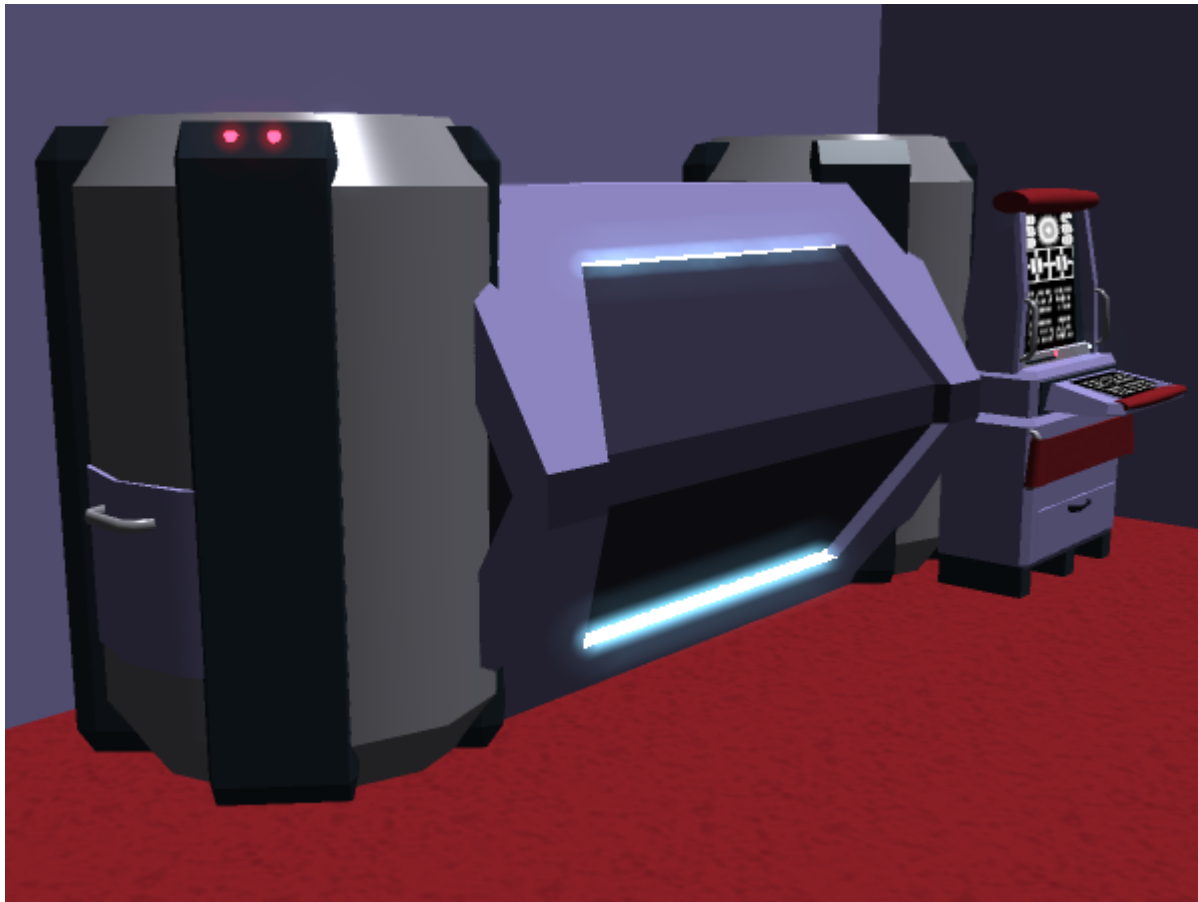


Star Army Fabrication Chamber, Type 39

Based on the [Standard Star Army Fabrication Area](#), the Fabrication Chamber was designed in [YE 39](#) for the [Star Army of Yamatai](#) and for [Project THOUGHT](#) for use in starships as well as in the field. It is typically used for a more portable scale of production, however. At 4m x 1.9m x 1.9m (4.9m x 1.9m x 1.9m with an optional [Aether Generator](#)), the entire assembly can fit in a single [SSCC-Medium Cargo Container](#) for field deployment. The effective construction volume available is 1.68m x 1.12m x 0.84m, or 1.58m³. It is just barely large enough to construct [Ke-Z1 Series Anti-Starship Torpedoes](#) or a normal-sized Power Armor, albeit with the major parts disassembled to fit within the chamber and a fair amount of time required.

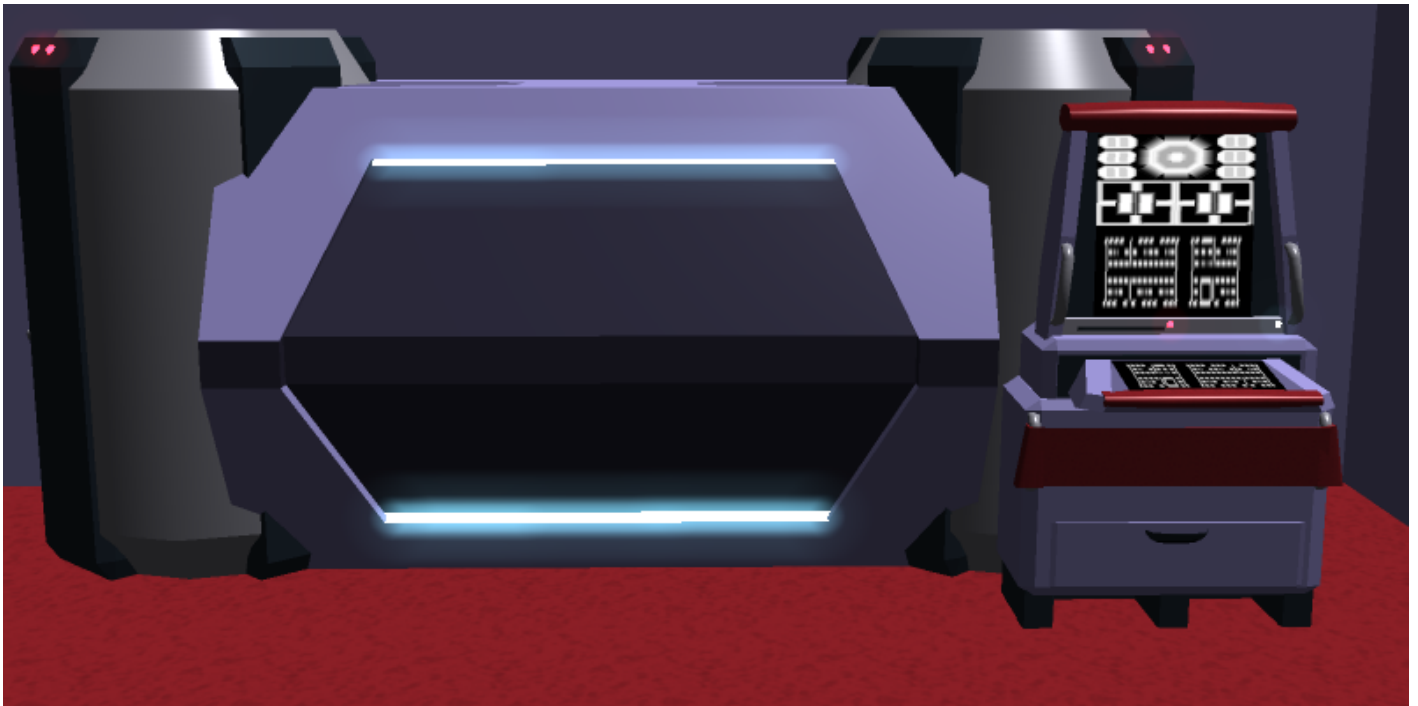


About the Fabrication Chamber

The Fabrication Chamber was initially developed in [YE 39](#) by [Kage Yaichiro](#) for use in an intended upgrade plan for both the [Chiaki-class \(1B\) Escort Destroyer](#) and the [Plumeria-class \(2D\) Medium Gunship](#), though it is planned to be used in other areas including the reconstruction of the city of Tokyo with its civilian limitations. The intention was to allow for plasma and matter from the [Multi-Stage Aether Drive](#) to be used to create ammunition for various physical armaments, though it can also be used with the older [Turbo Aether Plasma Drive](#) Drives, [Aether Generators](#), or even salvaged raw materials within certain limitations. Eventually, upon realizing the value of the system in field deployment, Yaichiro

elected to make the system suitable for the construction of materials and parts for colony use or other purposes and designed it to be portable.

Not only can the chamber be used to create ammunition for most kinds of turrets, but it can also be used for small system replacements or other components. It can even be used for making or purifying air, food, water, and medicine; though making large quantities of food on demand may require time-saving measures that limit choice and even texture and taste. Feeding more than 30 people three meals a day per chamber may cause this issue. It should also be noted that the chamber can also be used to sort debris into purified blocks of matter for recycling or storage. This is provided they do not require special processing that the [nanomachines](#) alone cannot manage, such as in the case of [Zesuaium](#). While it is possible to place matter into the Synthesis Reactor Module and convert it into other types of atoms through fusion or fission processes, exotic construction methods for restricted technologies are not possible for the civilian version of the Fabrication Chamber.



Components

Assorted components work together to make the Fabrication Chamber function, though it should be noted that there are two Synthesis Reactor Modules that could potentially be used. One is for civilian use while the other is for military use, and have different limitations on their capabilities. The optional Aether Generator also is a component which is to be considered, but is typically not present on starship-based offerings as it is not needed.

These components are intended to fit within a [SSCC-Medium Cargo Container](#) at minimum when assembled, though they can be shipped in larger containers alongside raw materials.

Kiosk Console



The Kiosk Console is simply a computer that accesses the Fabrication Chamber's systems and allows one to input commands or directives. Most use the [Zero-Gravity Kiosk Console, Type 39](#). This can either be connected to an external computer system like a [PANTHEON](#)-based offering or have the updated computer system offerings to control the Fabrication Chamber.

Synthesis Reactor Module, Civilian

The Synthesis Reactor Module is the tall container on the left of the system, and takes in either plasma from [Aether](#)-based systems or matter from an intake. It can then undergo nuclear fission or nuclear fusion, with the pressures involved carefully managed on the fly to deliver the desired materials. In this manner, it is possible to synthesize higher-tier materials than one may initially input into the system.

If the reaction would have a net loss of energy instead of a net gain, the Fabrication Chamber will draw added power from the attached power systems if available and permitted to by the main computer if present. As such, it is possible to readily synthesize matter above Iron. However, the civilian version of the system is explicitly designed to be incapable of reaching the pressures needed to create [Zesuaium](#) or the ingredients needed for [Yamataium](#).

This process can also be used to transform and decontaminate irradiated material, lending it to clean-up efforts of contaminated areas or components.

Synthesis Reactor Module, Military (Optional)

The military-grade version of the Synthesis Reactor Module replaces the Civilian version in military operations. It has all the capabilities of the civilian module, save for the fact that it has superior pressure ranges and can synthesize materials like [Zesuaium](#) in small quantities. This, however, takes added time

due to Zesuaium's complexity. The system must synthesize any Zesuaium or Zesuaium-coated components completely before starting on any others.

Aether Generator (Optional)

An Aether Generator with a size of 0.9m x 1.9m x 1.9m can be attached optionally to the system if no other source of power exists. This can provide matter and power to the unit, though the amount of plasma such a generator can provide for matter is limited. As such, supplemental matter collected for conversion is preferred for use with this system when employed in the field.

Nanomachine Colony Module

The tall container on the right of the Fabrication Chamber holds and maintains a nanomachine colony which is released into the Construction Chamber to do work or be replenished if needed, and sent back into the chamber for storage. The Nanomachine Colony Module is able to self-seal if punctured, and can control the Nanomachines to either repair damage or self-terminate.

Multi-Purpose Nanomachines, Type 39

These [Multi-Purpose Nanomachines, Type 39](#) are not capable of manipulating matter on the subatomic level beyond the electron shell; but can still sort, purify, and rearrange matter into objects or blocks. Some versions can also make new colonies of nanomachines for other purposes, but only within the bounds of appropriate security protocols.

Construction Chamber

This is the heart of the Fabrication Chamber and is typically called such even if its official name is the Construction Chamber. Its temperature, gravity (usually zero-G, and atmosphere (usually vacuum) is carefully controlled, and it has the capacity for forcefield projection. It also has eight arms inside with multi-tools on the tips like screwdrivers, welders, cutters, etc; usually folded against the top or bottom of the chamber, for machining or more conventional assembly/disassembly methods. The use of these arms is more common when working with items that are intended to be serviced or assembled by personnel. If needed, the arms' tools can be changed freely by nanomachines in the chamber for the task at hand. Its usable volume is 1.68m x 1.12m x 0.84m, or 1.58m³, though this is arranged in a hexagon with sides of 1.58m x 0.56m, constructed at 60 degree angles.

In this chamber, matter is rearranged and shaped into new ways by various methods. Plasma or simply heated materials from the Synthesis Reactor Module can be put in molds made out of forcefields and cooled to form castings. Nanomachine colonies can disassemble or rearrange refuse or debris that have been left in the chamber into pure ingots of materials or into new items, or even take material from the Synthesis Reactor Module to do the same. The arms can be used for more conventional construction

methods, or to simply do the “rough work” before the nanomachines do the final “polishing” to fine tolerances.

Access Doors

There are two hexagonal access doors on the Fabrication Chamber that each consist of sliding panels. One door is on the front, to the left of the Kiosk Console, and the other is opposite it to the rear of the chamber. While the one next to the Kiosk Console is almost always accessible for manual use, the rear-mounted one can often be recessed into a wall and loaded/unloaded by an automated system. This is commonly utilized when the Fabrication Chamber is used to synthesize ammunition for a vessel. Each door is 1m tall, is 1.26m wide at its narrowest points at the top and bottom, and is 1.66m wide at its widest point at the center. They can easily accommodate a 1500cm x 300cm round.

OOC Notes

Toshiro created this article on 2017/10/05 15:53. Approved by Ametheliana and FM approved by Wes on 2017/10/28, here:

<https://stararmy.com/roleplay-forum/index.php?threads/star-army-fabrication-chamber-type-39-supplemental-submissions.60160/#post-364006>

Products & Items Database	
Product Categories	interiors
Product Name	Star Army Fabrication Chamber
Nomenclature	Type 39
Manufacturer	Yugumo Corporation , Sunflower Corporation
Year Released	YE 39
Price (KS)	60,000.00 KS
Star Army Logistics	
Supply Classification	Class E - PARTS AND COMPONENTS
First Used	YE 39

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