

Global Synthetic Graphite Materials Market by Form (Electrode, Block, Powder, and Fiber), by Product Type (Primary, Secondary), by Application Type (Electrode, Cathode & Furnace, High Temperature Applications, EDM, Polysilicon Production, Lubricants, Foundry, Frictional Products, Parts & Components, and Others), by End Use Industry (Metal, Aerospace & Defense, Automotive, Photovoltaic, E & E, Industrial, and Others), by Manufacturing Process (Isostatic, Extruded, and Others), by Sales Channel (Direct Sales and Distributors), and by Region (North America, Europe, Asia-Pacific, and RoW), Trend, Forecast, Competitive Analysis, and Growth Opportunity: 2016-2021

<https://marketpublishers.com/r/G01A253B9CCEN.html>

Date: May 2024

Pages: 0

Price: US\$ 4,290.00 (Single User License)

ID: G01A253B9CCEN

Abstracts

This is the ONGOING report. If ordered it could be delivered in 2-3 weeks timeframe.

This report, from Stratview Research, studies the synthetic graphite market over the period 2010 to 2021. The report provides detailed insights on the market dynamics to enable informed business decision making and growth strategy formulation based on the opportunities present in the market.

The Global Synthetic Graphite Market: Highlights

Global Synthetic Graphite Materials Market by Form (Electrode, Block, Powder, and Fiber), by Product Type (Pri...

Synthetic graphite, also called as artificial graphite, is a man-made substance manufactured by the high temperature treatment (2,500 to 3,000 degree Celsius) of amorphous carbon materials. It is manufactured by calcination and subsequent graphitization of petroleum coke and can achieve purity of 99.9% carbon. The types of amorphous carbon used as precursors to graphite are many, and can be derived from petroleum, coal, or natural and synthetic organic materials. Synthetic graphite holds major share in the pie of the global graphite market.

Synthetic graphite has four principal types; electrode, block, powder, and fiber. The largest type of the synthetic graphite is graphite electrode that is predominately used in the electric arc furnaces for melting steel & iron and producing alloys.

Synthetic graphite blocks are also man-made products and are made using petroleum coke. Blocks are produced from isostatic, extruded, die molded, and vibration molded process. All these processes offer distinctive benefits and are used for producing graphite for different applications. Synthetic blocks are used in the large variety of applications ranging from polysilicon production for photovoltaic industry to high temperature reactors in nuclear industry.

Synthetic graphite powder is a low cost material because it's a by-product. It is used in applications, such as brake linings, lubricants and carbon brush. Synthetic graphite powder is generally a result of the granular graphite or graphite dust gathered during machining electrodes and blocks.

Carbon fiber is considered as an advanced fiber type and is used in many industries including aerospace and defense and automotive industry. High specific strength, lightweight, good fatigue strength, and excellent corrosion resistance make it a preferred material in the high performance applications. High focus on fuel efficiency, low carbon emission, weight reduction, comfort and passenger safety, and government regulations, such as CAF? standards are driving the increasing penetration of carbon composite structures in aerospace & defense, automotive, and wind energy segments. Carbon fiber is likely to experience double digit growth in the next five years. Carbon fiber market players are continuously working on the development of alternative precursors and efficient manufacturing processes with the aim to reduce the carbon fiber price. The target carbon fiber price is about \$5 per pound for usage in the mass production applications.

Graphite electrodes are the largest application of synthetic graphite and is expected to

remain the largest application in the next five years. Asia-Pacific region is the major consumer of the graphite electrode driven by rising demand for steel and other metals, mainly in China and India.

Battery is currently the hot topic in the graphite market. Battery is an application where both natural and synthetic graphite are used and truly compete with each other. There will be a continuous shift in graphite market away from amorphous natural graphite towards flake and synthetic graphite as emerging applications like batteries typically require large flake and high-purity grades.

The global synthetic graphite market offers a good growth opportunity during the forecast period of 2016 to 2021. Carbon fiber and synthetic blocks are expected to experience the fastest growth in the next five years driven by increasing penetration of carbon composites in aerospace and automotive industries and double digit growth of lithium-ion batteries in the electric vehicles.

Graphite electrode is expected to remain the largest application of the synthetic graphite in the next five years. Increasing use of electric arc furnaces for producing steel across the world is expected to drive sales of graphite electrodes.

The key synthetic graphite manufacturers are SGL Carbon SE, GrafTech International Holdings Inc, Mersen Group, Nippon Graphite Industries, Tokai Carbon Co., Toray Industries, Toho Tenax, Toyo Tanso, Mitsubishi Rayon Co., Baofeng Five-star Graphite, IBIDEN CO, Showa Denko K.K., and Graphite India. New product development, collaboration with customers, and long term contacts are the key strategies adopted by the key players to gain competitive edge in the market.

Research Methodology

This report offers high quality insights and is the outcome of detailed research methodology comprising extensive secondary research, rigorous primary interviews with industry stakeholders and validation and triangulation with Stratview Research's internal database and statistical tools. More than 1,000 authenticated secondary sources, such as company annual reports, fact book, press release, journals, investor presentation, white papers, patents, and articles have been leveraged to gather the data. More than 20 detailed primary interviews with the market players across the value chain in the all four regions and industry experts have been executed to obtain both the qualitative and quantitative insights.

Report Features

This report provides market intelligence in the most comprehensive way. The report structure has been kept such that it offers maximum business value. It provides critical insights on the market dynamics and will enable strategic decision making for the existing market players as well as those willing to enter the market. The following are the key features of the report:

Market structure: Overview, industry life cycle analysis, supply chain analysis

Market environment analysis: Growth drivers and constraints, Porter's five forces analysis, SWOT analysis

Market trend and forecast analysis

Market segment trend and forecast

Competitive landscape and dynamics: Market share, product portfolio, product launches, etc.

Attractive market segments and associated growth opportunities

Emerging trends

Strategic growth opportunities for the existing and new players

Key success factors

The global synthetic graphite market is segmented into the following categories.

Global Synthetic Graphite Market by Form:

Synthetic Electrode

Synthetic Block

Synthetic Carbon Fiber

Synthetic Powder

Global Synthetic Graphite Market by Product:

Primary Product

Secondary Products

Global Synthetic Graphite Market by Applications:

Electrode

Cathode & Furnace

High Temperature Applications

Electrical Discharge Machining

Polysilicon Production

Lubricants

Foundry

Frictional Products

Parts & Components

Others

Global Synthetic Graphite Market by End Use Industry:

Metal Industry

Aerospace & Defense

Automotive

Photovoltaic Industry

Electrical & Electronic

Industrial

Others

Global Synthetic Graphite Market by Manufacturing Process:

Isostatic Process

Extrusion Process

Others (Vibration and Die Molding)

Global Synthetic Graphite Market by Sales Channel:

Direct Sales

Distributors

Global Synthetic Graphite Market by Region:

North America

Europe

Asia – Pacific

Rest of the World

Report Customization Options

Global Synthetic Graphite Materials Market by Form (Electrode, Block, Powder, and Fiber), by Product Type (Pri...

With this detailed report, Stratview Research offers one of the following free customization options to our respectable clients:

Company Profiling

Detailed profiling of additional market players (upto 3)

SWOT analysis of key players (upto 3)

Geographic Analysis

Further segmentation of North America into USA, Canada, and Mexico

Regional Segmentation

Current market segmentation of any one of the regions by application

Contents

- Disclaimer
- Copyright
- Abbreviation
- Currency Exchange
- About Us
- Research Methodology
- Secondary Research
 - Key Information Gathered from Secondary Research
- Primary Research
 - Key Information Gathered from Primary Research
 - Breakdown of Primary Interviews by Region, Designation, and Value Chain Node
- Data Analysis and Triangulation
- Report Scope
- Report Objectives

1. EXECUTIVE SUMMARY

2. INDUSTRY OVERVIEW

- 2.1. Introduction
- 2.2. Synthetic Graphite v/s Competing Materials
- 2.3. Supply Chain Analysis
- 2.4. Market Segmentation
 - 2.4.1. By Form
 - 2.4.2. By Product Type
 - 2.4.3. By Applications
 - 2.4.4. By End Use Industry
 - 2.4.5. By Manufacturing Process
 - 2.4.6. By Sales Channel
 - 2.4.7. By Region

3. MARKET ENVIRONMENT ANALYSIS

- 3.1. PEST Analysis: Impact Assessment of Changing Business Environment
- 3.2. Market Drivers
- 3.3. Market Constraints
- 3.4. Porter Five Forces Analysis

- 3.4.1. Bargaining Power of Suppliers
- 3.4.2. Bargaining Power of Customers
- 3.4.3. Threat of New Entrants
- 3.4.4. Threat of Substitutes
- 3.4.5. Competitive Rivalry
- 3.5. SWOT Analysis
- 3.6. Supply v/s Demand Analysis

4. GLOBAL SYNTHETIC GRAPHITE MARKET – BY FORM

- 4.1. Strategic Insights
- 4.2. Global Synthetic Graphite Market by Form in 2015
- 4.3. Global Synthetic Graphite Market Trend and Forecast by Form (US\$ Million)
- 4.4. Global Synthetic Graphite Market Trend and Forecast by Form (Million lbs)
- 4.5. Growth Magnitude of the Global Synthetic Graphite Market by Form
- 4.6. Synthetic Graphite Electrode Market Trend and Forecast (US\$ Million and Million lbs)
- 4.7. Synthetic Graphite Block Market Trend and Forecast (US\$ Million and Million lbs)
- 4.8. Synthetic Graphite Powder Market Trend and Forecast (US\$ Million and Million lbs)
- 4.9. Synthetic Carbon Fiber Market Trend and Forecast (US\$ Million and Million lbs)

5. GLOBAL SYNTHETIC GRAPHITE MARKET – BY PRODUCT TYPE

- 5.1. Strategic Insights
- 5.2. Global Synthetic Graphite Market by Product Type in 2015
- 5.3. Global Synthetic Graphite Market Trend and Forecast by Product Type (US\$ Million)
- 5.4. Global Synthetic Graphite Market Trend and Forecast by Product Type (Million lbs)
- 5.5. Growth Magnitude of the Global Synthetic Graphite Market by Product Type
- 5.6. Primary: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 5.7. Secondary: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

6. GLOBAL SYNTHETIC GRAPHITE MARKET – BY APPLICATIONS

- 6.1. Strategic Insights
- 6.2. Global Synthetic Graphite Market by Applications in 2015
- 6.3. Global Synthetic Graphite Market Trend and Forecast by Applications (US\$ Million)

- 6.4. Global Synthetic Graphite Market Trend and Forecast by Applications (Million lbs)
- 6.5. Growth Magnitude of the Global Synthetic Graphite Market by Applications
- 6.6. Electrode: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.7. Cathode & Furnace: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.8. High Temperature Applications: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.9. Electrical Discharge Machining: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.10. Polysilicon Production: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.11. Lubricants: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.12. Foundry: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.13. Frictional Products: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.14. Parts and & Components: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 6.15. Others: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

7. GLOBAL SYNTHETIC GRAPHITE MARKET – BY END USE INDUSTRY

- 7.1. Strategic Insights
- 7.2. Global Synthetic Graphite Market by End Use Industry in 2015
- 7.3. Global Synthetic Graphite Market Trend and Forecast by End Use Industry (US\$ Million)
- 7.4. Global Synthetic Graphite Market Trend and Forecast by End Use Industry (Million lbs)
- 7.5. Growth Magnitude of the Global Synthetic Graphite Market by End Use Industry
- 7.6. Metal Industry: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 7.7. Aerospace & Defense: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 7.8. Automotive: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 7.9. Photovoltaic Industry: Global Synthetic Graphite Market Trend and Forecast (US\$

Million and Million lbs)

7.10. Electricals & Electronics Industry: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

7.11. Industrial: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

7.12. Others: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

8. GLOBAL SYNTHETIC GRAPHITE MARKET – BY MANUFACTURING PROCESS

8.1. Strategic Insights

8.2. Global Synthetic Graphite Market by Manufacturing Process in 2015

8.3. Global Synthetic Graphite Market Trend and Forecast by Manufacturing Process (US\$ Million)

8.4. Global Synthetic Graphite Market Trend and Forecast by Manufacturing Process (Million lbs)

8.5. Growth Magnitude of the Global Synthetic Graphite Market by Manufacturing Process

8.6. Iso-static Process: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

8.7. Extrusion Process: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

8.8. Others (Vibration and Die Molding): Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

9. GLOBAL SYNTHETIC GRAPHITE MARKET – BY SALES CHANNEL

9.1. Strategic Insights

9.2. Global Synthetic Graphite Market by Sales Channel in 2015

9.3. Global Synthetic Graphite Market Trend and Forecast by Sales Channel (US\$ Million)

9.4. Global Synthetic Graphite Market Trend and Forecast by Sales Channel (Million lbs)

9.5. Growth Magnitude of the Global Synthetic Graphite Market by Sales Channel

9.6. Direct Sales: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

9.7. Distributors: Global Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

10. GLOBAL SYNTHETIC GRAPHITE MARKET – BY REGION

- 10.1. Strategic Insights
- 10.2. Global Synthetic Graphite Market by Region in 2015
- 10.3. Global Synthetic Graphite Market Trend and Forecast by Region (US\$ Million)
- 10.4. Global Synthetic Graphite Market Trend and Forecast by Region (Million lbs)
- 10.5. Growth Magnitude of the Global Synthetic Graphite Market by Region
- 10.6. North America: Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 10.7. Europe: Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 10.8. Asia – Pacific: Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)
- 10.9. Rest of the World: Synthetic Graphite Market Trend and Forecast (US\$ Million and Million lbs)

11. COMPETITIVE ANALYSIS

- 11.1. Strategic Insights
- 11.2. Product Portfolio Analysis
- 11.3. Presence by Applications
- 11.4. Geographical Presence
- 11.5. New Product Launches
- 11.6. Mergers and Acquisitions
- 11.7. Market Share Analysis

12. STRATEGIC GROWTH OPPORTUNITIES

- 12.1. Strategic Insights
- 12.2. Market Attractive Analysis
 - 12.2.1. Market Attractiveness by Form
 - 12.2.2. Market Attractiveness by Applications
 - 12.2.3. Market Attractiveness by End Use Industry
 - 12.2.4. Market Attractiveness by Manufacturing Process
 - 12.2.5. Market Attractiveness by Sales Channel
 - 12.2.6. Market Attractiveness by Region
- 12.3. Emerging Trends
- 12.4. Key Success Factors
- 12.5. Growth Matrix Analysis

13. COMPANY PROFILE OF KEY PLAYERS

- 13.1. Asbury Graphite Mills, Inc
- 13.2. Baofeng Five-star Graphite Co., Ltd.,
- 13.3. Datong Xincheng New Material Co., Ltd
- 13.4. IBIDEN CO., LTD.
- 13.5. Fangda Carbon New Material Co., Ltd
- 13.6. Graphite India Limited
- 13.7. GrafTech International Holdings Inc
- 13.8. Mersen Group
- 13.9. Mitsubishi Rayon Co.
- 13.10. Nippon Graphite Industries, Co., Ltd.
- 13.11. SGL Carbon SE
- 13.12. Showa Denko K.K.
- 13.13. Tokai Carbon Co., Ltd.
- 13.14. Toray Industries
- 13.15. Toho Tenax
- 13.16. Toyo Tanso

I would like to order

Product name: Global Synthetic Graphite Materials Market by Form (Electrode, Block, Powder, and Fiber), by Product Type (Primary, Secondary), by Application Type (Electrode, Cathode & Furnace, High Temperature Applications, EDM, Polysilicon Production, Lubricants, Foundry, Frictional Products, Parts & Components, and Others), by End Use Industry (Metal, Aerospace & Defense, Automotive, Photovoltaic, E & E, Industrial, and Others), by Manufacturing Process (Isostatic, Extruded, and Others), by Sales Channel (Direct Sales and Distributors), and by Region (North America, Europe, Asia-Pacific, and RoW), Trend, Forecast, Competitive Analysis, and Growth Opportunity: 2016-2021

Product link: <https://marketpublishers.com/r/G01A253B9CCEN.html>

Price: US\$ 4,290.00 (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/G01A253B9CCEN.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