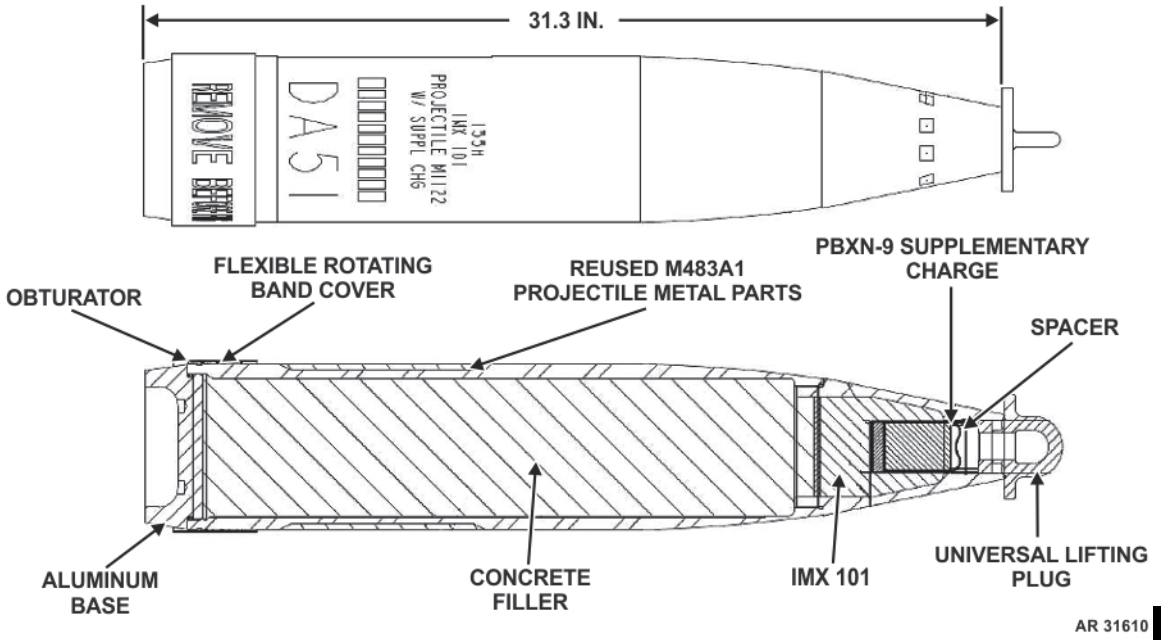
PROJECTILE, 155MM: HE, M1122



TYPE CLASSIFICATION:

TC-STD - November 2010.

USE:

This projectile will be used in place of the Practice, M804A1 projectile for 155mm Howitzer crew and forward observer training in indirect fire. Crew training can be conducted without the blast and fragmentation effects of the M795 projectile. The M1122 projectile is designed to be compatible with the M198, M777 series, and M109 series Howitzers.

DESCRIPTION:

The M1122 High Explosive (HE) Projectile will be the primary 155mm training projectile for HE artillery fire missions, providing improved and more realistic performance and survivability characteristics at a lower cost over currently fielded 155mm projectiles used for training. The M1122 is an improved artillery projectile containing Insensitive Munitions (IM) explosive that is ballistically similar to the 155mm M795 HE projectile. This projectile is required to safely accomplish training exercises in current and developmental registration corrections for computation of range, deflection and fuze correction for use with other members of the ballistically similar family of projectiles.

FUNCTIONING:

The 155mm M1122 projectile is shipped unfuzed with a Meltable Fuze Plug (MFP) for shipping and handling. When the weapon is fired, the rotating band engages the barrel rifling to impart spin to the projectile for stability in flight. The obturator behind the rotating band forms a seal to prevent leakage of gas pressure past the projectile. Rapidly expanding gases from the burning propellant charge propel the projectile through the barrel with the velocity necessary to reach the target. At the target, the warhead filler is detonated by the fuze. The fuze mode can be either impact, preset time, or proximity depending on fuze selection. The maximum range objective is established to provide the ability to reach targets at the same distance that lethal HE munition can reach. The M1122 projectile's top zone compatibility from a 39 caliber tube, with MACS propellant, provides a capability that is not present with the current stockpile of training munitions.

TABULATED DATA:

NSN	1320-01-579-6145
DODAC	1320-DA51
Type	High Explosive
Weight	103 lb (46.72 kg)
Length w/fuze	31.3 in. (79.5 cm)
Projectile:	
Body material	Steel w/aluminum ogive and base plug
Color	Olive drab w/yellow diamonds and markings
Filler	Concrete and IMX-101 explosive
Components:	
Propelling charge	M119A2, M203, M203A1, M231, M232, and M232A1
Primer	M82
Fuze	M557, M767 and M767A1, M739 and M739A1, M732A2, M782
Weapons used with	M198, M777A2, and M109A6

PERFORMANCE:

Maximum range	140 mi (22.5 km)
Minimum range	2.17 mi (3.5 km)

TEMPERATURE LIMITS:

Firing:	
Lower limit	0 ºF (-18 ºC)
Upper limit	+110 ºF (+43 ºC)
Storage:	
Lower limit	-65 ºF (-54 ºC)
Upper limit	+165 ºF (+74 ºC)

DRAWINGS:

Assembly	13022733
Pallet	8837839

UNIT OF ISSUE:

Packing	8 projectiles per pallet

PACKING DATA:

Pallet:	
Dimensions	38.75 x 29.13 x 14.63 in. (98.4 x 74 x 37.15 cm)
Cube	9.57 cu ft (0.27 cu m)
Weight	874 lb (396.4 kg) (per pallet of 8 projectiles)

SHIPPING AND STORAGE DATA:

DOD hazard class/division	1.2.2
Compatibility group	D
Proper shipping name	Projectiles
UN number	0169

LIMITATIONS:

Projectiles with Meltable Fuze Plugs (MFP) which have been sheared/broken off must not be fired. Ammunition must be returned to ASP.

There may be instances where the MFP can be damaged but still be removed safely. If there is no damage to fuzewell and fuze threads and a fuze can be seated properly into the projectile, the projectile is considered safe to fire. If a fuze cannot be seated properly, the projectile must not be fired and must be returned to ASP.

REFERENCES:

TM 9-1025-211-10
TM 9-1025-215-10
TM 9-2350-314-10
TM 9-1300-251-20&P*
TM 9-1300-251-34&P*
* TMs will be superseded by TM 9-1300-251-23&P.