Chelti Voidship Powder Magazine

The Ships Powder Magazine is an assortment of compartments that carry the solid munitions and chemical propulsion charges used on chelti vessels equipped with chemical or hybrid cannons. These types of magazines are sorted into specific loads designed to separate the different types of volatiles from each other. In particular, the explosive propellant from the liquid oxygen.

Placement

Ship magazines are usually located straddling the pressure hull of chelti ships, but not in direct contact with it. Often with an internal firewall to help protect the rest of the ship from possible ammunition cookoffs. They are protected by the hull armor of the ship as well.

Because the loads inside the magazines must be moved to the guns they are typically clustered near or under the ships turrets. Some turret models may have their own ready-mags, but destruction of these would only affect the single turret that was hit.

Safety Features

While underway the magazine is left in vacuum if possible. In the event that the ammunition does cook, the exterior hull is equipped with a specialized blow-off valve. The valve itself is more like a large plate acting as a cork over the magazine than anything fancy, but it allows the force of the explosion to be sucked into space without reflecting off the interior armor and minimizing damage to the pressure hull.

The magazines themselves can be easily removed once the covering armor is stripped off and replaced with fresh ones without the crew having to internally work with the magazines themselves, even though manual loading is more than possible through the exterior hull if only top-ups are required.

Internal monitoring also keeps the crew alert for any possible malfunctions, dangers, or other would-be surprises while the magazine is aboard.

Types

Because different types of magazine are volatile under different conditions the different compartments deserve a mention.

Warhead

The hate-filled pointy end of what comes out of the barrel. The warhead storage unit is typically kept in vacuum storage even if the load on some warheads is non-volatile. Warheads are stored by types ready to be feed to the guns individually. The entire section of the magazine is mechanized to juggle shells

 $\frac{\text{upuate.}}{2023/12/21} faction: chelti: armory: voidship_comp: voidship_powder_magazine \ https://wiki.stararmy.com/doku.php?id=faction: chelti: armory: voidship_comp: voidship_comp$

around at rapid speed.

Propellant

The chemical boom that gives the cannons its push. While ordinarily the powder charge would be more dangerous in planetary conditions, in space it can be stored easily in a vacuum with no access to oxygen. This effectively makes the powder almost inert until exposed to the oxidizer in the breach of the gun itself during loading. The powder is typically stored in plastic or cloth charge pellets which are feed systematically into the guns as required

Oxidizer

The most volatile of magazine types, liquid oxidizer is kept in multiple pressurized containers within the magazine section. Due to the nature of such liquids it's impossible to make the load absolutely inert during transit, but in the event of rupture the entire magazine can also be flooded with non-flammable noble gasses to try to suppress any fires while the individual tanks inside the magazine reduce initial exposure and loss in the event of cook-off.

From:

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

Permanent link:

https://wiki.stararmy.com/doku.php?id=faction:chelti:armory:voidship comp:voidship powder magazine

Last update: 2023/12/21 05:25



https://wiki.stararmy.com/ Printed on 2024/06/01 11:57