

# **Growth Opportunities in Global Pultrusion Market 2009 - 2014, September 2009**

<https://marketpublishers.com/r/G96038D1CE3EN.html>

Date: September 2009

Pages: 236

Price: US\$ 7,000.00 (Single User License)

ID: G96038D1CE3EN

## **Abstracts**

The Pultrusion market has experienced significant growth during last 5 years and is expected to reach \$1.5 billion in 2014 with a global growth rate of 6.3% for the next five years; it is one of the fastest growing processes within the composites industry for making of composite parts. Today pultruded products are becoming far more commonplace. Rebar, decking, grating, ladders, hand tools, window profiles, structural shapes and many other pultruded applications are gaining great interest from consumers. Demand has been driven by a variety of applications such like oil & gas, transportation, infrastructure, and consumer goods. Pultruded products are even finding their way into aerospace, UAV, wind energy, medical, and other applications adding on to penetration into new industry & applications.

The pultruded products are at the growth stage on life cycle curve. Cost efficiency; time-to-market; and pricing are major factors in gaining customer confidence and increase market share. The biggest hurdles at manufacturers end are fragmented market, high competition, traditional products, and rat-race. That shows a high potentials and eager for innovation in pultrusion market. Lucintel's comprehensive analysis unlocks an opportunity to cater pultrusion market in composites industry

This report provides the status of the global Pultrusion industry by the end of 2008 and forecasts the market for 2009-2014. Learn what factors are impacting the Pultrusion market. This market report provides trends and forecast for the worldwide Pultrusion industry in various market segments and applications such as grating, structural shapes, window profiles, ladder rails, electric insulators, tool handles, utility poles and others. It also provides regional analysis. Pultrusion market by materials such as reinforcements and resins are discussed.

The market size estimates for the pultrusion industry.

Pultrusion market breakdown by various applications (rebars, ladders, window profiles, grating, decking, structural shapes, electrical insulators, etc.) and industries (consumer goods, construction, electrical, transportation, infrastructure, chemical, etc.).

Pultrusion market by regions (North America, Europe, Asia) and by countries (USA, Canada, Mexico, Germany, Italy, UK, Finland, China, Japan etc).

Trend and forecast for the pultrusion industry. Growth rates for various applications.

Composite materials consumption in the global pultrusion industry. Market break down by different types of resins and fibers.

Competitive analysis: Market leaders and their market shares in grating, ladder, rebar, electrical insulator, window lineals and other applications.

Market penetration for pultruded products in various applications such as window lineals, rebar, grating, ladder rail, utility pole and bridge deck.

Market outlook and insights.

## Contents

### **1. EXECUTIVE SUMMARY**

### **2. PULTRUSION INDUSTRY BACKGROUND AND CHARACTERISTICS**

- 2.1 Pultrusion Industry Overview
- 2.2 Characteristics of the Pultrusion Industry
- 2.3 Industry Classification and Application Descriptions
  - 2.3.1 Building & Construction Industry
    - 2.3.1.1 Window Profiles
    - 2.3.1.2 Ladder Rails
  - 2.3.2 Infrastructure Industry
    - 2.3.2.1 Rebar
    - 2.3.2.2 Utility Poles
    - 2.3.2.3 Decking
    - 2.3.2.4 Dowel Bar
    - 2.3.2.5 Structural Beams for Bridges and Buildings
  - 2.3.3 Electric & Electronics Industry
    - 2.3.3.1 Electrical insulator rods
    - 2.3.3.2 Cable Trays
  - 2.3.4 Cooling Tower Industry
  - 2.3.5 Consumer & Sporting goods Industry
    - 2.3.5.1 Tool Handles
  - 2.3.6 Chemical Industry
    - 2.3.6.1 Pultruded Grating
    - 2.3.6.2 Hand rails and structural shapes
  - 2.3.7 Oil and Gas Industry
    - 2.3.7.1 Sucker Rods
  - 2.3.8 Transportation Industry
- 2.4 Price and Weight Distribution
  - 2.4.1 Ladder rail
  - 2.4.2 Window Lineal
  - 2.4.3 Grating

### **3. GLOBAL PULTRUSION MARKET ANALYSIS-2008**

- 3.1 Market Overview
- 3.2 Market Concentration

- 3.3 Regional Analysis
  - 3.3.1 North America
  - 3.3.2 European Pultrusion Market
  - 3.3.3 Asian Pultrusion Market
- 3.4 Driving Forces for the Use of pultrusion in composites
- 3.5 Key Requirements

## **4. COMPETITIVE ANALYSIS**

- 4.1 Overview
- 4.2 Window Profiles Market
  - 4.2.1 Market penetration
- 4.3 Rebar
  - 4.3.1 Market penetration
- 4.4 Ladder rail
  - 4.4.1 Market penetration
- 4.5 Utility pole
  - 4.5.1 Market penetration
- 4.6 Bridge Deck
  - 4.6.1 Market penetration
- 4.7-- Grating
  - 4.7.1 Market Penetration
- 4.8 Electric insulator
  - 4.8.1 Market Penetration
- 4.9 Tool handle
  - 4.9.1 Market Penetration
- 4.10 Cooling Tower
  - 4.10.1 Market Penetration
- 4.11 Sporting Goods
  - 4.11.1 Market Penetration

## **5. GLOBAL PULTRUSION MARKET TRENDS**

- 5.1 Overview
- 5.2 Trends in Global Pultrusion Market by Industry Served
- 5.3 Trends in Global Pultrusion Market by Applications
- 5.4 Market Trend by Raw Materials
- 5.5 Regional Trends

## **6. GLOBAL PULTRUSION MARKET FORECASTS**

- 6.1 Growth Drivers for Composites in the global PultrusionMarket
- 6.1.1 Growth Deflators for global pultrusion market in the composites
- 6.2 Forecast in Global Pultrusion Market
- 6.3 Forecast in Global Pultrusion Market by Industry
- 6.4 Forecast in Global Pultrusion Market by Applications
- 6.5 Forecast in Global Pultrusion Market by Regional

## **7. PULTRUSION MANUFACTURING PROCESS ANALYSIS**

- 7.1 Overview of Pultrusion Processes
- 7.2 Pultrusion Bath Process
- 7.3 Pultrusion Injection Process
- 7.4 Injection Die vs. Open Bath Pultrusion
- 7.5 Pultrusion Machines
- 7.5.1 Pultrusion Machine Builders

## **8. GROWTH OPPORTUNITIES AND EMERGING PULTRUSION APPLICATIONS**

- 8.1 Emerging Applications & Processes
- 8.2 Global Leaders in Pultrusion Market
- 8.3 North America Pultrusion Leader Profiles
- 8.4 European Leaders in Pultrusion: Profiles
- 8.5 Asian Leaders in Pultrusion: Profiles

## List Of Figures

### LIST OF FIGURES

#### CHAPTER 1 EXECUTIVE SUMMARY

Fig. 1.1: Porter's five forces model for the global pultrusion composites market

#### CHAPTER 2 PULTRUSION INDUSTRY BACKGROUND AND CHARACTERISTICS

Fig. 2.1: Pultrusion industry classification by sales segmentation and applications

Fig. 2.2: A pultruded composite window profile, Source: Exel Composites Oyj, Finland

Fig. 2.3: Expansion/contraction comparison for different types of window materials.

Fig. 2.4: Conductivity comparison for different types of window materials.

Fig. 2.5: Pultruded fiberglass ladder rails.

Fig. 2.6: A photograph of rebar

Fig. 2.7: A photograph of utility pole.

Fig. 2.8: A FRP stringer supported bridge deck.

Fig. 2.9: A photograph of dowel bar

Fig. 2.10: A photograph of pultruded I-beam.

Fig. 2.11: A picture of pultruded strain rod.

Fig. 2.12: Pultruded fiberglass cable tray by Enduro

Fig. 2.13: Cooling tower produced with pultruded fiberglass components.

Fig. 2.14: Pultruded fiberglass tool handles by Structron

Fig. 2.15: A photograph of pultruded gratings.

Fig. 2.16: A photograph of hand rail.

Fig. 2.17: A drawing of pultruded sucker rod

Fig. 2.18 Pultruded cab floor in truck application

#### CHAPTER 3 GLOBAL PULTRUSION MARKET ANALYSIS-2008

Fig. 3.1: Global Pultrusion market in terms of \$ million shipment (2003 vs. 2008)

Fig. 3.2: Global Pultrusion market in terms of million lbs shipment (2003 vs. 2008)

Fig. 3.3: Global Pultrusion corrosion & non-corrosion market in terms of \$ million in 2008

Fig. 3.4: Market distribution of corrosion & non-corrosion in pultrusion in 2008

Fig. 3.5: Pultrusion Market share in Global Composites Market 2008 (in B \$)

Fig. 3.6: Pultrusion Market share in Global Composites Market 2008 (in B \$)

Fig. 3.7: Top % segmentation of Pultruded products manufacturers by market value –

2008

Fig. 3.8: The leading pultruded products manufacturers for major applications

Fig. 3.9: Pultrusion Market 2008 by Region (in M \$)

Fig. 3.10: Pultrusion Market 2008 by Region (in M \$)

Fig. 3.11: Pultrusion Market 2008 by Region (in M lbs)

Fig. 3.12: Pultrusion Market 2008 by Region (in M lbs)

Fig. 3.13: North American Corrosion & Non-corrosion Pultrusion Market 2008(In \$ Mill)

Fig. 3.14: North American Corrosion & Non-corrosion Pultrusion Market 2008(In Mill lbs)

Fig. 3.15: European Corrosion & Non-corrosion Pultrusion Market 2008(In \$ Mill)

Fig. 3.16: European Corrosion & Non-corrosion Pultrusion Market 2008(In Mill lbs)

Fig. 3.17: Asia-Pacific Corrosion & Non-corrosion Pultrusion Market 2008(In \$ Mill)

Fig. 3.18: Asia-Pacific Corrosion & Non-corrosion Pultrusion Market 2008(In Mill lbs)

Fig. 3.19: Emphasis on cost and performance by various industry segments

## **CHAPTER 4 COMPETITIVE ANALYSIS**

Fig. 4.1: The rate of change for the residential window lineal market over the five-year period 2003-2008

Fig. 4.2: Typical pultruded bridge deck of 4" thick cross section.

## **CHAPTER 5 GLOBAL PULTRUSION MARKET TRENDS**

Fig. 5.1: Global Pultrusion Composites Market in 2003 and 2008 in \$ million

Fig. 5.2: Global Pultrusion Composites Market in 2003 and 2008 in million lbs

Fig. 5.3: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market

Fig. 5.4: Global Pultrusion Composites Market in 2007 and 2008 in \$ million

Fig. 5.5: Global Pultrusion Composites Market in 2007 and 2008 in million lbs

Fig. 5.6: Last 1 year (2007-2008) CAGR for Global Pultrusion Composites Market

Fig. 5.7: Global Pultrusion Composites Market in 2003 by Industry (\$ mill)

Fig. 5.8: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Industry (by M \$).

Fig. 5.9: Global Pultrusion Composites Market in 2003 by Industry (Mill lbs)

Fig. 5.10: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Industry (by Mill lbs)

Fig. 5.11: Global Pultrusion Composites Market in 2007 by Industry (\$ Mill)

Fig. 5.12: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Industry (by M \$).

Fig. 5.13: Global Pultrusion Composites Market in 2007 by Industry (\$ Mill)

Fig. 5.14: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by

Industry (by Mill lbs).

Fig. 5.15: Global Pultrusion Composites Market 2003 by Application (in M \$)

Fig. 5.16: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Application (by M \$).

Fig. 5.17: Global Pultrusion Composites Market 2003 by Application (in M lbs).

Fig. 5.18: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Application (by M lbs)

Fig. 5.19: Global Pultrusion Composites Market 2007 by Application (in M \$).

Fig. 5.20: Last 1 year (2007-2008) CAGR for Global Pultrusion Composites Market by Application (by M \$)

Fig. 5.21: Global Pultrusion Composites Market 2007 by Application (in M lbs).

Fig. 5.22: Last 1 year (2007-2008) CAGR for Global Pultrusion Composites Market by Application (by M lbs).

Fig. 5.23: Global Pultrusion Composites Market 2003 by Reinforcement Type (in M \$).

Fig. 5.24: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Reinforcement Type (by M \$).

Fig. 5.25: Global Pultrusion Composites Market 2003 by Reinforcement Type (In M lbs).

Fig. 5.26: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Reinforcement Type (by M lbs)

Fig. 5.27: Global Pultrusion Composites Market 2007 by Reinforcement Type (in M \$).

Fig. 5.28: Last 1 year (2007-2008) CAGR for Global Pultrusion Composites Market by Reinforcement Type (by M lbs)

Fig. 5.29: Global Pultrusion Composites Market 2007 by Reinforcement Type (in M lbs).

Fig. 5.30: Global Pultrusion Composites Market 2007 by Reinforcement Type (in \$ Mill)

Fig. 5.31: Global Pultrusion Composites Market 2003 by Resin (in \$ M).

Fig. 5.32: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Resin (in \$ M).

Fig. 5.33: Global Pultrusion Composites Market 2003 by Resin (in M lbs).

Fig. 5.34: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Resin (in M lbs).

Fig. 5.35: Global Pultrusion Composites Market 2007 by Resin (in \$M).

Fig. 5.36: Global Pultrusion Composites Market 2003 by region (in M \$).

Fig. 5.37: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Region (by M \$)

Fig. 5.38: Global Pultrusion Composites Market 2003 by region (in M lbs)

Fig. 5.39: Last 5 years (2003-2008) CAGR for Global Pultrusion Composites Market by Region (by M lbs).

Fig. 5.40: Global Pultrusion Composites Market 2007 by region (in M \$).

Fig. 5.41: Last 1 year (2007-2008) CAGR for Global Pultrusion Composites Market by



Region (by M \$).

Fig. 5.42: Global Pultrusion Composites Market 2007 by region (in M lbs).

Fig. 5.43: Last 1 year (2007-2008) CAGR for Global Pultrusion Composites Market by Region (by M lbs).

Fig. 5.44: North America Pultrusion Composites Market 2003 by Industry (in M \$).

Fig. 5.45: North America Pultrusion Composites Market 2008 by Industry (in M \$).

Fig. 5.46: Last 5 years (2003-2008) CAGR for North America Pultrusion Composites Market by Industry (by \$ Mill).

Fig. 5.47: North America Pultrusion Composites Market 2003 by Industry (in Mill lbs).

Fig. 5.48: North America Pultrusion Composites Market 2008 by Industry (in Mill lbs).

Fig. 5.49: Last 5 years (2003-2008) CAGR for North America Pultrusion Composites Market by Industry (by Mill lbs)

Fig. 5.50: North America Pultrusion Composites Market 2003 by Application (in \$ M).

Fig. 5.51: North America Pultrusion Composites Market 2003 by Industry (in Mill lbs).

Fig. 5.52: North America Pultrusion Composites Market 2008 by Industry (in M).

Fig. 5.53: North America Pultrusion Composites Market 2008 by Industry (in Mill lbs).

Fig. 5.54: Europe Pultrusion Composites Market 2003 by Industry (in \$ M).

Fig. 5.55: Europe Pultrusion Composites Market 2008 by Industry (in \$ M).

Fig. 5.56: Last 5 years (2003-2008) CAGR for Europe Pultrusion Composites Market by Industry (by \$ Mill).

Fig. 5.57: Europe Pultrusion Composites Market 2008 by Industry (in \$ M).

Fig. 5.58: Europe Pultrusion Composites Market 2008 by Industry (in Mill lbs).

Fig. 5.59: Last 5 years (2003-2008) CAGR for Europe Pultrusion Composites Market by Industry (by Mill lbs).

Fig. 5.60: Europe Pultrusion Composites Market 2003 by Applications (in \$ M).

Fig. 5.61: Europe Pultrusion Composites Market 2008 by Applications (in \$ M).

Fig. 5.62: Europe Pultrusion Composites Market 2008 by Industry (by Mill lbs).

Fig. 5.63: Asia-Pacific Pultrusion Composites Market 2003 by Industry (in \$ M).

Fig. 5.64: Asia-Pacific Pultrusion Composites Market 2008 by Industry (in \$ M).

Fig. 5.65: Last 5 years (2003-2008) CAGR for Europe Pultrusion Composites Market by Industry (in \$ Mill).

Fig. 5.66: Last 5 years (2003-2008) CAGR for Europe Pultrusion Composites Market by Industry (by Mill lbs)

Fig. 5.67: Asia-Pacific Pultrusion Composites Market 2003 by Application (in \$ M).

Fig. 5.68: Asia-Pacific Pultrusion Composites Market 2003 by Application (by Mill lbs)

Fig. 5.69: Asia-Pacific Pultrusion Composites Market 2008 by Application (in \$ M).

Fig. 5.70: Asia-Pacific Pultrusion Composites Market 2008 by Application (by Mill lbs)

Fig. 5.71: Major Raw materials Suppliers

## CHAPTER 6 GLOBAL PULTRUSION MARKET FORECASTS

Fig. 6.1: Key drivers & challenges for pultrusion market in composites

Fig. 6.2: Growth drivers for pultrusion market in composites with impact analysis for the short, medium and long term.

Fig. 6.3: Growth deflators for pultrusion market in composites with impact analysis for the short, medium and long term.

Fig. 6.4: Global Pultrusion Composites Market in 2009 and 2014 in \$ million

Fig. 6.4: Global Pultrusion Composites Market in 2009 and 2014 in \$ million

Fig. 6.5: Global Pultrusion Composites Market in 2009 and 2014 in million lbs

Fig. 6.6: Next 5 years (2009-2014) CAGR for Global Pultrusion Composites Market

Fig. 6.7: Global Pultrusion Composites Market in 2009 and 2008 in \$ million.

Fig. 6.8: Global Pultrusion Composites Market in 2009 and 2008 in million lbs

Fig. 6.9: Next 1 year (2008-2009) CAGR for Global Pultrusion Composites Market

Fig. 6.10: Global Pultrusion Composites Market by Industry in 2014 (in \$ mill)

Fig. 6.11: Next 5 years (2009-2014) CAGR for Global Pultrusion Composites Market by Industry (\$ Mill)

Fig. 6.12: Global Pultrusion Composites Market by Industry in 2014 (in Mill lbs)

Fig. 6.13: Next 5 years (2009-2014) CAGR for Global Pultrusion Composites Market by Industry (Mill lbs)

Fig. 6.14: Global Pultrusion Composites Market by Industry in 2014 (in \$ Mill)

Fig. 6.15: Next 1 years (2008-2009) CAGR for Global Pultrusion Composites Market by Industry (\$ Mill)

Fig. 6.16: Global Pultrusion Composites Market by Industry in 2014 (in Mill lbs)

Fig. 6.17: Next 1 year (2008-2009) CAGR for Global Pultrusion Composites Market by Industry (Mill lbs)

Fig. 6.18: Global Pultrusion Composites Market by Applications in 2014 (in \$ Mill)

Fig. 6.19: Next 5 years (2009-2014) CAGR for Global Pultrusion Composites Market by Applications (\$ Mill)

Fig. 6.20 Global Pultrusion Composites Market by Applications in 2014 (in Mill lbs)

Fig. 6.21: Next 5 years (2009-2014) CAGR for Global Pultrusion Composites Market by Applications (Mill lbs)

Fig. 6.22: Global Pultrusion Composites Market by Applications in 2009 (in \$ Mill)

Fig. 6.23: Global Pultrusion Composites Market by Applications in 2010 (in Mill lbs)

Fig. 6.24: Global Pultrusion Composites Market 2014 by region (in M \$)

Fig. 6.25: Next 5 years (2009-2014) CAGR for Global Pultrusion Composites Market by Region (by M \$)

Fig. 6.26: Global Pultrusion Composites Market 2014 by region (in M lbs)

Fig. 6.27: Next 5 years (2009-2014) CAGR for Global Pultrusion Composites Market by

Region (by M lbs)

Fig. 6.28: Global Pultrusion Composites Market 2009 by region (in M \$)

Fig. 6.29: Next 1 year (2008-2009) CAGR for Global Pultrusion Composites Market by Region (by M \$)

Fig. 6.30: Global Pultrusion Composites Market 2009 by region (in M lbs)

Fig. 6.31: Next 1 year (2008-2009) CAGR for Global Pultrusion Composites Market by Region (by M lbs)

## **CHAPTER 7 PULTRUSION MANUFACTURING PROCESS ANALYSIS**

Fig.7.1: Typical line diagram of a bath pultrusion process.

Fig. 7.2: Typical line diagram of an injection pultrusion process

## **CHAPTER 8 GROWTH OPPORTUNITIES AND EMERGING PULTRUSION APPLICATIONS**

Figure 8.1 Flat-Sided Ship Designs such as DDG 1000 (left) and War Fighter (right) are Ideal Candidates for Fabrication using Pultruded Flat Panels with Integral Joints

Figure 8.2: Pultruded wings for UAV

Source: Kazak Composites, Inc

Figure: 8.3 Pultruded wing: An example of a pultruded hollow wing without internal ribs.

Source: Kazak Composites

Figure 8.4: Materials handling equipment for mining industry: A roller tube pultruded by RS Technologies (above) made with polyurethane resin and glass reinforcements. The black color is imparted by carbon black filler, which helps to prevent static electricity buildup in underground mine applications.

Source: RS Technologies

Fig. 8.5: Pultruded Scaffolding.

Source: Strong well (U.S.)

Fig. 8.6: FRP Gridform for Bridge Applications.

Source: Strong well (U.S.)

Fig. 8.7: Composites Sheet Pile system.

Source: Creative Pultrusions (U.S.)

Fig: 8.8 Pultrusion Growth Matrix 2003-2008

Fig: 8.9 Pultrusion Growth Matrix 2003-2008 Fig: 8.10. Market Segmentation % of Pultrusion Manufacturers by Market Value-2008

Fig: 8.11. Market share by Industry Leader (in \$ Mill)

Fig: 8.12. Market share by Industry Leader (in Mill lbs)

## List Of Tables

### LIST OF TABLES

#### CHAPTER 1 EXECUTIVE SUMMARY

Table 1.1: Market parameters for end product usage of composites in global pultrusion market and attributes of usage

Table 1.2: Market parameters for raw materials of composites in global pultrusion market and attributes of usage

#### CHAPTER 2 PULTRUSION INDUSTRY BACKGROUND AND CHARACTERISTICS

Table 2.1: Characteristics of different window material types

#### CHAPTER 4 COMPETITIVE ANALYSIS

Table 4.1: Property comparison of different types of window profiles

Table 4.2: Cost and average life comparison for different types of utility poles

#### CHAPTER 8 GROWTH OPPORTUNITIES AND EMERGING PULTRUSION APPLICATIONS

Table 8.1: Pultrusion Market segments and Its Requirements

## I would like to order

Product name: Growth Opportunities in Global Pultrusion Market 2009 - 2014, September 2009

Product link: <https://marketpublishers.com/r/G96038D1CE3EN.html>

Price: US\$ 7,000.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G96038D1CE3EN.html>