HEXCEL CORP /DE/ Form 10-K February 10, 2010

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D. C. 20549

## FORM 10 K

# x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2009

or

### o Transition Report Pursuant to Section 13 or 15 (d) of the Securities Exchange Act of 1934

For the transition period from

**Commission File Number 1-8472** 

to

## **Hexcel Corporation**

(Exact name of registrant as specified in its charter)

**Delaware** (State of Incorporation) 94-1109521 (I.R.S. Employer Identification No.)

281 Tresser Boulevard Stamford, Connecticut 06901

(Address of principal executive offices and zip code)

Registrant s telephone number, including area code: (203) 969-0666

Securities registered pursuant to Section 12(b) of the Act:

Title of each class COMMON STOCK Name of each exchange on which registered NEW YORK STOCK EXCHANGE

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x No o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes o No o

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer x

Non-accelerated filer o (Do not check if a smaller reporting company) Accelerated filer o

Smaller reporting companyo

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes o No x

The aggregate market value of the registrant s common stock held by non-affiliates was \$914,585,628 based on the reported last sale price of common stock on June 30, 2009, which is the last business day of the registrant s most recently completed second fiscal quarter.

The number of shares outstanding of each of the registrant s classes of common stock, as of the latest practicable date.

Class COMMON STOCK **Outstanding as of February 9, 2010** 96,946,602

**Documents Incorporated by Reference:** 

Proxy Statement for Annual Meeting of Stockholders (to the extent specified herein) Part III.

#### PART I

#### ITEM 1. Business.

#### **General Development of Business**

Hexcel Corporation, founded in 1946, was incorporated in California in 1948, and reincorporated in Delaware in 1983. Hexcel Corporation and its subsidiaries (herein referred to as Hexcel, the Company, we, us, or our), is a leading advanced composites company. We develop, manufacture, and market lightweight, high-performance composites, including carbon fibers, reinforcements, prepregs, honeycomb, matrix systems, adhesives and composite structures, for use in Commercial Aerospace, Space and Defense and Industrial Applications. Our products are used in a wide variety of end applications, such as commercial and military aircraft, space launch vehicles and satellites, wind turbine blades, automotive, bikes, skis and a wide variety of other industrial applications.

We serve international markets through manufacturing facilities, sales offices and representatives located in the Americas, Asia Pacific and Europe. We are also an investor in a joint venture in Malaysia, which manufactures composite structures for Commercial Aerospace applications.

#### Narrative Description of Business and Segments

We are a manufacturer of products within a single industry: Advanced Composites. In 2007, we successfully concluded the reorganization of our former segments, Composites, Structures and Reinforcements in order to take full advantage of the many growing applications for advanced composite materials. We narrowed our focus and consolidated our activities through divestitures of our European Architectural business and U.S. electronics, ballistics and general industrial product lines, while retaining and combining our Reinforcements activities related to advanced composites with the rest of the business. The divested businesses are reported as discontinued operations within this annual report on Form 10-K. Unless otherwise indicated, all information within this annual report on Form 10-K reflects the continuing operations of Hexcel.

Hexcel presently reports two segments, Composite Materials and Engineered Products. The Composite Materials segment is comprised of our carbon fiber, reinforcements for composites, honeycomb core and matrix product lines. The Engineered Products segment is comprised of lightweight high strength composite structures and specially machined honeycomb product lines.

The following summaries describe the ongoing activities related to the Composite Materials and Engineered Products segments as of December 31, 2009.

#### **Composite Materials**

The Composite Materials segment manufactures and markets carbon fibers, fabrics and specialty reinforcements, prepregs, structural adhesives, honeycomb, composite panels, molding compounds, polyurethane systems and laminates that are incorporated into many applications, including military and commercial aircraft, wind turbine blades, recreational products and other industrial applications.

The following table identifies the principal products and examples of the primary end-uses from the Composite Materials segment:

SEGMENT	PRODUCTS	PRIMARY END-USES
COMPOSITE MATERIALS	Carbon Fibers	• Raw materials for prepregs, fabrics and specialty reinforcements
		• Filament winding for various space, defense and industrial applications
	Industrial Fabrics and Specialty Reinforcements	• Raw materials for prepregs and honeycomb
		• Composites and components used in aerospace, defense, wind energy, automotive, recreation and other industrial applications
	Prepregs and Other Fiber-Reinforced Matrix Materials	Composite structures
		• Commercial and military aircraft components
		Satellites and launchers
		• Aeroengines
		• Wind turbine and helicopter blades
		• Yachts, trains and performance cars
		• Skis, snowboards, hockey sticks, and bicycles
	Structural Adhesives	• Bonding of metals, honeycomb and composite materials
	Honeycomb	Composite structures and interiors
		• Impact and shock absorption systems
		Helicopter blades

*Carbon Fibers:* HexTow® carbon fibers are manufactured for sale to third-party customers as well as for our own use in manufacturing certain reinforcements and composite materials. Carbon fibers are woven into carbon fabrics, used as reinforcement in conjunction with a resin matrix to produce pre-impregnated composite materials (referred to as prepregs). Carbon fiber is also used in filament winding, hand layup, automatic tape layup and advanced fiber placement to produce finished composite components. Key product applications include structural components for commercial and military aircraft, space launch vehicles, and certain other applications such as recreational and industrial equipment.

*Industrial Fabrics and Specialty Reinforcements:* Industrial fabrics and specialty reinforcements are made from a variety of fibers, including carbon, aramid and other high strength polymers, several types of fiberglass, quartz, ceramic and other specialty fibers. These reinforcements are used in the production of prepregs and other matrix materials used in primary and secondary structural aerospace applications such as wing

components, horizontal and vertical stabilizer components, fairings, radomes and engine nacelles as well as overhead storage bins and other interior components. Our reinforcements are also used in the manufacture of a variety of industrial and recreational products such as wind energy blades, automotive components, boats, surfboards, skis and other sporting goods equipment.

*Prepregs:* HexPly® prepregs are manufactured for sale to third-party customers and for internal use by our Engineered Products segment in manufacturing composite laminates and monolithic structures, including finished components for aircraft structures and interiors. Prepregs are manufactured by combining high-performance reinforcement fabrics or unidirectional fibers with a resin matrix to form a composite material with exceptional structural properties not present in either of the constituent materials. Reinforcement fabrics used in the manufacture of prepregs include glass, carbon, aramid, quartz, ceramic and other specialty reinforcements. Resin matrices include bismaleimide, cyanate ester, epoxy, phenolic, polyester, polyimide and other specialty resins.

*Other Fiber-Reinforced Matrix Materials*: New fiber reinforced matrix developments include HexMC®, a new form of quasi-isotropic carbon fiber prepreg that enables small to medium sized composite components to be mass produced. HexTOOL® is a specialized form of HexMC® for use in the cost-effective construction of high temperature composite tooling. HexFIT® film infusion material is a product that combines resin films and dry fiber reinforcements to save lay-up time in production and enables the manufacture of large contoured composite structures, such as wind turbine blades.

Resins: Polymer matrix materials are sold in bulk and film form for use in direct process manufacturing of composite parts.

Resins can be combined with fiber reinforcements in manufacturing processes such as resin transfer molding (RTM), resin film infusion (RFI) or vacuum assisted resin transfer molding (VARTM) to produce high quality composite components for both aerospace and industrial applications.

*Structural Adhesives:* We manufacture and market a comprehensive range of Redux® film and paste adhesives. These structural adhesives, which bond metal to metal and composites and honeycomb structures, are used in the aerospace industry and for many industrial applications.

*Honeycomb:* HexWeb® honeycomb is a lightweight, cellular structure generally composed of nested hexagonal cells. The product is similar in appearance to a cross-sectional slice of a beehive. It can also be manufactured in asymmetric cell configurations for more specialized applications. Honeycomb is primarily used as a lightweight core material and acts as a highly efficient energy absorber. When sandwiched between composite or metallic facing skins, honeycomb significantly increases the stiffness of the structure, while adding very little weight.

We produce honeycomb from a number of metallic and non-metallic materials. Most metallic honeycomb is made from aluminum and is available in a selection of alloys, cell sizes and dimensions. Non-metallic materials used in the manufacture of honeycomb include fiberglass, carbon fiber, thermoplastics, non-flammable aramid papers, aramid fiber and other specialty materials.

We sell honeycomb as standard blocks and in slices cut from a block. Honeycomb is also supplied as sandwich panels, with facing skins bonded to either side of the core material. Honeycomb is also used in Acousti-Cap® where a non-metallic permeable cap material is embedded into honeycomb core that is used in aircraft engines to dramatically reduce noise during take off and landing without adding a structural weight penalty. Aerospace is the largest market for honeycomb products. We also sell honeycomb for non-aerospace applications including automotive parts, sporting goods, building panels, high-speed trains and mass transit vehicles, energy absorption products, marine vessel compartments, and other industrial uses. In addition, we produce honeycomb for our Engineered Products segment for use in manufacturing finished parts for airframe Original Equipment Manufacturers (OEMs).

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The following table identifies the key customers and the major manufacturing facilities of the Composite Materials segment:

#### **COMPOSITE MATERIALS**

		MAJOK
KEY CUST	MANUFACTURING FACILITIES	
Aernnova	Finmecanica	Casa Grande, Arizona
Alliant Techsystems	Gamesa	Decatur, Alabama
BAE Systems	GKN	Dagneux, France
The Boeing Company	Goodrich	Duxford, England
Bombardier	Lockheed Martin	Neumarkt, Austria
CFAN	Northrop Grumman	Les Avenieres, France
CTRM Aero Composites	Safran	Parla, Spain
Cytec Engineered Materials	Spirit Aerosystems	Salt Lake City, Utah
Daher	Textron	Seguin, Texas
EADS (including Airbus and	Trek	Stade, Germany
Eurocopter)		
Embraer	United Technologies	Illescas, Spain
FACC	Vestas	Tianjin, China
		Windsor, Colorado

Net sales for the Composite Materials segment to third-party customers were \$856.5 million in 2009, \$1,075.3 million in 2008 and \$941.9 million in 2007, which represented approximately 77%, 81% and 80%, of our net sales, respectively. Net sales for composite materials are highly dependent upon the number of large commercial aircraft produced as further discussed under the captions Significant Customers , Markets and Management s Discussion and Analysis of Financial Condition and Results of Operations . In addition, about 3% of our total production of composite materials in 2009 was used internally by the Engineered Products segment.

#### **Engineered Products**

The Engineered Products segment manufactures and markets composite structures and precision machined honeycomb parts for use in the aerospace industry. Composite structures are manufactured from a variety of composite and other materials, including prepregs, honeycomb, structural adhesives and advanced molding materials, using such manufacturing processes as autoclave processing, multi-axis numerically controlled machining, heat forming, compression molding and other composite manufacturing techniques.

The following table identifies the principal products and examples of the primary end-uses from the Engineered Products segment:

SEGMENT ENGINEERED PRODUCTS	PRODUCTS Composite Structures	<ul> <li>PRIMARY END-USES</li> <li>Aircraft structures and finished aircraft components, including wing to body fairings, wing panels, flight deck panels, door liners, helicopter blades, spars and tip caps</li> </ul>
	Machined Honeycomb	• Aircraft structural sub-components and semi-finished components used in helicopter blades, engine nacelles, and aircraft surfaces (flaps, wings, elevators and fairings)

Net sales for the Engineered Products segment to third-party customers were \$251.8 million in 2009, \$249.6 million in 2008 and \$229.2 million in 2007, which represented approximately 23%, 19% and 20% of our net sales, respectively.

The Engineered Products business unit has a 50% ownership interest in a Malaysian joint venture, Asian Composites Manufacturing Sdn. Bhd. (ACM). Under the terms of the joint venture agreement, Hexcel and The Boeing Company (Boeing) have transferred the manufacture of certain semi-finished composite components to this joint venture. Hexcel purchases the semi-finished composite components from the joint venture, and inspects and performs additional skilled assembly work before delivering them to Boeing. The joint venture also manufactures composite components for other aircraft component manufacturers. ACM had revenue of \$39.2 million, \$27.9 million and \$30.2 million in 2009, 2008 and 2007, respectively. For additional information on the Joint Venture investment see Note 5, *Investments in Affiliated Companies*.

The following table identifies the key customers and the major manufacturing facilities of the Engineered Products segment:

	ENGINEERED PRODUCTS
	MAJOR
KEY CUSTOMERS	MANUFACTURING FACILITIES
The Boeing Company	Kent, Washington
Bombardier	Burlington, Washington
GKN	Pottsville, Pennsylvania
Hawker / Beechcraft	Welkenraedt, Belgium
Spirit Aerosystems	Alor Setar, Malaysia (JV)
United Technologies	

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#### **Divested Businesses**

In 2007, we completed the sales of the U.S. electronics, ballistics and general industrial (EBGI) portion of our reinforcements business and of our European Architectural business. Cash proceeds from the sales were \$58.5 million and \$25.0 million, respectively. As a result of the sales, we recognized an after-tax loss of \$3.4 million on EBGI and an after-tax gain of \$6.5 million on the European Architectural business.

The EBGI sale included up to \$12.5 million of additional earn out payments contingent upon annual sales for three years of the Ballistics product line. The additional payments are capped with a maximum of \$5.0 million in any individual year. In 2009 and 2008 the Company received \$2.0 million and \$0.3 million, respectively. The income recognized after providing for a litigation claim is included as Other expense, net on the consolidated statements of operations. Additional payments, if any, will be recorded as income when earned. The earn out provision expires in August 2010.

See Note 19 Discontinued Operations and Note 5 Investments in Affiliated Companies to the accompanying consolidated financial statements of this Annual Report on Form 10-K for further information on the results from discontinued operations and information related to our joint ventures.

## Financial Information About Segments and Geographic Areas

Financial information and further discussion of our segments and geographic areas, including external sales and long-lived assets, are contained under the caption Management s Discussion and Analysis of Financial Condition and Results of Operations and in Note 17 to the accompanying consolidated financial statements of this Annual Report on Form 10-K. Significant Customers

Approximately 27%, 23% and 25% of our 2009, 2008, and 2007 net sales, respectively, were to The Boeing Company (Boeing) and related subcontractors. Of the 27% of overall sales to Boeing and its subcontractors in 2009, 21% related to Commercial Aerospace market applications and 6% related to Space and Defense market applications. Approximately 22%, 24% and 22% of our 2009, 2008, and 2007 net sales, respectively, were to European Aeronautic Defence and Space Company (EADS), including its business division Airbus Industrie (Airbus), and its subcontractors. Of the 22% of overall sales to EADS and its subcontractors in 2009, 19% related to Commercial Aerospace market applications and 3% related to Space and Defense market applications.

In 2009 and 2008, Vestas Wind Systems A/S accounted for nearly 12% and 11%, respectively, of the Company s total net sales. Prior to 2008, their sales were less than 10% of total net sales. All of these sales are included in the Composite Materials segment and are in the Industrial market.

Markets

Our products are sold for a broad range of end-uses. The following tables summarize our net sales to third-party customers by market and by geography for each of the three years ended December 31:

	2009	2008	2007
Net Sales by Market			
Commercial Aerospace	50%	54%	53%
Space and Defense	27	23	22
Industrial	23	23	25
Total	100%	100%	100%
Net Sales by Geography (a)			
United States	48%	48%	47%
Europe	52	52	53
Total	100%	100%	100%

(a) Net sales by geography based on the location in which the product sold was manufactured.

	2009	2008	2007
Net Sales to External Customers (b)			
United States	42%	36%	40%
Europe	45	51	48
All Others	13	13	12
Total	100%	100%	100%

(b) Net sales to external customers based on the location to which the product sold was delivered.

#### **Commercial Aerospace**

The Commercial Aerospace industry is our largest user of advanced composites. The economic benefits airlines can obtain from weight savings in both fuel economy and aircraft range, combined with the design enhancement that comes from the advantages of advanced composites over traditional materials, have caused the industry to be the leader in the use of these materials. While military aircraft and spacecraft have championed the development of these materials, Commercial Aerospace has had the greater consumption requirements and has commercialized the use of these products. Accordingly, the demand for advanced structural material products is closely correlated to the demand for commercial aircraft.

The use of advanced composites in Commercial Aerospace is primarily in the manufacture of new commercial aircraft. The aftermarket for these products is very small as many of these materials are designed to last for the life of the aircraft. The demand for new commercial aircraft is driven by two principal factors, the first of which is airline passenger traffic (the number of revenue passenger miles flown by the airlines) which affects the required size of airline fleets. According to the International Civil Aviation Organization, passenger traffic has grown at an annual compound rate of 5.5% from 1985 to 2007 and has seen year on year growth of 1.3% and 7.4% during 2008 and 2007. In 2009, they estimate a 4.1% decline in growth, but are expecting a return to growth in 2010.

Growth in passenger traffic requires growth in the size of the fleet of commercial aircraft operated by airlines worldwide.

A second factor, which is less sensitive to the general economy, is the replacement rates for existing aircraft. The rates of retirement of passenger and freight aircraft, resulting mainly from obsolescence, are determined in part by the regulatory requirements established by various civil aviation authorities worldwide as well as public concern regarding aircraft age, safety and noise. These rates may also be affected by the desire of the various airlines to improve operating costs with higher payloads and more fuel-efficient aircraft (which in turn is influenced by the price of fuel) and by reducing maintenance expense. In addition, there is expected to be increasing pressure on airlines to replace their aging fleet with more fuel efficient and quieter aircraft to be more environmentally responsible. When aircraft are retired from commercial airline fleets, they may be converted to cargo freight aircraft or scrapped.

An additional factor that may cause airlines to defer or cancel orders is their ability to obtain financing, including leasing, for new aircraft orders. This will be dependent both upon the financial health of the airline operators, as well as the overall availability of financing in the marketplace.

Each new generation of commercial aircraft has used increasing quantities of advanced composites, replacing metals. This follows the trend previously seen in military fighter aircraft where advanced composites may now exceed 50% of the weight of the airframe. Early versions of commercial jet aircraft, such as the Boeing 707, which was developed in the early 1950 s, contained almost no composite materials. One of the first commercial aircraft to use a meaningful amount of composite materials, the Boeing 767 entered into service in 1983, and was built with an airframe containing approximately 6% composite materials. The airframe of Boeing s 777 aircraft, which entered service in 1995, is approximately 11% composite. By comparison, the next generation of aircraft in development will contain significantly higher composite content by weight. The Airbus A380, which was certified in December 2006, is being built with an airframe containing approximately 23% composite content by weight. The first aircraft was delivered in 2007. Boeing s latest aircraft, the B787 has a content of 50% or more composite materials by weight. After several announced delays, the B787 maiden flight occurred in December 2009 and the aircraft is projected to enter into service in the fourth quarter of 2010. In December 2006, Airbus formally launched the A350 XWB which is also projected to have a composite content of 50% or more by weight. Airbus targets the A350 XWB to enter into service in 2013. We refer to this steady expansion of the use of composites in aircraft as the secular penetration of composites as it increases our average sales per airplane over time.

The impact on Hexcel of Boeing and Airbus production rate changes is typically influenced by two factors: the mix of aircraft produced and the inventory supply chain effects of increases or reductions in aircraft production. We have products on all Boeing and Airbus planes. The dollar value of our materials varies by aircraft type twin aisle aircraft use more of our materials than narrow body aircraft and newer designed aircraft use more of our materials than older generations. On average, for established programs, we deliver products into the supply chain about six months prior to aircraft delivery. Depending on the product, orders placed with us are received anywhere between one and eighteen months prior to delivery of the aircraft to the customer. For aircraft deliveries combined with the secular penetration of composites resulted in our Commercial Aerospace revenues increasing by approximately 14% in both 2008 and 2007. In 2009, Commercial Aerospace revenues declined by 22% as our customers adjusted their inventory levels and the business and regional jet market declined by more than 40% from 2008.

Set forth below are historical aircraft deliveries as announced by Boeing (including McDonnell Douglas) and Airbus:

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Boeing	256	271	375	563	620	491	527	381	281	285	290	398	441	375	481

Airbus	124	126	182	229	294	311	325	303	305	320	378	434	453	483	498
Total	380	397	557	792	914	802	852	684	586	605	668	832	894	858	979

Commercial Aerospace represented 50% of our 2009 net sales. Approximately 78% of these revenues can be identified as sales to Boeing, Airbus and their subcontractors for the production of commercial aircraft. Boeing and Airbus deliveries in 2009 were the highest in history, but we experienced much of that benefit in 2008. The balance of our Commercial Aerospace sales is related to regional and business aircraft manufacture, and other commercial aircraft applications. These applications also exhibit increasing utilization of composite materials with each new generation of aircraft. After several years of growing more than 20% per year, business and regional aircraft sales declined by more than 40% in 2009 from 2008 due to production cutbacks.

#### Space and Defense

The Space and Defense market has historically been an innovator in the use of, and source of significant demand for, advanced composites. The aggregate demand by Space and Defense customers is primarily a function of procurement of military aircraft that utilizes advanced composites by the United States and certain European governments. We are currently qualified to supply materials to a broad range of over 100 helicopter and military aircraft programs. The top ten programs by revenues represent less than 50% of

our Space & Defense revenues and no one program exceeds 10% of our revenues in this segment. These programs include the C-17, F/A-18E/F Hornet, the F-22 Raptor, and the Eurofighter (Typhoon), as well as the V-22 Osprey tiltrotor aircraft, and the Blackhawk, Tiger and NH90 helicopters. In addition, there are new programs in development or not yet at full production rates such as the F-35 (Joint Strike Fighter or JSF ), CH53K heavy lift helicopter, the S76D helicopter and the EADS A400M. The benefits that we obtain from these programs will depend upon which are funded and the extent of such funding. Space applications for advanced composites include solid rocket booster cases, fairings and payload doors for launch vehicles, and buss and solar arrays for military and commercial satellites.

Contracts for military and some commercial programs may contain provisions applicable to both U.S. Government contracts and subcontracts. For example, a prime contractor may flow down a termination for convenience clause to materials suppliers such as Hexcel. According to the terms of a contract, we may be subject to U.S. government Federal Acquisition Regulations, the Department of Defense Federal Acquisition Regulations Supplement, Cost Accounting Standards, and associated procurement laws.

#### Industrial Markets

The revenue for this market segment includes applications for our products outside the Commercial Aerospace and Space and Defense markets. A number of these applications represent emerging opportunities for our products. In developing new applications, we seek those opportunities where advanced composites technology offer significant benefits to the end user, often applications that demand high engineering performance. Within this segment, the major end market sub-segments include, in order of size based on our 2009 sales, wind energy, general industrial applications, recreational equipment (e.g., skis and snowboards, bicycles and hockey sticks), and transportation (e.g., automobiles, mass transit and high-speed rail, and marine applications). In 2009, the wind energy market accounted for more than half of our Industrial sales. Based on announced orders and backlogs and factory schedules from our wind energy customers, we anticipate a significant inventory correction, and reduced sales, in the near term. Our participation in these market applications complements our commercial and military aerospace businesses, and we are committed to pursuing the utilization of advanced structural material technology where it can generate significant value and we can maintain a sustainable competitive advantage.

Further discussion of our markets, including certain risks, uncertainties and other factors with respect to forward-looking statements about those markets, is contained under the captions Management s Discussion and Analysis of Financial Condition and Results of Operations and Risk Factors .

#### Backlog

In recent years, our customers have demanded shorter order lead times and just-in-time delivery performance. While we have many multi-year contracts with our major aerospace customers, most of these contracts specify the proportion of the customers requirements that will be supplied by us and the terms under which the sales will occur, not the specific quantities to be procured. Our Industrial customers have always desired to order their requirements on as short a lead-time as possible. As a result, twelve-month order backlog is not a meaningful trend indicator for us.

**Raw Materials and Production Activities** 

Our manufacturing operations are in many cases vertically integrated. We produce carbon fibers, industrial fabrics, composite materials and composite structures as well as sell these materials to third-party customers for their use in the manufacture of their products.

We manufacture high performance carbon fiber from polyacrylonitrile precursor (PAN). The primary raw material for PAN is acrylonitrile. All of the PAN we produce is for internal carbon fiber production. We consume approximately 60% by value of the carbon fiber we produce and sell the remainder of our output to third-party customers. However, as one of the world's largest consumers of carbon fiber, we also purchase significant quantities of carbon fiber from external sources for our own use. The sources of carbon fiber we can use in any product or application are sometimes dictated by customer qualifications or certifications, otherwise we select a fiber based on performance, price and availability. With the increasing demand for carbon fiber, particularly in aerospace applications, we have doubled our PAN and carbon fiber capacity over the past three years to serve the growing needs of our customers and our own downstream products. In October 2007, we announced another increase in PAN and carbon fiber capacity, which was originally scheduled to be completed by the end of 2010 and will increase our global capacity to a total of about 16 million pounds of carbon fiber. Due to the changing demand outlook, we modified the pace of the project to reduce capital spending. We now expect to complete the increase of our PAN capacity in the first half of 2010 and have delayed the target completion of our carbon fiber capacity expansion to 2012 or 2013. After a new line starts production, it can take over a year to be certified for aerospace qualifications. However, these lines can start supplying carbon fiber for many industrial and recreational applications within a short time period.

We purchase glass yarn from a number of suppliers in the United States, Europe and Asia. Aramid and high strength fibers are produced by only a few companies, and during periods of high demand, can be in short supply. In addition, epoxy and other specialty resins, aramid paper and aluminum specialty foils are used in the manufacture of composite products. A number of these products have only one or two sources qualified for use, so an interruption in their supply could disrupt our ability to meet our customer requirements. When entering into multi-year contracts with aerospace customers, we attempt to get back-to-back commitments from key raw material suppliers.

Our manufacturing activities are primarily based on make-to-order, and to a lesser extent, make-to-forecast production requirements. We coordinate closely with key suppliers in an effort to avoid raw material shortages and excess inventories. However, many of the key raw materials we consume are available from relatively few sources, and in many cases the cost of product qualification makes it impractical to develop multiple sources of supply. The lack of availability of these materials could under certain circumstances have a material adverse effect on our consolidated results of operations.

#### Research and Technology; Patents and Know-How

Research and Technology ( R&T ) departments support our businesses worldwide. Through R&T activities, we maintain expertise in precursor and carbon fiber, chemical and polymer formulation and curatives, fabric forming and textile architectures, advanced composite structures, process engineering, application development, analysis and testing of composite materials, computational design, and other scientific disciplines related to our worldwide business base.

Our products rely primarily on our expertise in materials science, textiles, process engineering and polymer chemistry. Consistent with market demand, we have been placing more emphasis on higher performing products and cost effective production processes while seeking to improve the consistency of our products and our capital efficiency. Towards this end, we have entered into formal and informal alliances, as well as licensing and teaming arrangements, with several customers, suppliers, external agencies and laboratories. We believe that we possess unique capabilities to design, develop and manufacture composite materials and structures. We have over 400 patents and pending applications worldwide, and have granted technology licenses and patent rights to several third parties primarily in connection with joint ventures and joint development programs. It is our policy to actively enforce our proprietary rights. We believe that the patents and know-how rights currently owned or licensed by Hexcel are adequate for the conduct of our business. We do not believe that our business would be materially affected by the expiration of any single patent or series of related patents, or by the termination of any single license agreement or series of related license agreements.

We spent \$30.1 million, \$31.4 million and \$34.2 million for R&T in 2009, 2008, and 2007, respectively. In constant currency, our 2009 spending is about 3% higher than 2008. Our spending on a quarter to quarter basis fluctuates depending upon the amount of new product development and qualification activities, particularly in relation to commercial aircraft applications, that are in progress. These expenditures are expensed as incurred.

#### **Environmental Matters**

We are subject to federal, state, local and foreign laws and regulations designed to protect the environment and to regulate the discharge of materials into the environment. We believe that our policies, practices, and procedures are properly designed to prevent unreasonable risk of environmental damage and associated financial liability. To date, environmental control regulations have not had a significant adverse effect on our overall operations.

Our aggregate environmental related accruals at December 31, 2009 and 2008 were \$8.3 million and \$9.2 million, respectively. As of December 31, 2009, and December 31, 2008, \$4.5 million and \$3.8 million, respectively, were included in Other current accrued liabilities , with the remainder included in Other non-current liabilities . As related to certain of our environmental matters, our accruals were estimated at the low end of a range of possible outcomes since there was no better point within the range. If we had accrued for these matters at the high end of the range of possible outcomes, our accruals would have been \$12.8 million and \$14.1 million at December 31, 2009 and 2008, respectively. Environmental remediation spending charged directly to our reserve balance for 2009, 2008, and 2007, was \$2.8 million, \$2.7 million and \$2.7 million, respectively. In addition, our operating costs relating to environmental compliance were \$10.0 million, \$11.1 million and \$8.2 million, for 2009, 2008, and 2007, respectively, and were charged directly to expense. Capital expenditures for environmental matters approximated \$4.8 million, \$7.3 million and \$2.3 million for 2009, 2008 and 2007, respectively.

These accruals can change significantly from period to period due to such factors as additional information on the nature or extent of contamination, the methods of remediation required, changes in the apportionment of costs among responsible parties and other actions by governmental agencies or private parties, as well as the impact, if any, of Hexcel being named in a new matter. A discussion of environmental matters is contained in Item 3, Legal Proceedings, and in Note 14 to the accompanying consolidated

financial statements included in this Annual Report on Form 10-K.

#### Sales and Marketing

A staff of salaried market managers, product managers and sales personnel sell and market our products directly to customers worldwide. We also use independent distributors and manufacturer representatives for certain products, markets and regions. In addition, we operate various sales representation offices in the Americas, Europe and Asia Pacific.

#### Competition

In the production and sale of advanced composites, we compete with a number of U.S. and international companies on a worldwide basis. The broad markets for composites are highly competitive, and we have focused on both specific submarkets and specialty products within markets. In addition to competing directly with companies offering similar products, we compete with producers of substitute composites such as structural foam, infusion technology, wood and metal. Depending upon the material and markets, relevant competitive factors include approvals, database of usage, technology, product performance, delivery, service, price and customer preference for sole sourcing.

#### Employees

As of December 31, 2009, we employed 3,734 full-time employees and contract workers, 2,028 in the United States and 1,706 in other countries. The number of full-time employees and contract workers as of December 31, 2008 and 2007 was 4,275 and 4,081, respectively.

#### **Other Information**

Our internet website is www.hexcel.com. We make available, free of charge through our website, our Form 10-Ks, 10-Qs and 8-Ks, and any amendments to these forms, as soon as reasonably practicable after filing with the Securities and Exchange Commission.

#### **ITEM 1A. Risk Factors**

An investment in our common stock or debt securities involves risks and uncertainties. You should consider the following risk factors carefully, in addition to the other information contained in this Annual Report on Form 10-K, before deciding to purchase any of our securities.

# Adverse macroeconomic and business conditions, as well as continued disruption in credit markets and government policy changes may significantly and negatively impact our revenues, profitability and financial condition.

Economic conditions in the United States and in foreign markets in which we operate could substantially affect our sales and profitability. Economic activity in the United States and throughout much of the world has undergone sudden, sharp changes. Global credit and capital markets have experienced unprecedented volatility and disruption, which periodically has caused large fluctuations in the access and cost of liquidity around the world. Some of our suppliers, customers and counterparties could face adverse liquidity issues. General concerns about the fundamental soundness of domestic and foreign economies may also cause customers to reduce their purchases.

Changes in governmental banking, monetary and fiscal policies to stabilize liquidity and increase credit availability may not be effective. It is difficult to determine the extent of the economic and financial market problems and the many ways in which they may affect our suppliers, customers and our business in general. Continuation or further deterioration of these financial and macroeconomic conditions could have a significant adverse effect on our sales, profitability and results of operations.

#### The markets in which we operate can be cyclical, and downturns in them may adversely affect the results of our operations.

Some of the markets in which we operate have been, to varying degrees, cyclical and have experienced downturns. A downturn in these markets could occur at any time, and in the event of a downturn, we have no way of knowing if, when and to what extent there might be a recovery. Any deterioration in any of the cyclical markets we serve could adversely affect our financial performance and operating results.

At December 31, 2009, Boeing and Airbus had a combined backlog of 6,863 aircraft, which is about seven years of production at 2009 record deliveries. To the extent any significant deferrals, cancellations or reduction in demand results in decreased aircraft

build rates, it would reduce net sales for our Commercial Aerospace products and as a result reduce our operating income. Approximately 50% of our net sales for 2009 were derived from sales to the Commercial Aerospace industry, which includes 78% from Airbus and Boeing aircraft and 22% from regional and business jets. Reductions in demand for commercial aircraft or a delay in deliveries could result from many factors, including a terrorist event similar to that which occurred on September 11, 2001 and any subsequent military response, changes in the propensity for the general public to travel by air, a rise in the cost of aviation fuel, a change in technology resulting in the use of alternative materials, consolidation and liquidation of airlines, availability of funding for new aircraft purchases or leases and slower macroeconomic growth. Both Boeing and Airbus have experienced various delays in their newest aircraft programs, including the Boeing 787, 747-8, A400M and the ramp-up of the Airbus A380. These delays have delayed and may continue to delay our expected growth or our effective utilization of capacity installed for such growth. Future delays in these or other major Boeing or Airbus programs could similarly impact our results.

In addition, our customers continue to emphasize the need for cost reduction or other improvements in contract terms throughout the supply chain. In response to these pressures, we may be required to accept increased risk or face the prospects of margin compression on some products in the future. Where possible, we seek to offset or mitigate the impact of such pressures through productivity and performance improvements, index clauses, currency hedging and other actions.

# A significant decline in business with Boeing, EADS, Vestas, or other significant customers could materially impact our business, operating results, prospects and financial condition.

We have concentrated customers in the Commercial Aerospace and wind energy markets. In the Commercial Aerospace market, approximately 78%, and in the Space and Defense market, approximately 36%, of our 2009 net sales were made to Boeing and EADS (including Airbus) and their related subcontractors. For the years ended December 31, 2009 and December 31, 2008, approximately 27% and 23% of our total consolidated net sales was made to Boeing and its related subcontractors, respectively, and approximately 22% and 24% of our total consolidated net sales, respectively, was made to EADS, including Airbus and its related subcontractors. In the wind energy market, nearly 12% of our total sales in 2009 and 11% in 2008 were made to Vestas Wind Systems A/S. Significant changes in the demand for our customers end products, the share of their requirements that is awarded to us or changes in the design or materials used to construct their products could result in a significant loss of business with these customers. The loss of, or significant reduction in purchases by, Boeing, EADS and Vestas or any of our other significant customers could materially impair our business, operating results, prospects and financial condition. The level of purchases by our customers is often affected by events beyond their control, including general economic conditions, demand for their products, business disruptions, disruptions in deliveries, strikes and other factors.

#### Reductions in space and defense spending could result in a decline in our net sales.

The growth in military aircraft production that has occurred in recent years may not be sustained, individual programs important to Hexcel may be cancelled, production may not continue to grow and the increased demand for replacement helicopter blades may not continue. The production of military aircraft depends upon defense budgets and the related demand for defense and related equipment. Approximately 27% of our net sales in 2009 were derived from space and defense industries.

#### A decrease in supply or increase in cost of raw materials could result in a material decline in our profitability.

Our profitability depends largely on the price and continuity of supply of raw materials, which are supplied through a sole source or a limited number of sources. We purchase large volumes of raw materials, such as epoxy and phenolic resins, aluminum foil, carbon fiber, fiberglass yarn and aramid paper. Any restrictions on the supply, or an increase in the cost, of our raw materials could significantly reduce our profit margins.

Efforts to mitigate restrictions on the supply or price increases of these raw materials by long-term purchase agreements, productivity improvements or by passing cost increases to our customers may not be successful.

#### We have substantial international operations subject to uncertainties which could affect our operating results.

We believe that revenue from sales outside the U.S. will continue to account for a material portion of our total revenue for the foreseeable future. Additionally, we have invested significant resources in our international operations and we intend to continue to make such investments in the future. Our international operations are subject to numerous risks, including:

- the difficulty of enforcing agreements and collecting receivables through some foreign legal systems;
- foreign customers may have longer payment cycles than customers in the U.S.;

• cost of compliance with international trade laws of all of the countries in which we do business, including export control laws, relating to sales and purchases of goods and equipment and transfers of technology;

• tax rates in some foreign countries may exceed those of the U.S. and foreign earnings may be subject to withholding requirements or the imposition of tariffs, exchange controls or other restrictions;

• general economic and political conditions in the countries where we operate may have an adverse effect on our operations in those countries or not be favorable to our growth strategy;

 governments may adopt regulations or take other actions that would have a direct or indirect adverse impact on our business and market opportunities; and

• the potential difficulty in enforcing our intellectual property rights in some foreign countries, and the potential for the intellectual property rights of others to affect our ability to sell product in certain markets.

Any one of the above could adversely affect our financial condition and results of operations.

In addition, fluctuations in currency exchange rates may influence the profitability and cash flows of our business. For example, our European operations sell some of the products they produce in U.S. dollars, yet the labor, overhead costs and portions of material costs incurred in the manufacture of those products is denominated in Euros or British pounds sterling. As a result, the local currency margins of goods manufactured with costs denominated in local currency, yet sold in U.S. dollars, will vary with fluctuations in currency exchange rates, reducing when the U.S. dollar weakens against the Euro and British pound sterling. In addition, the reported U.S. dollar value of the local currency financial statements of our foreign subsidiaries will vary with fluctuations in currency exchange rates. While we enter into currency exchange and hedge agreements from time to time to mitigate these types of fluctuations, we cannot remove all fluctuations or hedge all exposures, and our earnings are impacted by changes in currency exchange rates.

During the past several years, some countries in which we operate or plan to operate have been characterized by varying degrees of inflation and uneven growth rates. We currently do not have political risk insurance in the countries in which we conduct business. While we carefully consider these risks when evaluating our international operations we cannot provide assurance that we will not be materially adversely affected as a result of such risks.

#### We could be adversely affected by environmental and safety requirements.

Our operations require the handling, use, storage and disposal of certain regulated materials and wastes. As a result, we are subject to various laws and regulations pertaining to pollution and protection of the environment, health and safety. These requirements govern, among other things, emissions to air, discharge to waters and the generation, handling, storage, treatment and disposal of waste and remediation of contaminated sites. We have made, and will continue to make, capital and other expenditures in order to comply with these laws and regulations. These laws and regulations are complex, change frequently and could become more stringent in the future.

We have been named as a potentially responsible party under the U.S. Superfund law or similar state laws at several sites requiring clean up. These laws generally impose liability for costs to investigate and remediate contamination without regard to fault. Under certain circumstances liability may be joint and several, resulting in one responsible party being held responsible for the entire obligation. Liability may also include damages to natural resources. In connection with our Lodi, New Jersey facility, Hexcel, along with a number of other companies, has been directed by federal regulatory authorities to contribute to the assessment and restoration of a stretch of the Passaic River, a project currently estimated to cost \$900 million to \$2.3 billion. We have also incurred and likely will continue to incur expenses to investigate and clean up certain of our existing and former facilities, for which we believe we have adequate reserves. The ongoing operation of our manufacturing plants also entails environmental risks, and we may incur material costs or liabilities in the future which could adversely affect us.

In addition, we may be required to comply with evolving environmental, health and safety laws, regulations or requirements that may be adopted or imposed in the future or to address newly discovered information or conditions that require a response. Although most of our properties have been the subject of environmental site assessments, there can be no assurance that all potential instances of soil and groundwater contamination have been identified, even at those sites where assessments have been conducted. Accordingly,

we may discover previously unknown environmental conditions and the cost of remediating such conditions may be material. See Legal Proceedings below and Note 14 to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

#### Our forward-looking statements and projections may turn out to be inaccurate.

This Form 10-K includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements relate to analyses and other information that are based on forecasts of future results and estimates of amounts not yet determinable. These statements also relate to future prospects, developments and business strategies. These forward-looking statements are identified by their use of terms and phrases such as anticipate , believe , could , estimate , expect , intend , may , plan , predict , project , should , w and phrases, including references to assumptions. Such statements are based on current expectations, are inherently uncertain, and are subject to changing assumptions.

Such forward-looking statements include, but are not limited to: (a) the estimates and expectations based on aircraft production rates made publicly available by Boeing and Airbus; (b) the revenues we may generate from an aircraft model or program; (c) the impact of the possible push-out in deliveries of the Airbus and Boeing backlog and the impact of delays in new aircraft programs or the final Hexcel composite material content once the design and material selection has been completed; (d) expectations of composite content on new commercial aircraft programs and our share of those requirements; (e) expectations of growth in revenues from space and defense applications, including whether certain programs might be curtailed or discontinued; (f) expectations regarding growth in sales for wind energy, recreation and other industrial applications; (g) expectations regarding working capital trends and expenditures; (h) expectations as to the level of capital expenditures and when we will complete the construction and qualification of capacity expansions; (i) our ability to maintain and improve margins in light of the ramp-up of capacity and new facilities and the current economic environment; (j) the outcome of legal matters; (k) our projections regarding the realizability of net operating loss and foreign tax credit carryforwards, and the impact of the above factors on our expectations of 2010 financial results; and (l) the impact of various market risks, including fluctuations in interest rates, currency exchange rates, environmental regulations and tax codes, fluctuations in commodity prices, and fluctuations in the market price of our common stock. In addition, actual results may differ materially from the results anticipated in the forward looking statements due to a variety of factors, including but not limited to changing market conditions, increased competition, product mix, inability to achieve planned manufacturing improvements and cost reductions, and conditions in the financial markets.

Such forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause actual results to be materially different. Such factors include, but are not limited to, the following: changes in general economic and business conditions; changes in current pricing and cost levels; changes in political, social and economic conditions and local regulations, particularly in Asia and Europe; foreign currency fluctuations; changes in aerospace delivery rates; reductions in sales to any significant customers, particularly Airbus, Boeing or Vestas; changes in sales mix; changes in government defense procurement budgets; changes in military aerospace programs technology; industry capacity; competition; disruptions of established supply channels, particularly where raw materials are obtained from a single or limited number of sources and cannot be substituted by unqualified alternatives; manufacturing capacity constraints; and the availability, terms and deployment of capital.

If one or more of these risks or uncertainties materialize, or if underlying assumptions prove incorrect, actual results may vary materially from those expected, estimated or projected. In addition to other factors that affect our operating results and financial position, neither past financial performance nor our expectations should be considered reliable indicators of future performance. Investors should not use historical trends to anticipate results or trends in future periods. Further, our stock price is subject to volatility. Any of the factors discussed above could have an adverse impact on our stock price. In addition, failure of sales or income in any quarter to meet the investment community s expectations, as well as broader market trends, can have an adverse impact on our stock price. We do not undertake an obligation to update our forward-looking statements or risk factors to reflect future events or circumstances.

#### ITEM 1B. Unresolved Staff Comments

None.

#### **ITEM 2. Properties**

We own and lease manufacturing facilities and sales offices located throughout the United States and in other countries, as noted below. The corporate offices and principal corporate support activities are located in leased facilities in Stamford, Connecticut. Our research and technology administration and principal laboratories are located in Dublin, California; Duxford, United Kingdom; and Les Avenieres, France.

The following table lists our manufacturing facilities by geographic location, related segment, and principal products manufactured. This table does not include the manufacturing facility owned by ACM.

#### **Manufacturing Facilities**

Facility Location	Segment	Principal Products
United States:	-	
Decatur, Alabama	Composite Materials	PAN Precursor (used to produce Carbon Fibers)
Salt Lake City, Utah	Composite Materials	Carbon Fibers; Prepregs
Seguin, Texas	Composite Materials	Industrial Fabrics; Specialty Reinforcements
Casa Grande, Arizona	Composite Materials	Honeycomb and Honeycomb Parts
Windsor, Colorado	Composite Materials	Prepregs
Kent, Washington	Engineered Products	Composite structures
Pottsville, Pennsylvania	Engineered Products	Specially machined Honeycomb Parts
Burlington, Washington	Engineered Products	Specially machined Honeycomb Parts
International:		
Dagneux, France	Composite Materials	Prepregs
Nantes, France		