

# **Growth Opportunities in the Global Composite Cylinders Market 2014-2019: Trends, Forecast, and Opportunity Analysis**



Publication Date: October 2014

Copyright © 2011 by Lucintel

**Lucintel, the premier global management consulting and market research firm creates your equation for growth — whether you need to understand market dynamics, identify new opportunities, or increase your profitability.**

# Table of Contents

---

List of Figures	4
List of Tables	8
Disclaimer	10
Copyright	10
Abbreviations and technical units	11
About Us	12
<b>1. Executive Summary .....</b>	<b>14</b>
<b>2. Industry Background and Classifications .....</b>	<b>19</b>
2.1 History of the Composite Cylinders Market.....	19
2.2 Classification of Cylinders .....	24
2.3 Markets Served .....	28
2.4 Supply Chain.....	40
<b>3. Market Trend and Forecast Analysis .....</b>	<b>42</b>
3.1 Market Analysis 2013.....	42
3.1.1 <i>Global Composite Cylinders Market by Applications .....</i>	<i>43</i>
3.1.2 <i>Global Composite Cylinders Market by Types of Cylinders .....</i>	<i>45</i>
3.1.3 <i>Composites Consumption in the Global Composite Cylinders Market by Fiber Types</i>	<i>48</i>
3.1.4 <i>Global Composite Cylinders Market by Region .....</i>	<i>50</i>
3.2 Market Trend 2008-2013.....	53
3.2.1 <i>Macroeconomic Trends.....</i>	<i>53</i>
3.2.2 <i>Global Composite Cylinders Market by Value and Volume.....</i>	<i>56</i>
3.2.3 <i>Trends in the Global Composite Cylinders Market by Applications.....</i>	<i>59</i>
3.2.4 <i>Trends in the Global Composite Cylinders Market by Types of Cylinders.....</i>	<i>62</i>
3.2.5 <i>Composites Consumption Trends in the Global Composite Cylinders Market by</i>	
<i>Fiber Types .....</i>	<i>64</i>
3.2.6 <i>Trends in the Global Composite Cylinders Market by Region.....</i>	<i>68</i>
3.2.7 <i>Industry Drivers and Challenges .....</i>	<i>70</i>
3.3 Market Forecast Analysis .....	73
3.3.1 <i>Macroeconomic Forecast.....</i>	<i>73</i>
3.3.2 <i>Forecast for the Global Composite Cylinders Market by Value and Volume .....</i>	<i>75</i>

3.3.3	<i>Forecast for the Global Composite Cylinders Market by Applications.....</i>	<i>77</i>
3.3.4	<i>Forecast for the Global Composite Cylinders Market by Types of Cylinders.....</i>	<i>80</i>
3.3.5	<i>Composites Consumption Forecast in the Global Composite Cylinders Market by Fiber Types .....</i>	<i>82</i>
3.3.6	<i>Forecast for the Global Composite Cylinders Market by Region.....</i>	<i>85</i>
<b>4.</b>	<b>Competitive Analysis .....</b>	<b>88</b>
4.1	Product Portfolio Analysis.....	88
4.2	Market Share Analysis .....	91
4.3	Geographical Reach.....	95
4.4	Operational Integration .....	95
4.5	Porter's Five Forces Analysis .....	96
<b>5.</b>	<b>Growth Opportunity and Strategic Analysis.....</b>	<b>100</b>
5.1	Growth Opportunities Analysis .....	100
5.1.1	<i>Growth Opportunity for Composite Cylinders by Applications.....</i>	<i>100</i>
5.1.2	<i>Growth Opportunity for Composite Cylinders by Types of Cylinders.....</i>	<i>102</i>
5.1.3	<i>Growth Opportunity for Composite Cylinders by Region.....</i>	<i>103</i>
5.2	Emerging Trends in the Global Composite Cylinders Market.....	104
5.3	Strategic Analysis.....	108
5.3.1	<i>New Market Entry.....</i>	<i>108</i>
5.3.2	<i>Expansion Strategy.....</i>	<i>109</i>
5.4	Mergers and Acquisitions .....	111
5.5	Innovations.....	115
<b>6.</b>	<b>Company Profiles of Leading Players.....</b>	<b>117</b>

# List of Figures

---

## Chapter 2

- Figure 2.1: Schematic Representation of the Wet Filament Winding Process
- Figure 2.2: Filament Winding Process for Manufacturing CNG Cylinders
- Figure 2.3: Different Types of Cylinders
- Figure 2.4: Composites Penetration in Type II CNG Tank
- Figure 2.5: Composites Penetration in Type III CNG Tank
- Figure 2.6: Composites Penetration in Type IV CNG Tank
- Figure 2.7: Composite Cylinders Market Breakdown by Application
- Figure 2.8: An LPG Gas Grill, a Propane Car, and a Factory Using LPG to Manufacture Plastics
- Figure 2.9: An LPG Storage Composite Cylinder
- Figure 2.10: Trailers Carrying Composites CNG Cylinder
- Figure 2.11: Trailers Carrying Composite Hydrogen Cylinders
- Figure 2.12: Volvo Bi-fuel System
- Figure 2.13: Sun Bus Loaded with 12 Type IV CNG Fuel Tanks Mounted on the Roof of the Bus
- Figure 2.14: Mercedes Blue Zero F-Cell-2009
- Figure 2.15: Firefighters with SCBA Cylinders
- Figure 2.16: SCUBA Diver with Hoop Wrapped Cylinder in a Diving Kit
- Figure 2.17: Paintball Kit with Fiber Wrapped Cylinder
- Figure 2.18: Supply Chain of Global Composite Cylinders Market

## Chapter 3

- Figure 3.1: Global Composite Cylinders Market Distribution (\$M) by Application in 2013
- Figure 3.2: Global Composite Cylinders Market (\$M) by Application in 2013
- Figure 3.3: Global Composite Cylinders Market Distribution (Thousand Units) by Application in 2013
- Figure 3.4: Global Composite Cylinders Market (Thousand Units) by Application in 2013
- Figure 3.5: Global Composite Cylinders Market Distribution by Types of Cylinders (\$M) in 2013
- Figure 3.6: Global Composite Cylinders Market (\$M) by Types of Cylinders in 2013

Figure 3.7: Global Composite Cylinders Market Distribution by Types of Cylinders (Units) in 2013

Figure 3.8: Global Composite Cylinders Market (Thousand Units) by Types of Cylinders in 2013

Figure 3.9: Composites Consumption (\$M) in the Global Composite Cylinders Market Distribution by Fiber Type in 2013

Figure 3.10: Composites Consumption (\$M) in the Global Composite Cylinders Market (\$M) by Fiber Type in 2013

Figure 3.11: Composites Consumption (M lbs) in the Global Composite Cylinders Market Distribution by Fiber Type in 2013

Figure 3.12: Composites Consumption (M lbs) in the Global Composite Cylinders Market by Fiber Type in 2013

Figure 3.13: Global Composite Cylinders Market Distribution by Region (\$M) in 2013

Figure 3.14: Global Composite Cylinders Market by Region (\$M) in 2013

Figure 3.15: Global Composite Cylinders Market Distribution by Region (Units) in 2013

Figure 3.16: Global Composite Cylinders Market by Region (Thousand Units) in 2013

Figure 3.17: Global GDP Growth Rate Trend

Figure 3.18: Regional GDP Growth Rate Trend at Constant Price

Figure 3.19: Global Natural Gas Vehicles (Thousand Units) Trend (Cumulative) during 2008-2013

Figure 3.20: Global Natural Gas Vehicles (Thousand Units) Trend (Annual) during 2008-2013

Figure 3.21: Comparison of Average Prices of Retail Fuels in the US during 2008-2013

Figure 3.22: Global Composite Cylinders Market Trend (\$M) during 2008-2013

Figure 3.23: Global Composite Cylinders Market Trend (Thousand Units) during 2008-2013

Figure 3.24: Global Composite Cylinders Market Trend (\$M) by Application during 2008-2013

Figure 3.25: Global Composite Cylinders Market (Thousand Units) by Application during 2008-2010

Figure 3.26: CAGR for Global Composite Cylinders Market by Application (2008-2013)

Figure 3.27: Global Composite Cylinders Market Trend (\$M) by Types of Cylinders during 2008- 2013

Figure 3.28: Global Composite Cylinders Market Trend (Thousand Units) by Types of Cylinders during 2008-2013

Figure 3.29: CAGR for the Global Composite Cylinders Market by Types of Cylinders (2008-2013)

Figure 3.30: Composites Consumption (\$M) Trend in the Global Composite Cylinders Market by Fiber Type during 2008-2013

Figure 3.31: Composites Consumption (M lbs) Trend in the Global Composite Cylinders by Fiber Type during 2008-2013

Figure 3.32: CAGR for Composites Consumption in the Global Composite Cylinders Market by Fiber Type during 2008-2013

Figure 3.33: Global Composite Cylinders Market Trend (\$M) by Region during 2008-2013

Figure 3.34: Global Composite Cylinders Market Trend (Thousand Units) by Region during 2008-2013

Figure 3.35: CAGR for Composite Cylinders Market by Region (2008-2013)

Figure 3.36: Drivers and Challenges of Global Composite Cylinders Market

Figure 3.37: Global GDP Growth Rate Forecast

Figure 3.38: Regional GDP Growth Rate Forecast at Constant Price

Figure 3.39: Price Forecast for Alternative Fuels during 2014-2019

Figure 3.40: Global Composite Cylinders Market Forecast (\$M) (2014-2019)

Figure 3.41: Global Composite Cylinders Market Forecast (Thousand Units) (2014-2019)

Figure 3.42: Global Composite Cylinders Market Forecast (\$M) by Application (2014-2019)

Figure 3.43: Global Composite Cylinders Market Forecast (Thousand Units) by Application (2014-2019)

Figure 3.44: CAGR for Global Composite Cylinders (CAGR) by Application (2014- 2019)

Figure 3.45: Global Composite Cylinders Market Forecast (\$M) by Types of Cylinders (2014-2019)

Figure 3.46: Global Composite Cylinders Market Forecast (Thousand Units) by Types of Cylinders (2014-2019)

Figure 3.47: CAGR for Global Composite Cylinders Market by Types of Cylinders (2014-2019)

Figure 3.48: Composites Consumption (\$M) Forecast in the Global Composite Cylinders Market by Fiber Type (2014-2019)

Figure 3.49: Composites Consumption (M lbs) Forecast in the Global Composite Cylinders Market by Fiber Type (2014-2019)

Figure 3.50: CAGR for Composites Consumption in the Global Composite Cylinders Market by Fiber Type (2014-2019)

Figure 3.51: Global Composite Cylinders Market Forecast (\$M) by Region (2014-2019)

Figure 3.52: Global Composite Cylinders Market Forecast (Thousand Units) by Region (2014- 2019)

Figure 3.53: CAGR for Composite Cylinders Market Forecast by Region (2014-2019)

## **Chapter 4**

Figure 4.1: Market Share Analysis of Global Composite Cylinders Market in 2013

Figure 4.2: Market Share in Terms of \$ Value by Top Five Players for Global Composite Cylinders Market in 2013

Figure 4.3: Market Share Analysis of Type II Composite Cylinders Market in 2013

Figure 4.4: Market Share Analysis of Type III Composite Cylinders Market in 2013

Figure 4.5: Market Share Analysis of Type IV Composite Cylinders Market in 2013

Figure 4.6: Major Composite Cylinders Manufacturers Locations

Figure 4.7: Porter's Five Forces Model for Global Composite Cylinders Market

## **Chapter 5**

Figure 5.1: Growth Opportunity for the Global Composite Cylinders Market by Application 2014-2019

Figure 5.2: Growth Opportunity for the Global Composite Cylinders Market by Types of Cylinders 2014-2019

Figure 5.3: Growth Opportunity for the Global Composite Cylinders Market by Region 2014-2019

Figure 5.4: Major Capacity Expansion in Composite Cylinders Market by Major Players

Figure 5.5: Emerging Trends in the Global Composite Cylinders Market

# List of Tables

---

## Chapter 1

Table 1.1: Market Parameters for the Global Composite Cylinders Market and Attributes

## Chapter 3

Table 3.1: Market Trends (2008-2013) for the Global Composite Cylinders Market

Table 3.2: Average Growth Rates for One, Three, and Five Years for the Global Composite Cylinders Market in Terms of \$M

Table 3.3: Market Size and 2012-2013 Growth Rates for the Global Composite Cylinders Market in Various Applications in Terms of Value and Volume

Table 3.4: Market Size and Annual Growth Rates for the Global Composite Cylinders Market during Last Five Years (2008-2013) in Various Applications in Terms of Value and Volume

Table 3.5: Market Size and 2012-2013 Growth Rates for the Global Composite Cylinders Market by Types of Cylinders in Terms of Value and Volume

Table 3.6: Market Size and Annual Growth Rates for the Global Composite Cylinders Market during Last Five Years (2008-2013) by Types of Cylinders in Terms of Value and Volume

Table 3.7: Market Size and 2012-2013 Growth Rates for the Composites Consumption in the Global Composite Cylinders Market by Fiber Type in Terms of Value and Volume

Table 3.8: Market Size and Annual Growth Rates for the Composites Consumption in the Global Composite Cylinders Market during Last Five Years (2008-2013) by Fiber Type in Terms of Value and Volume

Table 3.9: Market Size and 2012-2013 Growth Rates for the Global Composite Cylinders Market by Region in Terms of Value and Volume

Table 3.10: Market Size and Annual Growth Rates for the Global Composite Cylinders Market during Last Five Years (2008-2013) by Region in Terms of Value and Volume

Table 3.11: Market Forecast (2014-2019) of the Global Composite Cylinders Market

Table 3.12: Average Growth Rates for One, Three, and Five Years for the Global Composite Cylinders Market in Terms of \$ Values

Table 3.13: Market Size and 2013-2014 Growth Rates for the Global Composite Cylinders Market by Application in Terms of Value and Volume



Table 3.14: Market Size and Annual Growth Rates for the Global Composite Cylinders Market during Next Five Years (2014-2019) by Application in Terms of Value and Volume

Table 3.15: Market Size and 2013-2014 Growth Rates for the Global Composite Cylinders Market by Types of Cylinders in Terms of Value and Volume

Table 3.16: Market Size and Annual Growth Rates for the Global Composite Cylinders Market during Next Five Years (2014-2019) by Types of Cylinders in Terms of Value and Volume

Table 3.17: Market Size and 2013-2014 Growth Rates for the Composites Consumption in the Global Composite Cylinders Market by Fiber Type in Terms of Value and Volume

Table 3.18: Market Size and Annual Growth Rates for the Composites Consumption in the Global Composite Cylinders Market during Next Five Years (2014-2019) by Fiber Type in Terms of Value and Volume

Table 3.19: Market Size and 2013-2014 Growth Rates for the Global Composite Cylinders Market by Types of Cylinders in Terms of Value and Volume

Table 3.20: Market Size and Annual Growth Rates for the Global Composite Cylinders Market during Next Five Years (2014-2019) by Fiber Type in Terms of Value and Volume

## **Chapter 4**

Table 4.1 Product Mapping of Composite Cylinders Manufacturers Based on Type of Tanks

Table 4.2: Product Mapping of Composite Cylinders Manufacturers Based on Applications

Table 4.3: Rankings of Suppliers Based on Composite Cylinders Market

Table 4.4: Presence of Composite Cylinders Manufacturers across the Value Chain

## **Chapter 5**

Table 5.1: New Players in the Global Composite Cylinders Market

Table 5.2: Innovations in the Global Composite Cylinders Market

## **Disclaimer**

---

It has been our intent to maintain the accuracy of the information presented in this report. Due to many circumstances beyond our direct control; however: Lucintel does not make any guarantees, expressed or implied, to the accuracy of the information contained in this report. Much of the information provided in this report is obtained from third-party industry sources, along with primary data from suppliers, producers, and other sources, for which Lucintel cannot make any assurances or guarantees on their behalf.

## **Copyright**

---

This report is protected by copyright of Lucintel. No part of this report may be copied or distributed without prior express written permission from Lucintel. This report is intended only for the use of the buyer or the company of the buyer, which he/she represents, and cannot be distributed in any form, electronic or otherwise, or be given to any third party without prior written permission

## Abbreviations and Technical Units

---

AFP	Automated Filament Placement
APAC	Asia Pacific
ATP	Automated Tape Laying
CAGR	Compounded Annual Growth Rate
CNG	Compressed Natural Gas
CF	Carbon Fiber
EU	Europe
GDP	Gross Domestic Product
HDV	Heavy Duty Vehicles
LDV	Light Duty Vehicles
LPG	Liquefied Petroleum Gas
NA	North America (includes USA, Mexico, Canada)
NGV	Natural Gas Vehicle
OEM	Original Equipment Manufacturer
ROW	Rest of the World(Other than NA and Europe)
RTM	Resin Transfer Molding
SCBA	Self-Contained Breathing Apparatus
SCUBA	Self-Contained Underwater Breathing Apparatus

## About Us

---

Lucintel, the premier global management consulting and market research firm creates winning strategy for growth—whether you need to understand market dynamics, identify new opportunities, or increase your profitability. It offers market assessments, competitive analysis, opportunity analysis, growth consulting, M&A, and due diligence services to executives and key decision-makers in a variety of industries. Over the last 15 years, Lucintel has served over 1,000 corporations in 70 countries. For further information, visit [www.lucintel.com](http://www.lucintel.com).

Our trusted data and analysis provides fact-based, actionable advice on all phases of market strategy and tactics. Combined with a worldwide perspective of the various industries, we provide you with a plan to improve performance in a competitive marketplace. In the end, we save you time and money – enabling you to make wise decisions quickly for the success of your company and customers.

Lucintel, headquartered in Irving, Texas (USA), provides actionable results that deliver significant value and long term growth to clients from various industries including aerospace, automotive, chemical, composites, construction, energy, marine, metal, mining, medical, sporting goods and technology. We have served **thousands of clients**, ranging from small, emerging organizations up to multi-national Fortune 500 companies in 70+ countries worldwide.

Lucintel has over 480 multi-client market intelligence reports related to aerospace, construction, consumer goods, energy, marine, transportation, IT, telecommunication, media and entertainment, banking, healthcare and materials industries. Please visit [http://www.lucintel.com/market\\_reports.aspx](http://www.lucintel.com/market_reports.aspx) to see a complete list of Lucintel reports or contact us at below address.

Lucintel LLC

222 Las Colinas Blvd West, Suite 1650, Irving, TX 75039, USA

Tel. +1-972-636-5056, Fax: +1-877-883-5140, Email: [helpdesk@Lucintel.com](mailto:helpdesk@Lucintel.com)

Market Reports	Consulting
 Aerospace & Defense	 Strategic Growth Consulting
 Transportation	 Benchmarking
 Chemical & Composite Materials	 Opportunity Screening
 Construction	 Partner Search and Evaluation
 Energy	 M & A Due Diligence
 Retail & Consumer Goods	 Market Entry Strategy
 Metal & Mining	
 Electrical & Electronics	

Lucintel has an extensive toolkit to address key strategic questions for increasing your company's profitability and industry presence. A representative sample of several clients, who we have had the privilege to support include:



# 1. Executive Summary

---

**NOTE:** This report considers the composite cylinders market with an in-depth analysis of three regions: North America, Europe, and Rest of World (ROW). The report also analyzes the composite cylinders market on the basis of applications such as gas carriers and storage, transportation, life support, and others. The report is segmented by type of cylinders such as type II, type III, and type IV. It is also segmented as composites consumption by fiber types such as carbon fiber, glass fiber and aramid fiber.

In 2013, the worldwide composite cylinders market reached XX thousand units with a value of \$XX million (€XX M). The market is expected to grow to \$XX million (€XX M) by 2019 at a CAGR of XX% over the next five years (2014-2019).

Composite cylinders are used in a variety of markets, including transportation, medical, Self-Contained Underwater Breathing Apparatus (SCUBA), and Self Contained Breathing Apparatus (SCBA) and many others.

Year-on-year demand (in millions of dollars) changes in end user segments of composite cylinders in 2013 were as follows:

- Gas Carriers & Storage : XX%
- Transportation : XX%
- Life Support : XX%
- Others : XX%

In terms of type of tanks, the growth rates in 2013 were as follows:

- Type-II : XX%
- Type-III : XX%
- Type-IV : XX%

A summary of the global composite cylinders market and its attributes are provided in the following table.

Table 1.1: Market Parameters for the Global Composite Cylinders Market and Attributes

<b>Market Parameters Composite Cylinders Market</b>	<b>Attributes</b>
Market Age	
Market Size of Composite Cylinders Market (2013) by Value	
Market Size of Composite Cylinders Market (2019) by Value	
Last Five Years' CAGR by Value (2008-2013)	
Forecast Period Market CAGR by Value (2014-2019)	
Annual Growth Rate 2012-2013	
Major Segments (by Cylinder Type)	

Major Segments (by Application)	
Major Segments (by Fiber Type)	
Degree of Competition	
Degree of Technical Change (Year-over-Year)	
Supplier Power	
Buyer Power	
Threat of New Entrants	
Market Concentration (% of Market Controlled by Top Five Competitors)	

***Several paragraphs and data are removed from this chapter and are available after purchasing the report. Please contact your account manager at Lucintel or write to [helpdesk@lucintel.com](mailto:helpdesk@lucintel.com). Please see below more sample pages.***



## **3. Market Trend and Forecast Analysis**

---

### **3.1 Market Analysis 2013**

This chapter presents an analysis of the composite cylinders market by segment, types, materials, and regions. It has wide applications in different areas, ranging from medical to recreation. Cylinders are customized as per their applications in different segments. Today, composite cylinders are used in a variety of end user industries such as transportation, life support, gas carriers & storage, and recreational & others.

#### **3.1.1 Global Composite Cylinders Market by Applications**

The following charts depict the composite cylinders market by applications in 2013.

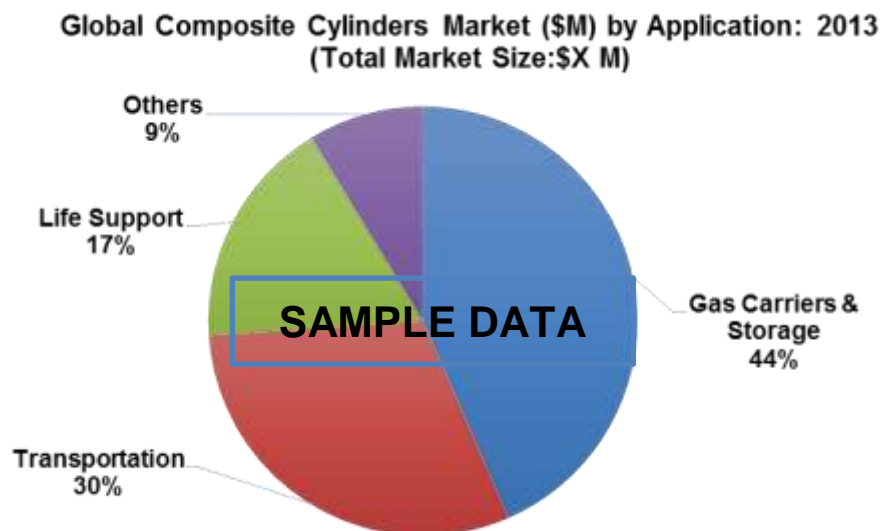


Figure 3.1: Global Composite Cylinders Market Distribution (\$M) by Application in 2013

### 3.1.2 Global Composite Cylinders Market by Types of Cylinders

Type IV is the predominant type of cylinder in the global composite cylinders market. Type IV cylinder consumption is also growing with increasing popularity in LPG and alternative fuel vehicles.

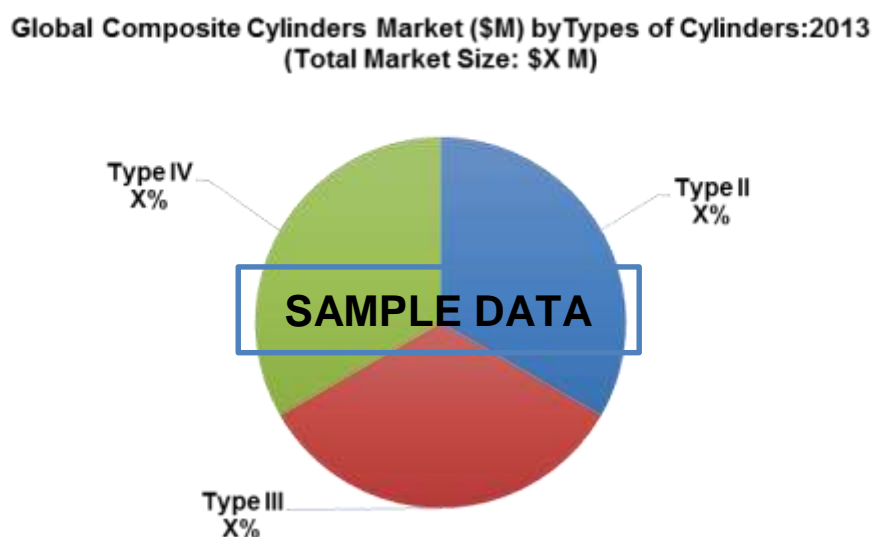


Figure 3.5: Global Composite Cylinders Market Distribution by Types of Cylinders (\$M) in 2013

### 3.1.3 Composites Consumption in the Global Composite Cylinders Market by Fiber Types

Composite cylinders are manufactured by glass, carbon, or aramid fibers impregnated in epoxy resin.

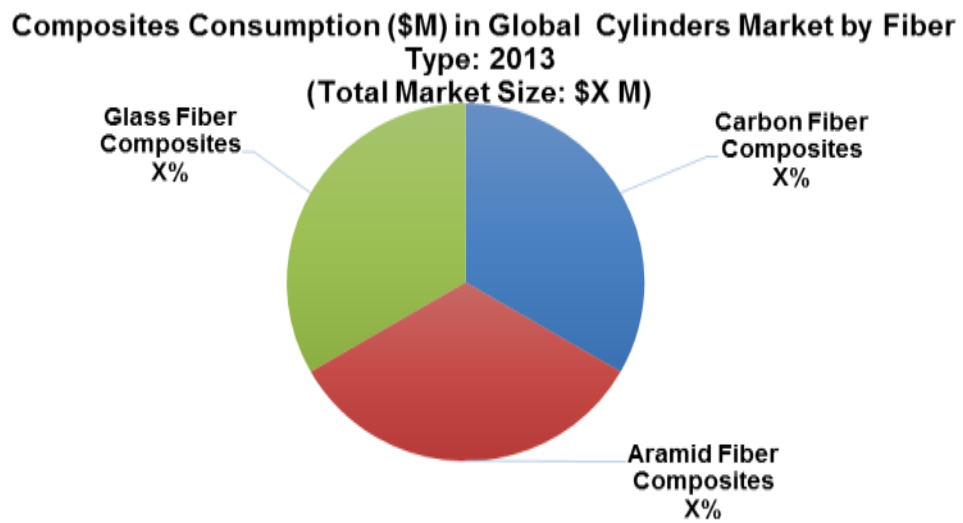


Figure 3.9: Composites Consumption (\$M) in the Global Composite Cylinders Market Distribution by Fiber Type in 2013

### 3.1.4 Global Composite Cylinders Market by Region

Total worldwide composite cylinders shipments were valued at \$XX million in 2013.

**Global Composite Cylinders Market(\$M) by Region: 2013**  
(Total Market Size: \$X M)

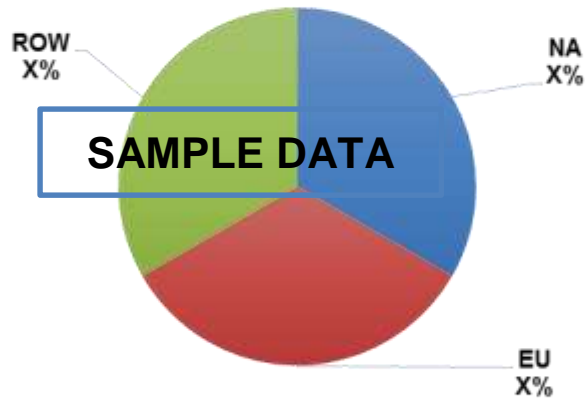


Figure 3.13: Global Composite Cylinders Market Distribution by Region (\$M) in 2013

## 3.2 Market Trend Analysis

### 3.2.2 Global Composite Cylinders Market by Value and Volume

Globally, the composite cylinders market witnessed CAGRs of XX% and XX% by value and volume respectively during the past five years (2008-2013). The market reached \$XX million in 2013 from \$XX million in 2008.

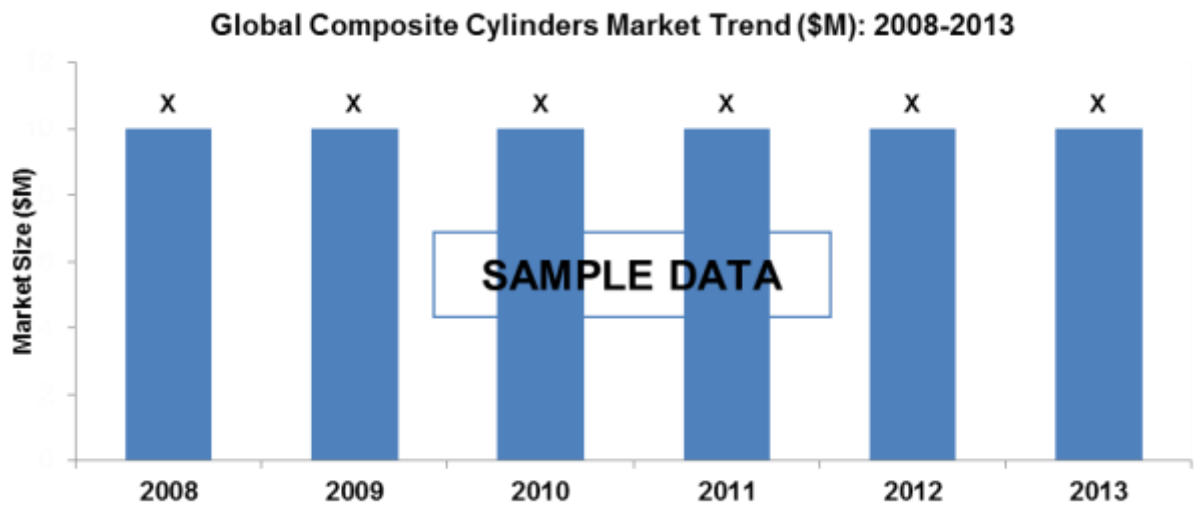


Figure 3.22: Global Composite Cylinders Market Trend (\$M) during 2008-2013

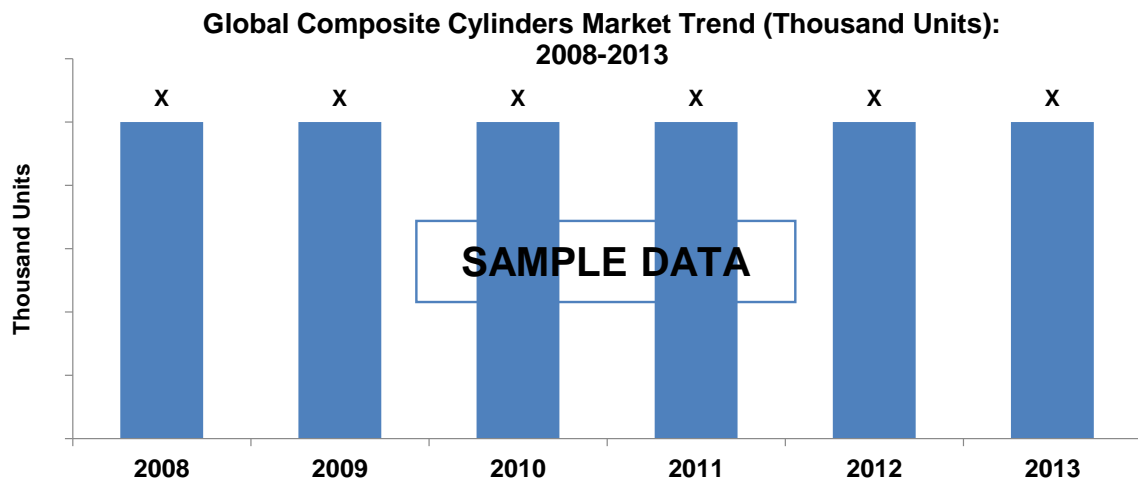


Figure 3.23: Global Composite Cylinders Market Trend (Thousand Units) during 2008-2013

Table 3.1: Market Trends (2008-2013) for Global Composite Cylinders Market

	2008	2009	2010	2011	2012	2013
Global Market (\$M)						
% Change		<b>SAMPLE DATA</b>				
Global Market (Thousand Units)						
% Change						

The average growth rates for one, three, and five years for the global composite cylinders market are depicted in the following table.

Table 3.2: Average Growth Rates for One, Three, and Five Years for the Global Composite Cylinders Market in Terms of \$M

Number of Years	Average Annual Growth Rate (CAGR) \$ Consumption
One Year (2012-2013) Three Years (2010-2013) Five Years (2008-2013)	<b>SAMPLE DATA</b>

### 3.3 Market Forecast Analysis

#### 3.3.2 Forecast for the Global Composite Cylinders Market by Value and Volume

The global composite cylinders market is forecast to grow from XX thousand units in 2014 to XX thousands units by 2019. In terms of shipment value, the composite cylinders market is forecast to grow from \$XX million in 2014 to \$XX million by 2019 at a CAGR of XX% during 2014-2019.

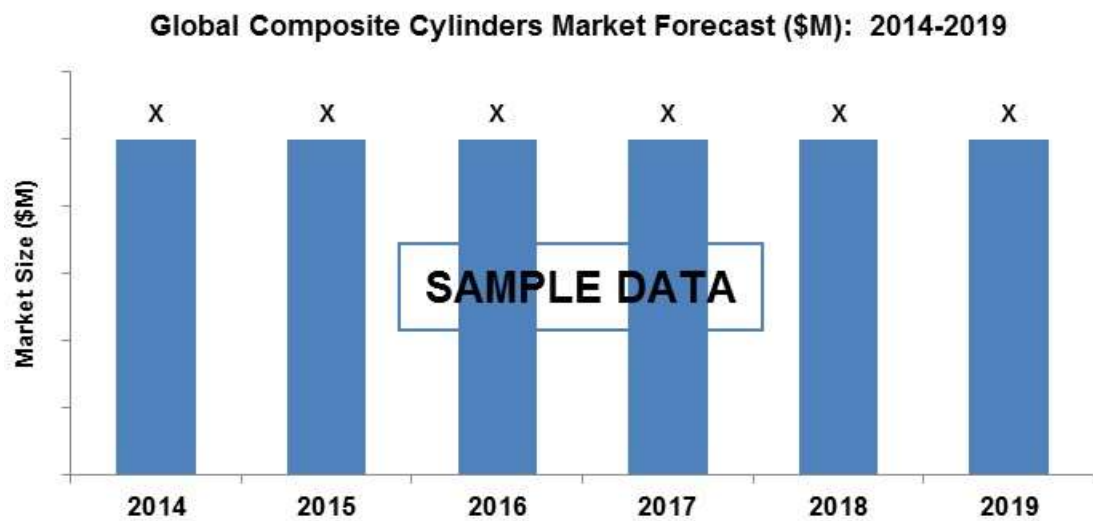


Figure 3.40: Global Composite Cylinders Market Forecast (\$M) (2014-2019)

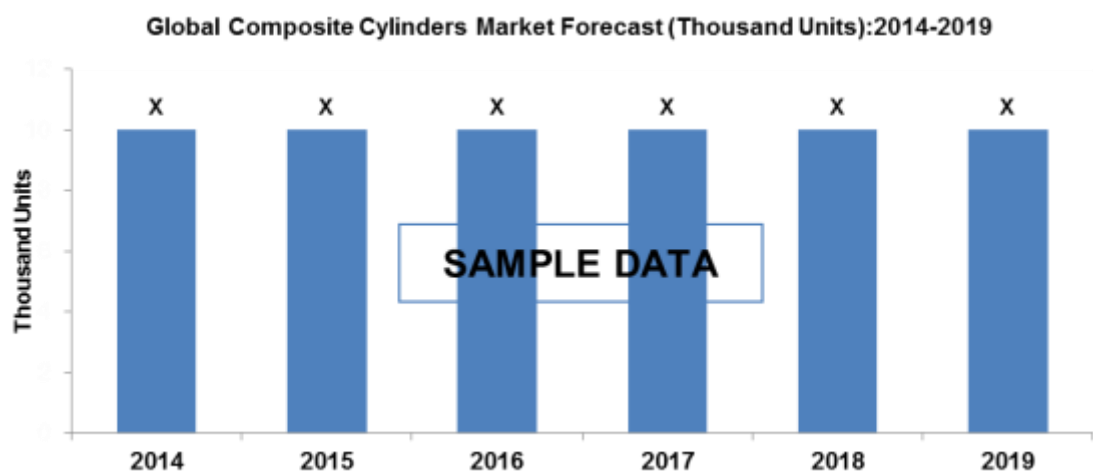


Figure 3.41: Global Composite Cylinders Market Forecast (Thousand Units) (2014-2019)

Table 3.11: Market Forecast (2014-2019) of the Global Composite Cylinders Market

	2014	2015	2016	2017	2018	2019
Global Composite Cylinders Market (\$M)						
% Change		<b>SAMPLE DATA</b>				
Global Composite Cylinders Market (Thousand Units)						
% Change						

Average growth rates for one, three, and five years for the global composite cylinders market are depicted in the following table.

Table 3.12: Average Growth Rates for One, Three, and Five Years for the Global Composite Cylinders Market in Terms of \$ Values

Number of Years	Average Annual Growth Rate (CAGR) \$ Values
One Year (2013-2014)	<b>SAMPLE DATA</b>
Three Years (2014-2017)	
Five Years (2014-2019)	

## 4.5 Porter's Five Forces Analysis

The global composite cylinders market is expected to grow in profitability in the coming years due to the rising demand for lightweight and easily portable alternatives. Based on the fundamentals of the industry and the competitive environment, the analysis reveals that the past trends are expected to continue in the near future.



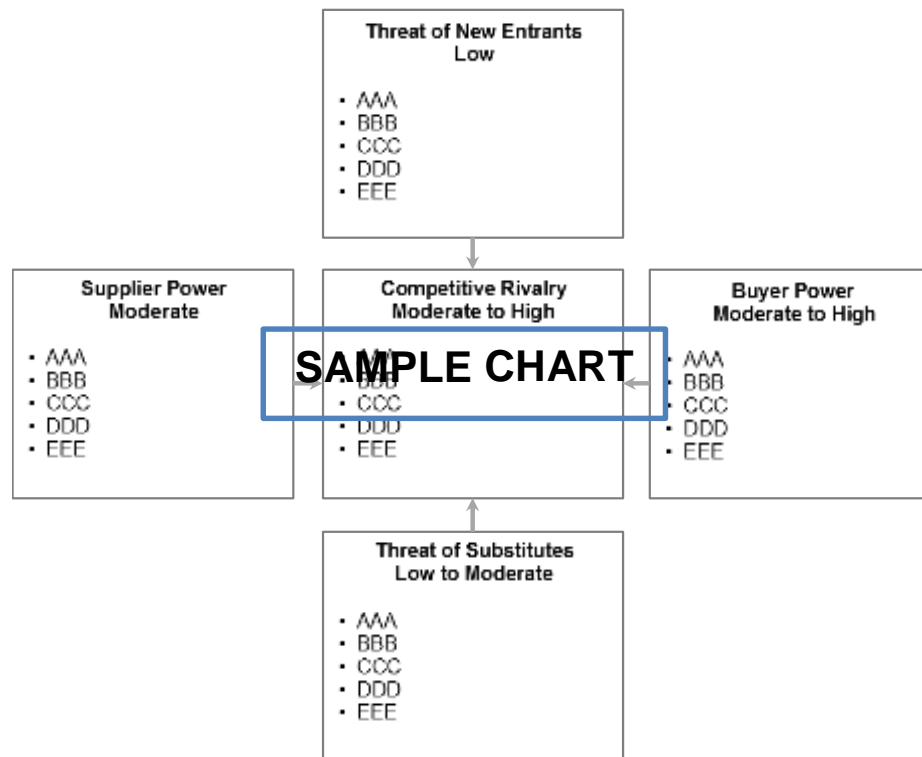


Figure 4.7: Porter's Five Forces Model for Global Composite Cylinders Market

***Several paragraphs and data are removed from this chapter as well as other chapters and are available after purchasing the report. Please contact your account manager at Lucintel or write to [helpdesk@lucintel.com](mailto:helpdesk@lucintel.com).***