Yamataium Graft

Developed and used by Yuki Toshiro between YE 30 and YE 32 and formally recognized and employed on a wider scale by the Star Army of Yamatai in YE 41, Yamataium Graft is an intermediate form of Yamataium with cavities inside. It can be used to make solid Yamataium if energy is provided after it is placed, and is on its own approximately as strong as light armors like Durandium Alloy.

Yamataium Graft	
Faction	Yamatai Star Empire
Designer	Yuki Toshiro
Manufacturer	Ketsurui Fleet Yards, Kessaku Systems, Yugumo Corporation, Yuki Toshiro
Fielded by	Star Army of Yamatai, Yuki Toshiro
Type of Product Materials	
Production	Mass Production

History

In YE 30, a salvager named Yuki Toshiro commanded the SRSS Yggdrasill in salvage operations during which solid chunks of Yamataium were recovered. As was typical in his operations, he reported the items he recovered and surrendered the restricted technologies to the Star Army of Yamatai, and also got rewards in some cases. However, due to an oversight on the Army's part, the restricted Yamataium was not claimed and instead written off as his property.

Not aware of a problem, the young man started to cut apart the Yamataium and experimented, exploiting its regeneration capabilities to 'grow' more Yamataium than he started with by employing three-dimensional techniques inspired by skin grafts. Eventually developing Yamataium Graft, he was able to completely upgrade his ship to employ Yamataium as the "Yggdrasill Kai" Vampire Variant by YE 32. Only after this process was done did Toshiro realize that there might be a problem and willingly contacted the Star Army of Yamatai again under his own initiative as recorded here. Fortunately for Toshiro, he had thoroughly documented the entire process and chain of custody. Concluding that the Army was in error and that he had attained the Yamataium legally, the matter was then considered closed.

Toshiro remains one of the few civilians (if not the only one) outside of the military or supporting corporations permitted to use Yamataium and Yamataium Graft, though a chain of custody from the original chunks must be maintained.

Nine years later, in YE 41, this thorough documentation was uncovered and formally recognized by engineers as an option for military use. The Yamataium Graft technology was re-purposed toward the optimization of military starship construction.

Function and Design

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Yamataium Graft is a Yamataium component which is porous with vacuum-filled cavities. These cavities give the component as little mass and as much surface area as possible in a given volume. While this reduces the strength and weight of the Yamtaium to that of Light Armor, it is actually meant as an intermediate construction material more than a final armor intended for combat.

By having as little mass as possible, the Yamataium Graft is less costly to produce and easier to place than solid Yamataium. By having as much surface area as possible, it is then possible to abuse Yamataium's regeneration properties to fill those internal cavities and make the Yamataium Graft into solid Yamataium as quickly as possible when energy is applied once the components are in position. The small cavities and large amounts of surface area allow the material to "fill in" rapidly rather than in days like normal hull damage. An entire ship could be converted gradually as it is constructed, while a single Integrated CFS Array Panel placed by a technician could fill in over a few minutes due to having ample energy dedicated to it.

It is often used in the following cases:

- Less costly construction and faster placement of Yamataium in and on a ship
- Seamlessly merging Yama-Dura connections or backplates to pure Yamataium armor
- Manufacture of lighter weight Integrated CFS Array Panels, including those stored on ships for field repair purposes
- Hull patching equipment

Appearance

Yamataium Graft looks exactly like Yamataium, grey and less suitable for retaining detail than other materials, though it has a more finely textured surface. This not only is a consequence of the maximization of surface area, but also allows paint to more readily adhere to its surface.

Availability

Though mass produced, the materials is typically for use by the military and its contractors only. Yuki Toshiro is a rare exception, and he cannot sell it.

OOC Notes

Toshiro created this article on 2019/05/10 17:56. It was FM approved by Wes and later got NTSE approval from the same on 2019/05/18.

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