

IIS-R1-1a "Mercian" Autonomous Mothership

The Mercian is a ship designed by IIS, utilising mass-production and matter-conversion technology to create what is essentially a mobile fleetyard that can produce many ships provided the materials. The ship can hold its own in a battle against a large force, depending on how much time it has to prepare and produce the ships from its supplies to defend it.

About the Ship

The ship was designed by the [Iemochi Applied Technologies](#), following research by [Iemochi Nagamura](#) over the course of a few years, designs were completed in [YE 39](#). The ship is the first wholly designed by the company themselves, the result of lots of groundwork and liaison with other companies.

Key Features

This ship offers the production capabilities to create an entire fleet from the single vessel given enough time. The usage of an array of fabrication modules in the loading areas of the vessel allow for whatever solid inputted to be converted into the materials needed for any given ship on demand.

The ship is filled to the brim with [Junkers](#) through an arrangement made with [IIS](#) and [The Wire Guided](#). These Junkers act as shipbuilders, able to create much more flexible designs than a bunch of robot arms in a fixed space would do.

Mission Specialization

As the production capabilities of this ship can produce anything from that can be created through atomic assembly from diamonds to [water](#), the ship can be used as a multi-role craft.

- Mass Combat
- Fleet Repair
- Fleetbuilding
- Salvage
- Humanitarian Work
- Blockades

Appearance

The Mercian is roughly a horseshoe shape, with two long appendages extending from the front of the craft. Several lights can be seen on the front and sides, heat exchanges from the factories and internal production bays within. Two long metal bands also reinforce the center of the craft, which is adorned with

hangar exits for its products.

History and Background

The idea was thought up by [lemochi Nagamura](#) in [YE 39](#). He theorised that the refinement and usage of subatomic manipulation technology on a large scale could be used to convert incoming light, easily stored solids into useful materials for shipbuilding. Following this idea, he came up with the concept of having a ship with no fixed decks so that any amount or size of ship could be accounted for.

Statistics and Performance

General

- Class: ISS-R1-1 Series
- Type: Cruiser
- Designers: [lemochi Innovations & Sales](#)
- Manufacturer: [lemochi Applied Technologies](#)
- Fielded by: [lemochi Innovations & Sales](#)

Passengers

Crew: No crew is required, one crewmember is to be stationed in continuous stasis in a [Ke-S3-X2900 Escape Pod](#) to be awoken in case of extreme emergency.

Maximum Capacity: There are no accommodations for people. About 2 people can fit aboard in an emergency, but facilities would be stretched.

Dimensions

- Length: 510 meters
- Width: 490 meters
- Height: 352 meters
- Decks: Variable to the amount/size of products. Crew is always kept safe and accessible no matter what.

Propulsion and Range

- Sub-light drive capable of speeds up to .20c
- Continuum Distortion Drive: 15,000c
- Hyperspace Fold Drive: 0.60 ly/m

- Sublight Boost: Double speed available for five minutes
- Range: Unlimited
- Lifespan: 40+ years estimated lifespan
- Refit Cycle: All refits can be produced and installed onboard on demand.

Damage Capacity

See [Damage Rating \(Version 3\)](#) for an explanation of the damage system.

- Tier: 12
- All offense capabilities depend on external constructs.
- Ship is extremely hard to detect due to Faraday Cage, IIS cloaking technology and zero lifeforms, atmosphere or heating.
- A weak shield can be raised to encompass the whole ship.
- In the event of boarders taking the ship or the ship is about to be captured, either the shipboard AI or IIS HQ will awaken the crewmember. They will leave their pod and activate the ship's self destruct and data wipe.
- The ship is filled with [Junkers](#) and essentially act as a mini self defence force.

Hull and Hull Systems

The hull is made of a mixture of alloyed metals including titanium and aluminium, though the hull is interweaved with a tungsten-based Faraday Cage. The outside is coated with the IIS signature biological cloaking agent, detailed [here](#). No shields are used, rendering a near-zero emissions ship, even heat is not a factor as the ship is left exposed to space.

Inside the Ship

There is no atmosphere inside the ship - not only does this mitigate the need for cooling for the fabricators and converters, it also reduces the risk of hazards such as fire, boarders and stowaways. The single crewmember is put into stasis in a [Spacesuit](#) of their choice and hence can perform their duty despite these conditions. The only atmosphere is in the external loading bays containing the femtomachines used to make the raw materials as they perform best in atmosphere. This is kept inside a double airlock. The vehicle and fighter complement of this cruiser is created on the fly and can reach an exponential amount given enough time.

Compartment Layouts

Below are the compartment layouts of the IIS Mercian.

Bridge

The “Bridge” is simply a secure transponder unit that connects to a secure comms network for operational orders from [IIS](#) Headquarters.

Loading Areas

The loading areas are large atmosphere-filled rooms where cargo is loaded from the external sources for production. The femomachines inside recombine the solids into equal amounts of useful shipbuilding materials for the Junkers via quantum manipulation.

Engineering

There are a variable amount of decks created for fabrication, all filled with [Junkers](#). Supplies needed are created as generic material (normally aerogel) is passed through the airlocks.

Exit Bays

Small openings and corridors lead through to the zero-g openings on the outside of the ship, allowing the drones outside.

Ship Systems

Below are the ship's systems.

Computers and Electronics

Freespacer [Junkers](#) form the backbone for much of the production, maintenance and last line of defence for the ship. They can change and build ships in the place of fabricators, allowing for total versatility of amount and size of vessels produced.

The ship's interior is lined thickly with wiring, contrary to normal hull designs with the electronics embedded within. This serves to marginally boost its durability while making faults easier for Junkers to repair. The ship's sensors are the same as many commercial freighters and are not anything special, though modifications may be made.

Propulsion

The Mercian features three methods of propulsion: it carries auxiliary heavy fusion engines for sublight travel and has a hyperspace fold generator. The Mercian has an extremely basic emergency shielding array that can be raised to cover the ship. Propulsion is based on the burning of solid rocket fuel, created via the fabrication process detailed within. Fuel is HTPB, ammonium perchlorate and aluminium powder.

OOC Notes

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