

Crystal Processing Center

Crystal Processing Centers is the first location that a mined [Lunabaren Crystals](#) goes to for processing, the facilities first came about just one season after the [Neshaten](#) discovery of Lunabaren crystals in ER 020. They are considered high security facilities due to the inherit dangers of processing and handling crystals and can 'only' be build in very cold environments or high up on mountains.

The facility is broken up into several sections, each one designed to handle a particular part of the processing. Most facilities are owned and operated independently by trade-families, with a few exceptions including military and government owned facilities.

Purpose

The purpose behind the CPC is to provide a location where mined Lunabaren Crystals are processed for usage within society. Because of how dangerous the toxic fumes are from the processing, the facilities have to be located away from ANY places that have more than three hundred people residing in them.

Mines must be built in cold regions.

Sections

The following is a list of sections that make up the processing centers. Each one is interconnected but is also built out of military grade armor plating and reinforcements to help protect other buildings in the event of an explosion.

Receiving and Sorting Center

The receiving and sorting center is the first location that a Lunabaren crystal comes to after it is mined and transported to the facility. Because the crystals comes in various sizes, they must be sorted to determine whether they'll be used in civilian electronics, military, vehicles, and so on. Crystals are sorted from tiny, small, medium, large, huge.

Refining Center

The Refining center is where sorted crystals next go to and are then refined. The refining process involves removing imperfections or elements that don't belong on the crystals, this also includes any minerals that might've been mixed into the surrounding ground over the years. The refining is entirely automated since workers can't do the work because of the toxins, however, workers do inspect and supervise the machines to ensure no malfunctions occur.

A typical CPC has at least four refining centers, with two offline and only used when supply and demand goes up.

Freezer

The Freezer is a room set aside from the refining center where toxic particles are blown into, when these particles enter the room they encounter a temperature of roughly negative three hundred and forty degree kelvin, this flash-freezes that particles instantly. A fine watery mist is blown into the room that latches onto these particles and makes it easy for them to be collected.

Once these particles are collected, they are transported to a recycling facility to be destroyed.

Quality Control Center

Q.C.C. is responsible for examining all refined crystals for damages that could occur during the refining process. This includes any cracks or cuts in the crystals, if any are found the crystal is discarded and marked off as being unusable in power generation and instead is relegated to other products such as energized armor plating.

Shipping Center

The shipping center is as it's name implies, the center is responsible for packaging all finished crystals into special packages that help keep the crystal stable during transport. Specialized transports are required for the transportation of power crystals along with experienced drivers.

Inherent Dangers

There are a number of dangers that come with processing Lunabaren crystals, not just the risk of a crystal exploding during refining but also the larger risk of air-borne toxins. One such is known as [crystalline toxin](#) which forms during the refining process, as parts of the crystal are cut off or burned away, small particles begin to fill the air.

In places such as the processing center, workers must wear hazard suits and have oxygen tanks or an oxygen cable connected directly to their suits - this is because respirator filters are useless against the fine particles that make up the toxin.

All equipment in the facility is treated with a special coating that prevents the toxin from sticking, the facilities also go through a mandatory cleaning once every three days in order to keep the risks of combustion down and people being infested with the toxin. Unfortunately, because the suits can't be treated with the non-stick coating, all hazard suits have to be destroyed after only a single use. A single processing center can end up going through thirty suits in one day, and over a hundred if not more in a

single season.

Another big danger is [Crystallization](#), which occurs very rarely and only under perfect conditions.

Because of these risks, every building is built apart from one another to contain any accidents. A cold climate is also required.

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