

Type 30 Link Siphon (Retconned)



This Device is Retconned due to Wormhole Usage.



Inspired by the Ascendancy's [Link Device](#), this is a power system designed by [Kage Yaichiro](#) as a power source rather than a weapon. This is intended for use as an alternative secondary power source to Aether, which is easily detectable on sensors. However, since the pressures normally inside the star are maintained, the benefit is a nuclear fusion reaction which yields as much energy as generally needed to power a ship.

This design was later constructed for the [Star Army of Yamatai](#), through a contract with [Motoyoshi Fleet Yards](#).

Operation

Using the Aether Generators or the Capacitor Array, one of the Micro Link Devices lock onto a star and load the reinforced Yamataium core with fissile material. this material is at the star's core pressure, meaning that no 'heating up' of the reactor is needed. Energy generation is nearly immediate via the HEMR Collecton System, and the waste material is moved elsewhere, usually super-compressed Yamataium tanks.

In emergencies, standard fusion can be achieved by using hydrogen from matter collectors built into the ship, or by recycling the helium collected, which is stored in highly compressed tanks at 95% fusion pressure. In the latter, it is called Recycling Mode, and returns Carbon.

Components

Micro Link Device (2)

The Micro Link Device can transfer matter against vast distances, but less matter than its weapons grade 'big sister'. This is because it is designed to transfer stellar matter selectively, and a constant flow of matter at a steady rate. Two are attached to each reactor—one to siphon fissile material into the reactor and maintain Stellar Core Standard pressure, and the other to allow the core to interact with energy collectors and to remove byproduct. This allows a steady flow of hydrogen input, helium output, and energy collection.

Reinforced Yamataium Core

The core cannot really be called a reactor in its normal mode, as it does nothing to sustain or catalyze

the reaction, other than maintain a steady inward force to prevent the material from escaping. All interaction is done via the Micro Link Devices, allowing very fine control-and instant aborts and/or venting should anything go wrong.

The core can be used as a reactor, when Hydrogen from matter collectors or Helium from the [Compressed Helium Container](#) is loaded into it. It then uses a spherial forcefield on its interior to compress the material, and squeeze as much energy as possible out of the material.

The Core is hidden, as a sphere within the HEMR Collection System, and has emergency force fields in place should structural integrity fail. These can restrain the matter long enough for the material to be vented into space..

Heat, Electromagnetic, and Radiation (HEMR) Collection System

Mounted on the surface of the Reinforced Yamataium core, it converts heat, electromagnetic energy, and radioactivity into usable energy; which power the Micro Link Devices once the system has been 'primed'. This is aided by the nodal system. Once it detects that the Link Siphon has been deactivated, the remainder of the energy siphoned from the helium is fed to recharge the Capacitor Array.

It appearance is a sphere of Yamataium about 5 feet in radius; with coiled, 2 multi-layered tubing surrounding it. The sphere has special systems designed to convert heat, EM, and radioactive energy into usable electrical energy.

Capacitor Array

This is a simple capacitor array, which can start the Link Siphon should the Aether Generators be unable to do so.

Compressed Helium Containers

[Compressed Helium Container](#)

These tanks store the helium at pressures which are a significant fraction of what is needed for them to undergo nuclear fusion into carbon. These can be re-fed into the Reinforced Yamataium Core, and the unit can be used as a conventional reactor, albeit at high pressure and needing less energy to accelerate the helium to obtain carbon.

Matter Collector Interface

Connects the Micro Link Devices to standard hydrogen gathering devices, allowing the introduction of fissile materials into the Reinforced Yamataium core. This allows conventional fusion.

Benefits

- The Siphon, tapping into an existing natural reactor rather than starting its own reactions, needs no warming up and begins making energy right away.
- Since it is managed by the Micro Link Devices, the reaction can be stopped and/or the material vented if there is a problem.
- On sensors, the reaction looks similar to that of a very small solar flare rather than an aether reaction
- A single star can easily power thousands of warships, or even many planets, for perhaps millions of years depending on power load and efficiency.
- Since the pressure is equidistant rather than more at the center, like in conventional reactors, the power output is *magnitudes* higher than artificial forms of fusion in reactors the same size.

Limitations

- The system is halted if an Anti-FTL field is raised. This is circumvented by still using antimatter or aether as a backup or combat power source, or using the system's Recycling mode to process stored Helium.
- It is harmful to stars over many millions of years. As such, it must be used on stars which lack planets, are already dying, or are in danger of achieving the mass needed to go supernova.

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