

Kozan Class Heavy Mining Ship

A ship built originally by an independent miner, then bought by Marloke Nayacesen.

About the Kozan

The Kozan is a heavy mining ship owned and operated by the Nayacesen family.

History

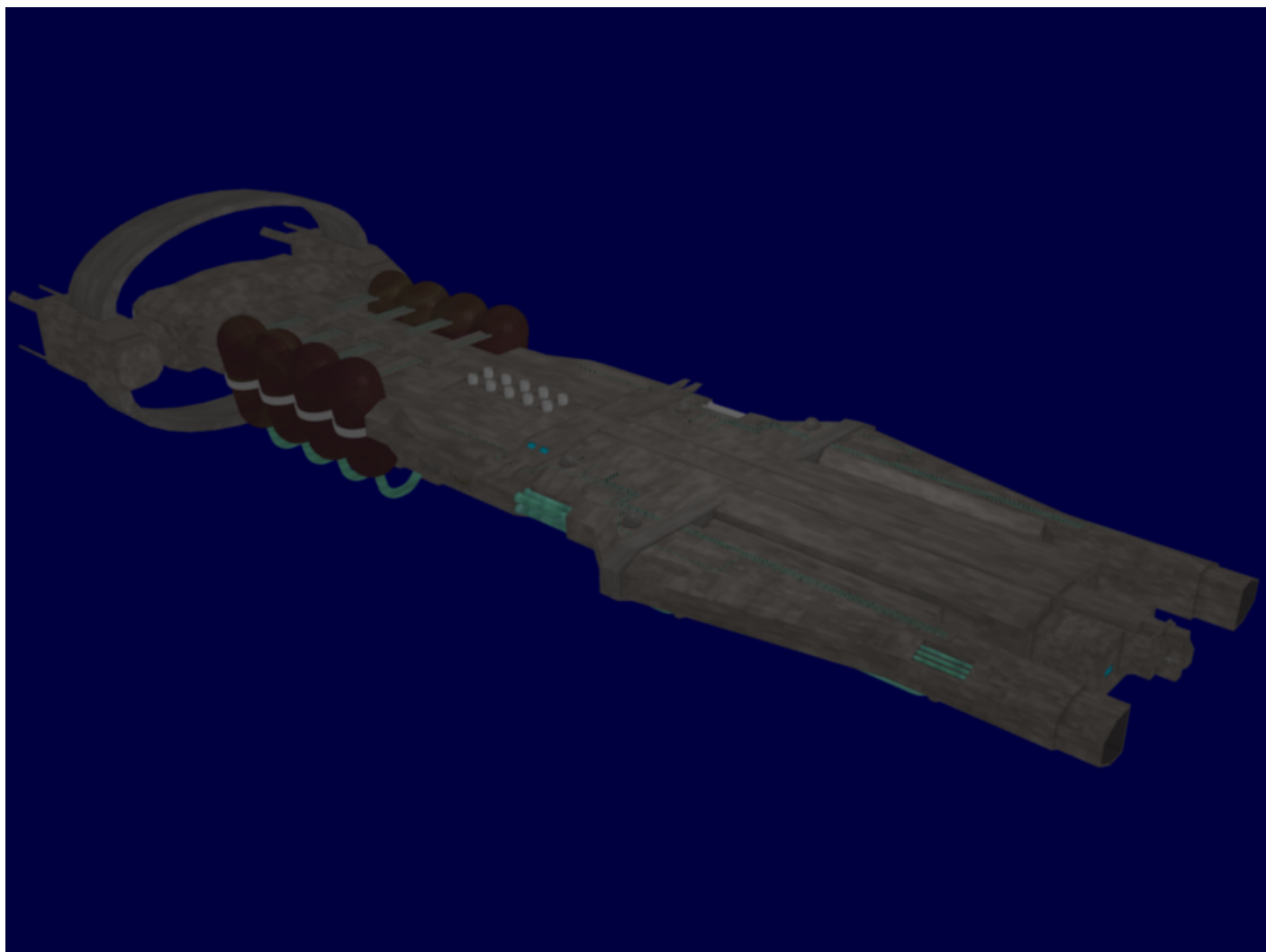
Designed and built in early [YE 01](#), the Kozan was designed by ship designer Kozan Kitenema, an independent miner who worked outside of the lawful territories and wanted nothing to do with corporate interests. Utilizing the money he had made, he constructed a ship to fit his needs. The Kozan was built to serve the roll of a heavy mining ship, equiped with heavy armor plating to withstand impacts from asteriods and other special bodies while also being able to take a pounding from pirates long enough to escape. Only one was made, no others were created.

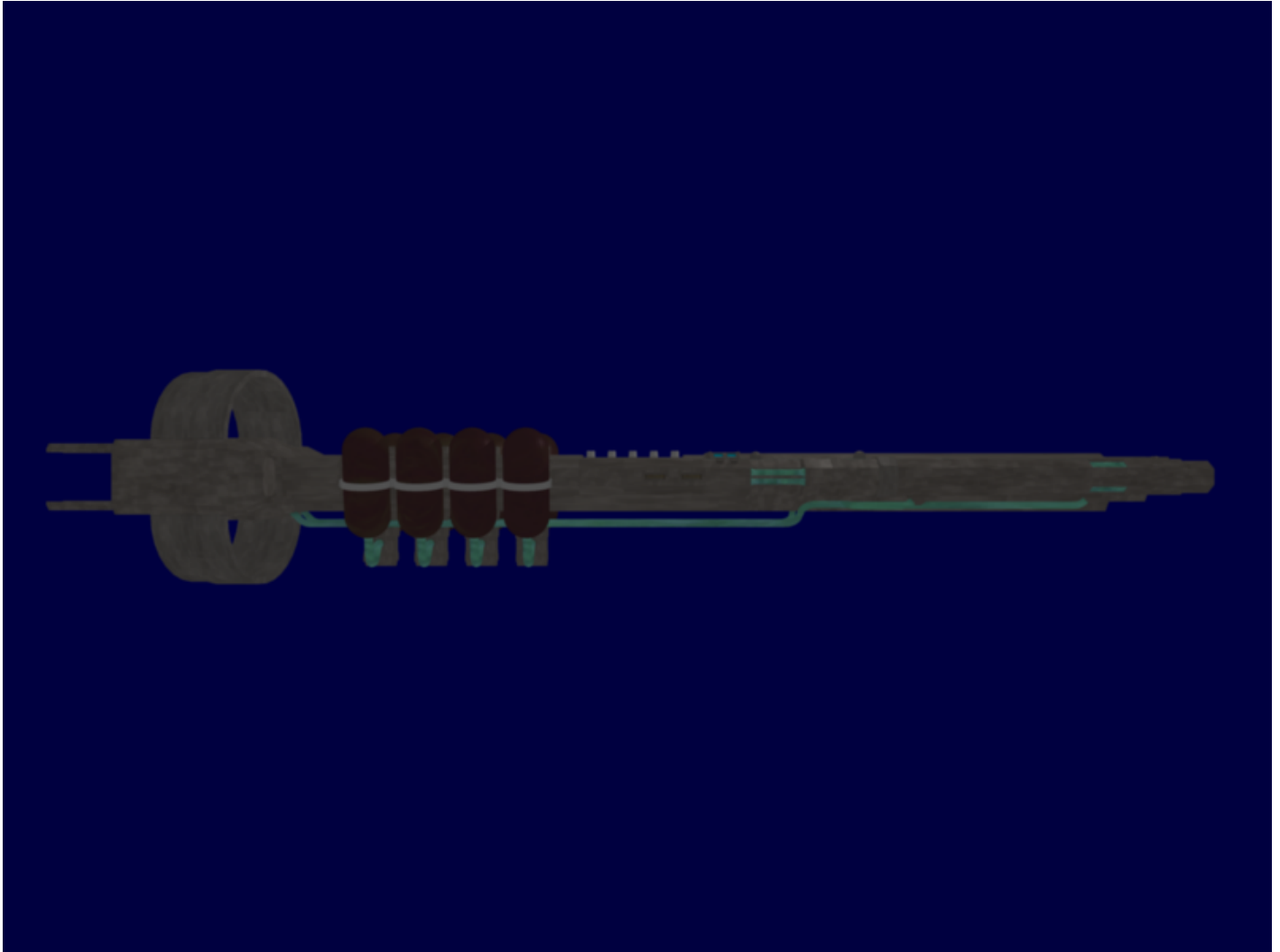
In [YE 17](#), Kozan sold the ship to an independent miner named Marloke Nayacesen who wanted to upgrade from a smaller mining ship the family owned. Marloke retrofitted and modified the ship to serve his families needs, he removed two of the ships eight cargo bays and replaced them with two laboritories. He renovated one additional cargo bay into a reactor room to serve as a backup generator. The modificaitons and retrofits took two years to complete, and by [YE 18](#) the ship left drydock.

By [YE 31](#), the ship had already showed its age. Having been refitted and modified many times over its nearly thirty year lifetime, the ship's internal structure doesn't look like what it did when it was first created. By [YE 30](#), Marloke had replaced the ships primary shield generator with a more current tech one, he had also installed more advanced hyper-drives. However, in the middle of [YE 31](#) the ship was besieged by pirates and evacuated.

In the middle of [YE 33](#), the ship was recovered just outside of the Chen Nebula. A salvage contract by Takeyu was sent to Yuki Toshiro, who accepted the job and subsequently reovered the ship along with a few other ships in the area. The ship was brought to Pisces station where it undergoes repair operations while some of Takeyu's old crew, whom he had contacted, undergo the process of finding people that can be trusted to help bolster its skeleton crew.

Appearance





The Kozan is a fairly large vessel, its long from end to end yet not as wide. It possess a fixed reinforced ring toward the rear to shield the engines from asteroids. A set of large pipes run from the bottom of the ship from the engine section toward the mining beams. Two sets of hanger bays can be seen, one located in the rear and another located toward the front just under the forward mining bridge.

Toward the rear center of the ship are refining stations for mined minerals. The ships dull gray/brown color helps it blend in with most asteroid fields.

Statistical Data

General

Class: Industrial Nomenclature: Ki-Y1-1A Type: Heavy Industrial Miner Designers: Kozan Kitenema (deceased) Manufacturer: Kozan Kitenema Fielded by: Nayacesen Family **Organizations using:** None
Production: Only one

Crew and Accommodations

Crew: 140 **Passengers:** 120 Maximum Capacity: 300 **Emergency Capacity:** Utilizing the cargobays, and mineral storage bays, excluding the external tanks. This ship can hold nearly five hundred people in an emergency situation, but doing so is highly ill-advised.

Dimensions

Length: 750 meters (feet) Width: 234 meters (feet) Height: 145 meters (feet) Decks: 11 (4 meters each)

Propulsion and Range

Speeds

The Kozan is a civilian vessel.

- **Sublight Engines:** .150c
- **Hyperspace Drive:** 0.3 ly/m

Durability and Maintenance

Service Lifespan: Estimated 15 years of constant use, though longer with proper maintenance work and refits.

Refit Cycle: None, dependent on the owner.

Damage Capacity

See [Damage Rating \(Version 3\)](#) for an explanation of the damage system.

Hull: 40 Shields: 20 (Threshold 2)

Inside the Kozan

<cross section if possible>

Deck	Sections
One	Recreational Rooms, Passenger Quarters, primary and second hanger bays located rear of ship, escape pods

Deck	Sections
Two	Crew Quarters, Officer Quarters, Captains Quarters, Family Quarters, observation lounge, power relay systems room, mining beam maintenance corridors, armory
Three	Internal armor plating, maintenance conduits, power conduits, ore smelter plant, cargo bays
Four	Internal armor plating, crew quarters, primary reactor for starboard mining beam, primary reactor for portside mining beam, cargo bays, armory
Five	Recreations, Main Bridge, Main Galley, Communications dish, Communications room, forward mining bridge, cargo bays, main life support systems
Six	Secondary Mining bridge, emergency backup reactors, port and starboard power conduits
Seven	Forward hanger bay, rear primary ship reactor, Engineering, crew quarters, cargo bays, port and starboard mining beam chambers, hot labs
Eight	Mineral storage tanks (rear) cargo bays, secondary back up reactor, shield generators, Engineering Second Level
Nine	Ore transfer conduits, crew quarters, damage control center, armory, Engineering Third level
Ten	Cargo Bays, Sensor Control Room, Crew quarters, Engineering Fourth level
Eleven	Crew quarters, Cargo Bays, ore transfer pipes to mineral storage tanks, external power conduits to port and starboard mining beams, escape pods

Armory

The Kozan possess three armories, stocked full of weapons and armor vests and only accessible during boarding action. The armory can be accessed by anyone, but the armory located near the captains quarters can only be accessed by the Nayacesen family themselves.

Bridge

There are three bridges on this ship, two designed to operate the ships mining beam and one which serves as the primary bridge.

Primary Bridge

Located toward the rear deep in the ship, the primary bridge houses helms, weapons and sensor control. This is where the ships captain normally resides, its a fairly large bridge, requiring at least ten officers to man.

Located toward the rear of the bridge is the primary entrance, leading out into the passage way. The center of the bridge has a holographic display, installed by Marloke in [YE 21](#), the holographic display gives the bridge crew a much better view of their surroundings, by transmitting sensor data to the holographic pad which in turn interprets the data and shows what it is seeing.

Mining Bridge

The mining bridge, located forward of the ship between the two main mining beams, is much larger than the primary bridge. Manned by eighteen people, the mining bridge operates the mining lasers themselves. They control the power flow, beam density and frequency. They can control where the beam is fired and the path it takes, during operation, the mining bridge is given thruster control to 'nudge' the ship along a course.

Secondary Mining Bridge

Located under the main mining bridge, this particular bridge is crewed by only six crewmen. It monitors ore yield, and are the one's who are able to shut down the mining laser in the event of an emergency. They have a holographic tank in the center of their bridge that shows the insides of the beam chamber and allows them to monitor it for any damage that may be caused by harvested rocks. In the event of damage, the crew here can shut down power to one of hte two chambers and send in damage control teams.

Family Cabin

The family cabin is the living quarters for the Nayacesen family, it offers a luxurious place for the family to live and comes fully furnished. It is four bedrooms with a single kitchen, living room, and a playroom.

There is a separate room off to the side for the head of the family to monitor ship operations, and displays on the wall afford the family a view of outside the ships thanks to a myriad of cameras that dot the hull.

Captains Cabin

Different from the family, this is where the captain of the ship resides. Even though the Nayacesens owned the ship, they still hired on a captain to help command the ship. The captains cabin has a king sized bed, its own kitchen and bathroom along with a holographic display of the entire ship.

Cargo Hold

The ships eight main cargoholds are used primarily to store repair materials, including components and reactor assembly parts along with backup systems. Two cargoholds are designed to store food and are located nearest the galley.

Portside Cargohold

The Portside Cargohold is accessible externally by shuttle, and is one of the largest holds on the ship. It is used to house defense drones, mining vehicles, and other essential supplies including backup parts for

the ships main reactor.

Starboard Cargohold

The Starboard Cargohold is the same as the portside. There is a long hallway that connects both holds together.

Mineral Storage Tanks

Mined minerals are stored in the eight storage tanks located rear of the ship, these tanks can serve dual purposes, of either storing regular minerals or liquid harvested from icesteriod or ice nebula's.

Crew Cabins

The crew cabins were designed to house two crewmen, they are moderately furnished due to the crews hardwork. The cabins have two beds, each seperated by a wall partition, each side has its own dresser and desk. Each crew cabin is seperated by a sliding door.

Public Showers

There are public showers located on each floor where crew quarters are located.

Engineering

The ships main engineering is where all operations related to the ships primary reactor and power systems are located and is crewed by nearly twenty people. Main engineering is located toward the rear of the ship and has access passages to the port and starboard engine pylons along with a rear entrance to the rear engine assembly. There are two reactors in engineering, one serves as a 'kick-start' reactor to the primary reactor.

The ships FTL drive is located here as well as the main entry into the power systems control room.

Power Systems

The Power Systems control room is perhaps one of the more heavily guarded places on the ship, and houses the main AI control systems as well as the main power systems that controls the entire ship.

Maintenance Conduits

Maintenance conduits snake their way throughout the ship, allowing the engineering staff almost unlimited access to all areas of the ships. The conduits are cramped though, requiring a person to crawl through in some areas.

Medical Center

There is a single medical center on board the ship located toward the forward center of the ship, it is large and can accommodate a good sized group of people. The center is only moderately advanced, lacking ST-Backup technology and designed to serve a civilian roll on board a mining ship. There are eight medical beds and two quarantine beds, there is a decontamination room.

Air Locks

Because of the roll this ship places, all air locks serve as decontamination areas for purging radiation.

Mess and Galley

There is one central galley located near the main bridge, while there are smaller galleys located on each crew deck.

The main galley is decently sized to handle the majority of the ships crew in one area, it is staffed twenty four years, since the ship works on four hour shifts. There is no central cook, and the crew are free to fix whatever food they desire. The smaller galleys are more like lounge rooms with very little actual kitchen ware and only a refrigerator.

Passageways

The Passage Ways of the Kozan are rather generic, with exposed panels that shows the ships wiring and internal piping. Some passage ways, such as those located on the crew decks, are completely covered with no exposed wires or internal piping. The passage ways are zero-g.

Hanger Bay

There are three hanger bays on this ship, two located rear and one located fore. The two rear hanger bays are primarily used by crewmen for transporting essential cargo to the ship. Each bay can hold eight shuttles, while the forward bay can hold only four. The two rear bays are interconnected by a blast shield which is only lowered during a pirate attack.

Weapon placements

There are eight turrets arrayed around the ship, used exclusively for destroying munitions or rogue asteroids. Theoretically, the ship's two mining beams 'could' be used as a weapon as well.

Hot Labs

The Hot labs were originally two hidden cargo-holds for use in transporting illegal contraband past police forces, when the Nayacesens acquired the vessel, they completely revamped the cargo holds and turned them into laboratories. These labs have their own life-support systems that are independent from the ship itself, there is a single entrance hidden behind a bookcase in the family cabin.

These labs are used to create new software and components and then test them before being put to use on the ship. Can also be used for chemical and mineral testing.

Ship Systems

Repulsor Ring Assembly

Located on the rear of the ship is a ring assembly that serves one very specific purpose: to repulse objects away from the ship. The repulsor rings help nudge objects such as asteroids or even drones and fighters away from the ship, its internal structure makes it very fragile.

Computer and Sensor Systems

The ship is equipped with two quantum computers one used for the majority of the ship while the second is used primarily by the mining lasers due to their enormous computing power needed. The quantum computers are shielded from EMP thanks to several inches of thick armor plating. There are no maintenance hatches into the room, and crews must enter through one central room. The processing room is located behind the main bridge and can 'only' be accessed by the main bridge.

The main sensor system is comprised of only three components.

Mass Sensor Array

The Mass Sensor Array serves two purposes, the first is for identifying objects out in space while the second is for determining the composition of an asteroid. It can detect the mass of an object up to only half an AU, but the objects need to be within roughly twenty thousand miles from the ship in order for a resolution to be made.

Graviton Sensors

The ships graviton sensors are utilized for determining the distance between objects, be it a ship, asteroid or a star.

Tachyon Sensors

Used as an early warning to the ship, the tachyon sensors are able to detect ships within FTL speeds, such as hyperspace, and give the Kozan time to retreat.

Emergency Systems

The ship is equipped with a series of emergency blast doors located in key areas of the ship, including the crew quarters, bridge areas, and hanger bays along with the cargo hold, shuttle bay, and drone bay. There are damage control stations on each deck, along with fire control stations. The damage control center is equipped with three damage control stations, two fire control stations, and has access to a cargo hold with repair materials.

The material tanks can be jettisoned from the main ship in the risk of an explosion.

Escape pods are located along the bottom and top of the ship, as well as the port and starboard sides.

Life Support System

The ship possess a robust support system, with the crew quarters having their own independent support systems in the event of a hull breach. The ships recycling system is able to break down waste into a paste that is then stored in tank located along the ships rear. The paste can be used to fuel the ships main engines, providing an improvement to the thrust of the vessel for a short period of time.

Onboard water supplies can be replenished by the ship by mining ice-rocks, which are then processed into drinkable water, which is stored in two large tanks in the center of the ship. The water is recycled, but is commonly replaced after each visit to a docking station, in short though, the on board recycling system allows the wtaer to be usable for only five years.

Because of the mining beam, only the crew quarters, main and mining bridges, and recreational and galleys posses cooling systems, the rest of the ship does not.

Gravity is also only located in the crew quarters and galley, everywhere else is zero-g.

Reactor Systems

The ship is powered by a single large fusion reactor, which takes up three decks. A second, medium sized

reactor, is used as a form of backup. The main reactor can power the ships main systems along with the mining lasers, while the medium sized reactor can power the ships remaining systems or serve as a secondary backup.

Propulsion

The ship possess engines for both sub-light and hyperfolding, however, its rear 'ring' assembly is also a gravitic drive core, which allows it to operate without using its main engines to move at sub-light speed. This ring assembly, however, is fragile and rarely used.

Weapons Systems

The ship is outfitted with six Tier 9, Heavy Anti-Mecha based turrets used almost exclusively for ship-board defense and are primarily located around the ships forward mining bridge and the rear where the storage tanks are located.

Theoretically, the ships mining beam 'could' be used as a weapon...

Drone Bay

Located along the ships underside, the bay contains two types of drones: one for defense, and one for mining. The first is the Giliane Class Mining Drone, used to mine rocks too small for the mining beam to effectively engage, while the Violan is used strictly for operational defense, for taking out small rogue asteroids or for harassing pirates and raiders.

The bay is set up as a rack, with the defense drones on the bottom and the mining drones at the top. This results in the ship being forced to launch its compliment of defense drones first before its mining drones. This naturally changes as drones return to offload cargo or to recharge their onboard batteries.

Mineral Harvesting Beam

There are two mineral harvesting chambers located at the front, port and starboard, sides of the ship. There are two beams that make up the main beam, one helps melt the rock enough to loosen it up, then a second one pulls the loose rock into the ship where it is brought to the refining facilities to be refined and then stored for later drop off.

Super Structure

The Kozan was designed utilizing a [Durandium Alloy](#), which provides the ship with the best form of protection available to it. Because of how the Kozan is engineered, there is cross-bracing between the interiors and exterior hull, giving the ship a bit more protection from impacts with celestial objects such

as asteroids.

Armored Hull

The ship is equipped with a thin layer of titanium armor plating that protects it from rogue asteroid impacts, the internal latticing allows the armor to withstand a higher degree of hits than is typical for an industrial ship, but the armor is not rated to handle too much punishment in a combat situation.

Vehicle Complement

1 [Ke-T7-1B Raccoon Transport Shuttle](#) - not on Kozan, in a warehouse 9 [Ke-T3 "Lion" Transport Shuttle](#) 15 [Gilane Mining Drone](#) 10 [Viole Defense Drone](#)

From:

<https://wiki.stararmy.com/> - **STAR ARMY**

Permanent link:

https://wiki.stararmy.com/doku.php?id=starships:kozan_class_heavy_mining_ship

Last update: **2023/12/20 18:22**

