



HÉRCULES 45.4/268.5_190 (H₂)

Technical Datasheet & Strategic Applications

ETERNAUS Airship Division

(International aerospace standard tone — Executive & Engineering Edition)

INTRODUCTION — The New Global Standard in Super-Heavy Aerial Logistics

The ETERNAUS Airship Division engineers' atmospheric megastructures that combine aerospace-grade precision, sovereign-level capability, and ultra-efficient hydrogen propulsion. Positioned between the Titan and the Atlas, the **Hércules** is the world's most advanced super-heavy logistics aircraft — a platform designed to replace and surpass the legendary Antonov-class freighters, now absent from the global market.

With **210 tons of payload capacity**, **21,000 m³ of internal cargo volume**, and **four multi-purpose decks**, the Hércules performs missions that once required convoys, ports, railways, cranes, and months of planning. What traditionally took **230 days** can now be completed in **5**.

Engineered under international aerospace standards, the Hércules delivers silent, emission-free, runway-independent operations with continuous airborne autonomy. It is simultaneously a **super-heavy cargo aircraft**, a **global industrial lifter**, a **remote-access installation platform**, and a **luxury airborne residence** — serving the needs of engineers, sovereign clients, and high-net-worth individuals alike.

This Technical Datasheet provides the structural specifications and operational parameters required by aerospace authorities and engineering teams, while presenting the strategic applications valued by CEOs, sheiks, investors, and global operators.

1. Basic Dimensions

- **Overall Length:** 268.5 m
- **Maximum Diameter:** 45.4 m
- **Maximum Cross-Section:** 1,620 m²
- **External Surface Area:** 31,000 m²
- **Displaced Volume:** 302,000 m³
- **Maximum Thrust:** 390,000 kg

2. Structural Information

- **Material:** ALLOY 2090-T83 aerospace-grade sheet
- **Plate Thickness:** 0.8 mm
- **Specific Density:** 2.1 kg/m²
- **Tensile Strength:** 70 kg/mm²
- **Allowable Stress:** 21 kg/mm²
- **Transverse Prestressing:** 10 kg/mm²
- **Longitudinal Prestressing:** 5.0 kg/mm²
- **Operating Pressure:** 350 mmca



- **Maximum Allowable Pressure:** 560 mmca
- **External Compression Resistance:** 350 kg/m²

3. Operational Performance

- **Operating Speed Limit:** 210 km/h
- **Superstructure Weight:** 77,000 kg
- **Accessories Weight:** 45,000 kg
- **Gas Weight:** 30,000 kg
- **Fuel Weight:** 28,000 kg
- **Payload Capacity:** 210,000 kg
- **Total Operating Weight:** 180,000 kg
- **Displacement Factor:** 0.06823 × vel³

Range by Speed

- **70 km/h — 500 HP:** 56,000 km
- **100 km/h — 1,460 HP:** 27,500 km
- **140 km/h — 4,000 HP:** 14,000 km
- **180 km/h — 8,500 HP:** 6,500 km
- **210 km/h — 13,500 HP:** 4,200 km

MAIN USES — HÉRCULES (H₂)

(Structured in 9 chapters — matching Titan & Atlas, adapted to the Hercules scale)

The Hércules is a **multi-role super-heavy platform** engineered for industrial operations, strategic logistics, luxury transport, and remote-access missions. With four decks and 5,600 m² of usable interior space, it is one of the most versatile aircraft ever conceived.

1. Ultra Luxury Passenger Transport & Aerial Hospitality

- Up to **1,400 passengers** in ultra-first-class suites and private apartments.
- Four panoramic decks with lounges, dining areas, and leisure spaces.
- Ideal for premium routes such as Dubai–London, Abu Dhabi–Paris, Doha–Singapore.
- Annual revenue potential: **US\$ 140 million** (96 flights NYC–London).
- Zero-emission hydrogen propulsion for silent, vibration-free travel.

The Hércules becomes a **flying boutique hotel**, ideal for sovereign fleets and luxury operators.

2. Winged Palaces & Private Airborne Residences

- Configurable as a **5,600 m² flying palace** with 2.5-meter ceilings.
- Ideal for royal families, global leaders, and UHNWIs seeking privacy and prestige.
- Can operate as:
 - Airborne residence
 - Diplomatic platform



- Traveling executive headquarters
- Airborne yacht (180 m / 600 ft aesthetic configuration)

3. Super-Heavy Cargo Transport & Industrial Mega lifting

With **210 tons** of payload and integrated lifting systems, the Hércules can:

- Remove turbines, transformers, mining machines, wind-energy modules, oil-platform components, silos, tanks, and industrial equipment directly from factories.
- Transport them across continents without ports, roads, or runways.
- Perform lifting and installation at the destination using only onboard stabilizers.

230 days → 5 days in the China hydroelectric scenario.

4. Chemical, Hazardous & High-Value Industrial Transport

The Hércules can transport:

- Chemical waste
- Industrial reagents
- High-value hazardous materials
- Specialized containers and tanks

Example: **210,000 kg × €3.50/kg = €735,000 per flight → €150 million/year**

Ideal for:

- Environmental service companies
- Government contracts
- Industrial waste management
- High-margin logistics operators

5. Remote-Access Installation & Infrastructure Deployment

The Hércules can install:

- Hydroelectric modules
- Mining equipment
- Prefabricated structures
- Wind-energy components
- Oil-platform modules

All without cranes, counterweights, or ground access.

6. Mining, Energy & Resource Operations

- Transport of minerals, ores, and industrial materials.
- Delivery to remote mines, deserts, mountains, and polar regions.
- Support for energy megaprojects and offshore operations.

7. Disaster Response & Humanitarian Operations

- Transport of food, water, medical supplies, and emergency equipment.
- Evacuation of large populations.
- Support for wildfire control, flood response, and crisis stabilization.

8. Agriculture, Forestry & Environmental Missions

- Reforestation with mature trees.



- Transport of agricultural surplus to remote or strategic regions.
- Fogging, spraying, and environmental monitoring.
- Support for desert greening and irrigation projects.

9. Commercial, Tourism & Special Operations

- Airborne tourism platform.
- Remote-region ecotourism.
- Traveling commercial hub for isolated communities.
- Mobile observation and research platform.

CONCLUSION

The Hércules is a **super-heavy logistics revolution** — a machine capable of transforming how industries build, expand, and connect across the planet. With unmatched autonomy, lifting capability, and versatility, it stands as one of the most impactful aircraft ever conceived, ready to serve sovereign fleets, global corporations, and visionary private clients.