

**Mari Swa:**

The way Taygetans make their everyday clothes is using replicator machines. Of course, handwoven and handmade clothing are the preferred ones by far because of the effort that was put in them and because of the artistic value they have as well. But when everyday garments are needed, and many of them, Taygetans simply replicate new ones over and over.

A replicator machine is a rectangular-shaped transparent box with solid and opaque corners and edges. It has two square magnetic generators, for lack of better words, one on each side. They are flat black in color and with several half spheres in the center following a honeycomb formation, and they may have one or two manually opening doors depending on the model. These machines come in different sizes and can be as small as a microwave oven for household use or as large as a building for industrial purposes. These machines can print just about any inorganic object and of nearly any material with very few restrictions. These machines can also replicate organic components as long as they are not alive or meant to be eaten; replicated food results in a toxic caricature with no nutritional value.

To make a simple copy of any piece of clothing or shoes, a shirt for example, we would use the replicator machines that are installed in each of Toleka's laundry rooms and are of the perfect interior size to accommodate clothing and footwear. We open the box and place the t-shirt inside, and we close it again. The machine starts its process of scanning the garment, where it detects its molecular construction using mostly advanced spectrometers. When the scan is finished, you can remove your original piece of clothing from the machine. The scan takes only a few seconds to complete.

The machine detects and isolates all the materials and chemicals present in the piece of clothing and produces a computer-generated model that it presents to you using a holographic screen that lights up next to the replicator machine. This screen comes up from an incandescent, thin, and long generator, and the image is fully interactive and tactile, where you can not only see what it is projecting in 3D, but you can also touch the items and icons in the image because it gives you tactile feedback. There you can decide whether you want to straight copy the t-shirt or any garment you are replicating, or you want to modify it in any way. For example, you can add or subtract pockets, change them from location, modify the color, the size, and shape of the garment, and so on. All the changes you want to make to the piece of clothing can be made manipulating the holographic image with your hands

and fingers, and you can use all the options the machine gives you to manipulate the menu on the right side of the screen image. When you are ready, you simply touch the print button and then you can see how your new garment starts to materialize inside the transparent box. It will be ready in less than a minute.

There are several kinds of replicator machines. In the case of the ones meant for clothing, it uses a basic component material that comes in the form of a white dust the machine injects into the box area, where it is chemically changed and caused to bond in specific ways to form the piece of clothing. This process is done by imposing what I could describe as a high-energy micro-hologram over each special dust particle, causing it to fuse and change its chemical properties into what is needed, discarding as vapor the ones it will not use. And all this is guided with computer-controlled microgravity technology. This machine is basically an advanced 3D printer. The basic and generic dust used for all clothing is a sort of «mother material» the machine can alter at a molecular level to copy just about all the materials used for garments, taking into account that in Taygeta, fully synthetic cloth is hardly ever used for everyday clothing, favoring natural components, being cotton the most widely used, relegating the synthetic to special needs, for example, the advanced composite material used for space suits and one-piece uniforms.

The dust itself can be copied to refill the clothing machines using another replicator that is specialized in an even more advanced form of printing. These super-advanced replicators can literally print just about any material and shape, no matter how complex it may be, even at a molecular level. Because these machines create a high-energy field inside that provides all the exact vibrations each individual particle of whatever is being replicated needs. These machines create the exact harmonics of a frequency that are needed to literally manifest each subatomic component out of the field of potential energy or Ether that surrounds everything. These machines are capable of materializing anything, applying the basic concept of creating matter from energy. Highly advanced civilizations at Taygetan level can not only produce energy from matter, they can also produce matter from energy. As a reference, producing energy from matter is akin to the level of technological advancement on Earth that is nuclear power: splitting the atom to produce energy, mostly in the form of radiation and heat. On Earth, they still haven't found the way to reverse that process, creating a hard and solid object from basic energy of any kind or source. The level of advancement of Taygetan technology can not only manifest matter out of energy, they can do so in a controlled manner with the exact wanted results.

These advanced replicators can be considered to be the ultimate 3D printing machines, and as would be expected, they can also replicate a simple piece of clothing. But anyhow, Taygetans still prefer the simpler model that uses a «mother dust» when making their garments. These machines are very widely used in Taygeta and in all comparable level societies because of its obvious practical applications, and nearly all the mass-produced items come from a machine like these. You can literally design any object using the computer aided with artificial intelligence with all its internal components and moving parts, as well as all the chips and circuitry it may have inside, complete with multiple types of materials, combining them all. Once your design is ready, you can computer-test it for problems, stress points, and deficiencies to correct them as much as possible, also being able to anticipate where your designed machine will fail during its use. And when you are ready, you simply print it in the machine. This is the reason why replicators come in different sizes in order to accommodate any needed volume. Taygetan starships and other ones pertaining to technological civilizations of similar level come equipped with large replicator machines in their engineering spaces to be able to manufacture any spare parts for its engines and all the other systems and components of a ship, giving them a nearly unlimited range, reducing the need for so-called «dry dock» repairs in an elaborated base back home. In order to copy an elaborated object that is not yet in the replicator computer database, you still need an original. For example, I cannot simply print a human-made cell phone from thin air. I could make one that looks like a human cell phone using images and manipulating the hologram previous to the printing, but for an exact copy with all its correct functions, I would still need a base example to scan first.

In every private bathroom in this ship, in its dresser, there is another kind of simple replicator. This one is specialized in replicating makeup for girls. There you can choose from a large palette of ready-made hues and colors for your powders, lipsticks, and makeup pencils. A small holographic screen pops up in front of the mirror where you can modify each one to the exact shade you want, and the machine will always keep your favorite colors full and ready to use. Although back in Taygeta there are printers that do your makeup on you automatically, here on the ship, you still have to do it yourself the traditional way with your brushes and pads, as usual. As for me, I'm only starting to see the use of putting on makeup, as I usually don't wear any at all, or only very lightly.

In the dresser of every private bathroom here, there is another machine. This one looks like what you would consider to be an old-fashioned large hair dryer, half

Industrial Replicators, Makeup and Clothes in Taygeta.  
(English) □□ □

incorporated into the wall, and you must place your head in it. The machine will not only dry your hair, it can also comb and arrange it into any desired preset hairdo. It does this by identifying each individual hair strand and rearranging it using controlled gravity. I've used the thing only once or twice, but I really don't like it, so I dry and comb my hair also the traditional way, as always.

These replicators are the backbone of Taygetan industry, to call it somehow. We, contrary to what happens on Earth, everything is designed carefully to provide the highest quality that will provide the longest useful lifespan of any object or machine produced. That is, they have no programmed obsolescence as they do on Earth.

<https://www.youtube.com/watch?v=udxUuKL5GY0>