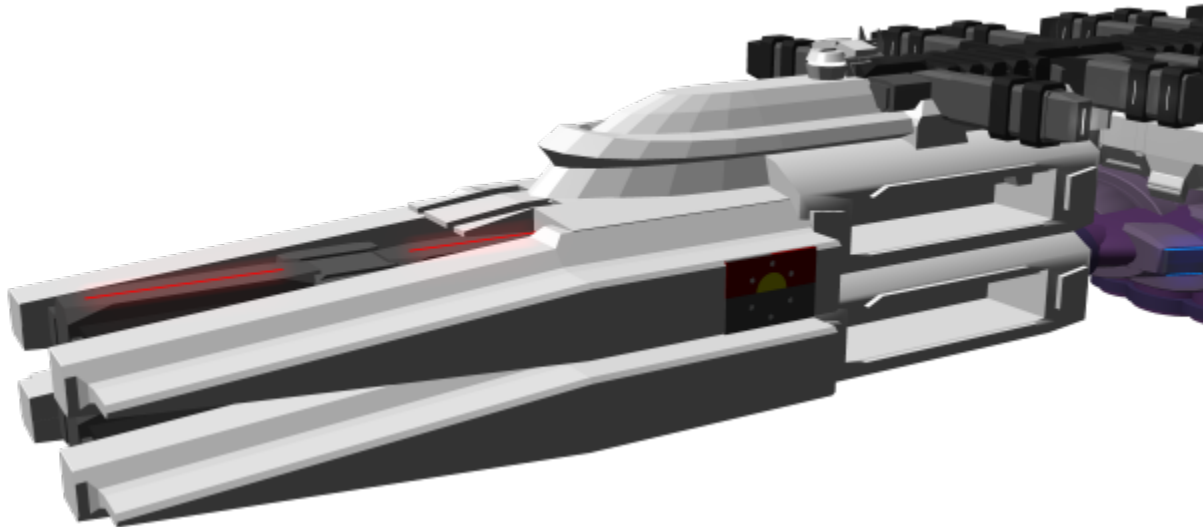


Dragon-class Mobile Refinery

The Mobile Refinery is a special Starship used by the [Mining Guild](#) beginning in [YE 41](#). Its main purpose is to refine ore that was mined without the need for a stationary building.

This article can also be found on the [Mining Guild Equipment](#) page.



About the Ship

The Mining Guild's mission to refine and extract ore and gems that would normally require arduous transportation from an asteroid and a trip through the atmosphere to a planet-side refinery. Not only was this wasteful and a logistical challenge, but it was also a strain on a planet's environment.

With these challenges in mind, the Mining Guild reached out to the [NDC's Department of Engineering](#). Together, they designed and built the MG-MR-1a Dragon-class Mobile Refinery, a huge starship that could act as a mobile refinery. As the NDC's Department of Engineering shifted to a focus on government and military projects, the Mining Guild acquired its own ability to produce starships - including the Dragon.

Key Features

- Refining ore
- Capable of relocation
- Looking awesome

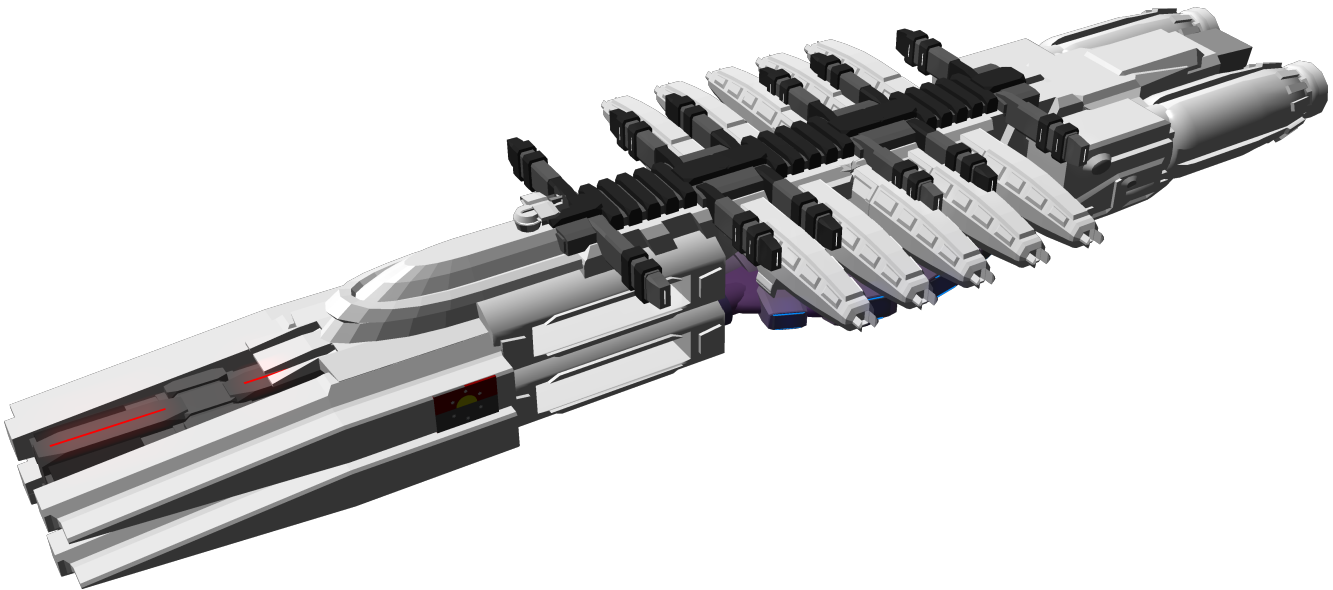
Mission Specialization

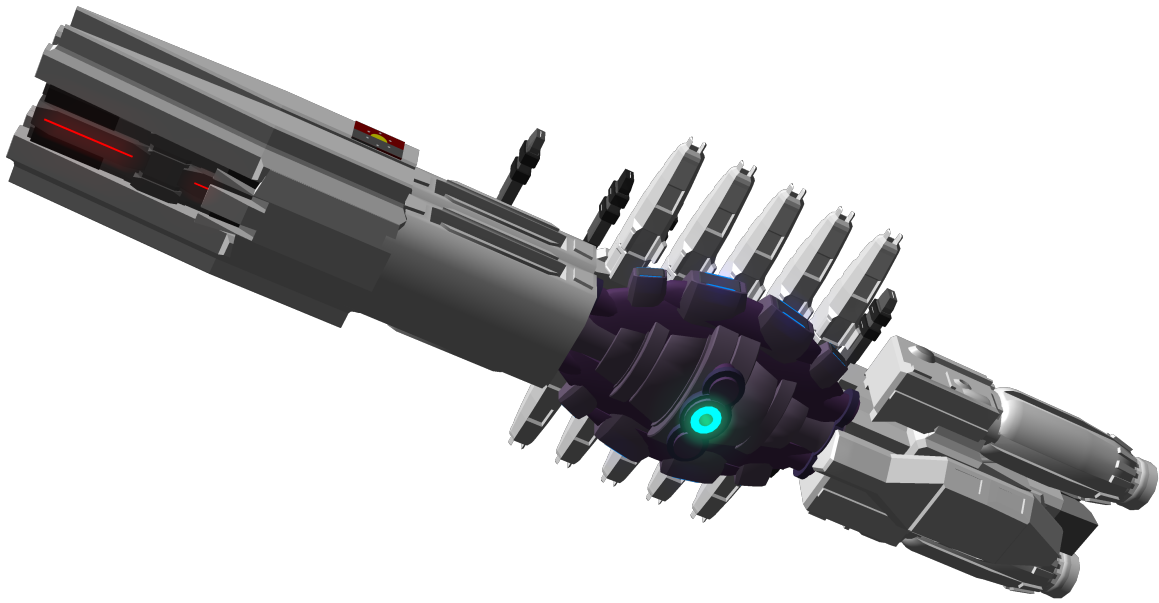
The primary purpose of the Dragon-class is to refine ore without the need to rely on planetary transportation and facilities. As a starship, the Dragon-class can relocate to the most advantageous position to support the Mining Guild's resourcing efforts.

Appearance

The Dragon-class appears like a skyscraper and a sea ship merged into one glorious package. Along the sides of the ship, hangar bays are located to allow shuttles and transports to land and dock for refueling or disembarking. Behind these bays are ten slots for ore unloading. Each slot is associated with a specific ore that the Mining Guild is resourcing, simplifying the sorting and storing process.

At the end of the ship are its great thrusters, capable of propelling the ship through the atmosphere and into space with ease. Beneath the ore unloading and sorting section is a large airlock ringed by a cyan-colored light that can be used in emergencies.





History and Background

The technological brains of the Mining Guild, [Aeta Kurosaki](#) and [Nyx Pine](#), knew that they needed a way to refine their ore in a smarter fashion. They were concerned about the space requirements, whether the government would support the required construction projects, and the amount of the building that would be required to support all of the facility's traffic, sorting, storage, and refining operations.

The scale of the problem seemed daunting until one engineer made them think of creating a mobile refinery. The [Department Of Engineering](#) had expertise in ship design and construction, so the NDC and Mining Guild together came up with a schematic. Once they secured approval from Astrid to use parts from a Neplesian ship, they began construction on the Mining Guild's first Mobile Refinery..

After the launch of the first Mobile Refinery, the Mining Guild found itself with an excess cash flow. Putting the surplus revenue to work as new Mobile Refineries, the Mining Guild continues to collect materials for the New Dusk Conclave's use. In light of this, the Guild decided to name the new ship in the same fashion as the [Magpie](#) and the [Stork](#) that came before it. A name that fit the Mobile Refinery's ability to collect vast hoardes of minerals and gems and turn it into a stockpile of wealth - the "Dragon".

Statistics and Performance

General

General information about the Starship

- Class: MG-MR-1a

- Type: Mobile Refinery
- Designers: [Aeta Kurosaki](#), [Nyx Pine](#), Engineers
- Manufacturer: [Mining Guild](#)
- Fielded by: [Mining Guild](#)

Passengers

Crew: 42,000 are recommended, 5,000 are required.

Unexpected Guests: accommodations for 1,750 people.

Dimensions

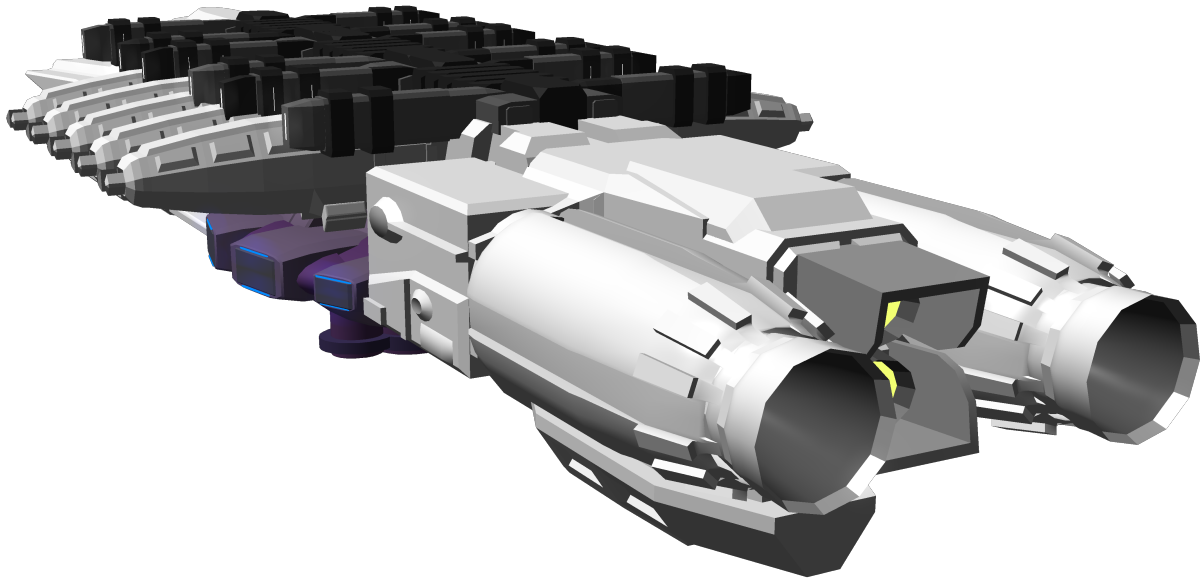
Here are the Dimensions of the Starship.

- Length: 1200 meters
- Width: 800 meters
- Height: 400 meters
- Decks: 32 (10 meters each, 6 meters of usable space, 4 meter thick bulkheads of armor between each deck)

Propulsion and Range

Here are the states for the Propulsion system

- [Falcon Tunnel Drive](#): 0.2ly/m with a jump range of 15ly max per jump.
- Sublight Engines: .30c
- Range: Year with the right support craft.
- Lifespan: 20 years
- Refit Cycle: yearly.



Damage Capacity

DRv3 Tier: DR T14

Inside the Ship

Deck Layout

- Deck 1-4: Bridge, [Origin Point Defense Weapons](#)
- Deck 4-8: Hangar Bays, Maintenance Bays, Workshops
- Deck 8-12: Hangar Bays, Maintenance Bays, Workshops
- Deck 12-16: Armor and bulkheads, Workshops, [Origin Point Defense Weapons](#), Cargo Holds
- Deck 16-20: Crew habitation, Crew Habitation, Crew Recreation
- Deck 20-24: Life Support, Waste Reclamation, Cargo Holds
- Deck 24-28: Ore Refinery, Engineering, Fabrication, Engineering
- Deck 28-32: Continued Ore refinery

Compartment Layouts

Bridge

The bridge of the Dragon was positioned at the bow of the ship, mere meters from the edge of the ship at the sides and 2 meters from the front of the ship. The Bridge is a medium-sized room with standing

room, and to the starboard side is the communications station, to the left of the Captain's chair. The bridge also has a wide viewing area displaying the universe ahead. The helmsmen and Navigator's seat is in front of the captain's seat. The Chief engineer's section was at the back to the left, while the head of security was to the right.

Habitation area

On Decks 16 through to the 20th Deck was a long stretch of a hallway full to the end of doors broken only by elevators every mile, each deck was the same a hall with doors, and elevators each clean, warm and brightly lit with a comfortable setting that would not cause problems for those walking. In the hours designated as Morning when the Crew has just woken up, and at night, the lights are much dimmer than before. Every single door within the decks opened into a living room, which held the doors to bathrooms and bedrooms, each full of beds, dressers, and desks. Each of these crew habitation rooms was split to a specific species so that members of certain species inhabited the rooms there so they were neighbors of all.

Managers and their assistants get a much more lavish rooms than the ordinary workers, but the pilots get quarters just as lavish. There were rooms on the last deck for card games, and holosuites, and exercise rooms. Each room safe for the Managers, the assistance, and the Pilots are the size of a town apartment.

Cargo Storage Areas

Each room had access to a storage area, designated to each individual persons living in the quarters, while the quarters were the size of a standard apartment, the storage area was the size of rooms. The lights here are dim all around, but still vis

Engineering

Engineering room was built with a new power core, and with enough room for it. It's positioned at the back of the ship, behind the cargo bay, and spans from last three decks vertically in the aft. On the third deck at the back is where the drive system is located, with the bulk of the thrusters seen, closer to the middle is the Engine. The second deck houses electrical, and the AI core, through the AI core. This is on a balcony with the double doors behind the Armory and Research and development. There is a railing to prevent falls, but there were no stairs or ladders to go to the bottom of the engineering area, almost as if the designer specifically made it for those with the ability to fly.

Maintenance Conduits

the Maintenance tunnels are cramped crawl spaces, though fortunately there were a few hatchways that allowed one to exit if the need came to it.

Medical Center

The Mining Guild medical bay follows the New Dusk Conclave standard for medical bays within their starships. They use the same medical techniques and technology that they have at their disposal. Each bed is separated into rooms where the doors can be opened and closed or remain in either state of privacy requirements, the beds themselves are made with the patient's physiology in mind. The medical staff, both organic and synthetic are trained or programmed, to help the personnel of the Mining Guild to the best of their abilities, there's even an area for the synthetics where they can be repaired. Both are brightly lit, clean and sterile, ready to serve. Whether the patient is organic or synthetic, Human, Separashan, Elysian, clone with animal physiology or Gynoid and androids it wouldn't matter here, the medical staff will treat their patients with respect, and help them recover so that the patient whoever they are can get back to their lives and their work.

They also don't care if the Patient got their injuries from foolery, or if they were attacked, they will be treated the same.

Passageways

There are multiple passageways throughout the Mobile Refinery, in an almost maze-like fashion that has the potential to make someone lost, unless they had a GPS device with them. There's a hatch to the maintenance tunnels at every T section that somewhat sometimes aligned with the maintenance tunnel's T-junction.

Power Armor Bays

Within the Dragon was a section specifically for the Mining Guild's power armor. The Cargo hold for the ship has a lot of room for more than a Hundred [Ant Power armor](#), in the Maintenance bays has a section for the Power armor, if it needs to be worked on.

Shuttle Bays

The Shuttle bay of the Dragon is large enough that it can hold 40 [Stork Transports](#) on a top-level, while temporarily it can hold half of that number of the [Magpie Industrial shuttles](#) on a lower level. Each level has Technicians on standby, ready to add fuel or make any needed repairs for the shuttles as needed. For those wishing to join the Mobile, Refinery would find a large door with the Guild insignia on it. This door will let them into a passageway to go whether they need to go.

Ore refinement section

The Ore Refinery is a massively huge part of the ship, using complex technology to refine the ore that had been dug up. This is done in a vast variety of traditional ways, but also using advanced technology that required little to no interference. However, because of the by-product of certain materials that may

cause gas and radiation exposure into the environment during the process, the workers sit in pods where they operate the [NDC's ACE bodies](#). The room is sealed to prevent the breach of these harmful things. The machines are made with [Aegium](#), to reduce the heat emissions, and later on, once the Mining Guild had enough money, [Skusten](#) was purchased to aid in the heat's reduction.

Ship Systems

Armored Hull and Hull Integrated Systems

The ship's hull structure is composed of a combination [Durandium](#) and [ADNR \(Aggregated Diamond Nanorods\)](#). It also has a layer of a gel resistant to heat, energy, and kinetic-based damage. This gel is flexible, and because of that and its state of matter, it can also fill in space between the layers of graphene sandwiched [Osmanium](#) spread throughout.

The gel is very resistant to kinetic forces as the force of an impact is absorbed and spread outward by the jiggly substance. The gel is resistant to excess energy exposure (including magnetic) because of being composed of silicon-based materials and traces of rubber-like matter. It is not immune to electromagnetic pulse weapons, just more resistant than usual.

Lastly, the gel is highly absorbent to heat and will radiate it off over time due because of the properties of its state of matter and composition. This is within a shell of [Aegium](#), which also makes up the support structure deeper within.

Computers and Electronics

The Dragon's computer system is installed with a [Knight-type AI](#) which was a part of the Destiny AI list. This was so that the Mobile Refineries could be connected to the other starships of the Mining Guild, and so it could be linked to the one on their Space Station. With the Knight-type AI, [Knight-type Sensors](#) and a [Knight-type Communication System](#) were also installed.

Emergency Systems

A bank of 100 [BW-PC-1B "PowerPak"](#), acts as an emergency power source if the main drive's power cores die. This will ensure that comms, life support, and sensors continue to receive power for three weeks. Alternatively Alongside the hull, were special devices that can absorb the radiation emanating from space, and convert this to energy, that could be stored in special power storages in order to aid its power usage. This could lead to indefinite duration of power

Life Support Systems

On all Mining Guild ships and their Space Station, a [External Respiration Kit](#) aids in cleaning the air that the organics' breath out, as well as the water needs of organics.

Waste Disposal

Waste is transferred to a large tank where a huge magnet slides over the ceiling; metal items are picked up by this and are transported to a new tank. It is then where an advanced sorting system sorts the pieces into proper holes. The metal is smelted, and merges into what would normally be a giant ingot, had it all not been separated again before it entered the molds. The metal is sent to the various factories of the [New Dusk Conclave](#) to be made into new items.

Manure is dropped into large barrels that are transferred to farms or factories that can turn it into fertilizer. Broken electronics are taken apart, the metal joins the other metal, and the other materials follow suit in their respective compartments.

Other Life Support Systems

Besides the other Life support, some aqueducts transfer water, and flushing toilets, and working sinks. The water is quadruple filtered so that nothing, not even microbes, can contaminate water. The Salt in the water is sent to a different area where it is made for a new purpose. This allows the Settlers to drink water should they need to.

Propulsion

Large sized [Helix Plasma Engines](#) are arranged at the back of the craft along with the thrusters. The drive system for these are powered by 8 [Power Core](#). Along with its special storage, they can last the operation of the Dragon class up to a year, if not longer with support craft.

Shield Systems

The Dragon-class is protected by a NDC [Paladin Barrier System](#).

Weapons Systems

Although it does not look like it, the Dragon is armed with multiple defensive weapons:

- 20x [Origin Point Defense Weapons](#) (T9) located throughout the ship.

Vehicle Complement

- Up to 40 [Magpie-class Industrial Cargo Freighter](#) or 500 [Stork-class Personnel Transport](#)

Fighters

Although it's a non-military vessel, the Mining Guild has chosen to get some from the NDC Military to aid in protecting them.

- Can carry up to 1000 fighters provided that the hangers are cleared of other ships.

Price

750.000 DS

1,194,444 KS

OOO Notes

[Charaa](#) created this article on 2019/09/07 13:22.

[Jack Pine](#) was kind enough to help with the images as well as help me with getting them here.

- [Approval Thread](#)

Products & Items Database	
Product Categories	starships
Product Name	Dragon-Class Mobile Refinery
Nomenclature	MG-MR-1A
Manufacturer	Mining Guild
Price (KS)	1,194,444.00 KS

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

Permanent link:
https://wiki.stararmy.com/doku.php?id=corp:mining_guild:starships:mobile_refinery&rev=1700312350

Last update: **2023/12/21 01:19**

