

Space Carbon Fiber Composite Market - A Global and Regional Analysis: Focus on Application, End User, Raw Material, Tensile Modulus, Manufacturing Process, and Country Analysis - Analysis and Forecast, 2023-2033

<https://marketpublishers.com/r/SE49B715790BEN.html>

Date: May 2023

Pages: 178

Price: US\$ 5,500.00 (Single User License)

ID: SE49B715790BEN

Abstracts

Space Carbon Fiber Composite Market Overview

The space carbon fiber composite market was valued at \$393.6 million in 2022 and is projected to reach \$1,679.7 million by 2033. The space carbon fiber composite market is expected to be driven by the increasing demand for small satellites with a lightweight profile for communication and Earth observation applications, the growing commercial space sector, and the development of reusable launch vehicles. Additionally, advancements in manufacturing technologies and materials are also key factors that are expected to drive market growth.

Market Lifecycle Stage

The space carbon fiber composite market has gained significant importance over the years. The space carbon fiber composite market is currently in the growth stage, as there is an increasing demand for lightweight, high-strength materials in the space industry. Carbon fiber composites have emerged as a viable alternative to traditional materials due to their superior strength-to-weight ratio and resistance to fatigue and corrosion. Moreover, the development of advanced manufacturing technologies such as automated fiber placement (AFP) and additive manufacturing has enabled the production of complex geometries for space applications while reducing production time and costs. In addition, there is an increasing focus on developing carbon fiber composites with high thermal and radiation resistance, which are crucial for deep space

exploration missions.

Impact

The space carbon fiber composite market is expected to grow significantly in the coming years, driven by various factors such as the development of low Earth orbit satellite constellations, reusable small sat launchers, and multiple interplanetary and deep space missions. However, the high cost of carbon fiber composites and the challenges associated with their manufacturing processes, such as quality control and the need for specialized equipment and specific expertise, pose significant challenges to market growth. The development of new, cost-effective manufacturing technologies and the increasing adoption of carbon fiber composites in various space-based applications are expected to mitigate these challenges and support market growth in the long term.

Market Segmentation

Segmentation 1: by Application

Satellites

Launch Vehicles

Deep Space Exploration

Segmentation 2: by End User

Commercial

Defense

Segmentation 3: by Manufacturing Process

Automated Fiber Placement (ATL/AFP)

Compression Molding

Additive Manufacturing

Segmentation 4: by Raw Material

Pitch-Based

PAN-Based

The PAN-based raw material segment is expected to dominate the market during the forecast period from 2023 to 2033. The factor contributing to this growth is the increasing demand for cost-effective carbon fiber composites, which provide immense strong physical properties.

Segmentation 5: by Tensile Modulus

High-Modulus

Ultrahigh Modulus

The high-modulus segment is expected to lead the global space carbon fiber composite market in terms of tensile modulus. This growth is attributed to the excellent stiffness and high strength-to-weight ratio of high modulus carbon fiber composites.

Segmentation 6: by Region

North America - U.S. and Canada

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

Asia-Pacific - Japan, India, and Rest-of-Asia-Pacific

Rest-of-the-World - U.A.E. and Brazil

In terms of region, North America is estimated to lead the market throughout the forecast period from 2023 to 2033. The factor attributing to the growth of this region is the presence of highly specialized key companies engaged in developing and providing

advanced composites for space applications.

Recent Developments in the Space Carbon Fiber Composite Market

In October 2022, Beyond Gravity received the contract to supply 38 payload fairings for ULA's Vulcan rockets, which will be used to launch the satellites of Amazon's project Kuiper.

In October 2022, Beyond Gravity and HyPrSpace formed a partnership for the development of the orbital micro-launcher OB-1, with the structural composite parts of the rocket based on innovative flexline technology.

In July 2022, Boston Materials and Textron Systems announced a partnership to jointly develop an enhanced thermal protection system (TPS) based on the Z-axis fiber technology to be deployed in hypersonic vehicles and reusable launch vehicles.

In March 2022, Beyond Gravity and Amazon announced a partnership to develop and manufacture customized satellite dispenser systems for Project Kuiper. The project aims to establish a low Earth orbit (LEO) constellation comprising 3,236 satellites.

Demand - Drivers and Limitations

The following are the drivers for the space carbon fiber composite market:

Increase in the Demand for Satellites

Growing Number of Deep Space Exploration Programs

Increase in the Utilization of Carbon Fiber Composite in Small Launch Vehicles

The following are the challenges for the space carbon fiber composite market:

High Production Costs

Utilization of Alternate Materials

How can this report add value to an organization?

Platform/Innovation Strategy: The product section will help the reader understand the various ongoing and upcoming developments in the space carbon fiber composite market. It will also help the readers understand the global potential of different solution markets. The players operating in this market are developing advanced composite material profiles and are deeply engaged in long-term partnerships and collaborations with commercial and government agencies. Moreover, the study also examines the investment scenario in the research and development of the space carbon fiber composite market.

Growth/Marketing Strategy: The space carbon fiber composite market has seen major development activities by key players operating in the market, such as business expansion activities, contracts, mergers, partnerships, and collaborations. The most favored strategy for the companies has been contracts to strengthen their positions in the space carbon fiber composite market. For instance, in October 2022, Beyond Gravity received the contract to supply 38 payload fairings for ULA's Vulcan rockets, which will be used to launch the satellites of Amazon's project Kuiper. Notably, Beyond Gravity and Amazon also announced a partnership to develop and manufacture customized satellite dispenser systems for Project Kuiper.

Competitive Strategy: The study has analyzed and profiled the space carbon fiber composite manufacturers, startups, and emerging players in advanced composite manufacturing in the global space carbon fiber composite market. These companies capture the maximum share in the global space carbon fiber composite market. Moreover, a detailed competitive benchmarking of the companies and organizations operating in the space carbon fiber composite market has been carried out, which will help the reader to understand how players are performing, exhibiting a clear market landscape. In addition to this, comprehensive competitive strategies such as partnerships, agreements, and collaborations will aid the reader in understanding the untapped revenue pockets in the market.

Key Market Players and Competition Synopsis

The companies that are profiled have been selected based on inputs gathered from primary experts and analysis of the company's coverage, product portfolio, and market penetration.

In 2022, the top segment players leading the market included established players, constituting 75% of the presence in the market. During the same timeframe, emerging market participants included startup entities that accounted for approximately 25% of the presence in the market.

Key Companies Profiled

Applied Composites

Airborne

ACPT Inc. (Advanced Composite Products and Technology)

Boston Materials, Inc

CarboSpaceTech GmbH

CPI AdamWorks, LLC

CST Composites

Calian Group Ltd.

Hexcel Corporation

Hanwha Cimarron

Oxeon AB

Peak Technology

Rockwest Composites, Inc.

RUAG Group

SGL Carbon SE

Teijin Limited

TRB

Toray Advanced Composites

SpaceX

Blue Origin

Maxar Technologies

ROCKET LAB USA

Thales Group

Airbus S.A.S

ArianeGroup

Boeing

Contents

1 MARKETS

1.1 Industry Outlook

1.1.1 Composite Materials for Space Applications: Overview

1.1.2 Trends Fueling Space Carbon Fiber Composite Market

1.1.3 Ongoing and Upcoming Programs

1.1.3.1 European Union Space Carbon Project

1.1.3.2 NASA's Super Lightweight Aerospace Composites (SAC)

1.1.3.3 Oak Ridge National Laboratory Carbon-Carbon Composites

1.1.4 Key Composite Suppliers

1.2 Business Dynamics

1.2.1 Business Drivers

1.2.1.1 Increase in the Demand for Satellites

1.2.1.2 Growing Number of Deep Space Exploration Programs

1.2.1.3 Increase in the Utilization of Carbon Fiber Composite in Small Launch

Vehicles

1.2.2 Business Challenges

1.2.2.1 High Production Costs

1.2.2.2 Utilization of Alternate Materials

1.2.3 Business Strategies

1.2.4 Business Strategies

1.2.4.1 New Product Launch

1.2.5 Corporate Strategies

1.2.5.1 Partnerships

1.2.6 Business Opportunities

1.2.6.1 Opportunities for Satellite Manufacturers

1.2.6.2 Opportunities in the Launch Vehicle Manufacturing

1.2.6.3 Opportunities in Deep Space Exploration

2 APPLICATION

2.1 Global Space Carbon Fiber Composite Market (by Application)

2.1.1 Market Overview

2.1.1.1 Demand Analysis of the Global Space Carbon Fiber Composite Market (by Application)

2.1.2 Satellites

2.1.2.1 Small Satellites (0-500kg)

- 2.1.2.2 Medium Satellites (500-1,000kg)
- 2.1.2.3 Large Satellites (1,000kg and Above)
- 2.1.3 Launch Vehicles
 - 2.1.3.1 Small and Medium-Lift Launch Vehicles
 - 2.1.3.2 Heavy and Super Heavy-Lift Launch Vehicles
- 2.1.4 Deep Space Exploration
 - 2.1.4.1 Lander
 - 2.1.4.2 Rover
 - 2.1.4.3 Orbiter
- 2.2 Global Space Carbon Fiber Composite Market (by End User)
 - 2.2.1 Market Overview
 - 2.2.1.1 Demand Analysis of the Global Space Carbon Fiber Composite Market (by End User)
 - 2.2.2 Commercial
 - 2.2.3 Defense

3 PRODUCT

- 3.1 Global Space Carbon Fiber Composite Market (by Raw Material)
 - 3.1.1 Market Overview
 - 3.1.1.1 Demand Analysis of the Global Space Carbon Fiber Composite Market (by Raw Material)
 - 3.1.2 Pitch-Based
 - 3.1.3 PAN-Based
- 3.2 Global Space Carbon Fiber Composite Market (by Tensile Modulus)
 - 3.2.1 Market Overview
 - 3.2.1.1 Demand Analysis of the Global Space Carbon Fiber Composite Market (by Tensile Modulus)
 - 3.2.1.2 High-Modulus
 - 3.2.1.3 Ultrahigh Modulus
- 3.3 Global Space Carbon Fiber Composite Market (by Manufacturing Process)
 - 3.3.1 Market Overview
 - 3.3.1.1 Demand Analysis of the Global Space Carbon Fiber Composite Market (by Manufacturing Process)
 - 3.3.2 Automated Fiber Placement (ATL/AFP)
 - 3.3.2.1 Satellites
 - 3.3.2.1.1 Small Satellites (0-500 kg)
 - 3.3.2.1.2 Medium Satellites (501-1000 kg)
 - 3.3.2.1.3 Large Satellites (1,000 kg and Above)

- 3.3.2.2 Launch Vehicles
 - 3.3.2.2.1 Small and Medium-Lift Launch Vehicles
 - 3.3.2.2.2 Heavy and Super Heavy-Lift Launch Vehicles
- 3.3.2.3 Deep Space Exploration
- 3.3.3 Compression Molding
 - 3.3.3.1 Satellites
 - 3.3.3.1.1 Small Satellites (0-500 kg)
 - 3.3.3.1.2 Medium Satellites (501-1,000 kg)
 - 3.3.3.1.3 Large Satellites (1,000 kg and Above)
 - 3.3.3.2 Launch Vehicles
 - 3.3.3.2.1 Small and Medium-Lift Launch Vehicles
 - 3.3.3.2.2 Heavy and Super-Heavy Lift Launch Vehicles
 - 3.3.3.3 Deep Space Exploration
- 3.3.4 Additive Manufacturing
 - 3.3.4.1 Satellites
 - 3.3.4.1.1 Small Satellites (0-500 kg)
 - 3.3.4.1.2 Medium Satellites (501-1,000 kg)
 - 3.3.4.1.3 Large Satellites (1,000 kg and Above)
 - 3.3.4.2 Launch Vehicles
 - 3.3.4.2.1 Small and Medium-Lift Launch Vehicles
 - 3.3.4.2.2 Heavy and Super-Heavy Lift Launch Vehicles
 - 3.3.4.3 Deep Space Exploration

4 REGION

- 4.1 Global Space Carbon Fiber Composite Market (by Region)
- 4.2 North America
 - 4.2.1 Market
 - 4.2.1.1 Key Space Carbon Fiber Composite Players in North America
 - 4.2.1.2 Business Drivers
 - 4.2.1.3 Business Challenges
 - 4.2.2 Application
 - 4.2.2.1 North America Space Carbon Fiber Composite Market (by Application)
 - 4.2.3 North America (by Country)
 - 4.2.3.1 U.S.
 - 4.2.3.1.1 Markets
 - 4.2.3.1.1.1 Key Space Carbon Fiber Composite Players in the U.S.
 - 4.2.3.1.2 Application
 - 4.2.3.1.2.1 U.S. Space Carbon Fiber Composite Market (by Application)

- 4.2.3.2 Canada
 - 4.2.3.2.1 Markets
 - 4.2.3.2.1.1 Key Space Carbon Fiber Composite Players in Canada
 - 4.2.3.2.2 Application
 - 4.2.3.2.2.1 Canada Space Carbon Fiber Composite Market (by Application)
- 4.3 Europe
 - 4.3.1 Markets
 - 4.3.1.1 Key Space Carbon Fiber Composite Players in Europe
 - 4.3.1.2 Business Drivers
 - 4.3.1.3 Business Challenges
 - 4.3.2 Application
 - 4.3.2.1 Europe Space Carbon Fiber Composite Market (by Application)
 - 4.3.3 Europe (by Country)
 - 4.3.3.1 Germany
 - 4.3.3.1.1 Markets
 - 4.3.3.1.1.1 Key Space Carbon Fiber Composite Players in Germany
 - 4.3.3.1.2 Application
 - 4.3.3.1.2.1 Germany Space Carbon Fiber Composite Market (by Application)
 - 4.3.3.2 France
 - 4.3.3.2.1 Application
 - 4.3.3.2.1.1 France Space Carbon Fiber Composite Market (by Application)
 - 4.3.3.3 Russia
 - 4.3.3.3.1 Application
 - 4.3.3.3.1.1 Russia Space Carbon Fiber Composite Market (by Application)
 - 4.3.3.4 U.K.
 - 4.3.3.4.1 Market
 - 4.3.3.4.1.1 Key Space Carbon Fiber Composite Players in the U.K.
 - 4.3.3.4.2 Application
 - 4.3.3.4.2.1 U.K. Space Carbon Fiber Composite Market (by Application)
 - 4.3.3.5 Rest-of-Europe
 - 4.3.3.5.1 Market
 - 4.3.3.5.1.1 Key Space Carbon Fiber Composite Players in Rest-of-Europe
 - 4.3.3.5.2 Application
 - 4.3.3.5.2.1 Rest-of-Europe Space Carbon Fiber Composite Market (by Application)
 - 4.4 Asia-Pacific
 - 4.4.1 Markets
 - 4.4.1.1 Key Space Carbon Fiber Composite Players in Asia-Pacific
 - 4.4.1.2 Business Drivers
 - 4.4.1.3 Business Challenges

4.4.2 Application

4.4.2.1 Asia-Pacific Space Carbon Fiber Composite Market (by Application)

4.4.3 Asia-Pacific (by Country)

4.4.3.1 India

4.4.3.1.1 Market

4.4.3.1.1.1 Key Space Carbon Fiber Composite Players in India

4.4.3.1.2 Application

4.4.3.1.2.1 India Space Carbon Fiber Composite Market (by Application)

4.4.3.2 Japan

4.4.3.2.1 Market

4.4.3.2.1.1 Key Space Carbon Fiber Composite Players in Japan

4.4.3.2.2 Application

4.4.3.2.2.1 Japan Space Carbon Fiber Composite Market (by Application)

4.4.3.3 Rest-of-Asia-Pacific

4.4.3.3.1 Application

4.4.3.3.1.1 Rest-of-Asia-Pacific Space Carbon Fiber Composite Market (by Application)

4.5 Rest-of-the-World

4.5.1 Market

4.5.1.1 Business Drivers

4.5.1.2 Business Challenges

4.5.2 Rest-of-the-World (by Country)

4.5.2.1 U.A.E.

4.5.2.1.1 Application

4.5.2.1.1.1 U.A.E Space Carbon Fiber Composite Market (by Application)

4.5.2.2 Brazil

4.5.2.2.1 Application

4.5.2.2.1.1 Brazil Space Carbon Fiber Composite Market (by Application)

5 MARKETS – COMPETITIVE BENCHMARKING & COMPANY PROFILES

5.1 Market Share Analysis

5.2 Composite Companies

5.2.1 Applied Composites

5.2.1.1 Company Overview

5.2.1.1.1 Role of Applied Composites in the Global Space Carbon Fiber Composite Market

5.2.1.1.2 Customers

5.2.1.1.3 Product Portfolio

- 5.2.1.2 Corporate Strategies
 - 5.2.1.2.1 Partnerships, Collaborations, Agreements, and Contracts
- 5.2.1.3 Analyst View
- 5.2.2 Airborne
 - 5.2.2.1 Company Overview
 - 5.2.2.1.1 Role of Airborne in the Global Space Carbon Fiber Composite Market
 - 5.2.2.1.2 Customers
 - 5.2.2.1.3 Product Portfolio
 - 5.2.2.2 Business Strategies
 - 5.2.2.2.1 Investment
 - 5.2.2.3 Corporate Strategies
 - 5.2.2.3.1 Partnerships, Collaborations, Agreements, and Contracts
 - 5.2.2.4 Analyst View
- 5.2.3 ACPT Inc. (Advanced Composite Products and Technology)
 - 5.2.3.1 Company Overview
 - 5.2.3.1.1 Role of ACPT Inc. in the Global Space Carbon Fiber Composite Market
 - 5.2.3.1.2 Customers
 - 5.2.3.1.3 Product Portfolio
 - 5.2.3.2 Business Strategies
 - 5.2.3.2.1 Investment
 - 5.2.3.3 Analyst View
- 5.2.4 Boston Materials, Inc
 - 5.2.4.1 Company Overview
 - 5.2.4.1.1 Role of Boston Materials, Inc in the Global Space Carbon Fiber Composite Market
 - 5.2.4.1.2 Customers
 - 5.2.4.1.3 Product Portfolio
 - 5.2.4.2 Business Strategies
 - 5.2.4.2.1 Investment
 - 5.2.4.3 Corporate Strategies
 - 5.2.4.3.1 Partnerships, Collaborations, Agreements, and Contracts
 - 5.2.4.4 Analyst View
- 5.2.5 CarboSpaceTech GmbH
 - 5.2.5.1 Company Overview
 - 5.2.5.1.1 Role of CarboSpaceTech GmbH in the Global Space Carbon Fiber Composite Market
 - 5.2.5.1.2 Customers
 - 5.2.5.1.3 Product Portfolio
 - 5.2.5.2 Analyst View

5.2.6 CPI AdamWorks, LLC

5.2.6.1 Company Overview

5.2.6.1.1 Role of CPI AdamWorks, LLC in the Global Space Carbon Fiber

Composite Market

5.2.6.1.2 Customers

5.2.6.1.3 Product Portfolio

5.2.6.2 Corporate Strategies

5.2.6.2.1 Partnerships, Collaborations, Agreements, and Contracts

5.2.6.3 Analyst View

5.2.7 CST Composites

5.2.7.1 Company Overview

5.2.7.1.1 Role of CST Composites in the Global Space Carbon Fiber Composite

Market

5.2.7.1.2 Customers

5.2.7.1.3 Product Portfolio

5.2.7.2 Analyst View

5.2.8 Calian Group Ltd.

5.2.8.1 Company Overview

5.2.8.1.1 Role of Calian Group Ltd. in the Global Space Carbon Fiber Composite

Market

5.2.8.1.2 Customers

5.2.8.1.3 Product Portfolio

5.2.8.2 Analyst View

5.2.9 Hexcel Corporation

5.2.9.1 Company Overview

5.2.9.1.1 Role of Hexcel Corporation in the Global Space Carbon Fiber Composite

Market

5.2.9.1.2 Customers

5.2.9.1.3 Product Portfolio

5.2.9.2 Corporate Strategies

5.2.9.2.1 Partnerships, Collaborations, Agreements, Investments, and Contracts

5.2.9.3 Analyst View

5.2.10 Hanwha Cimarron

5.2.10.1 Company Overview

5.2.10.1.1 Role of Hanwha Cimarron in the Global Space Carbon Fiber Composite

Market

5.2.10.1.2 Customers

5.2.10.1.3 Product Portfolio

5.2.10.2 Corporate Strategies

- 5.2.10.2.1 Partnerships, Collaborations, Agreements, Investments, and Contracts
- 5.2.10.3 Analyst View
- 5.2.11 Oxeon AB
 - 5.2.11.1 Company Overview
 - 5.2.11.1.1 Role of Oxeon AB in the Global Space Carbon Fiber Composite Market
 - 5.2.11.1.2 Customers
 - 5.2.11.1.3 Product Portfolio
 - 5.2.11.2 Business Strategies
 - 5.2.11.2.1 New Product Launches
 - 5.2.11.3 Analyst View
- 5.2.12 Peak Technology
 - 5.2.12.1 Company Overview
 - 5.2.12.1.1 Role of Peak Technology in the Global Space Carbon Fiber Composite Market
 - 5.2.12.1.2 Customers
 - 5.2.12.1.3 Product Portfolio
 - 5.2.12.2 Corporate Strategies
 - 5.2.12.2.1 Partnerships, Collaborations, Agreements, and Contracts
 - 5.2.12.3 Analyst View
- 5.2.13 Rockwest Composites, Inc.
 - 5.2.13.1 Company Overview
 - 5.2.13.1.1 Role of Rockwest Composites, Inc. in the Global Space Carbon Fiber Composite Market
 - 5.2.13.1.2 Customers
 - 5.2.13.1.3 Product Portfolio
 - 5.2.13.2 Analyst View
- 5.2.14 RUAG Group (Beyond Gravity)
 - 5.2.14.1 Company Overview
 - 5.2.14.1.1 Role of RUAG Group (Beyond Gravity) in the Global Space Carbon Fiber Composite Market
 - 5.2.14.1.2 Customers
 - 5.2.14.1.3 Product Portfolio
 - 5.2.14.2 Corporate Strategies
 - 5.2.14.2.1 Partnerships, Collaborations, Agreements, and Contracts
 - 5.2.14.3 Analyst View
- 5.2.15 SGL Carbon SE
 - 5.2.15.1 Company Overview
 - 5.2.15.1.1 Role of SGL Carbon SE in the Global Space Carbon Fiber Composite Market

- 5.2.15.1.2 Customers
- 5.2.15.1.3 Product Portfolio
- 5.2.15.2 Analyst View
- 5.2.16 Teijin Limited
 - 5.2.16.1 Company Overview
 - 5.2.16.1.1 Role of Teijin Limited in the Global Space Carbon Fiber Composite Market
 - 5.2.16.1.2 Product Portfolio
 - 5.2.16.2 Corporate Strategies
 - 5.2.16.2.1 Acquisition
 - 5.2.16.3 Analyst View
- 5.2.17 TRB
 - 5.2.17.1 Company Overview
 - 5.2.17.1.1 Role of TRB in the Global Space Carbon Fiber Composite Market
 - 5.2.17.1.2 Customers
 - 5.2.17.1.3 Product Portfolio
 - 5.2.17.2 Corporate Strategies
 - 5.2.17.2.1 Partnerships, Collaborations, Agreements, and Contracts
 - 5.2.17.3 Analyst View
- 5.2.18 Toray Advanced Composites
 - 5.2.18.1 Company Overview
 - 5.2.18.1.1 Role of Toray Advanced Composites in the Global Space Carbon Fiber Composite Market
 - 5.2.18.1.2 Customers
 - 5.2.18.1.3 Product Portfolio
 - 5.2.18.2 Corporate Strategies
 - 5.2.18.2.1 Partnerships, Collaborations, Agreements, and Contracts
 - 5.2.18.3 Analyst View
- 5.3 Satellite and Launch Vehicle Companies
 - 5.3.1 SpaceX
 - 5.3.1.1 Company Overview
 - 5.3.1.1.1 Role of SpaceX in the Global Space Carbon Fiber Composite Market
 - 5.3.1.1.2 Product Portfolio
 - 5.3.1.2 Business Strategies
 - 5.3.1.2.1 New Developments
 - 5.3.1.3 Corporate Strategies
 - 5.3.1.3.1 Partnerships, Collaborations, Agreements, and Contracts
 - 5.3.1.4 Analyst View
 - 5.3.2 Blue Origin

- 5.3.2.1 Company Overview
 - 5.3.2.1.1 Role of Blue Origin in the Global Space Carbon Fiber Composite Market
 - 5.3.2.1.2 Product Portfolio
- 5.3.2.2 Corporate Strategies
 - 5.3.2.2.1 Partnerships
- 5.3.2.3 Analyst View
- 5.3.3 Maxar Technologies
 - 5.3.3.1 Company Overview
 - 5.3.3.1.1 Role of Maxar Technologies in the Global Space Carbon Fiber Composite Market
 - 5.3.3.1.2 Product Portfolio
 - 5.3.3.2 Corporate Strategies
 - 5.3.3.2.1 Partnerships, Collaborations, Agreements, Investments, and Contracts
 - 5.3.3.3 Analyst View
- 5.3.4 ROCKET LAB USA
 - 5.3.4.1 Company Overview
 - 5.3.4.1.1 Role of ROCKET LAB USA in the Global Space Carbon Fiber Composite Market
 - 5.3.4.1.2 Product Portfolio
 - 5.3.4.2 Corporate Strategies
 - 5.3.4.2.1 Partnerships, Collaborations, Agreements, Contracts, Mergers, and Acquisitions
 - 5.3.4.3 Analyst View
- 5.3.5 Thales Group
 - 5.3.5.1 Company Overview
 - 5.3.5.1.1 Role of Thales Group in the Global Space Carbon Fiber Composite Market
 - 5.3.5.1.2 Product Portfolio
 - 5.3.5.2 Corporate Strategies
 - 5.3.5.2.1 Partnerships, Collaborations, Agreements, Investments, and Contracts
 - 5.3.5.3 Analyst View
- 5.3.6 Airbus S.A.S
 - 5.3.6.1 Company Overview
 - 5.3.6.1.1 Role of Airbus S.A.S in the Global Space Carbon Fiber Composite Market
 - 5.3.6.1.2 Product Portfolio
 - 5.3.6.2 Corporate Strategies
 - 5.3.6.2.1 Partnerships, Collaborations, Agreements, and Contracts
 - 5.3.6.3 Analyst View
- 5.3.7 ArianeGroup
 - 5.3.7.1 Company Overview

- 5.3.7.1.1 Role of ArianeGroup in the Global Space Carbon Fiber Composite Market
- 5.3.7.1.2 Product Portfolio
- 5.3.7.2 Corporate Strategies
 - 5.3.7.2.1 Partnerships, Collaborations, Agreements, Investments, and Contracts
- 5.3.7.3 Analyst View
- 5.3.8 Boeing
 - 5.3.8.1 Company Overview
 - 5.3.8.1.1 Role of Boeing in the Global Space Carbon Fiber Composite Market
 - 5.3.8.2 Product Portfolio
 - 5.3.8.3 Corporate Strategies
 - 5.3.8.3.1 Partnerships, Collaborations, Agreements, Investments, and Contracts
 - 5.3.8.4 Analyst View

6 GROWTH OPPORTUNITIES AND RECOMMENDATIONS

- 6.1 Carbon Fiber Composite Manufacturers
 - 6.1.1 Growth Opportunity 1: Enhanced Material Properties
 - 6.1.2 Recommendations
- 6.2 Carbon Fiber Composite Component Manufacturers
 - 6.2.1 Growth Opportunity: Increase in Utilization of Carbon Fiber Composites for Space Applications
 - 6.2.2 Recommendations
- 6.3 Composite Component Manufacturers
 - 6.3.1 Growth Opportunity: Increasing Carbon Fiber Composites Demand for Secondary Applications
 - 6.3.2 Recommendations

7 RESEARCH METHODOLOGY

- 7.1 Factors for Data Prediction and Modeling

List Of Figures

LIST OF FIGURES

- Figure 1: Global Space Carbon Fiber Composite Market, \$Million, 2022 and 2033
- Figure 2: Global Space Carbon Fiber Composite Market (by Application), \$Million, 2022 and 2033
- Figure 3: Global Space Carbon Fiber Composite Market (by Raw Material), \$Million, 2022 and 2033
- Figure 4: Global Space Carbon Fiber Composite Market (by Tensile Modulus), \$Million, 2022 and 2033
- Figure 5: Global Space Carbon Fiber Composite Market (by Region), \$Million, 2023
- Figure 6: Space Carbon Fiber Composite Market Coverage
- Figure 7: Key Composite Suppliers for Satellite Application
- Figure 8: Key Composite Suppliers for Launch Vehicle Application
- Figure 9: Global Space Carbon Fiber Composite Market: Business Dynamics
- Figure 10: Global Satellite Launch Forecast, Volume (Unit), 2021-2032
- Figure 11: Share of Key Market Strategies and Developments, January 2020-April 2023
- Figure 12: Global Space Carbon Fiber Composite Market (by Application)
- Figure 13: Global Space Carbon Fiber Composite Market (by End User)
- Figure 14: Global Space Carbon Fiber Composite Market (by Raw Material)
- Figure 15: Global Space Carbon Fiber Composite Market (by Tensile Modulus)
- Figure 16: Global Space Carbon Fiber Composite Market (by Manufacturing Process)
- Figure 17: Global Space Carbon Fiber Composite Market Share (by Company), 2022
- Figure 18: Thales Group: R&D Analysis, \$Million, 2020-2021
- Figure 19: Airbus: R&D Analysis, \$Million, 2019-2021
- Figure 20: Boeing: R&D Analysis, \$Million, 2019-2021
- Figure 21: Research Methodology
- Figure 22: Top-Down and Bottom-Up Approach
- Figure 23: Assumptions and Limitations

List Of Tables

LIST OF TABLES

Table 1: Aerospace-Grade Materials Cost

Table 2: New Product Development, January 2018-April 2023

Table 3: Investments, January 2018-April 2023

Table 4: Partnerships, Collaborations, Agreements, and Contracts, 2020-2022

Table 5: Mergers and Acquisitions, January 2019-April 2023

Table 6: Global Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 7: Global Space Carbon Fiber Composite Market (by Application), Volume (in Tons), 2022-2033

Table 8: Global Space Carbon Fiber Composite Market (by Satellite Application), \$Million, 2022-2033

Table 9: Global Space Carbon Fiber Composite Market (by Satellite Application), Volume (in Tons), 2022-2033

Table 10: Global Space Carbon Fiber Composite Market (by Launch Vehicle Application), \$Million, 2022-2033

Table 11: Global Space Carbon Fiber Composite Market (by Launch Vehicle Application), Volume (in Tons), 2022-2033

Table 12: Global Space Carbon Fiber Composite Market (by End User), \$Million, 2022-2033

Table 13: Global Space Carbon Fiber Composite Market (by Raw Material), \$Million, 2022-2033

Table 14: Global Space Carbon Fiber Composite Market (by Tensile Modulus), \$Million, 2022-2033

Table 15: Global Space Carbon Fiber Composite Market (by Manufacturing Process), \$Million, 2022-2033

Table 16: Global Space Carbon Fiber Composite Market (by Region), \$Million, 2022-2033

Table 17: North America Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 18: U.S. Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 19: Canada Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 20: Europe Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 21: Germany Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 22: France Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 23: Russia Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 24: U.K. Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 25: Rest-of-Europe Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 26: Asia-Pacific Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 27: India Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 28: Japan Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 29: Rest-of-Asia-Pacific Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 30: U.A.E. Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 31: Brazil Space Carbon Fiber Composite Market (by Application), \$Million, 2022-2033

Table 32: Applied Composites: Product Portfolio

Table 33: Applied Composites: Partnerships, Collaborations, Agreements, and Contracts

Table 34: Airborne: Product Portfolio

Table 35: Airborne: Investment

Table 36: Airborne: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 37: ACPT Inc.: Product Portfolio

Table 38: ACPT Inc.: Investment

Table 39: Boston Materials, Inc: Investment

Table 40: Boston Materials, Inc: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 41: CarboSpaceTech GmbH: Product Portfolio

Table 42: CPI AdamWorks, LLC: Product Portfolio

Table 43: CPI AdamWorks, LLC: Partnerships, Collaborations, Agreements, and Contracts

Table 44: Calian Group Ltd.: Product Portfolio

Table 45: Hexcel Corporation: Product Portfolio

Table 46: Hexcel Corporation: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 47: Hanwha Cimarron: Product Portfolio

Table 48: Hanwha Cimarron: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 49: Oxeon AB: Product Portfolio

Table 50: Oxeon AB: New Product Launches

Table 51: Peak Technology: Product Portfolio

Table 52: Peak Technology: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 53: Rockwest Composites, Inc.: Product Portfolio

Table 54: RUAG Group: Product Portfolio

Table 55: RUAG Group: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 56: SGL Carbon SE: Product Portfolio

Table 57: Teijin Limited: Product Portfolio

Table 58: Teijin Limited: Acquisition

Table 59: TRB: Product Portfolio

Table 60: TRB: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 61: Toray Advanced Composites: Product Portfolio

Table 62: Toray Advanced Composites: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 63: SpaceX: Product Portfolio

Table 64: SpaceX: New Developments

Table 65: SpaceX: Partnerships, Collaborations, Agreements, and Contracts

Table 66: Blue Origin: Product Portfolio

Table 67: Blue Origin: Partnerships

Table 68: Maxar Technologies: Product Portfolio

Table 69: Maxar Technologies: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 70: ROCKET LAB USA: Product Portfolio

Table 71: ROCKET LAB USA: Partnerships, Collaborations, Agreements, Contracts, Mergers, and Acquisitions

Table 72: Thales Group: Product Portfolio

Table 73: Thales: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 74: Airbus S.A.S: Product Portfolio

Table 75: Airbus S.A.S: Partnerships, Collaborations, Agreements, and Contracts

Table 76: ArianeGroup: Product and Service Portfolio

Table 77: ArianeGroup: Partnerships, Collaborations, Agreements, Investments, and Contracts

Table 78: Boeing: Product Portfolio

Table 79: Boeing: Partnerships, Collaborations, Agreements, Investments, and Contracts

I would like to order

Product name: Space Carbon Fiber Composite Market - A Global and Regional Analysis: Focus on Application, End User, Raw Material, Tensile Modulus, Manufacturing Process, and Country Analysis - Analysis and Forecast, 2023-2033

Product link: <https://marketpublishers.com/r/SE49B715790BEN.html>

Price: US\$ 5,500.00 (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/SE49B715790BEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970