Ge-C1-V3300 - Life Support System (SAOY)



The Ge-C1-V3300 - Life Support System is installed on Star Army of Yamatai vessels built by Geshrinari Shipyards starting in YE 33.

Every room is connected to the The Ge-C1-V3300. The environmental system is capable of providing clean atmosphere, heating and air conditioning and water purification. The system is scalable to provide depending on the ship's compliment. Hot water is provided by on-demand heaters. The system also provides artificial gravity for the comfort of the ship occupants. Occupants of the living quarters can select and store custom settings within the living quarters on the ship.

The system does require periodic maintenance.

System details

Air System

Air is passed through a series of hemosynth filters which remove particulate matter. It then goes through a dehumidifier and the extracted water is sent to the water system. The air is then passed through the scrubbers which break down the carbon dioxide to maintain proper oxygen levels.

Blowers are then used to circulate the air through the ship's air ducts. Heating and cooling is done by a heat exchanger unit prior to being blown into a room.

The system also has a series of storage tanks to augment the life support system or for emergencies when the system has failed.

Water System

This is the latest system used on Geshrinari Shipyards for water treatment.

Filtration

All returned water is passed through a series of filters to remove any solid matter from waste water. The

removed matter is then transferred to a drier which heats it and removed all moisture. The dried matter is then put into a hemosynth processor which brakes it down into its basic elements and transfers the output to the Fabrication bay for use there.

Purification

The filtered water is then run through a pressure tank where it is heated to above boiling, the water then passes into a cooling tank and then through an osmosis system to purify the water and produce potable water. The purified water is then stored in reservoirs until it is needed.

Heating

Hot water is produced by non-demand hot water systems, which precludes having a separate water system for hot water.

Gravity & Inertial Control

This system consists of gravity generators positioned throughout the ship. Normal gravity is handled by directional systems located in the decks. These provide a range of gravity from .5 to 1.5 G's. Common areas are typically kept at 1G, while private areas can be adjusted to meet the occupants needs.

Located in the hull space surrounding the ship are additional generators which provide protection from high G maneuvers. Under normal circumstances they counteract most or all of the G's caused by acceleration.

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