Medium Mecha Bay

The Medium Mecha Bay was designed by Origin Industries in YE 40 as a component of the Karakoram-class Mecha Carrier; since the Mecha Bay is mostly a self-contained module, however, it is capable of easily being utilized in other starship designs or refitted onto existing starships.

About the Medium Mecha Bay

Origin's Medium Mecha Bay is a large multi-use compartment intended for the storage, repair, maintenance, launch, and retrieval of mecha and was designed to facilitate all of these tasks without necessarily needing outside support - which is why it's packed full of equipment in order to complete its jobs.

Statistics

Information about the Medium Mecha Bay, including its nomenclature and size.

General

General information about the Medium Mecha Bay.

- Nomenclature: OI-C2-M4000
- Type: Mecha Compartment
- Designers: Origin Industries
- Manufacturers: Origin Industries

Size

Sizing information about the Medium Mecha Bay.

- Height: 30 meters
- Width: 15 meters
- **Depth:** 15 meters

Components

The Medium Mecha Bay is a nearly self-sufficient compartment, featuring its own power source and all of the major subsystems needed to facilitate its many functions.

Automated Crane Arms

The Automated Crane Arms are the heart of the Medium Mecha Bay's maintenance and repair system. These arms are highly mobile along the sides of the Bay and together can extend to reach to the middle of the compartment. There are eight such arms in the Bay and each arm can hold up to ten tons by itself, thereby allowing for them to carry and position large or small components; the arms can either follow an automated program set by an operator or the ship's AI - or can be controlled manually by an operator.

Automated Maintenance Arms

The Automated Maintenance Arms are similar to the Crane Arms but are much smaller and designed for more precise work. These arms have multi-purpose heads on them which can be very easily swapped out for different heads capable of carrying out different tasks (such as positioning, welding, removal and installation of small parts, and even painting) and are capable of handling any normal task that is needed for the maintenance and repair of a mecha - however they are no replacement for a living technician in the event of non-standard repairs and maintenance. Like the Crane Arms, the Automated Maintenance Arms can either be controlled by an operator- or AI-set routine - or can be manually operated.

Catapult Doors

The doors of the Medium Mecha Bay are multi-purpose in function, serving as an armored cover to protect the contents of the bay and as a catapult system. Hinged both at the bottom and the top, the doors fold down and then outwards, then convert into a 60-meter-long linear catapult for the launching of mecha from the Bay. Each of the two catapults launches one mecha at a time and accelerate the mecha to a speed of about 2,000 kilometers per hour.

Control Pod

The Control Pod is the position from which all maintenance, repair, and launch activities in the Medium Mecha Bay are controlled. This small pod can hold up to two people, contains basic life support systems, and includes a gravitic system to keep it isolated from gravitic forces encountered within the bay (keeping its occupants at or below 1g of force); additionally, the Control Pod contains a command station which allows for the assigning of tasks to the arms within the bay and the monitoring of power generation, power usage, and material/supply consumption by the Medium Mecha Bay's components. The Control Pod may also be used to directly control systems and components within the Bay.

Fluid Supply System

The Fluid Supply System is a multipurpose system that allows for the transfer of fluids from storage tanks located in the sides of the bays to the mecha that are housed within the Bay. Composed of long hoses on reels as well as a variety of nozzles and connectors, this system can transfer grease, oil, hydraulic fluid,

fuels, reaction material, and other fluid or fluid-like substances; lastly, the Fluid Supply System works in conjunction with - and is manipulated by - the Automated Maintenance Arms.

Foot Clamps

Along the floor and ceiling of the Medium Mecha Bay are four sets of variable-width foot clamps that are used to help to secure mecha in the bay either 'upright' or 'upside-down'.

Modular Support Arms

Similar to the Automated Crane Arms but specifically designed to support mecha, the Modular Support Arms are connected to the back of the Medium Mecha Bay, are tough and sturdy, and have specialized heads which allow them to clamp or otherwise hold on to mecha. There are eight of these arms, two of which are needed to support most mecha; larger mecha require more arms to support them. The Support Arms are also capable of positioning mecha so that they can access the catapult doors for launch.

Power Generation

The Medium Mecha Bay contains four HONEY CRUSH generators spaced about its the walls, which provide power generation to the bay itself and “shore power” to mecha when they are being serviced or maintained so that tests, updates, and other related tasks can be performed without requiring the use of the mecha's own reactors. These generators each have a heavy-duty cable on a reel that connects to a service port on the mecha to allow the transfer of power and the heads on these cables may be changed to allow interfacing with mecha designed by other manufacturers.

Variable Unidirectional Gravitational Plating

The top and bottom of the Medium Mecha Bay have gravitational plating installed; unlike most Origin Industries designs, this particular model of plating is a non-permanent type and can have its effects varied or even turned off entirely - thus granting the Bay the ability to remain in zero gravity during maintenance (to ease the handling of large components) and increase gravity when testing components. The Variable Unidirectional Gravitational Plating is typically set between 1g and 0g, can produce up to 30g of force momentarily, and can sustain up to 10g for several minutes in order to simulate the amounts of force that may be placed on mecha during use.

OOC Notes

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