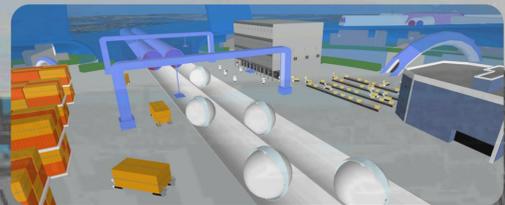


Layout of the port

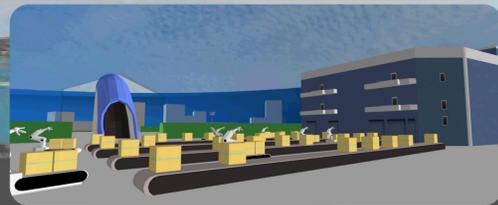
Transport station - Innermost part

This is the waiting and loading for the external transport vehicles. Robotics arms are responsible for lifting and loading the cargo into the right positions within this sections. The Internal transportation, utilizing the maglev and vertical magnet ring vehicle, also helps in this process.



The storage area

Cargo that has been unloaded from the external transports is then classified and transported to categorized storage zones. Specialized lifting robots handle the sorting, transportation, and placement of the cargo within the designated storage areas. A local network system, integrated with the robots, collects and manages all the information related to the stored cargo.

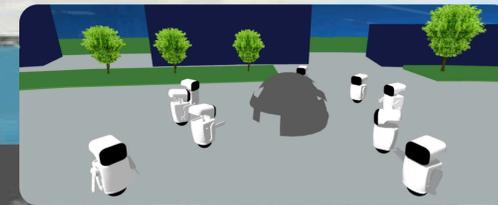


Drone Shipping - Outermost part

This section is dedicated to the drone shipping operations. Bird-like drones are responsible for the autonomous shipping tasks in this area. Repair robots, equipped with various tools, are integrated to maintain and service the drones as needed.



To charge for the drones, specialized tree-like charging stations are also designed. These charging stations allow the drones to land and balance on the "branches" of the tree, saving valuable space in the port. Shipping stuffs can be transported from the ground level to the top of the charging tree, where the drones can then pick it up and deliver it to its destination.



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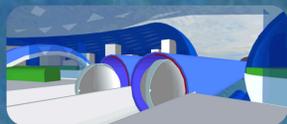
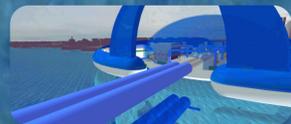
Overall

Future Eye is a highly automated modern port, focused on rapidly increasing cargo operation speed. The port uses a vacuum tunnel system to transport cargos across the sea, rather than relying on traditional shipping methods.

The port is operated by three types of robots: chip robots for collecting cargo data, lifting robots for handling cargo, and assistance robots for repairs.

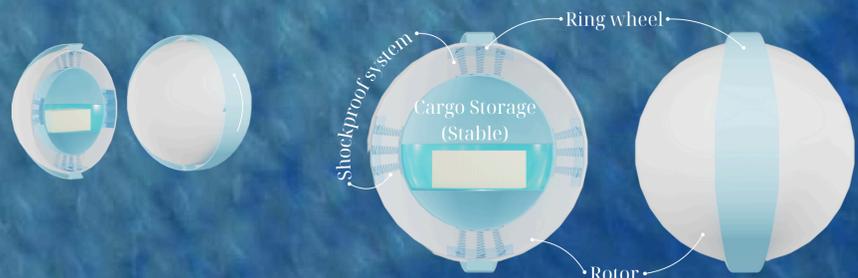
The external transportation system

The external transportation system is a tunnel system that runs across the sea. The tunnel is completely closed off from air, which allows the transportation system inside to travel at much higher speeds.



The system integrates with the traditional shipping method as there are many hubs offshore, to transfer cargos from cargo ship to the system.

The key part of the system is a unique vehicle design consisting of three main components. The innermost part is where to place to cargo, stabilized by a shockproof system. Surrounding this is a spherical layer that acts as a rotor, rotating to generate electricity as it moves through the tunnel's magnetic field. The outermost component is the ring wheel, which creates speed and motion, propelling the vehicle through the tunnel.



Benefits of the new transportation system

- Self-produced energy
- Safe Cargo transport (unaffected by factors like weather, water currents)
- High-Speed travel

The 14th Virtual Design World Cup

Future Eye

THE LUNAR EMISSARY

Shade3D, 3Dsmax, Engineer's Studio

UC-win/Road, Pier 3D bar arrangement

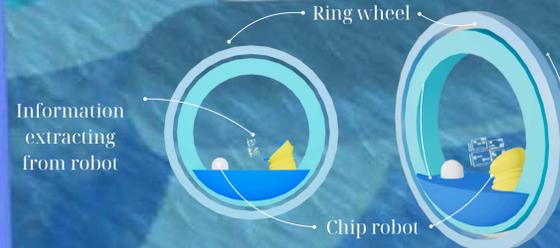
Design Concept

As its name suggests, "Future Eye", this project is promising to offer an insight into future living. The port's symmetric design also refers the shape of an eye, reinforcing its theme of foresight and innovation.

The project's color palette is mainly blue, inspired by the whale. This is meant to convey a sense of promise and reliability for the future.

The internal transportation system

The whole port area is covered by a magnetic field. This allows all vehicles and robotic systems within the port to "float" using maglev technology..



The main part of the system is the vertical magnet ring. On this ring, the north and south poles are placed alternately, balancing the gravitational force and the propulsive force. As the vehicle moves through the magnetic field, the interaction between its own magnetic elements and magnetic fields generates thrust. This propulsion can either attract or repel the vehicle, allowing for controlled movement. This vehicle allows the vehicle to travel in any kind of direction.

Capsule-shaped chip robot is the key of the transportation. When the robot is placed onto a vehicle, it can immediately identify the vehicle and its associated mission, so that it can then determine the route for the vehicle to take within the port's transportation network.

Collection of Assistance Robots

- Compact design
- Responsible for managing and routing for the Inside Transportation system.
- Communicate with other robots and the central network to ensure timely and accurate cargo movements.



Chip Robots

- Transport cargos across every sections
- Lifting and handling cargos
- Classify and place cargo in categorized zones
- Work in conjunction with the robotic arms at the Transport Station



Lifting Robots

- Integrated with interchangeable tools to perform multiple tasks
- Responsible for repairing machines robots in the port and support drones when needed



Assistance Robots