Origin 125mm Gauss Cannon Shell

The 125mm Gauss Cannon Shell, initially created by Origin Defense Manufacturing and based off of the munitions used in Paragon's HCS2 125mm Coilgun, is improved upon to be used within Origin's own 125mm Gauss Cannon. It is meant for heavy combat and thus is capable of demolishing heavy vehicles, power armor, and as fortifications such as bunkers. Production of the round began in YE 34 alongside several new vehicles produced by Origin Industries.

Stats

• Damage Rating: Tier 9 (Heavy Anti-Mecha)

• Caliber: 125mm x 900mm

Damage Description: Munition Type Dependent
Effective Range 10 KM/6.2 Miles (Atmosphere)

• Muzzle Velocity: 6,200 m/s

• Muzzle Blast: Large, bright white concussive blast.

• Recoil: Excessively Heavy

• Energy Source: Weapon Gauss Coils

Ammunition Types

125mm Gauss Cannon Quickchart		
Туре	Damage	Price
API-DS	Tier 8	40 KS
HEAT-FG	Tier 7 ¹⁾	60 KS
HE-P	Tier 9	80 KS

Armor Piercing Incendiary Discarding Sabot

The standard anti-armor round used against vehicles and power armor.

Composition

An old concept that has been around for some time, the discarding sabot design is still nonetheless effective and has been nearly unchanged in basic design as a result. The round consists of an arrow-shaped kinetic penetrator which is in turn made up of depleted uranium. This projectile, known as a flechette, is sandwiched inside a durandium spindle sabot which is firmly attached to the ferric penetrator - the two will detach upon firing. As it is ammunition for a gauss weapon, the round is literally nothing more than the projectile and sabot petals, with the metal 'arrow' measuring 900mm in length.

Performance

The round damages only the target it impacts, upon which the depleted uranium ignites. Depending on circumstances, the kinetic penetrator may either continue on through - strewing the inside of the target with incendiary fragments and shrapnel on its way out - or shatter within, immolating the interior. Unlike full bore rounds, the sabots are far more accurate at long distance and extreme ranges due to their flight properties.

High Explosive Anti-Tank Fragmentation

Another old yet effective staple of warfare, the HEAT type round is used to defeat - armored targets, demolishing them with its explosion - and neutralize infantry and nearby power armor with fragments.

Composition

A heavy metal alloy cone is seated with its tip facing away from the front, with high explosives packed in behind it. Around the sides of the shaped charge is a fragmentation sleeve. Both of these are seated within the shell - which contains a smart-fuse - and may be set to air-burst at a fixed location, detonate based on proximity, or detonate on contact by default. The round itself has no case, propellant, or primer as it is merely a 'warhead' designed to be propelled by the gauss coils of a weapon system.

Performance

Upon detonation, the explosives force the heavy metal conical liner to become a jet of liquid metal which proceeds forward at hypersonic speeds to pierce whatever is in front of it. Upon entry of a target, it immolates the interior. The same explosion that causes the copper to turn into a liquid jet also has considerable force, turning the sleeve around it into a hail of damaging fragments that can harm even power armor. The maximum range at which the concussive force can notably damage a power armor is 15 meters, while the fragments can do worthwhile damage to power armor at 40 meters out.

High Explosive Plasma

A more modern ammunition capable of both anti-armor duties and demolition.

Composition

The shell consists of a hardened exterior designed to resist the stresses of acceleration with a 'smart fuse' at the nose. Inside is a plasma containment system designed to release the plasma it contains upon either contact detonation or preset air-burst detonation.

https://wiki.stararmy.com/ Printed on 2024/06/03 07:11

Performance

When released, the plasma inside reacts with whatever material it comes in contact with. The plasma's extreme heat vaporizes matter - coupled with the compression from the containment unit, it expands rapidly, much like an explosion. In comparison to the HEAT round, its area of effect is much larger, capable of doing meaningful damage to a Power Armor at 80 meters out from the point of detonation. The force of the explosion also causes a small scale mushroom cloud and can knock over some lighter PA models.

OOC Notes

Kai re-created this article on 2018/07/07 10:52.

Products & Items Database		
Product Categories	weapons: ammunition	
Product Name	125mm Gauss Cannon Shell	
Manufacturer	Origin Industries	

1)

Area of effect.

From:

https://wiki.stararmy.com/ - STAR ARMY

Permanent link:

https://wiki.stararmy.com/doku.php?id=corp:origin:125mm_gauss_cannon_ammunition&rev=1700311970

Last update: 2023/12/20 21:01

