

Global Solid Rocket Motors Market Size, Share, Trends & Analysis by Component (Propellant, Igniter, Thruster/Nozzle, Motor Casing and Insulation, Others), by Launch Platform (Airborne, Ground-based, Naval), by Application (Satellite Launch Vehicles, Missiles), by End Use (Space Agencies, Research Institutes, Defense) and Region, with Forecasts from 2025 to 2034.

<https://marketpublishers.com/r/GD6CA34B8885EN.html>

Date: January 2026

Pages: 228

Price: US\$ 3,890.00 (Single User License)

ID: GD6CA34B8885EN

Abstracts

The Global Solid Rocket Motors Market is set to experience significant growth from 2025 to 2034, driven by the rising demand for reliable and high-performance propulsion systems in space and defense applications. Solid rocket motors (SRMs) are integral to missiles, launch vehicles, and other aerospace systems, ensuring effective thrust and operational efficiency while maintaining safety and reliability. These motors play a critical role in both defense and space exploration sectors, offering solutions to meet evolving technological and strategic requirements. Valued at USD XX.XX billion in 2025, the market is projected to grow at a CAGR of XX.XX%, reaching USD XX.XX billion by 2034.

Definition and Scope of Solid Rocket Motors

Solid rocket motors are propulsion systems that utilize solid propellants to produce thrust for missiles, satellite launch vehicles, and other aerospace applications. These systems serve to provide reliable and high-performance propulsion while ensuring safety and operational efficiency. The market covers SRMs designed for various launch platforms, including airborne, ground-based, and naval systems. The motors are critical

in both defense and space sectors, with applications ranging from tactical and strategic missiles to satellite launch vehicles.

Market Drivers

Technological Advancements in Propulsion Systems: With increasing demand for high-efficiency propulsion, advancements in solid propellant formulations and motor design are driving the need for improved SRMs.

Growth in Space Exploration and Satellite Launch Programs: Rising investments in satellite deployment and space missions, particularly in Asia-Pacific and emerging economies, are fueling demand for reliable solid rocket motors.

Defense Modernization and Missile Programs: Governments worldwide are modernizing defense systems and investing in advanced missile programs, driving demand for solid rocket motors with superior performance and precision.

Rising Demand for Tactical and Strategic Missiles: Growing geopolitical tensions and security concerns are increasing the need for SRMs in defense applications globally.

Market Restraints

High Cost of Advanced SRMs: The development and production of high-performance solid rocket motors, especially those with advanced propellant or safety features, can be expensive, limiting adoption among smaller operators.

Stringent Regulatory and Safety Requirements: Compliance with international safety standards and export controls can slow the adoption of SRMs and increase operational complexity.

Limited Reusability: Most solid rocket motors are single-use, which may restrict cost efficiency compared to reusable propulsion systems.

Opportunities

Expansion of Space Programs in Emerging Markets: Increasing space initiatives

in countries such as India, China, and Brazil are creating significant growth opportunities for SRMs.

Integration in Hybrid and Multi-stage Launch Vehicles: The combination of solid rocket motors with other propulsion technologies presents new avenues for innovation and market expansion.

Collaborations in Defense and Research: Joint ventures and international research programs are likely to boost demand for advanced solid rocket motors.

Retrofit and Upgrade Programs: Upgrading existing missile and launch systems with improved SRMs provides substantial opportunities in the aftermarket segment.

Market Segmentation Analysis

By Component

Propellant

Igniter

Thruster/Nozzle

Motor Casing and Insulation

Others

By Launch Platform

Airborne

Ground-based

Naval

By Application

Satellite Launch Vehicles

Missiles

By End Use

Space Agencies

Research Institutes

Defense

Regional Analysis

North America: Dominates the solid rocket motors market due to robust defense spending, established aerospace capabilities, and strong government-backed space programs.

Europe: Home to leading aerospace and defense manufacturers, Europe is experiencing steady growth driven by missile programs and space exploration initiatives.

Asia-Pacific: The fastest-growing region, led by China, India, and Japan, with increasing defense modernization, space exploration projects, and strategic missile programs.

Latin America: Emerging space and defense initiatives in countries like Brazil and Mexico are driving demand for SRMs, especially for new satellite launch vehicles and missiles.

Middle East & Africa: Rising defense budgets and interest in space programs are increasing the need for advanced solid rocket motors in both defense and aerospace applications.

The Global Solid Rocket Motors Market is positioned for substantial growth in the coming years, driven by technological advancements, strategic defense programs, and expanding space exploration initiatives. As governments, research institutes, and

aerospace organizations increasingly focus on reliable propulsion systems and mission success, the market for solid rocket motors will continue to expand, offering numerous opportunities for innovation and market penetration.

Competitive Landscape

The Global Solid Rocket Motors Market is highly competitive, with players constantly innovating to meet emerging technological and regulatory requirements. Key players in the market include:

Northrop Grumman Corporation

Aerojet Rocketdyne Holdings, Inc.

Lockheed Martin Corporation

Raytheon Technologies Corporation

Bharat Dynamics Limited

ISRO Propulsion Complex

ATK Space Systems (Northrop Grumman)

China Aerospace Science and Technology Corporation (CASC)

Rheinmetall AG

Dynetics, Inc.

Contents

1. INTRODUCTION

- 1.1. Definition and Scope of Solid Rocket Motors
- 1.2. Objectives of the Report
- 1.3. Research Methodology
- 1.4. Assumptions and Limitations

2. EXECUTIVE SUMMARY

- 2.1. Key Market Highlights
- 2.2. Market Snapshot
- 2.3. Overview of Components, Launch Platforms, and Applications
- 2.4. Analyst Recommendations

3. MARKET DYNAMICS

- 3.1. Market Drivers
 - 3.1.1. Increasing Demand for Satellite Launch Vehicles
 - 3.1.2. Expansion of Defense and Missile Programs
 - 3.1.3. Technological Advancements in Propellants and Motor Design
 - 3.1.4. Other Drivers
- 3.2. Market Restraints
 - 3.2.1. High Production and Development Costs
 - 3.2.2. Stringent Safety and Regulatory Standards
 - 3.2.3. Other Restraints
- 3.3. Market Opportunities
 - 3.3.1. Growing Commercial Space Exploration Initiatives
 - 3.3.2. Adoption of Advanced Materials for Motor Components
 - 3.3.3. Expansion in International Collaborations and Space Programs
 - 3.3.4. Other Opportunities
- 3.4. Market Challenges
 - 3.4.1. Competition from Liquid Rocket Engines
 - 3.4.2. Supply Chain and Raw Material Volatility
 - 3.4.3. Environmental and Disposal Concerns

4. GLOBAL SOLID ROCKET MOTORS MARKET ANALYSIS

- 4.1. Market Size and Forecast (2025–2034)
- 4.2. Market Share Analysis by:
 - 4.2.1. Component
 - 4.2.1.1. Propellant
 - 4.2.1.2. Igniter
 - 4.2.1.3. Thruster/Nozzle
 - 4.2.1.4. Motor Casing and Insulation
 - 4.2.1.5. Others
 - 4.2.2. Launch Platform
 - 4.2.2.1. Airborne
 - 4.2.2.2. Ground-based
 - 4.2.2.3. Naval
 - 4.2.3. Application
 - 4.2.3.1. Satellite Launch Vehicles
 - 4.2.3.2. Missiles
 - 4.2.4. End Use
 - 4.2.4.1. Space Agencies
 - 4.2.4.2. Research Institutes
 - 4.2.4.3. Defense
- 4.3. Technology Trends and Innovations in Solid Rocket Motors
- 4.4. Cost Structure and Value Chain Analysis
- 4.5. Regulatory and Compliance Landscape
- 4.6. SWOT Analysis
- 4.7. Porter's Five Forces Analysis

5. REGIONAL MARKET ANALYSIS

- 5.1. North America
 - 5.1.1. Market Overview
 - 5.1.2. Market Size and Forecast
 - 5.1.3. Key Trends and Developments
 - 5.1.4. Competitive Landscape
- 5.2. Europe
 - 5.2.1. Market Overview
 - 5.2.2. Market Size and Forecast
 - 5.2.3. Key Trends and Developments
 - 5.2.4. Competitive Landscape
- 5.3. Asia Pacific
 - 5.3.1. Market Overview

- 5.3.2. Market Size and Forecast
- 5.3.3. Key Trends and Developments
- 5.3.4. Competitive Landscape
- 5.4. Latin America
 - 5.4.1. Market Overview
 - 5.4.2. Market Size and Forecast
 - 5.4.3. Key Trends and Developments
 - 5.4.4. Competitive Landscape
- 5.5. Middle East & Africa
 - 5.5.1. Market Overview
 - 5.5.2. Market Size and Forecast
 - 5.5.3. Key Trends and Developments
 - 5.5.4. Competitive Landscape

6. COMPETITIVE LANDSCAPE

- 6.1. Market Share Analysis of Key Players
- 6.2. Company Profiles
 - 6.2.1. Northrop Grumman Corporation
 - 6.2.2. Aerojet Rocketdyne Holdings, Inc.
 - 6.2.3. Lockheed Martin Corporation
 - 6.2.4. Raytheon Technologies Corporation
 - 6.2.5. Bharat Dynamics Limited
 - 6.2.6. ISRO Propulsion Complex
 - 6.2.7. ATK Space Systems (Northrop Grumman)
 - 6.2.8. China Aerospace Science and Technology Corporation (CASC)
 - 6.2.9. Rheinmetall AG
 - 6.2.10. Dynetics, Inc.
- 6.3. Strategic Developments: Mergers, Acquisitions, Partnerships
- 6.4. Focus on R&D and Technological Advancements

7. FUTURE OUTLOOK AND MARKET FORECAST

- 7.1. Investment Opportunities and Market Expansion (2025–2034)
- 7.2. Trends Toward More Efficient and Environmentally Compliant Motors
- 7.3. Innovations in Propellant and Component Technologies
- 7.4. Strategic Recommendations for Stakeholders

8. KEY INSIGHTS AND SUMMARY OF FINDINGS

9. FUTURE PROSPECTS FOR THE GLOBAL SOLID ROCKET MOTORS MARKET

List Of Tables

LIST OF TABLES

Table 1: Global Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 2: Global Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 3: Global Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 4: Global Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 5: Global Solid Rocket Motors Market, By Region, 2025–2034 (USD Million)

Table 6: North America Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 7: North America Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 8: North America Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 9: North America Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 10: United States Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 11: United States Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 12: United States Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 13: United States Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 14: Canada Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 15: Canada Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 16: Canada Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 17: Canada Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 18: Europe Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 19: Europe Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 20: Europe Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 21: Europe Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 22: Germany Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 23: Germany Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 24: Germany Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 25: Germany Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 26: UK Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 27: UK Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 28: UK Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 29: UK Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 30: France Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 31: France Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 32: France Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 33: France Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 34: Rest of Europe Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 35: Rest of Europe Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 36: Rest of Europe Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 37: Rest of Europe Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 38: Asia-Pacific Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 39: Asia-Pacific Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 40: Asia-Pacific Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 41: Asia-Pacific Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 42: China Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 43: China Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 44: China Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 45: China Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 46: India Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 47: India Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 48: India Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 49: India Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 50: Japan Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 51: Japan Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 52: Japan Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 53: Japan Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 54: South Korea Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 55: South Korea Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 56: South Korea Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 57: South Korea Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 58: Australia Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 59: Australia Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 60: Australia Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 61: Australia Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 62: Rest of Asia-Pacific Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 63: Rest of Asia-Pacific Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 64: Rest of Asia-Pacific Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 65: Rest of Asia-Pacific Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Table 66: Rest of the World Solid Rocket Motors Market, By Component, 2025–2034 (USD Million)

Table 67: Rest of the World Solid Rocket Motors Market, By Launch Platform, 2025–2034 (USD Million)

Table 68: Rest of the World Solid Rocket Motors Market, By Application, 2025–2034 (USD Million)

Table 69: Rest of the World Solid Rocket Motors Market, By End Use, 2025–2034 (USD Million)

Million)

Table 70: Global Solid Rocket Motors Market, Strategic Developments, 2025–2034

Table 71: Global Solid Rocket Motors Market, Mergers & Acquisitions, 2025–2034

Table 72: Global Solid Rocket Motors Market, New Product Launches, 2025–2034

Table 73: Global Solid Rocket Motors Market, Collaborations & Partnerships,
2025–2034

Table 74: Global Solid Rocket Motors Market, Investment Trends, 2025–2034

Table 75: Global Solid Rocket Motors Market, Technological Advancements,
2025–2034

Table 76: Global Solid Rocket Motors Market, Regulatory Landscape, 2025–2034

Table 77: Global Solid Rocket Motors Market, Future Trends & Opportunities,
2025–2034

Table 78: Global Solid Rocket Motors Market, Competitive Landscape, 2025–2034

List Of Figures

LIST OF FIGURES

Figure 1: Global Solid Rocket Motors Market: Market Segmentation

Figure 2: Global Solid Rocket Motors Market: Research Methodology

Figure 3: Top-Down Approach

Figure 4: Bottom-Up Approach

Figure 5: Data Triangulation and Validation

Figure 6: Global Solid Rocket Motors Market: Drivers, Restraints, Opportunities, and Challenges

Figure 7: Global Solid Rocket Motors Market: Porter's Five Forces Analysis

Figure 8: Global Solid Rocket Motors Market: Value Chain Analysis

Figure 9: Global Solid Rocket Motors Market Share Analysis, By Component, 2025–2034

Figure 10: Global Solid Rocket Motors Market Share Analysis, By Launch Platform, 2025–2034

Figure 11: Global Solid Rocket Motors Market Share Analysis, By Application, 2025–2034

Figure 12: Global Solid Rocket Motors Market Share Analysis, By End Use, 2025–2034

Figure 13: North America Solid Rocket Motors Market Share Analysis, By Component, 2025–2034

Figure 14: North America Solid Rocket Motors Market Share Analysis, By Launch Platform, 2025–2034

Figure 15: North America Solid Rocket Motors Market Share Analysis, By Application, 2025–2034

Figure 16: North America Solid Rocket Motors Market Share Analysis, By End Use, 2025–2034

Figure 17: Europe Solid Rocket Motors Market Share Analysis, By Component, 2025–2034

Figure 18: Europe Solid Rocket Motors Market Share Analysis, By Launch Platform, 2025–2034

Figure 19: Europe Solid Rocket Motors Market Share Analysis, By Application, 2025–2034

Figure 20: Europe Solid Rocket Motors Market Share Analysis, By End Use, 2025–2034

Figure 21: Asia-Pacific Solid Rocket Motors Market Share Analysis, By Component, 2025–2034

Figure 22: Asia-Pacific Solid Rocket Motors Market Share Analysis, By Launch Platform, 2025–2034

Figure 23: Asia-Pacific Solid Rocket Motors Market Share Analysis, By Application, 2025–2034

Figure 24: Asia-Pacific Solid Rocket Motors Market Share Analysis, By End Use, 2025–2034

Figure 25: Middle East & Africa Solid Rocket Motors Market Share Analysis, By Component, 2025–2034

Figure 26: Middle East & Africa Solid Rocket Motors Market Share Analysis, By Launch Platform, 2025–2034

Figure 27: Middle East & Africa Solid Rocket Motors Market Share Analysis, By Application, 2025–2034

Figure 28: Middle East & Africa Solid Rocket Motors Market Share Analysis, By End Use, 2025–2034

Figure 29: South America Solid Rocket Motors Market Share Analysis, By Component, 2025–2034

Figure 30: South America Solid Rocket Motors Market Share Analysis, By Launch Platform, 2025–2034

Figure 31: South America Solid Rocket Motors Market Share Analysis, By Application, 2025–2034

Figure 32: South America Solid Rocket Motors Market Share Analysis, By End Use, 2025–2034

Figure 33: Global Solid Rocket Motors Market: Competitive Benchmarking

Figure 34: Global Solid Rocket Motors Market: Vendor Share Analysis, 2025–2034

Figure 35: Global Solid Rocket Motors Market: Key Player Strategies

Figure 36: Global Solid Rocket Motors Market: Recent Developments and Innovations

Figure 37: Global Solid Rocket Motors Market: Partnerships, Collaborations, and Expansions

Figure 38: Global Solid Rocket Motors Market: Mergers and Acquisitions

Figure 39: Global Solid Rocket Motors Market: SWOT Analysis of Key Players

I would like to order

Product name: Global Solid Rocket Motors Market Size, Share, Trends & Analysis by Component (Propellant, Igniter, Thruster/Nozzle, Motor Casing and Insulation, Others), by Launch Platform (Airborne, Ground-based, Naval), by Application (Satellite Launch Vehicles, Missiles), by End Use (Space Agencies, Research Institutes, Defense) and Region, with Forecasts from 2025 to 2034.

Product link: <https://marketpublishers.com/r/GD6CA34B8885EN.html>

Price: US\$ 3,890.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/GD6CA34B8885EN.html>