

Rail Composites Market by Fiber Type (Glass Fiber, Carbon Fiber), Resin Type (Polyester, Phenolic, Epoxy, Vinyl Ester), Manufacturing Process (Lay-up, Injection Molding, Compression Molding, RTM), Application, & Region - Global Forecast to 2028

<https://marketpublishers.com/r/R6E5CA85A8DEN.html>

Date: March 2024

Pages: 209

Price: US\$ 4,950.00 (Single User License)

ID: R6E5CA85A8DEN

Abstracts

The rail composites market is projected to grow from USD 1.7 billion in 2023 to USD 2.4 billion by 2028, at a CAGR of 7.2% during the forecast period. Almost all composites used in the rail industry are manufactured using thermosetting resin due to their high resistance to high temperature. Phenolic resin obtained by the reaction of phenols and aldehydes. Phenolic resins have good fire, smoke, and toxic (FST) resistant properties; hence, used widely in the rail applications. Phenolic resin is used in the manufacturing of ceilings, floors, bulkheads, and stairs among other applications.

“Filament winding manufacturing process is expected to register highest CAGR in rail composites market during forecasted period.”

Filament winding is an automated open molding process in which a rotating mandrel is used as a mold to produce an inner surface and a laminate surface on the outside of the product. This process offers high fiber loading and produces high strength-to-weight ratio laminates. It is a quick and economical method for manufacturing rail composites. This process is automated and used to make engineered structures. It produces hollow or circular components.

“In terms of value, interior components application accounted for the largest share of the overall rail composites market.”

Composites get widely used in manufacturing ducts, seats, panels, and many other

interior and exterior components in the rail industry. Headrest back panels, seats, luggage bins can be produced from glass fiber composites. Composite modules, such as trays, grabs handles, and seat holders can be manufactured from natural fiber composites, which can give them an aesthetic look and feel, apart from being low cost. Cooling fan blades, such as ventilator fan blades, cooling fan with butt blades, cooling ventilators with bar blades can be manufactured with composites.

“During the forecast period, the rail composites market in Europe region is projected to register second-highest CAGR.”

Europe is projected to be the second-fastest-growing region the rail composites market during forecasted years. Most of the European government owned rail companies provides high-speed rail (HSR) service. In many European countries inter-country HSR network is operational. The EU commission is planning to allocate some part of community funds for the development of HSR within the trans-Europe network. This expansion plan of HSR network is estimated to increasing the demand for composites in rail applications.

This study has been validated through primary interviews with industry experts globally. These primary sources have been divided into the following three categories:

By Company Type- Tier 1- 40%, Tier 2- 33%, and Tier 3- 27%

By Designation- C Level- 50%, Director Level- 30%, and Others- 20%

By Region- North America- 15%, Europe- 50%, Asia Pacific (APAC) - 20%, RoW-15

The report provides a comprehensive analysis of company profiles:

Prominent companies include Gurit Holdings AG (Switzerland), Hexcel Corporation (US), 3A Composites (Switzerland), Toray Industries, Inc. (Japan), Solvay (Belgium), Teijin Limited (Japan), Premier Composite Technologies (UAE), Dartford Composites Ltd. (UK), Exel Composites (Finland), Avient Corporation (US), Kinenco Limited (India), BASF SE (Germany), AVIC Cabin Systems (UK), BFG International (Bahrain), and Reliance Industries Ltd. (India).

Research Coverage

Rail Composites Market by Fiber Type (Glass Fiber, Carbon Fiber), Resin Type (Polyester, Phenolic, Epoxy, Viny...

This research report categorizes the rail composites Market by Fiber Type (Carbon Fiber, Glass Fiber, and Others), Resin Type (Polyester, Phenolic, Epoxy, Vinyl Ester, and Others), Manufacturing Process (Lay-up, Filament Winding, Injection Molding, Pultrusion, RTM, Compression Molding, And Others), Application (Exterior Components, Interior Components, and Others), and Region (North America, Europe, Asia Pacific, and Rest of the World). The scope of the report includes detailed information about the major factors influencing the growth of the rail composites market, such as drivers, restraints, challenges, and opportunities. A thorough examination of the key industry players has been conducted in order to provide insights into their business overview, solutions, and services, key strategies, contracts, partnerships, and agreements. New product and service launches, mergers and acquisitions, and recent developments in the rail composites market are all covered. This report includes a competitive analysis of upcoming startups in the rail composites market ecosystem.

Reasons to buy this report:

The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall rail composites market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers (Increasing demand for high-speed rails, aesthetic properties and safety), restraints (High processing cost, concerns about recyclability), opportunities (Increasing demand from emerging countries, high adoption in rail ties, sleeper and composite bridges), and challenges (Development of low-cost manufacturing technologies) influencing the growth of the rail composites market

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the rail composites market

Market Development: Comprehensive information about lucrative markets – the

report analyses the rail composites market across varied regions.

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the rail composites market

Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like Gurit Holdings AG (Switzerland), Hexcel Corporation (US), 3A Composites (Switzerland), Toray Industries, Inc. (Japan), Solvay (Belgium), Teijin Limited (Japan), Premier Composite Technologies (UAE), Dartford Composites Ltd. (UK), Exel Composites (Finland), Avient Corporation (US), Kinenco Limited (India), BASF SE (Germany), AVIC Cabin Systems (UK), BFG International (Bahrain), and Reliance Industries Ltd. (India). among others in the rail composites market.

Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES

1.2 MARKET DEFINITION

1.3 INCLUSIONS & EXCLUSIONS

1.4 MARKET SCOPE

FIGURE 1 RAIL COMPOSITES MARKET SEGMENTATION

1.4.1 REGIONS COVERED

1.4.2 YEARS CONSIDERED

1.5 CURRENCY

1.6 UNITS CONSIDERED

1.7 LIMITATIONS

1.8 STAKEHOLDERS

1.9 SUMMARY OF CHANGES

1.9.1 IMPACT OF RECESSION

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 2 RAIL COMPOSITES MARKET: RESEARCH DESIGN

2.1.1 SECONDARY DATA

2.1.2 PRIMARY DATA

2.1.2.1 Key primary participants

2.1.2.2 Breakdown of primary interviews

2.1.2.3 Key industry insights

2.2 IMPACT OF RECESSION

2.3 MARKET SIZE ESTIMATION

2.3.1 BOTTOM-UP APPROACH

FIGURE 3 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH

2.3.2 TOP-DOWN APPROACH

FIGURE 4 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH

2.4 BASE NUMBER CALCULATION

2.4.1 APPROACH 1: SUPPLY-SIDE ANALYSIS

FIGURE 5 METHODOLOGY FOR SUPPLY-SIDE SIZING OF RAIL COMPOSITES MARKET

2.4.2 APPROACH 2: DEMAND-SIDE ANALYSIS

FIGURE 6 METHODOLOGY FOR DEMAND-SIDE SIZING OF RAIL COMPOSITES

MARKET

2.5 MARKET FORECAST APPROACH

2.5.1 SUPPLY SIDE

2.5.2 DEMAND SIDE

2.6 DATA TRIANGULATION

FIGURE 7 RAIL COMPOSITES MARKET: DATA TRIANGULATION

2.7 FACTOR ANALYSIS

2.8 RESEARCH ASSUMPTIONS

2.9 RESEARCH LIMITATIONS

2.10 ASSOCIATED RISKS

3 EXECUTIVE SUMMARY

FIGURE 8 GLASS FIBER COMPOSITES LED OVERALL RAIL COMPOSITES MARKET IN 2022

FIGURE 9 PHENOLIC RESIN ACCOUNTED FOR LARGEST SHARE OF RAIL COMPOSITES MARKET IN 2022

FIGURE 10 LAY-UP MANUFACTURING PROCESS ACCOUNTED FOR LARGEST SHARE IN 2022

FIGURE 11 INTERIOR COMPONENTS SEGMENT DOMINATED RAIL COMPOSITES MARKET IN 2022

FIGURE 12 ASIA PACIFIC LED RAIL COMPOSITES MARKET IN 2022

4 PREMIUM INSIGHTS

4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN RAIL COMPOSITES MARKET

FIGURE 13 SIGNIFICANT GROWTH EXPECTED IN RAIL COMPOSITES MARKET BETWEEN 2023 AND 2028

4.2 RAIL COMPOSITES MARKET, BY APPLICATION AND REGION

FIGURE 14 ASIA PACIFIC ACCOUNTED FOR LARGEST SHARE OF RAIL COMPOSITES MARKET

4.3 RAIL COMPOSITES MARKET, BY FIBER TYPE

FIGURE 15 GLASS FIBER RAIL COMPOSITES DOMINATED MARKET IN 2022

4.4 RAIL COMPOSITES MARKET, BY RESIN TYPE

FIGURE 16 PHENOLIC RESIN SEGMENT ACCOUNTED FOR LARGEST MARKET SHARE IN 2022

4.5 RAIL COMPOSITES MARKET, BY MANUFACTURING PROCESS

FIGURE 17 LAY-UP MANUFACTURING PROCESS ACCOUNTED FOR LARGEST SHARE IN 2022

4.6 RAIL COMPOSITES MARKET, BY KEY COUNTRIES

FIGURE 18 CHINA TO BE FASTEST-GROWING MARKET DURING FORECAST PERIOD

5 MARKET OVERVIEW

5.1 INTRODUCTION

5.2 MARKET DYNAMICS

FIGURE 19 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES IN RAIL COMPOSITES MARKET

5.2.1 DRIVERS

5.2.1.1 Weight reduction and parts consolidation

5.2.1.2 Increasing demand for high-speed rail (HSR)

TABLE 1 HSR MILEAGE IN OPERATION & UNDER CONSTRUCTION, BY COUNTRY

5.2.1.3 Improved esthetics and safety

5.2.2 RESTRAINTS

5.2.2.1 High processing & manufacturing costs

5.2.2.2 Difficulty of recycling composites

5.2.2.3 Lack of standardization in manufacturing technologies

5.2.3 OPPORTUNITIES

5.2.3.1 Increasing demand from emerging countries

5.2.3.2 Growing adoption of composites in rail ties, sleeper, and composite bridges

5.2.4 CHALLENGES

5.2.4.1 Development of low-cost technologies to manufacture composites

5.2.4.2 Reduction of process cycle time

5.3 PORTER'S FIVE FORCES ANALYSIS

FIGURE 20 RAIL COMPOSITES MARKET: PORTER'S FIVE FORCES ANALYSIS

5.3.1 THREAT OF NEW ENTRANTS

5.3.2 THREAT OF SUBSTITUTES

5.3.3 BARGAINING POWER OF BUYERS

5.3.4 BARGAINING POWER OF SUPPLIERS

5.3.5 INTENSITY OF COMPETITIVE RIVALRY

TABLE 2 RAIL COMPOSITES MARKET: PORTER'S FIVE FORCES ANALYSIS

5.4 ECOSYSTEM ANALYSIS/MARKET MAP

TABLE 3 RAIL COMPOSITES MARKET: ROLE IN ECOSYSTEM

FIGURE 21 RAIL COMPOSITES MARKET: ECOSYSTEM MAP

FIGURE 22 RAIL COMPOSITES MARKET: KEY STAKEHOLDERS IN ECOSYSTEM

5.5 PRICING ANALYSIS

5.5.1 AVERAGE SELLING PRICE, BY APPLICATION (KEY PLAYERS)

FIGURE 23 AVERAGE SELLING PRICES FOR TOP THREE APPLICATIONS
(USD/KG)

5.5.2 AVERAGE SELLING PRICE, BY FIBER TYPE

FIGURE 24 AVERAGE SELLING PRICE OF RAIL COMPOSITES, BY FIBER TYPE
(USD/KG)

5.5.3 AVERAGE SELLING PRICE, BY RESIN TYPE

FIGURE 25 AVERAGE SELLING PRICE OF RAIL COMPOSITES, BY RESIN TYPE
(USD/KG)

5.5.4 AVERAGE SELLING PRICE, BY REGION

TABLE 4 AVERAGE SELLING PRICE OF RAIL COMPOSITES, BY REGION

5.6 VALUE CHAIN ANALYSIS

FIGURE 26 RAIL COMPOSITES MARKET: VALUE CHAIN ANALYSIS

5.7 TRADE ANALYSIS

5.7.1 EXPORT SCENARIO FOR HS CODE 7019

FIGURE 27 EXPORT OF GLASS FIBERS, BY KEY COUNTRIES, 2018–2022 (USD
THOUSAND)

TABLE 5 TOP 10 EXPORTING COUNTRIES IN 2022

5.7.2 IMPORT SCENARIO FOR HS CODE 7019

FIGURE 28 IMPORT OF GLASS FIBERS, BY KEY COUNTRIES, 2018–2022 (USD
THOUSAND)

TABLE 6 TOP 10 IMPORTING COUNTRIES IN 2022

5.7.3 EXPORT SCENARIO FOR HS CODE 681511

TABLE 7 TOP 15 EXPORTING COUNTRIES IN 2022

5.7.4 IMPORT SCENARIO FOR HS CODE 681511

TABLE 8 TOP 15 IMPORTING COUNTRIES IN 2022

5.8 TECHNOLOGY ANALYSIS

TABLE 9 COMPARATIVE STUDY OF MAJOR COMPOSITE MANUFACTURING
PROCESSES

5.8.1 TECHNOLOGY ANALYSIS FOR GLASS FIBER COMPOSITES

5.8.2 TECHNOLOGY ANALYSIS FOR CARBON FIBER COMPOSITES

5.8.3 COMPLEMENTARY TECHNOLOGIES FOR LATEST MANUFACTURING
PROCESS OF CARBON FIBERS

5.9 KEY STAKEHOLDERS AND BUYING CRITERIA

5.9.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 29 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP
THREE APPLICATIONS

TABLE 10 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP
THREE APPLICATIONS

5.9.2 BUYING CRITERIA

FIGURE 30 KEY BUYING CRITERIA FOR TOP THREE APPLICATIONS

TABLE 11 KEY BUYING CRITERIA FOR TOP THREE APPLICATIONS

5.10 PATENT ANALYSIS

5.10.1 INTRODUCTION

5.10.2 METHODOLOGY

5.10.3 DOCUMENT TYPE

TABLE 12 RAIL COMPOSITES MARKET: TOTAL NUMBER OF PATENTS

FIGURE 31 PATENT ANALYSIS, BY DOCUMENT TYPE

FIGURE 32 PATENT PUBLICATION TRENDS, 2018?2023

5.10.4 INSIGHTS

5.10.5 LEGAL STATUS OF PATENTS

FIGURE 33 RAIL COMPOSITES MARKET: LEGAL STATUS OF PATENTS

5.10.6 JURISDICTION ANALYSIS

FIGURE 34 CHINA JURISDICTION REGISTERED HIGHEST NUMBER OF PATENTS

5.10.7 TOP APPLICANTS' ANALYSIS

FIGURE 35 CRRC QINGDAO SIFANG CO., LTD. REGISTERED HIGHEST NUMBER OF PATENTS

5.10.8 PATENTS BY CRRC QINGDAO SIFANG CO., LTD.

5.10.9 PATENTS BY UNIV JILIN

5.10.10 PATENTS BY NEWTRY CO., LTD.

5.10.11 TOP 10 PATENT OWNERS IN LAST 10 YEARS

5.11 REGULATORY LANDSCAPE

5.11.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 13 NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 14 EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 15 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 16 REST OF THE WORLD: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.11.2 STANDARDS IN COMPOSITES MARKET

TABLE 17 CURRENT STANDARD CODES FOR AUTOMOTIVE AND TRANSPORTATION COMPOSITES

5.12 KEY CONFERENCES AND EVENTS

TABLE 18 LIST OF CONFERENCES AND EVENTS, 2023–2025

5.13 CASE STUDY ANALYSIS

5.14 TRENDS AND DISRUPTIONS IMPACTING CUSTOMER BUSINESS

FIGURE 36 REVENUE SHIFT AND NEW REVENUE POCKETS IN COMPOSITES MARKET

5.15 INVESTMENT AND FUNDING SCENARIO

FIGURE 37 DEALS AND FUNDING IN COMPOSITES MARKET SOARED IN 2023

FIGURE 38 MOST VALUED COMPOSITES FIRMS IN 2023 (USD BILLION)

6 RAIL COMPOSITES MARKET, BY FIBER TYPE

6.1 INTRODUCTION

FIGURE 39 GLASS FIBER COMPOSITES TO DOMINATE RAIL COMPOSITES MARKET

TABLE 19 RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022 (USD MILLION)

TABLE 20 RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022 (KILOTON)

TABLE 21 RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028 (USD MILLION)

TABLE 22 RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028 (KILOTON)

6.2 GLASS FIBER COMPOSITES

6.2.1 GLASS FIBER RAIL COMPOSITES MARKET, BY REGION

TABLE 23 GLASS FIBER RAIL COMPOSITES MARKET, BY REGION, 2020–2022 (USD MILLION)

TABLE 24 GLASS FIBER RAIL COMPOSITES MARKET, BY REGION, 2020–2022 (KILOTON)

TABLE 25 GLASS FIBER RAIL COMPOSITES MARKET, BY REGION, 2023–2028 (USD MILLION)

TABLE 26 GLASS FIBER RAIL COMPOSITES MARKET, BY REGION, 2023–2028 (KILOTON)

6.3 CARBON FIBER COMPOSITES

6.3.1 CARBON FIBER RAIL COMPOSITES MARKET, BY REGION

TABLE 27 CARBON FIBER RAIL COMPOSITES MARKET, BY REGION, 2020–2022 (USD MILLION)

TABLE 28 CARBON FIBER RAIL COMPOSITES MARKET, BY REGION, 2020–2022 (KILOTON)

TABLE 29 CARBON FIBER RAIL COMPOSITES MARKET, BY REGION, 2023–2028 (USD MILLION)

TABLE 30 CARBON FIBER RAIL COMPOSITES MARKET, BY REGION, 2023–2028 (KILOTON)

6.4 OTHER FIBER COMPOSITES

6.4.1 NATURAL FIBER COMPOSITES

6.4.2 BASALT FIBER COMPOSITES

6.4.3 ARAMID FIBER COMPOSITES

6.4.4 HYBRID FIBER COMPOSITES

6.4.5 ULTRA-HIGH-MOLECULAR-WEIGHT POLYETHYLENE (UHMWPE) FIBER COMPOSITES

6.4.6 OTHER FIBER RAIL COMPOSITES MARKET, BY REGION

TABLE 31 OTHER FIBER RAIL COMPOSITES MARKET, BY REGION, 2020–2022 (USD MILLION)

TABLE 32 OTHER FIBER RAIL COMPOSITES MARKET, BY REGION, 2020–2022 (KILOTON)

TABLE 33 OTHER FIBER RAIL COMPOSITES MARKET, BY REGION, 2023–2028 (USD MILLION)

TABLE 34 OTHER FIBER RAIL COMPOSITES MARKET, BY REGION, 2023–2028 (KILOTON)

7 RAIL COMPOSITES MARKET, BY RESIN TYPE

7.1 INTRODUCTION

7.1.1 POLYESTER

7.1.2 PHENOLIC

7.1.3 EPOXY

7.1.4 VINYL ESTER

FIGURE 40 PHENOLIC RESIN TO DOMINATE OVERALL RAIL COMPOSITES MARKET

TABLE 35 RAIL COMPOSITES MARKET, BY RESIN TYPE, 2020–2022 (USD MILLION)

TABLE 36 RAIL COMPOSITES MARKET, BY RESIN TYPE, 2020–2022 (KILOTON)

TABLE 37 RAIL COMPOSITES MARKET, BY RESIN TYPE, 2023–2028 (USD MILLION)

TABLE 38 RAIL COMPOSITES MARKET, BY RESIN TYPE, 2023–2028 (KILOTON)

8 RAIL COMPOSITES MARKET, BY MANUFACTURING PROCESS

8.1 INTRODUCTION

8.1.1 LAY-UP PROCESS

8.1.2 FILAMENT WINDING PROCESS

8.1.3 INJECTION MOLDING PROCESS

8.1.4 PULTRUSION PROCESS

8.1.5 COMPRESSION MOLDING PROCESS

8.1.6 RESIN TRANSFER MOLDING (RTM) PROCESS

FIGURE 41 LAY-UP MANUFACTURING PROCESS TO ACCOUNT FOR LARGEST SHARE OF RAIL COMPOSITES MARKET

TABLE 39 RAIL COMPOSITES MARKET, BY MANUFACTURING PROCESS, 2020–2022 (USD MILLION)

TABLE 40 RAIL COMPOSITES MARKET, BY MANUFACTURING PROCESS, 2020–2022 (KILOTON)

TABLE 41 RAIL COMPOSITES MARKET, BY MANUFACTURING PROCESS, 2023–2028 (USD MILLION)

TABLE 42 RAIL COMPOSITES MARKET, BY MANUFACTURING PROCESS, 2023–2028 (KILOTON)

9 RAIL COMPOSITES MARKET, BY APPLICATION

9.1 INTRODUCTION

FIGURE 42 INTERIOR COMPONENTS APPLICATION TO DOMINATE RAIL COMPOSITES MARKET

TABLE 43 RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 44 RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 45 RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 46 RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

9.2 EXTERIOR COMPONENTS

9.2.1 RAIL COMPOSITES MARKET IN EXTERIOR COMPONENTS APPLICATION, BY REGION

TABLE 47 RAIL COMPOSITES MARKET IN EXTERIOR COMPONENTS, BY REGION, 2020–2022 (USD MILLION)

TABLE 48 RAIL COMPOSITES MARKET IN EXTERIOR COMPONENTS, BY REGION, 2020–2022 (KILOTON)

TABLE 49 RAIL COMPOSITES MARKET IN EXTERIOR COMPONENTS, BY REGION, 2023–2028 (USD MILLION)

TABLE 50 RAIL COMPOSITES MARKET IN EXTERIOR COMPONENTS, BY REGION, 2023–2028 (KILOTON)

9.3 INTERIOR COMPONENTS APPLICATION

9.3.1 RAIL COMPOSITES MARKET IN INTERIOR COMPONENTS APPLICATION, BY REGION

TABLE 51 RAIL COMPOSITES MARKET IN INTERIOR COMPONENTS, BY REGION, 2020–2022 (USD MILLION)

TABLE 52 RAIL COMPOSITES MARKET IN INTERIOR COMPONENTS, BY REGION, 2020–2022 (KILOTON)

TABLE 53 RAIL COMPOSITES MARKET IN INTERIOR COMPONENTS, BY REGION, 2023–2028 (USD MILLION)

TABLE 54 RAIL COMPOSITES MARKET IN INTERIOR COMPONENTS, BY REGION, 2023–2028 (KILOTON)

9.4 OTHER APPLICATIONS

9.4.1 RAIL COMPOSITES MARKET IN OTHER APPLICATIONS, BY REGION

TABLE 55 RAIL COMPOSITES MARKET IN OTHER APPLICATIONS, BY REGION, 2020–2022 (USD MILLION)

TABLE 56 RAIL COMPOSITES MARKET IN OTHER APPLICATIONS, BY REGION, 2020–2022 (KILOTON)

TABLE 57 RAIL COMPOSITES MARKET IN OTHER APPLICATIONS, BY REGION, 2023–2028 (USD MILLION)

TABLE 58 RAIL COMPOSITES MARKET IN OTHER APPLICATIONS, BY REGION, 2023–2028 (KILOTON)

10 RAIL COMPOSITES MARKET, BY REGION

10.1 INTRODUCTION

FIGURE 43 CHINA TO BE FASTEST-GROWING RAIL COMPOSITES MARKET

TABLE 59 RAIL COMPOSITES MARKET, BY REGION, 2020–2022 (USD MILLION)

TABLE 60 RAIL COMPOSITES MARKET, BY REGION, 2020–2022 (KILOTON)

TABLE 61 RAIL COMPOSITES MARKET, BY REGION, 2023–2028 (USD MILLION)

TABLE 62 RAIL COMPOSITES MARKET, BY REGION, 2023–2028 (KILOTON)

10.2 NORTH AMERICA

10.2.1 IMPACT OF RECESSION

FIGURE 44 NORTH AMERICA: RAIL COMPOSITES MARKET SNAPSHOT

10.2.2 NORTH AMERICA RAIL COMPOSITES MARKET, BY FIBER TYPE

TABLE 63 NORTH AMERICA: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022 (USD MILLION)

TABLE 64 NORTH AMERICA: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022 (KILOTON)

TABLE 65 NORTH AMERICA: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028 (USD MILLION)

TABLE 66 NORTH AMERICA: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028 (KILOTON)

10.2.3 NORTH AMERICA RAIL COMPOSITES MARKET, BY APPLICATION

TABLE 67 NORTH AMERICA: RAIL COMPOSITES MARKET, BY APPLICATION,

2020–2022 (USD MILLION)

TABLE 68 NORTH AMERICA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 69 NORTH AMERICA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 70 NORTH AMERICA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

10.2.4 NORTH AMERICA RAIL COMPOSITES MARKET, BY COUNTRY

TABLE 71 NORTH AMERICA: RAIL COMPOSITES MARKET, BY COUNTRY, 2020–2022 (USD MILLION)

TABLE 72 NORTH AMERICA: RAIL COMPOSITES MARKET, BY COUNTRY, 2020–2022 (KILOTON)

TABLE 73 NORTH AMERICA: RAIL COMPOSITES MARKET, BY COUNTRY, 2023–2028 (USD MILLION)

TABLE 74 NORTH AMERICA: RAIL COMPOSITES MARKET, BY COUNTRY, 2023–2028 (KILOTON)

10.2.4.1 US

10.2.4.1.1 Increasing spending on rail sector to drive demand

TABLE 75 US: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 76 US: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 77 US: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 78 US: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

10.2.4.2 Canada

10.2.4.2.1 Interior application to account for largest market share

TABLE 79 CANADA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 80 CANADA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 81 CANADA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 82 CANADA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

10.3 EUROPE

10.3.1 IMPACT OF RECESSION

FIGURE 45 EUROPE: RAIL COMPOSITES MARKET SNAPSHOT

10.3.2 EUROPE RAIL COMPOSITES MARKET, BY FIBER TYPE

TABLE 83 EUROPE: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022
(USD MILLION)

TABLE 84 EUROPE: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022
(KILOTON)

TABLE 85 EUROPE: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028
(USD MILLION)

TABLE 86 EUROPE: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028
(KILOTON)

10.3.3 EUROPE RAIL COMPOSITES MARKET, BY APPLICATION

TABLE 87 EUROPE: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 88 EUROPE: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 89 EUROPE: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 90 EUROPE: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.3.4 EUROPE RAIL COMPOSITES MARKET, BY COUNTRY

TABLE 91 EUROPE: RAIL COMPOSITES MARKET, BY COUNTRY, 2020–2022 (USD
MILLION)

TABLE 92 EUROPE: RAIL COMPOSITES MARKET, BY COUNTRY, 2020–2022
(KILOTON)

TABLE 93 EUROPE: RAIL COMPOSITES MARKET, BY COUNTRY, 2023–2028 (USD
MILLION)

TABLE 94 EUROPE: RAIL COMPOSITES MARKET, BY COUNTRY, 2023–2028
(KILOTON)

10.3.4.1 Germany

10.3.4.1.1 Presence of large rail manufacturing industry to drive demand

TABLE 95 GERMANY: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 96 GERMANY: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 97 GERMANY: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 98 GERMANY: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.3.4.2 France

10.3.4.2.1 Presence of large network of high-speed rail driving demand

TABLE 99 FRANCE: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 100 FRANCE: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 101 FRANCE: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 102 FRANCE: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.3.4.3 UK

10.3.4.3.1 Significant investments in HSR to support market growth

TABLE 103 UK: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD
MILLION)

TABLE 104 UK: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 105 UK: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD
MILLION)

TABLE 106 UK: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.3.4.4 Spain

10.3.4.4.1 Interior components application dominates market in Spain

TABLE 107 SPAIN: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 108 SPAIN: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 109 SPAIN: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 110 SPAIN: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.3.4.5 Italy

10.3.4.5.1 Large rail network to drive market in Italy

TABLE 111 ITALY: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 112 ITALY: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 113 ITALY: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 114 ITALY: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.3.4.6 Turkey

10.3.4.6.1 Enhancements of rail services to drive market

TABLE 115 TURKEY: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 116 TURKEY: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 117 TURKEY: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 118 TURKEY: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

10.3.4.7 Rest of Europe

TABLE 119 REST OF EUROPE: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 120 REST OF EUROPE: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 121 REST OF EUROPE: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 122 REST OF EUROPE: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

10.4 ASIA PACIFIC

10.4.1 IMPACT OF RECESSION

FIGURE 46 ASIA PACIFIC: RAIL COMPOSITES MARKET SNAPSHOT

10.4.2 ASIA PACIFIC RAIL COMPOSITES MARKET, BY FIBER TYPE

TABLE 123 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022 (USD MILLION)

TABLE 124 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022 (KILOTON)

TABLE 125 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028 (USD MILLION)

TABLE 126 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028 (KILOTON)

10.4.3 ASIA PACIFIC RAIL COMPOSITES MARKET, BY APPLICATION

TABLE 127 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 128 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 129 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 130 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

10.4.4 ASIA PACIFIC RAIL COMPOSITES MARKET, BY COUNTRY

TABLE 131 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY COUNTRY, 2020–2022
(USD MILLION)

TABLE 132 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY COUNTRY, 2020–2022
(KILOTON)

TABLE 133 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY COUNTRY, 2023–2028
(USD MILLION)

TABLE 134 ASIA PACIFIC: RAIL COMPOSITES MARKET, BY COUNTRY, 2023–2028
(KILOTON)

10.4.4.1 China

10.4.4.1.1 Presence of large-scale manufacturing facilities to increase demand for composites

TABLE 135 CHINA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 136 CHINA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 137 CHINA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 138 CHINA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.4.4.2 Japan

10.4.4.2.1 Increasing demand from various applications to drive market

TABLE 139 JAPAN: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 140 JAPAN: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 141 JAPAN: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 142 JAPAN: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.4.4.3 India

10.4.4.3.1 Availability of inexpensive labor and raw materials to drive market

TABLE 143 INDIA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 144 INDIA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 145 INDIA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 146 INDIA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028

(KILOTON)**10.4.4.4 Australia****10.4.4.4.1 Interior components application to dominate market**

TABLE 147 AUSTRALIA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 148 AUSTRALIA: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 149 AUSTRALIA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 150 AUSTRALIA: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

10.4.4.5 Rest of Asia Pacific

TABLE 151 REST OF ASIA PACIFIC: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 152 REST OF ASIA PACIFIC: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 153 REST OF ASIA PACIFIC: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 154 REST OF ASIA PACIFIC: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (KILOTON)

10.5 REST OF WORLD**10.5.1 IMPACT OF RECESSION****10.5.2 REST OF WORLD RAIL COMPOSITES MARKET, BY FIBER TYPE**

TABLE 155 REST OF WORLD: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022 (USD MILLION)

TABLE 156 REST OF WORLD: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2020–2022 (KILOTON)

TABLE 157 REST OF WORLD: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028 (USD MILLION)

TABLE 158 REST OF WORLD: RAIL COMPOSITES MARKET, BY FIBER TYPE, 2023–2028 (KILOTON)

10.5.3 REST OF WORLD RAIL COMPOSITES MARKET, BY APPLICATION

TABLE 159 REST OF WORLD: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (USD MILLION)

TABLE 160 REST OF WORLD: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022 (KILOTON)

TABLE 161 REST OF WORLD: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028 (USD MILLION)

TABLE 162 REST OF WORLD: RAIL COMPOSITES MARKET, BY APPLICATION,

2023–2028 (KILOTON)

10.5.4 REST OF WORLD RAIL COMPOSITES MARKET, BY COUNTRY

TABLE 163 REST OF WORLD: RAIL COMPOSITES MARKET, BY COUNTRY,
2020–2022 (USD MILLION)

TABLE 164 REST OF WORLD: RAIL COMPOSITES MARKET, BY COUNTRY,
2020–2022 (KILOTON)

TABLE 165 REST OF WORLD: RAIL COMPOSITES MARKET, BY COUNTRY,
2023–2028 (USD MILLION)

TABLE 166 REST OF WORLD: RAIL COMPOSITES MARKET, BY COUNTRY,
2023–2028 (KILOTON)

10.5.4.1 Brazil

10.5.4.1.1 Development in rail sector to drive demand for composites

TABLE 167 BRAZIL: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 168 BRAZIL: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 169 BRAZIL: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 170 BRAZIL: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.5.4.2 Mexico

10.5.4.2.1 Growing demand in internal components application to drive market

TABLE 171 MEXICO: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(USD MILLION)

TABLE 172 MEXICO: RAIL COMPOSITES MARKET, BY APPLICATION, 2020–2022
(KILOTON)

TABLE 173 MEXICO: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(USD MILLION)

TABLE 174 MEXICO: RAIL COMPOSITES MARKET, BY APPLICATION, 2023–2028
(KILOTON)

10.5.4.3 Others in Rest of World

TABLE 175 OTHERS IN ROW: RAIL COMPOSITES MARKET, BY APPLICATION,
2020–2022 (USD MILLION)

TABLE 176 OTHERS IN ROW: RAIL COMPOSITES MARKET, BY APPLICATION,
2020–2022 (KILOTON)

TABLE 177 OTHERS IN ROW: RAIL COMPOSITES MARKET, BY APPLICATION,
2023–2028 (USD MILLION)

TABLE 178 OTHERS IN ROW: RAIL COMPOSITES MARKET, BY APPLICATION,
2023–2028 (KILOTON)

11 COMPETITIVE LANDSCAPE

11.1 INTRODUCTION

11.2 KEY PLAYERS' STRATEGIES/RIGHT TO WIN

TABLE 179 STRATEGIES ADOPTED BY RAIL COMPOSITE MANUFACTURERS

11.3 REVENUE ANALYSIS

FIGURE 47 REVENUE ANALYSIS OF TOP 5 MARKET PLAYERS

11.4 MARKET SHARE ANALYSIS

FIGURE 48 SHARES OF KEY PLAYERS IN RAIL COMPOSITES MARKET

TABLE 180 RAIL COMPOSITES MARKET: DEGREE OF COMPETITION

11.5 BRAND/PRODUCT COMPARATIVE ANALYSIS

FIGURE 49 BRAND/PRODUCT COMPARATIVE ANALYSIS

11.6 COMPANY EVALUATION MATRIX

11.6.1 STARS

11.6.2 EMERGING LEADERS

11.6.3 PERVASIVE PLAYERS

11.6.4 PARTICIPANTS

FIGURE 50 RAIL COMPOSITES MARKET: COMPANY EVALUATION MATRIX, 2022

11.6.5 COMPANY FOOTPRINT

FIGURE 51 COMPANY OVERALL FOOTPRINT

TABLE 181 COMPANY FIBER TYPE FOOTPRINT

TABLE 182 COMPANY RESIN TYPE FOOTPRINT

TABLE 183 COMPANY APPLICATION FOOTPRINT

TABLE 184 COMPANY REGION FOOTPRINT

11.7 START-UP/SME EVALUATION MATRIX

11.7.1 PROGRESSIVE COMPANIES

11.7.2 RESPONSIVE COMPANIES

11.7.3 DYNAMIC COMPANIES

11.7.4 STARTING BLOCKS

FIGURE 52 RAIL COMPOSITES MARKET: START-UPS/SMES EVALUATION MATRIX, 2022

11.7.5 COMPETITIVE BENCHMARKING OF KEY START-UPS/SMES

TABLE 185 RAIL COMPOSITES MARKET: DETAILED LIST OF KEY START-UPS/SMES

TABLE 186 RAIL COMPOSITES MARKET: COMPETITIVE BENCHMARKING OF KEY START-UPS/SMES

11.8 VALUATION AND FINANCIAL METRICS OF RAIL COMPOSITE MANUFACTURERS

FIGURE 53 EV/EBITDA OF KEY MANUFACTURERS

FIGURE 54 YEAR-TO-DATE (YTD) PRICE TOTAL RETURN AND 5-YEAR STOCK BETA OF KEY MANUFACTURERS

11.9 COMPETITIVE SCENARIO AND TRENDS

11.9.1 PRODUCT LAUNCHES

TABLE 187 RAIL COMPOSITES MARKET: PRODUCT LAUNCHES, JANUARY 2020–FEBRUARY 2024

11.9.2 DEALS

TABLE 188 RAIL COMPOSITES MARKET: DEALS, JANUARY 2020–FEBRUARY 2024

11.9.3 EXPANSIONS

TABLE 189 RAIL COMPOSITES MARKET: EXPANSIONS, JANUARY 2020–FEBRUARY 2024

12 COMPANY PROFILE

(Business overview, Products/Solutions/Services offered, Recent Developments, MnM view, Right to win, Strategic choices, Weaknesses and competitive threats) *

12.1 KEY COMPANIES

12.1.1 GURIT HOLDINGS AG

TABLE 190 GURIT HOLDING AG: COMPANY OVERVIEW

FIGURE 55 GURIT HOLDING AG: COMPANY SNAPSHOT

TABLE 191 GURIT HOLDING AG: PRODUCTS/SOLUTIONS/SERVICES OFFERED

12.1.2 HEXCEL CORPORATION

TABLE 192 HEXCEL CORPORATION: COMPANY OVERVIEW

FIGURE 56 HEXCEL CORPORATION: COMPANY SNAPSHOT

TABLE 193 HEXCEL CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 194 HEXCEL CORPORATION: EXPANSIONS, JANUARY 2020–FEBRUARY 2024

12.1.3 SOLVAY

TABLE 195 SOLVAY: COMPANY OVERVIEW

FIGURE 57 SOLVAY: COMPANY SNAPSHOT

TABLE 196 SOLVAY: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 197 SOLVAY: PRODUCT LAUNCHES, JANUARY 2020–FEBRUARY 2024

TABLE 198 SOLVAY: DEALS, JANUARY 2020–FEBRUARY 2024

12.1.4 TEIJIN LIMITED

TABLE 199 TEIJIN LIMITED: COMPANY OVERVIEW

FIGURE 58 TEIJIN LIMITED: COMPANY SNAPSHOT

TABLE 200 TEIJIN LIMITED: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 201 TEIJIN LIMITED: PRODUCT LAUNCHES, JANUARY 2020?FEBRUARY 2024

12.1.5 3A COMPOSITES

TABLE 202 3A COMPOSITES: COMPANY OVERVIEW

FIGURE 59 3A COMPOSITES: COMPANY SNAPSHOT

TABLE 203 3A COMPOSITES: PRODUCTS/SOLUTIONS/SERVICES OFFERED

12.1.6 TORAY INDUSTRIES, INC.

TABLE 204 TORAY INDUSTRIES, INC.: COMPANY OVERVIEW

FIGURE 60 TORAY INDUSTRIES, INC.: COMPANY SNAPSHOT

TABLE 205 TORAY INDUSTRIES, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 206 TORAY INDUSTRIES, INC.: PRODUCT LAUNCHES, JANUARY 2020?FEBRUARY 2024

TABLE 207 TORAY INDUSTRIES, INC.: DEALS, JANUARY 2020?FEBRUARY 2024

TABLE 208 TORAY INDUSTRIES, INC.: EXPANSIONS, JANUARY 2020?FEBRUARY 2024

12.1.7 PREMIER COMPOSITE TECHNOLOGIES

TABLE 209 PREMIER COMPOSITE TECHNOLOGIES: COMPANY OVERVIEW

TABLE 210 PREMIER COMPOSITE TECHNOLOGIES: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 211 PREMIER COMPOSITE TECHNOLOGIES: DEALS, JANUARY 2020?FEBRUARY 2024

12.1.8 DARTFORD COMPOSITES LTD.

TABLE 212 DARTFORD COMPOSITES LTD.: COMPANY OVERVIEW

TABLE 213 DARTFORD COMPOSITES LTD.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

12.1.9 EXEL COMPOSITES

TABLE 214 EXEL COMPOSITES: COMPANY OVERVIEW

FIGURE 61 EXEL COMPOSITES: COMPANY SNAPSHOT

TABLE 215 EXEL COMPOSITES: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 216 EXEL COMPOSITES: PRODUCT LAUNCHES, JANUARY 2020?FEBRUARY 2024

12.1.10 AVIENT CORPORATION

TABLE 217 AVIENT CORPORATION: COMPANY OVERVIEW

FIGURE 62 AVIENT CORPORATION: COMPANY SNAPSHOT

TABLE 218 AVIENT CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

12.1.11 KINECO LIMITED

TABLE 219 KINECO LIMITED: COMPANY OVERVIEW

TABLE 220 KINECO LIMITED: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 221 KINECO LIMITED: EXPANSIONS, JANUARY 2020?FEBRUARY 2024

12.1.12 BASF SE

TABLE 222 BASF SE: COMPANY OVERVIEW

FIGURE 63 BASF SE: COMPANY SNAPSHOT

TABLE 223 BASF SE: PRODUCTS/SOLUTIONS/SERVICES OFFERED

12.1.13 AVIC CABIN SYSTEMS (UK)

TABLE 224 AVIC CABIN SYSTEMS (UK): COMPANY OVERVIEW

TABLE 225 AVIC CABIN SYSTEMS (UK): PRODUCTS/SOLUTIONS/SERVICES OFFERED

12.1.14 BFG INTERNATIONAL

TABLE 226 BFG INTERNATIONAL: COMPANY OVERVIEW

TABLE 227 BFG INTERNATIONAL: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 228 BFG INTERNATIONAL: DEALS, JANUARY 2020?FEBRUARY 2024

12.1.15 RELIANCE INDUSTRIES LTD.

TABLE 229 RELIANCE INDUSTRIES LTD.: COMPANY OVERVIEW

FIGURE 64 RELIANCE INDUSTRIES LTD.: COMPANY SNAPSHOT

TABLE 230 RELIANCE INDUSTRIES LTD.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

*Details on Business overview, Products/Solutions/Services offered, Recent Developments, MnM view, Right to win, Strategic choices, Weaknesses and competitive threats might not be captured in case of unlisted companies.

12.2 OTHER COMPANIES

12.2.1 TRB

TABLE 231 TRB: COMPANY OVERVIEW

12.2.2 LANXESS

TABLE 232 LANXESS: COMPANY OVERVIEW

12.2.3 CELANESE CORPORATION

TABLE 233 CELANESE CORPORATION: COMPANY OVERVIEW

12.2.4 LAMERA AB

TABLE 234 LAMERA AB: COMPANY OVERVIEW

12.2.5 ADAMANT COMPOSITES LTD.

TABLE 235 ADAMANT COMPOSITES LTD.: COMPANY OVERVIEW

12.2.6 MADER

TABLE 236 MADER: COMPANY OVERVIEW

12.2.7 FDC COMPOSITES INC.

TABLE 237 FDC COMPOSITES INC.: COMPANY OVERVIEW

12.2.8 VICTALL

TABLE 238 VICTALL: COMPANY OVERVIEW

12.2.9 PROLONG COMPOSITES

TABLE 239 PROLONG COMPOSITES: COMPANY OVERVIEW

13 APPENDIX

13.1 DISCUSSION GUIDE

13.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

13.3 CUSTOMIZATION OPTIONS

13.4 RELATED REPORT

13.5 AUTHOR DETAILS

About

The report “Rail Composites Market by Fiber type, Applications, by resin type and by geography - Trend and Forecast to 2020” defines and segments the global rail composite market with an analysis and forecast of its global volume and value.

The Asia-Pacific and European region were the world's largest market for rail composite in 2014. China is the key consumer of rail composite in Asia-Pacific. Growth of high speed train in china and South Korea is one of the biggest driver for this market in Asia pacific region. China's rollout of its high-speed rail network started in 2007. By now, it rolled out many high-speed rail lines. Various product launches, partnerships, agreements, and expansions have in turn made the regions a potential growth market for rail composite.

Glass fiber composite is the biggest rail composite material driven by its high demand for various rail applications. Interior components are the growing application of rail composite and are projected to grow at a healthy rate in projected period.

Toray Industries (Japan), Cytec Industries Inc. (U.S.), Royal TenCate nv (Netherlands), Gurit Holding AG (Switzerland), Hexel Corporation (U.S.), and Teijin Limited (Japan) are some of the major supplier of rail composites material. Company profiling and competitive strategies adopted by top rail composite components manufacturers such as AIM ALTITUDE (U.K.), Dartford Composites Ltd. (U.K.), and Exports Limited (India), Premier Composite Technologies (Dubai), FDC Composites Inc. (Canada), TPI Composites Inc. (U.S.), etc. are also covered in the report.

The rail composites market is projected to witness growth at an estimated CAGR of 8.5% from 2015 to reach \$1 billion by 2020.

I would like to order

Product name: Rail Composites Market by Fiber Type (Glass Fiber, Carbon Fiber), Resin Type (Polyester, Phenolic, Epoxy, Vinyl Ester), Manufacturing Process (Lay-up, Injection Molding, Compression Molding, RTM), Application, & Region - Global Forecast to 2028

Product link: <https://marketpublishers.com/r/R6E5CA85A8DEN.html>

Price: US\$ 4,950.00 (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/R6E5CA85A8DEN.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