Antarctica21
Fly & Sail Expeditions



Magellan Explorer

Purpose-designed for boutique expeditions in Antarctica

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Magellan Explorer

Magellan Explorer joined the Antarctica21 fleet during the 2019-20 season as the world's first expedition ship custom-designed for Antarctic air-cruise operations. It provides a stylish base for our guests' adventures, combining excellence in expedition and boutique hospitality.





Powerful and nimble, *Magellan Explorer* was developed from the ground up by international polar expedition experts working closely with designers, engineers, and naval architects. With intelligent and sustainable solutions designed specifically to enhance the guest experience, Magellan Explorer is the ideal base for Antarctica21's air-cruise operations.



Interior Design

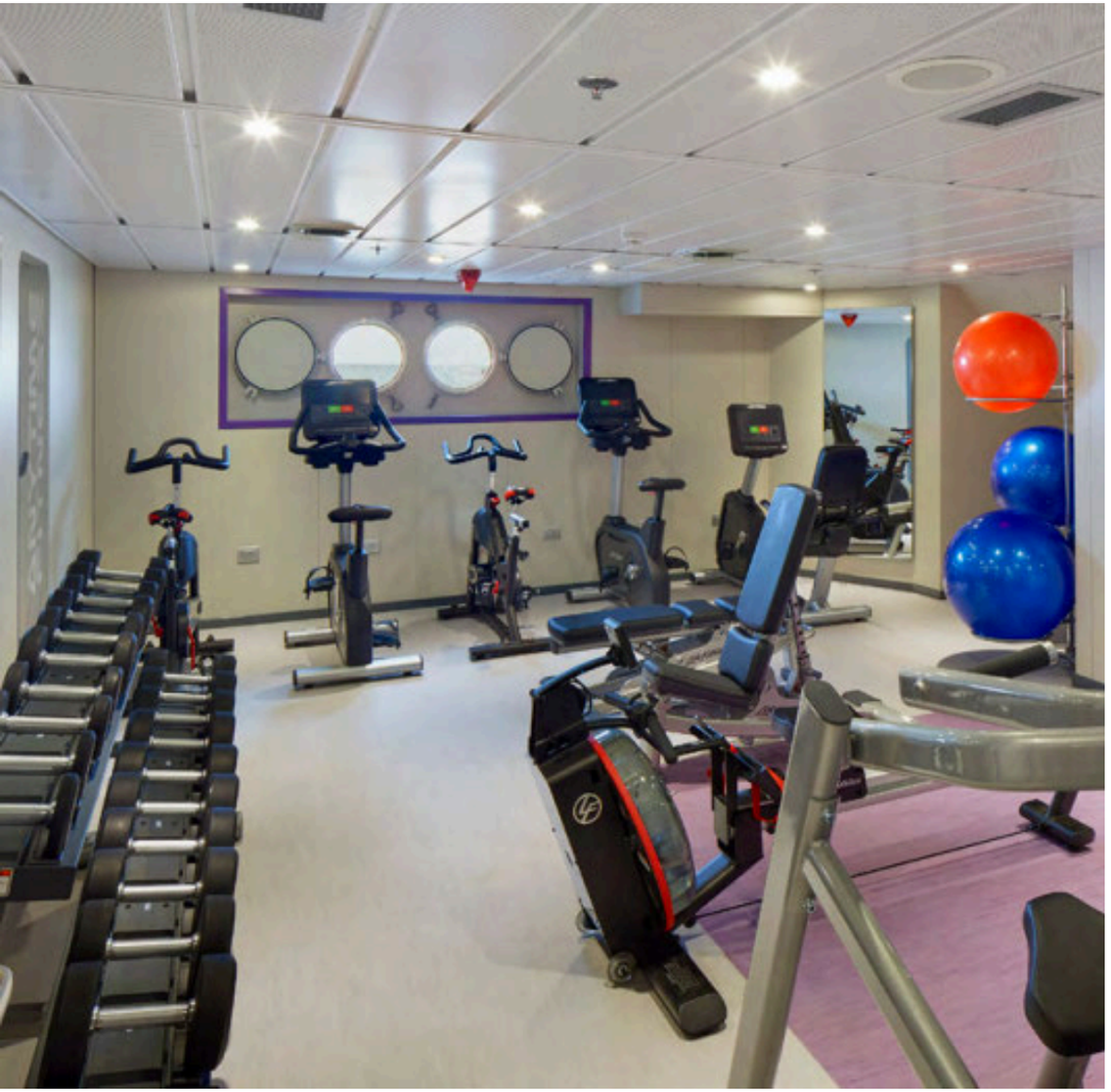
Designed to provide optimal comfort and a modern style, our spaces invite relaxation and enjoyment. Enrique Concha & Co., a renowned design studio in Santiago de Chile, designed Magellan Explorer's interiors considering every detail from the colors, the materials, to the lighting. Each element skillfully selected to enhance the experience on board.



Dining Room



Lounge and Bar



Gym



Library

Suites and Cabins

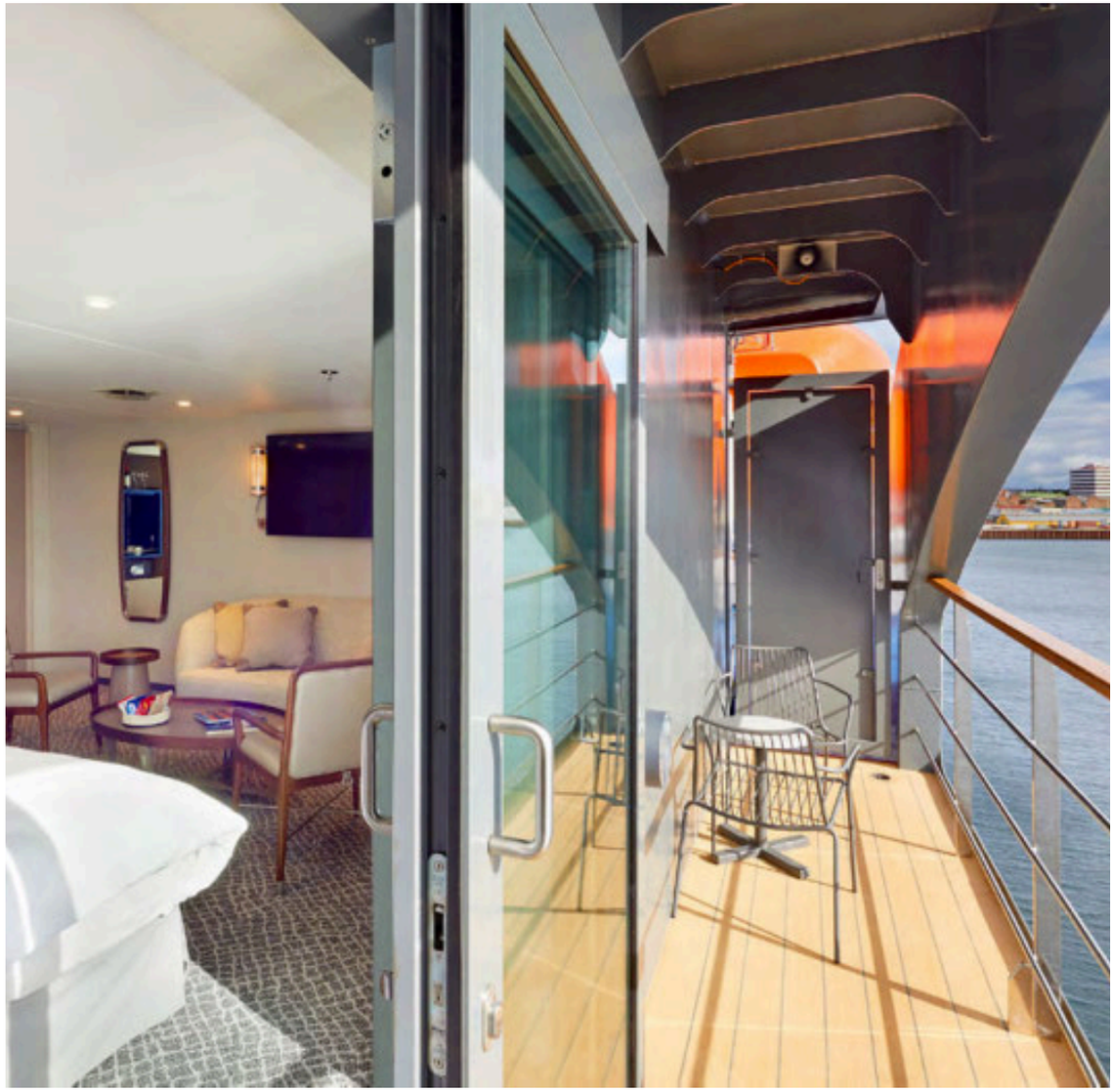
For our air-cruises, Magellan Explorer has a capacity for 73 guests lodging in seven accommodation categories, including dedicated single cabins. All cabins except Porthole Cabins feature private balconies. All double cabins except two have two twin beds that can be configured as one king-size bed.

All accommodations feature a wardrobe, individually controlled heating system, a sitting area, and a private bathroom with a shower and heated floors.





Penthouse Suite



Penthouse Suite

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Suite

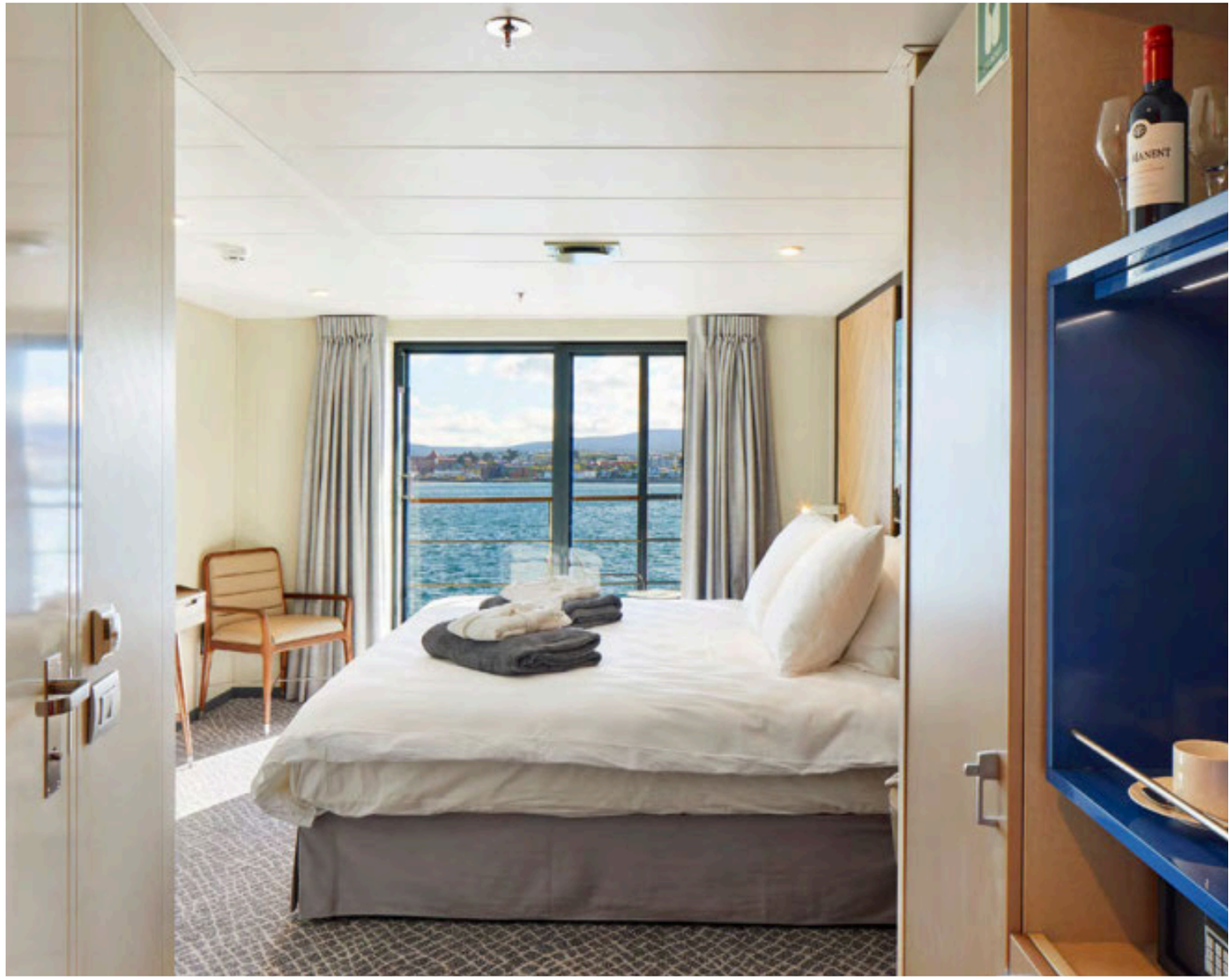


Suite

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Porthole Cabin



Deluxe Veranda Cabin



Destination Experience on the Inside

Magellan Explorer's public spaces were designed to foster connection with its destinations. The accessible bow allows exceptional wildlife viewing and photographic opportunities. Guests can enjoy a forward-facing observation lounge and bar, where our expert polar guides also deliver educational programs and information. The outdoor observation deck offers expansive views and close contact with the natural environments we sail through. The dining room offers ample space for guests with large windows for sightseeing while enjoying a delicious meal. There is a meeting room, a library filled with Antarctic-themed books, a gift shop, and a protected outdoor barbecue area. The ship also has a gym and a sauna.



Outdoor Barbecue Area



Accessible Bow

Magellan Explorer's Features

Built to the latest Polar Code specifications, the ship carries a Polar Class 6 ice class (Lloyd's Register PC6). For comfortable navigation and maneuverability, the vessel features stabilizers and bow and stern thrusters. An ice-detecting radar allows for more safety in navigation. And to reduce the environmental footprint, Magellan Explorer is equipped with an energy-recovery system that recycles the heat produced by the engines to warm up the ship and its water supply.



More Features

GUEST FEATURES

- A bar offering a selection of Chilean domestic and international drinks
- Gym and sauna
- Well stocked library with a collection of Antarctic-themed books in multiple languages
- Local intranet with daily programs, international news, etc. accessible wirelessly
- throughout the ship
- Meeting Room with multimedia resources and interactive science lab
- Satellite internet service available and accessible wireless throughout the ship
- Forward observation deck and accessible bow
- Zodiac embarkation area equipped with hangers, lockers and sitting facilities

DINING FEATURES

- Main dining room offers buffet breakfast and lunch, and table service dinner
- The BBQ deck offers al fresco dining, weather permitting
- Selection of premium Chilean wines served with lunch and dinner
- Snacks and drinks during welcome and farewell celebrations
- Complimentary self-service coffee, tea, chocolate, cappuccino, and water offered 24/7 in the library and bar

TECHNICAL FEATURES

- Retractable stabilizers
- Double hull construction
- Bulb designed for polar navigation
- Bow and stern thrusters
- State-of-the-art navigation equipment
- Latest ice radar technology
- Two mid-ship gangways for Zodiac operations
- Large expedition warehouse
- Tier III compliance, the most stringent emission standard
- Heat recycling system
- Fleet of 10 Zodiac boats

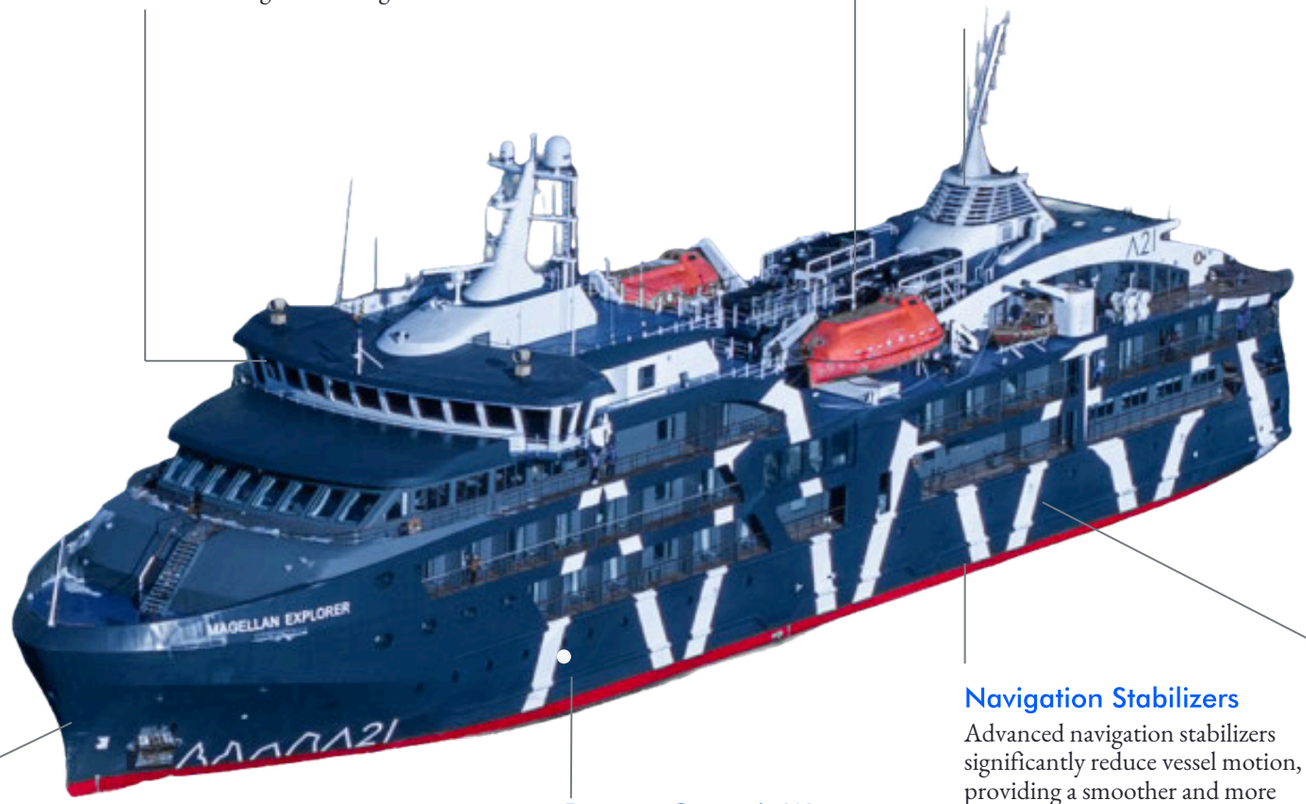
Magellan Explorer

The Vessel's Features

Designed for Sustainable Boutique Adventures in Antarctica

88	96	60	7
Guests on Antarctic Air-Cruises	Guests on Sea Voyages	Expedition Staff & Crew	Accommodation Categories

90.7 m (297.5 ft)	16.2 m (53.1 ft)	4.3 m (14.1 ft)
Length	Breadth	Draft



Tier III Compliance

This is one of the highest environmental standards for residual emissions, and compliance is achieved through Selective Catalytic Reduction (SCR) systems, which significantly reduce engine emissions.

Ascenz Marorka

This on-board a digital solution that will monitor and optimizes fuel consumption and operational energy efficiency, contributing to reducing emissions.

Atmos Air

The AtmosAir system uses bipolar ionization with duct-mounted sensors to continuously reduce contaminants and allergens.

Responsible Waste Management

On board the ship, waste management meets MARPOL and IMO requirements: waste is segregated, tracked, and safely stored onboard, compacted and secured, until delivery to authorized port facilities to minimize environmental impact

Waste Reduction Technologies

Onboard systems such as food waste digesters, compactors, and shredders minimize the volume of organic and inorganic waste, helping ensure compliance with strict environmental standards.

Water Refill Stations

Water refill stations offer guests a convenient way to stay hydrated without the environmental cost of disposable plastic bottles.

Anti-Fouling Coating

Advanced anti-fouling coating prevents marine organisms from attaching to the hull. This helps reduce drag and minimizes environmental impact by avoiding harmful biocides found in older coatings.

Heat Recovery System

The vessel is equipped with an integrated heat recovery system that captures waste heat from engines. The recovered thermal energy is reused primarily for the ship's HVAC, hot water systems and to produce fresh water, significantly reducing reliance on fuel-fired boilers.

Reverse Osmosis Water System

This system converts seawater into freshwater through advanced filtration, ensuring a constant supply for onboard use and reducing reliance on shore-based water resources.

Navigation Stabilizers

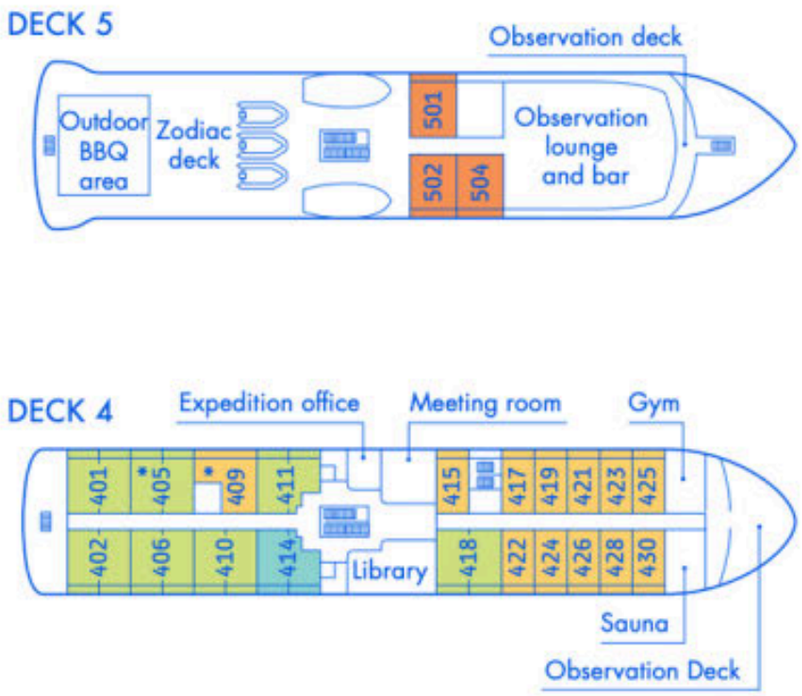
Advanced navigation stabilizers significantly reduce vessel motion, providing a smoother and more comfortable experience for guests on board.

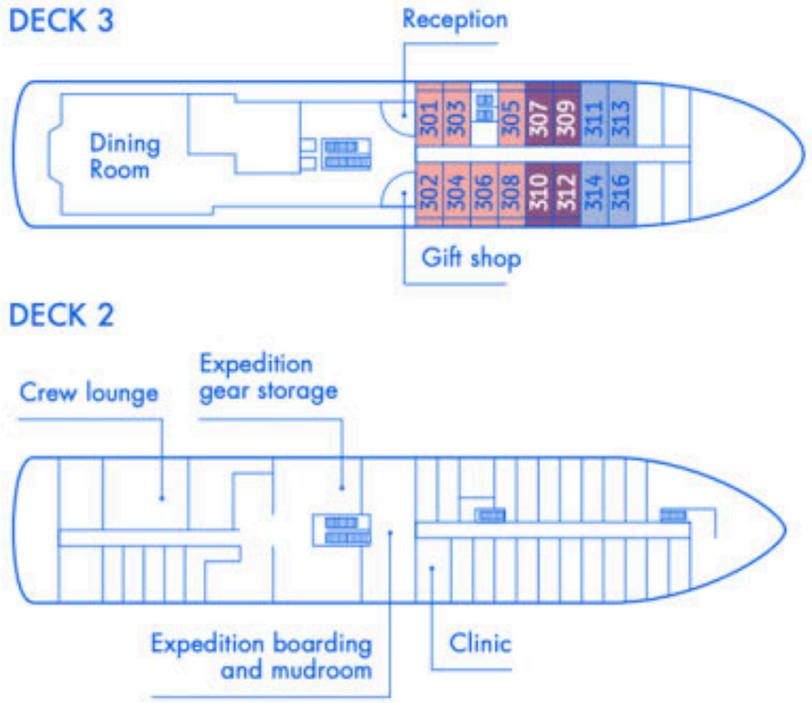
Ballast Water Management System

The system uses treated seawater to maintain vessel stability and trim, ensuring safe and efficient operations, while adhering to environmental regulations to avoid ecological disruption.

Specifications

- Passengers: Up to 88 on air-cruises
- Expedition Staff & Crew: 60
- Lifeboats: 2, fully enclosed, capacity of 160 (in addition to 8 life rafts, capacity of 160)
- Length: 90.7 m
- Breadth: 16.2 m
- Draft: 4.3 m
- Propulsion: Diesel engines, 3,440 kW
- Ice Class: LR PC6
- Cruising Speed: 14 knots in open water





Cabins

Category	Approx. Size	Details
Single Cabin	210 sq. ft. 19 sq. m	Cabin with sitting area and balcony
Penthouse Suite	360 sq. ft. 33 sq. m	Suite with sitting room, balcony and bedroom area
Suite	480 sq. ft. 44 sq. m	Two-room suite with sitting room, balcony and bedroom
Deluxe Veranda Cabin	240 sq. ft. 22 sq. m	Cabin with sitting area and balcony
Veranda Cabin	210 sq. ft. 19 sq. m	Cabin with sitting area and balcony
Porthole Cabin	200 sq. ft. 18 sq. m	Cabin with sitting area and porthole
Triple Suite	480 sq. ft. 44 sq. m	Suite with two bedrooms, balcony, and sitting area

SUITES AND CABINS DETAILS

Penthouse Suites

- 360 sq. ft. / 33 sq. m
- Located on Deck 5
- 2 twin beds or 1 king-size bed
- Separate sitting area with sofa and coffee table
- Desk and chair 2 armchairs
- Private balcony with sitting area
- Combo Euro-American electrical outlets with USB port
- Safe
- Closed-circuit TV screen
- Telephone
- Hairdryer
- Selection of snacks restocked daily
- Mini-bar restocked daily
- Coffee maker
- Larger private bathroom with separate shower
- Premium bathroom amenities
- Bathrobes and slippers

Bed can be configured as either one king-size bed (2.1 × 2.0 mt. / 82" × 78") or two twin beds (1.05 × 2.0 mt. / 41" × 78")



SUITES AND CABINS DETAILS

Suite

- 480 sq. ft. / 44 sq. m
- Located on Deck 4
- 2 twin beds or 1 king-size bed
- Separate living area with queen-size sofa bed and coffee table
- Desk and chair sets in both living and bedroom areas
- 2 armchairs with side tables
- 2 private balconies with sitting areas
- Combo Euro-American electrical outlets with USB port
- Safe
- Telephone
- Hairdryer
- Selection of snacks restocked daily
- Mini-bar restocked daily
- Coffee maker
- 2 larger private bathrooms with separate shower
- Premium bathroom amenities
- Bathrobes and slippers

Bed can be configured as either one king-size bed (2.1 × 2.0 mt. / 82" × 78") or two twin beds (1.05 × 2.0 mt. / 41" × 78")



SUITES AND CABINS DETAILS

Deluxe Veranda Cabin

- 240 sq. ft. / 22 sq. m
- Located on Deck 4
- 2 twin beds or 1 king-size bed
- Desk and chair 1 armchair with side table
- Private balcony with sitting area
- Combo Euro-American electrical outlets with USB port
- Safe
- Telephone
- Hairdryer
- Selection of snacks restocked daily
- Mini-bar restocked daily
- Coffee maker
- Larger private bathroom with separate shower
- Premium bathroom amenities
- Bathrobes and slippers

Bed can be configured as either one king-size bed (2.1 × 2.0 mt. / 82" × 78") or two twin beds (1.05 × 2.0 mt. / 41" × 78")



SUITES AND CABINS DETAILS

Veranda Cabin

- 210 sq. ft. / 19 sq. m
- Located on Deck 3
- 2 twin beds or 1 king-size bed
- Desk and chair 1 armchair with side table
- Private balcony with sitting area
- Combo Euro-American electrical outlets with USB port
- Safe
- Telephone
- Hairdryer
- Private bathroom with separate shower
- Bathroom amenities
- Bathrobes and slippers

Bed can be configured as either one king-size bed (2.1 × 2.0 mt. / 82" × 78") or two twin beds (1.05 × 2.0 mt. / 41" × 78")



SUITES AND CABINS DETAILS

Porthole Cabin

- 200 sq. ft. / 18 sq. m
- Located on Deck 3
- 2 twin beds or 1 king-size bed
- Desk and chair 2 armchairs with side table
- Combo Euro-American electrical outlets with USB
- Safe
- Telephone
- Hairdryer
- Private bathroom with separate shower
- Bathroom amenities
- Bathrobes and slippers

Bed can be configured as either one king-size bed (2.1 × 2.0 mt. / 82" × 78") or two twin beds (1.05 × 2.0 mt. / 41" × 78")



SUITES AND CABINS DETAILS

Single Veranda Cabin

- 200 sq. ft. / 18 sq. m
- Located on Deck 3
- 1 king-size bed Desk and chair
- 1 armchair with side table
- Private balcony with sitting area
- Combo Euro-American electrical outlets with USB port
- Safe
- Telephone
- Hairdryer
- Private bathroom with separate shower
- Bathroom amenities
- Bathrobe and slippers

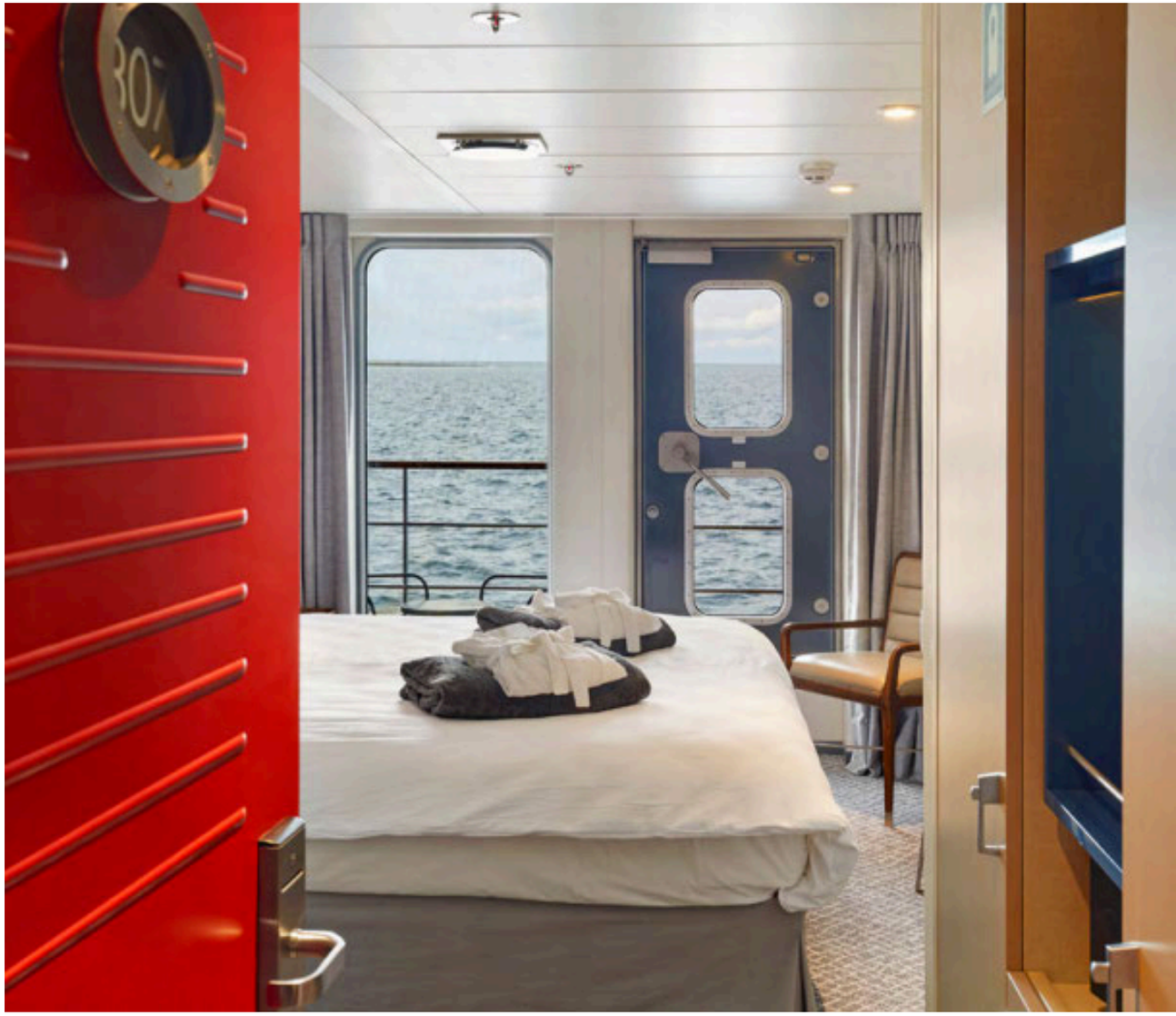


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SUITES AND CABINS DETAILS

Triple Suite

- 480 sq. ft. / 44 sq. m
- Located on Deck 4
- 2 twin beds and 1 queen-size bed (max. occupancy 3 guests)
- Separate living area with sofa and coffee table
- Desks and chair sets in both living and bedroom areas
- 2 armchairs with side tables
- 2 private balconies with sitting areas
- Combo Euro-American electrical outlets with USB port
- Safe
- Telephone
- Hairdryer
- Selection of snacks restocked daily
- Mini-bar restocked daily Coffee maker
- 2 larger private bathrooms with separate shower
- Premium bathroom amenities
- Bathrobes and slippers



Magellan Explorer
Inspired by Nature



The Interior Design

The team at Enrique Concha & Co. explains the interior design of the new ship.

WHAT IS THE VISION THAT LEADS YOUR PROJECTS?

We ground each project on a strong conceptual foundation. Ideas are our North Star. As a studio we are quite versatile and that is reflected in the wide range of projects in our portfolio. From hotels based in the forest to urban architecture, we adapt and focus the vision based on the requirements of our clients.

The designs of the Coquinaria and Margó restaurants in Santiago were both conceived in our office, but their styles are completely different. There is a stylistic range in the yachts and ships we have designed.

And if we talk about our hotel projects, from The Singular or Cumbres hotels in Chile, to Arennas Máncora in Peru, each was based on its own unique design concept.

In all cases, what we want is to be faithful to our client's vision, whether that client is an individual or a brand, so that they can identify themselves in our work. That way, we know our designs will be authentic and will resonate with the people who use our spaces.

WHAT IS THE DESIGN CONCEPT BEHIND MAGELLAN EXPLORER?

I will answer by asking you: Why do your travelers go to Antarctica? They go to see the unique landscape, observe wildlife, immerse themselves in pure nature, and enjoy the beauty and silence that can be found in that remote corner of our planet. Those are the images that remain in the memories of travelers. Your expeditions elicit powerful emotions and provide inspiration that is deep and meaningful. That privileged contact with nature, the awe and gratitude travelers tell us they feel, are the main anchors of the Antarctica21 experience. Your guests are not looking for lively casinos and endless entertainment choices. They are looking for a rare and exclusive opportunity



Enrique Concha
Director



José Antonio Anselmo
Architect & Design Director



María Fernanda Perez
Industrial Designer



Francisco Lara
Junior Architect

to connect with nature, to live a transformative experience that is singular, exclusive and personal. Now, to carry those considerations into the design of the ship's interiors, we focused our research on four different references: nautical, modern transportation, bold nature and unique lifestyle. We studied each of these references, capturing shapes and styles, integrating elements that spoke to the Antarctic experience. We also profiled the guests, their motivations and objectives. The look and feel we developed are centered on curves and symmetry, organic elements and a feeling of perpetual movement, while giving space to flexible, high-end furnishings. We worked with innovative lighting solutions to create rhythm and volume in the corridors. The base color selection was inspired by the Antarctic landscape, with blue tones that recall ancient ice, whites to reflect purity, and a touch of metallic patterns inspired by the rocks. We want travelers to feel the hospitality of a boutique hotel, the style of a modern yacht, and a deep sense of connection to the Antarctic environment.



Enrique Concha & Co's office in Santiago de Chile

HOW LONG DOES IT TAKE FROM CONCEPT TO FINISHED PRODUCT?

Every project is different and depends on many factors. In the case of *Magellan Explorer*, it took about six months to research, set the direction, and develop the plan. During the ship's construction, our design team collaborated closely with the shipyard and the team at Antarctica21. We worked together and responded to the various design requirements as the ship was being built. We were deeply involved in the project all the way to the inauguration, in September 2019.

HAS THIS PROJECT BEEN MORE CHALLENGING THAN OTHERS?

In some ways, it has been. We have designed ships before but never specifically for Antarctic conditions. Many specific requirements have had to be taken into consideration, impacting the design. For instance, although generally the ship navigates in calm waters in Antarctica, it must also be prepared to navigate on rough seas when traveling there and back. So the impact of the movement of the ship had to be taken into consideration. We have had to consider how to secure furniture, fixtures, and other decorative objects. We have had to develop complex design solutions for many areas of the ship, from cabins, to bathrooms, to the lounge, and even the galley.



Building an Antarctic Ship

Diana Galimberti, Antarctica21's Executive Vice President, Product and Operations, at the time of construction of the vessel, tells us about Magellan Explorer.

WHY WAS THE NAME MAGELLAN EXPLORER CHOSEN?

The name *Magellan Explorer* is a tribute to what distinguishes Antarctica21. Our HQ is in Punta Arenas, the hometown of our founders and the capital city of the Chilean region of "Magallanes," Spanish for Magellan. In 1520, the Portuguese explorer discovered the strait that today bears his name, connecting the Atlantic and Pacific oceans. At the time of Magellan to the south was the so-called "Terra Australis Incognita". From Punta Arenas many important historic expeditions have left for Antarctica. Today the region has a deep connection to Antarctica and remains one of the major international Antarctic gateways. As "local actors" steeped in this reality, with all the important advantages that give us in managing our operation, we decided to recognize Ferdinand Magellan by naming the ship in his honor.

WHAT WAS YOUR ROLE IN THE CONSTRUCTION OF THE NEW SHIP?

My team and I have shared our operational expertise with the designers, engineers and naval architects. We helped ensure that the new ship would be designed to meet all the specific requirements of our Antarctic air-cruises. It has been an exceptional opportunity to contribute and to help shape the ideal ship. The project has been a team effort with the contribution of several international polar expedition experts. One such expert is Mariano Curiel, our Operations Director, who has more than 200 Antarctic trips to his credit.

WHAT ARE THE MAIN CHALLENGES IN THE CONSTRUCTION OF AN ANTARCTIC SHIP?

Antarctica is one of the most extreme environments on Earth. Human activity couldn't exist there without sophisticated facilities that can withstand those conditions. Low temperatures, sea ice and icebergs

that drift with the currents represent the greatest challenge for ships that sail in those remote seas. Safety is undoubtedly one of the fundamental concerns for a polar ship. Two elements in particular are essential to ensure a ship's safety in Antarctica: a suitable hull and state-of-the-art navigation equipment. While *Magellan Explorer* will sail mainly in coastal areas along the Antarctic Peninsula, where the waters are relatively calm, the ship has been designed as an ocean-going vessel that can navigate the wild Southern Ocean. *Magellan Explorer* benefits from a system of retractable stabilizing fins that reduce the ship's movement caused by the waves and improve the comfort on board in a significant way.

YOU SAID THAT MAGELLAN EXPLORER IS PURPOSE-BUILT FOR AIR-CRUISE OPERATIONS. HOW SO?

One of the special features of the air-cruise model is that the ship remains in Antarctica for extended periods of time. Most ships' itineraries start and end at a port, where passengers turnover takes place and where all the necessary supplies, such as provisions, fuel, water, etc. are loaded. *Magellan Explorer* has been designed to maximize its range, making it the first ship in the world specifically designed for Antarctic air-cruises. When the project was in its early stages, there was intense communication with the engineers at the shipyard on this. Claudio Bobadilla, in charge of Marine Operations at Antarctica21, worked hard to verify that all the operational requirements were met. *Magellan Explorer* is equipped with marine gasoil (MGO) tanks with a total capacity of 720 m3, sufficient to allow the ship to operate in Antarctica for 60 days. The ship is also equipped with ample spaces for storing provisions, including large refrigerated areas and freezers. There are tanks of 200 m3 on board for the storage of fresh water. Fresh water is produced on board through a desalination plant that guarantees the production of about 24 tons per day. Special attention has also been paid to the ship's waste management processes, since all the waste produced is compacted and stored on board.

WHAT ABOUT THE SHIP'S HULL? HOW DOES IT DEAL WITH FLOATING ICE?

As I mentioned, one of the biggest challenges for a ship that sails in a polar environment is floating ice. It moves constantly and its presence is unpredictable and random. Consequently, the design and structure of the ship's hull are central to the safety of navigation. Since 2017, the navigation of ships in polar areas has been regulated by standards issued by the International Maritime Organization (IMO) through what is known as the Polar Code. *Magellan Explorer* is built with a double hull made of thick steel plates. It has a rounded bilge and a special bulb designed specifically to facilitate polar navigation. The two main engines, with a total power of 3,440 kW, guarantee plenty of propulsion to push sea ice out of the way. All that, together with many other structural elements and state-of-the-art ice radar, ensure that the ship complies with the Polar Code and are given a PC6 Class. Things get very technical but essentially it means that, during the summer and fall seasons, *Magellan Explorer* can navigate safely in polar seas

covered with one year old ice of medium thickness that may contain some older ice. In short, the ship is perfectly suited for the itineraries that Antarctica21 offers in the Antarctic Peninsula.

THE SHIP HAS A HEAT RECOVERY SYSTEM. WHAT IS THAT ABOUT?

It is a system that recovers and repurposes the residual heat produced by the engines. Using heat exchangers, energy is extracted from the engines' cooling liquid. That energy is then reused in the operation of the ship's heating system, to heat water used on board, and for the production of the ship's fresh water supply. Antarctica is a wildlife sanctuary and one of the most pristine places on our Planet. Its conservation is one of the great commitments of the international community. In designing the ship, we worked hard to ensure energy efficiency to minimize environmental impact. I should also note that both main engines comply with the Tier III emission standard, the most stringent emission standard in the shipping industry.

ANY OTHER TECHNICAL REQUIREMENTS WERE CONSIDERED FOR THE SHIP?

One of our central objectives has been to create a ship that supports our specific expedition style. We like to travel in search of the best places and the best opportunities to visit the White Continent, constantly adapting to the changing ice and the climate conditions. We want to adapt to wildlife patterns and make quick decisions about a trip's itinerary. For that, we need the flexibility that only a relatively small and very maneuverable ship like *Magellan Explorer* can provide. The ship is extremely agile and is equipped with bow and stern thrusters of 500 KW each. We have the ability to operate Zodiac boats from two mid-ship gangways since the ship is equipped with two landing gates and a double set of cranes. It allows us to offer greater protection and stability against the swell or wind during Zodiac operations. We can also be very quick and efficient with embarkation and disembarkation, avoiding unnecessary wait times for our guests. Finally, the ship is equipped with a large expedition warehouse that runs across the entire width of the ship. That area supports the outdoor activities we offer, such as sea kayaking, and hiking and snowshoes, allowing us to deliver those experiences efficiently and to a high-quality standard.

Contact us

Your questions are welcome

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