

# Europe Space-Qualified Propellant Tank Market: Focus on Platform, Propellant Tank, and Country - Analysis and Forecast, 2023-2033

<https://marketpublishers.com/r/E807337282C4EN.html>

Date: December 2024

Pages: 0

Price: US\$ 3,250.00 (Single User License)

ID: E807337282C4EN

## Abstracts

Hard copy option is available on any of the options above at an additional charge of \$500. Please email us at [order@marketpublishers.com](mailto:order@marketpublishers.com) with your request.

This report will be delivered in 7-10 working days. Introduction to Europe Space-Qualified Propellant Tank Market

In 2023, the Europe space-qualified propellant tank market was valued at \$403.2 million and is expected to reach \$501.8 million by the end of 2033, growing at a CAGR of 2.21% during the forecast period 2023-2033. Space-qualified propellant tanks, which are made to withstand the demanding requirements of space missions, are crucial parts of European aerospace engineering. The fuel required for spaceship propulsion is stored in these tanks, allowing for operations like deep space exploration, orbit modifications, and deorbiting. To guarantee dependability, safety, and effectiveness in the demanding environment of space, their design and production need for cutting-edge materials and technology.

Tanks that can endure high pressures, temperatures, and the corrosive character of different propellants have been developed as a result of recent developments in materials science. In an effort to lessen the environmental impact of space missions, leading manufacturers like Benchmark Space Systems and research institutes like the ?ukasiewicz Institute of Aviation are spearheading innovation in propulsion systems employing green propellants like high-test peroxide (HTP).

The successful use of these tanks in European space missions underscores the importance of reliable propellant storage solutions as satellite technology and

interplanetary exploration continue to expand. Design considerations, including material selection and structural integrity, are critical for mission success, balancing performance, cost, and manufacturability. As the European space industry focuses on sustainability and efficiency, space-qualified propellant tanks will remain essential in powering the next generation of spacecraft, supporting further exploration and utilization of outer space.

## Market Introduction

The market for space-qualified propellant tanks in Europe is expanding rapidly due to the rising need for sophisticated propulsion systems for space missions. Designed to hold propellants required for spacecraft propulsion, including orbital corrections, deorbiting, and deep space exploration, these tanks are essential parts of aeronautical engineering. The increasing number of interplanetary missions, satellite launches, and technological developments in space exploration are driving the market.

For space-qualified propellant tanks to withstand the harsh conditions of space, such as high pressures, temperature swings, and exposure to corrosive propellants, they must fulfill strict performance, safety, and reliability requirements. Tanks that can survive these challenging conditions while preserving efficiency and lessening their environmental impact have been developed as a result of recent advancements in materials science. Manufacturers in Europe, including Benchmark Space Systems, and research institutions like the ?ukasiewicz Institute of Aviation, are pioneering efforts to integrate green propellants and sustainable technologies into propulsion systems.

As space exploration continues to expand, the role of space-qualified propellant tanks becomes even more critical. These tanks are essential for ensuring the success of space missions, including satellite deployment, scientific research, and the push for interplanetary exploration. The increasing emphasis on sustainability, cost-effectiveness, and performance within the European space industry further accelerates the demand for innovative propellant storage solutions, positioning the market for continued growth.

## Market Segmentation

### Segmentation 1: by Platform

#### Satellite

0-500 kg

501-1,000 kg

1,001 kg and Above

Launch Vehicle

Small Lift Launch Vehicle (0-2,200 kg)

Medium and Heavy Lift Launch Vehicle (2,201 kg and Above)

## Segmentation 2: by Propellant Tank

Diaphragm Tanks

Propellant Management Devices

Helium, Nitrogen and Xenon Tanks

Aluminum Alloy Tanks

Hydrazine Tanks

HTP Tanks

## Segmentation 3: by Region

Europe - U.K., Germany, France, Russia, and Rest-of-the-Europe

How can this report add value to an organization?

**Product/Innovation Strategy:** The product segment helps the reader understand the different types of products available for deployment in Europe Region. Moreover, the study provides the reader with a detailed understanding of the Europe space-qualified propellant tank market based on platform (satellite and launch vehicle).

**Growth/Marketing Strategy:** The Europe space-qualified propellant tank market has seen major development by key players operating in the market, such as business expansion, partnership, collaboration, and joint venture. The company's favored strategy has been partnerships and contracts to strengthen its position in the Europe space-qualified propellant tank market.

### Key Market Players and Competition Synopsis

The companies that are profiled have been selected based on thorough secondary research, which includes analyzing company coverage, product portfolio, market penetration, and insights gathered from primary experts.

Some prominent names established in this market are:

Airbus S.A.S.

Ariane Group

OHB SE

## Contents

Executive Summary  
Scope and Definition

### 1 MARKETS

- 1.1 Trends: Current and Future Impact Assessment
  - 1.1.1 Increasing Focus on Sustainability
  - 1.1.2 On-Orbit Servicing and Refueling Technologies
- 1.2 Regulatory Landscape (by Country)
  - 1.2.1 U.K.
  - 1.2.2 France
  - 1.2.3 Germany
  - 1.2.4 Russia
- 1.3 Ecosystem/Ongoing Programs
  - 1.3.1 The ASTRIS Mission
  - 1.3.2 SpaceTank Project
- 1.4 Space-Qualified Propellant Tank Manufacturers and Standards
- 1.5 New Space Business Scenario: An Emerging Opportunity for the Space-Qualified Propellant Tank Market
  - 1.5.1 Growth in Small Satellite Market
  - 1.5.2 Growth in Small Launch Vehicle Market
- 1.6 Start-Ups and Investment Landscape
- 1.7 Market Dynamics Overview
  - 1.7.1 Market Drivers
    - 1.7.1.1 Advancements in Materials and Manufacturing Processes
    - 1.7.1.2 Increasing Deployment of Satellite Constellation
  - 1.7.2 Market Restraints
    - 1.7.2.1 Risk of Orbital Debris Colliding with Propellant Tanks
  - 1.7.3 Market Opportunities
    - 1.7.3.1 Modular and Reusable Propellant Tank Systems
    - 1.7.3.2 Increasing Deep Space Mission
- 1.8 Supply Chain Overview

### 2 REGIONS

- 2.1 Regional Summary
- 2.2 Europe

- 2.2.1 Regional Overview
- 2.2.2 Driving Factors for Market Growth
- 2.2.3 Factors Challenging the Market
- 2.2.4 Application (by Platform)
- 2.2.5 Product (by Propellant Tank)
- 2.2.6 France
  - 2.2.6.1 Application (by Platform)
  - 2.2.6.2 Product (by Propellant Tank)
- 2.2.7 Germany
  - 2.2.7.1 Application (by Platform)
  - 2.2.7.2 Product (by Propellant Tank)
- 2.2.8 U.K.
  - 2.2.8.1 Application (by Platform)
  - 2.2.8.2 Product (by Propellant Tank)
- 2.2.9 Russia
  - 2.2.9.1 Application (by Platform)
  - 2.2.9.2 Product (by Propellant Tank)
- 2.2.10 Rest-of-Europe
  - 2.2.10.1 Application (by Platform)
  - 2.2.10.2 Product (by Propellant Tank)

### **3 MARKETS - COMPETITIVE BENCHMARKING & COMPANY PROFILES**

- 3.1 Next Frontiers
- 3.2 Geographic Assessment
  - 3.2.1 AIRBUS
    - 3.2.1.1 Overview
    - 3.2.1.2 Top Products/Product Portfolio
    - 3.2.1.3 Top Competitors
    - 3.2.1.4 Target Customers
    - 3.2.1.5 Key Personnel
    - 3.2.1.6 Analyst View
    - 3.2.1.7 Market Share, 2022
  - 3.2.2 ArianeGroup
    - 3.2.2.1 Overview
    - 3.2.2.2 Top Products/Product Portfolio
    - 3.2.2.3 Top Competitors
    - 3.2.2.4 Target Customers
    - 3.2.2.5 Key Personnel

3.2.2.6 Analyst View

3.2.2.7 Market Share, 2022

3.2.3 OHB SE

3.2.3.1 Overview

3.2.3.2 Top Products/Product Portfolio

3.2.3.3 Top Competitors

3.2.3.4 Target Customers

3.2.3.5 Key Personnel

3.2.3.6 Analyst View

3.2.3.7 Market Share, 2022

## **4 RESEARCH METHODOLOGY**

4.1 Data Sources

4.1.1 Primary Data Sources

4.1.2 Secondary Data Sources

4.1.3 Data Triangulation

4.2 Market Estimation and Forecast

## List Of Figures

### LIST OF FIGURES

Figure 1: Space-Qualified Propellant Tank Market (by Region), \$Million, 2022, 2023, and 2033

Figure 2: Europe Space-Qualified Propellant Tank Market (by Platform, \$Million, 2022 and 2033

Figure 3: Europe Space-Qualified Propellant Tank Market (by Propellant Tank), \$Million, 2022 and 2033

Figure 4: Space-Qualified Propellant Tank, Recent Developments

Figure 5: Small Satellite Market Scenarios (101-2,200 Kg), 2022-2033

Figure 6: Small Launch Vehicle Scenarios, 2022-2026

Figure 7: Impact Analysis of Market Navigating Factors, 2022-2033

Figure 8: Upcoming Deep Space Missions

Figure 9: Supply Chain and Risks within the Supply Chain

Figure 10: France Space-Qualified Propellant Tank Market, \$Million, 2022-2033

Figure 11: Germany Space-Qualified Propellant Tank Market, \$Million, 2022-2033

Figure 12: U.K. Space-Qualified Propellant Tank Market, \$Million, 2022-2033

Figure 13: Russia Space-Qualified Propellant Tank Market, \$Million, 2022-2033

Figure 14: Rest-of-Europe Space-Qualified Propellant Tank Market, \$Million, 2022-2033

Figure 15: Strategic Initiatives, 2020-2023

Figure 16: Share of Strategic Initiatives, 2020-2023

Figure 17: Data Triangulation

Figure 18: Top-Down and Bottom-Up Approach

Figure 19: Assumptions and Limitations

## List Of Tables

### LIST OF TABLES

Table 1: Market Snapshot

Table 2: Space-Qualified Propellant Tank Market Opportunities across Regions

Table 3: Other Sections Under the Regulations for Propulsion Systems

Table 4: 12. List of Certification

Table 5: Funding and Investment Scenario, January 2019-January 2024

Table 6: Space-Qualified Propellant Tank Market (by Region), \$Million, 2022-2033

Table 7: Europe Space-Qualified Propellant Tank Market (by Platform), \$Million, 2022-2033

Table 8: Europe Space-Qualified Propellant Tank Market (by Propellant Tank), \$Million, 2022-2033

Table 9: France Space-Qualified Propellant Tank Market (by Platform), \$Million, 2022-2033

Table 10: France Space-Qualified Propellant Tank Market (by Propellant Tank), \$Million, 2022-2033

Table 11: Germany Space-Qualified Propellant Tank Market (by Platform), \$Million, 2022-2033

Table 12: Germany Space-Qualified Propellant Tank Market (by Propellant Tank), \$Million, 2022-2033

Table 13: U.K. Space-Qualified Propellant Tank Market (by Platform), \$Million, 2022-2033

Table 14: U.K. Space-Qualified Propellant Tank Market (by Propellant Tank), \$Million, 2022-2033

Table 15: Russia Space-Qualified Propellant Tank Market (by Platform), \$Million, 2022-2033

Table 16: Russia Space-Qualified Propellant Tank Market (by Propellant Tank), \$Million, 2022-2033

Table 17: Rest-of-Europe Space-Qualified Propellant Tank Market (by Platform), \$Million, 2022-2033

Table 18: Rest-of-Europe Space-Qualified Propellant Tank Market (by Propellant Tank), \$Million, 2022-2033

Table 19: Market Share

## I would like to order

Product name: Europe Space-Qualified Propellant Tank Market: Focus on Platform, Propellant Tank, and Country - Analysis and Forecast, 2023-2033

Product link: <https://marketpublishers.com/r/E807337282C4EN.html>

Price: US\$ 3,250.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/E807337282C4EN.html>