +125°F (+52°C)
Fire Control - Optica	l M1372A Panoramic Telescope M171 Telescope Mount
Fire Control - Digital	Pointing and Aiming System; Inertial Navigation System; GPS Antenna; Muzzle Velocity Radar System; Direct Fire Sight with Laser ge Finder; Gunners Display Unit
Ammunition	Uses all ammunition currently fired by M776 Cannon
Rate of Fire	Maximum: 5 rounds per minute Sustained: 2 rounds per minute
Maximum Range	Charge 5: 15.5 mi. (25 km) RAP: 18.75 miles (30 km)