

## Aerospace Composites 2018

A review of the world aerospace composites market from  
Counterpoint Market Intelligence Limited

Why buy this 220-page report?

**It reflects analysis of our discussions with companies at all levels: raw materials, tooling, Tier-2, Tier-1, Super Tier-1 and aircraft OEMs, including suppliers from Europe, North America, & Asia**

- Our 2018 report offers comprehensive market analysis including:
  - Carbon fibre market: market size and market shares - estimated by both volume and value.
  - Global aerospace carbon fibre prepreg market: Market size and market shares
  - Composites parts manufacture: Market size for Aerostructures, engine components and interiors
  - Aerostructures, engine components and interiors composite parts analysed by fibre type
  - Growth in composite parts: estimated over ten years
- Market trends and its key characteristics
  - Entry barriers in the material supply chain: where SMEs find it hard to enter/prosper
  - Opportunity areas for SMEs: we identify 23 SMEs
  - Processes for parts manufacture: market shares for hand lay-up, AFP/ATL and RTM
  - Recycling of composites: market size, growth and trends
- Aerostructures and engine components
  - Infusion, automation and textile technology
  - Thermoplastics: which parts will feel the impact?
- Interiors
  - Which fibre types will see growth?
  - Which materials will gain share?
  - Which parts will see increased use of composites?
- Vertical integration in the material supply chain
  - Which companies are wholly or partly integrated?
  - Does it confer competitive advantage?
- The organisation of composite parts production
  - Suppliers analysed by: product commonality; process and/or materials type, and customer focus/location.

**The report provides profiles of 58 companies. Our profiles cover;**

- Origins and ownership; Our estimate of aerostructures sales, plus financials if obtainable; operations and technologies; customers and contracts; strategy and recent developments; our comments including our categorisation of composites capability

We offer purchasers of our report a free teleconference to discuss any aspects.

## CONTENTS

1. Summary
2. Introduction
  - 2.1. A brief description of Counterpoint's market model
  - 2.2. Overview of the composite usage on commercial aircrafts
  - 2.3. Aerospace composites supply chain
3. Fibre Market
  - 3.1. Carbon Fibre Market
    - 3.1.1. Introduction to carbon fibre
    - 3.1.2. Carbon fibre market
  - 3.2. Glass Fibre market
    - 3.2.1. Introduction to glass fibre
    - 3.2.2. Global glass fibre market
    - 3.2.3. China's glass fibre market
  - 3.3. Aramid Fibre market
    - 3.3.1. Introduction to aramid materials
    - 3.3.2. Para-aramid market
    - 3.3.3. Meta-aramid market
4. Resin
  - 4.1. Thermoplastics
  - 4.2. Thermosets
5. Intermediate Product
  - 5.1. Prepreg Market
  - 5.2. Honeycomb core
    - 5.2.1. Core material technology
    - 5.2.2. Honeycomb trends in China
6. Market Share by Processing Method
7. Market Sizes by Applications
  - 7.1. Aerostructures
  - 7.2. Engine components
  - 7.3. Cabin interiors
    - 7.3.1. Introduction
    - 7.3.2. Interior panels
    - 7.3.3. Seats
    - 7.3.4. Carts and trolleys
    - 7.3.5. Lavatories
    - 7.3.6. Crew rests
    - 7.3.7. Monuments
  - 7.4. Aerospace Tooling
8. Market Shares by Major Players
  - 8.1. Aerostructures
  - 8.2. Engine components
  - 8.3. Cabin interiors
  - 8.4. Tooling
9. Trends
  - 9.1. Raw materials
    - 9.1.1. Carbon fibre production cost reduction
    - 9.1.2. The rise of thermoplastics
  - 9.2. Intermediate products
    - 9.2.1. Is 3D weaving the way to go? Comparison between braiding, weaving and z-pinning

- 9.3. Composite recycling
  - 9.4. Nanocomposites
  - 9.5. Barriers to entry
  - 9.6. Opportunities for SMEs
  - 9.7. Organisation of composite structures manufacturing in aerospace companies
    - 9.7.1. To what extent are supply chains vertically integrated?
      - 9.7.1.1. Aerostructures and Engines Component Suppliers
      - 9.7.1.2. An integration advantage for aerostructures and Interiors Suppliers?
      - 9.7.1.3. An integration advantage for engine component suppliers?
  - 9.8. Trends in Aerostructures
    - 9.8.1. Thermoplastics in aerostructures
    - 9.8.2. Hand layup vs AFP/ATL
    - 9.8.3. Autoclave vs Out-of-Autoclave (OOA)
    - 9.8.4. Composites Additive Manufacturing
    - 9.8.5. Composites fastening
    - 9.8.6. Metal fights back
  - 9.9. Trends in Engine components
  - 9.10. Trends in Cabin interiors
  - 9.11. Trends in Composite tooling for composite structures
- 10. Profiles of The Leading Companies
    - 10.1. Raw major material suppliers  
*18 profiles*
    - 10.2. Profiles of major composite parts suppliers  
*18 profiles*
    - 10.3. Profiles of SMEs in aerospace composites
      - 10.3.1. Carbon fibre manufacturers  
*2 profiles*
      - 10.3.2. Intermediates products manufacturers  
*11 profiles*
      - 10.3.3. Composite parts manufacturers  
*7 profiles*
      - 10.3.4. Integrated composite manufacturers  
*2 profiles*
  - 11. Counterpoint Market Intelligence Limited terms of business

## WHY COUNTERPOINT?

Counterpoint Market Intelligence Limited was formed by George Burton and Richard Apps in 2004 to offer original, independent and rigorous research into aerospace markets. Between them, George and Richard have over 40 years of experience in senior positions in aerostructures, engine components, and aerospace equipment.

Counterpoint now has an international business, with 95% of sales outside the UK. Sales of research reports have led to consultancy projects. Two thirds of sales are to the aerospace industry – aircraft and engine prime contractors and first and second tier suppliers. Other clients are private equity funds, investment banks and government organisations.

In addition to this report the following reports are available from Counterpoint Market Intelligence Limited:

- Aerostructures 2017
- Aero-engine and IGT components 2017
- Aircraft Interiors 2017
- Tooling & automated assembly for aerostructures 2017
- Aerospace Actuation 2016
- Airborne Pods 2016
- Mini reports;
  - Aircraft Harnesses and Electrical Standard Parts 2018
  - Aircraft Interior Lighting 2018
  - Engine controls and fuel systems 2018
  - Aerospace valves 2017
  - Aircraft fluid conveyance 2017
  - Aerospace Machining 2016
  - Environmental control systems 2015
  - Aerospace ball screws 2015
  - Stuffing for airframes 2015

Counterpoint Market Intelligence Limited also undertakes consultancy studies for its clients in areas including the following:

- Deep-dive market analysis
- Evaluation of the strategic positioning of businesses
- Market and strategy-related due diligence for M&A
- Acquisitions search

### How to buy the report

Please contact us using the contact details below or email us on [enquiries@cpmil.com](mailto:enquiries@cpmil.com).

|               |  |              |  |
|---------------|--|--------------|--|
| George Burton | Tel: +44 (0)1747 852805  | Richard Apps | Tel: +44 (0)1235 868051  |
|               | Mobile: +44 (0)7770 982153   |              | Mobile: +44 (0)7741 035969   |
|               | e-mail: <a href="mailto:georgeburton@cpmil.com">georgeburton@cpmil.com</a> |              | e-mail: <a href="mailto:richardapps@cpmil.com">richardapps@cpmil.com</a> |

Address: Counterpoint Market Intelligence Ltd, Curlew Meadow, Denchworth, Oxfordshire OX12 0EA, UK

Website: [www.cpmil.com](http://www.cpmil.com)

## COUNTERPOINT MARKET INTELLIGENCE LIMITED TERMS AND CONDITIONS OF TRADING

### Use

Single Site Licence: This report may be used by an unlimited number of people within the same site. Each of these people may use the report on any computer, and may print out the report, but may not share the report (or any information contained therein) with any person or persons outside that site without the written approval of Counterpoint Market Intelligence Limited.

Group Licence: This report may be used by an unlimited number of people within the same group of companies. Users must not share the report (or any information contained therein) with any person or persons outside that group of companies without the written approval of Counterpoint Market Intelligence Limited.

### Limitation on liability of Counterpoint Market Intelligence Limited

Counterpoint Market Intelligence Limited makes no representation or warranty, expressed or implied, as to the accuracy or completeness of the information contained in this report. Counterpoint Market Intelligence Limited shall not be held liable for consequential and indirect losses or loss of profit or revenue resulting from the use of this report. No recommendations are made or should be implied from this report.

### Intellectual Property

All intellectual property rights, including but not limited to copyright, shall remain the property of Counterpoint Market Intelligence Limited or any third-party licensors.

### Payment

Payment of Counterpoint Market Intelligence Limited's invoices is to be made within 30 days of the date of invoice.

### Governing Law and Jurisdiction

Any dispute or claim arising out of or in connection with this report (including non-contractual disputes or claims) shall be governed by, and construed in accordance with, the Law of England and Wales. The purchaser of this report irrevocably agrees that the courts of England and Wales shall have exclusive jurisdiction to settle any dispute or claim that arises out of or in connection with this Report (including non-contractual disputes or claims).