HEXCEL CORP /DE/ Form S-3 November 24, 2004

QuickLinks -- Click here to rapidly navigate through this document

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON NOVEMBER 24, 2004

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

HEXCEL CORPORATION

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

3089

(Primary Standard Industrial Classification Code Number)

94-1109521

(I.R.S. Employer Identification Number)

Two Stamford Plaza 281 Tresser Boulevard Stamford, Connecticut 06901-3238

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Ira J. Krakower, Esq.
Senior Vice President and General Counsel
Hexcel Corporation
Two Stamford Plaza
281 Tresser Boulevard
Stamford, Connecticut 06901-3238
(203) 969-0666

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Joseph A. Coco, Esq.
Thomas W. Greenberg, Esq.
Skadden, Arps, Slate, Meagher & Flom LLP
Four Times Square
New York, New York 10036

Kris F. Heinzelman, Esq. Cravath, Swaine & Moore LLP Worldwide Plaza 825 Eighth Avenue New York, New York 10019

Approximate date of commencement of proposed sale to the public: As soon as possible after the effective date of this Registration Statement as determined by market conditions.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box: o

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, please check the following box: o

If this Form is filed to register additional securities or an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: o

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: o

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box: o

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Unit(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, par value \$0.01 per share, of Hexcel Corporation	24,149,998	\$16.37	\$395,335,467	\$50,089

- (1) Includes an aggregate of 3,149,998 shares of common stock that may be purchased by the underwriters to cover over-allotments, if any.
- Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(c) under the Securities Act of 1933, as amended, based on the average of the high and low prices of the common stock on the New York Stock Exchange on November 22, 2004.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion. Dated November 24, 2004.

21,000,000 Shares

Hexcel Corporation

Common Stock

All of the shares of common stock in this offering are being sold by the selling stockholders identified in this prospectus. Hexcel will not receive any of the proceeds from the sale of the shares being sold by the selling stockholders.

The common stock is listed on the New York Stock Exchange and the Pacific Exchange under the symbol "HXL". The last reported sale price of the common stock on November 23, 2004 was \$16.61 per share.

See "Risk Factors" on page 14 to read about factors you should consider before buying shares of the common stock.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Initial price to public	\$	\$
Underwriting discount	\$	\$
Proceeds, before expenses, to the selling stockholders	\$	\$

To the extent that the underwriters sell more than 21,000,000 shares of common stock, the underwriters have the option to purchase up to an additional 3,149,998 shares from the selling stockholders at the initial price to public less the underwriting discount.

The underwriters expect to deliver the shares against payment in New York, New York on

, 2004.

Goldman, Sachs & Co.

Credit Suisse First Boston

Deutsche Bank Securities

Bear, Stearns & Co. Inc.

Jefferies Quarterdeck

Prospectus dated , 2004.

AVAILABLE INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission, or SEC. You may read and copy any document Hexcel files at the SEC's public reference rooms in Washington, D.C., New York, New York and Chicago, Illinois. Please call the SEC at 1-888-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public from the SEC's website at www.sec.gov or from our website at www.hexcel.com. However, the information on our website does not constitute a part of this prospectus.

In this document, we "incorporate by reference" the information we file with the SEC, which means that we can disclose important information to you by referring to that information. The information incorporated by reference is considered to be a part of this prospectus. Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for all purposes to the extent that a statement contained in this prospectus or in any other subsequently filed document that is also incorporated or deemed to be incorporated by reference, modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus. We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus until the offering is completed.

Annual Report on Form 10-K for the fiscal year ended December 31, 2003;

Quarterly Reports on Form 10-Q for the quarters ended March 31, 2004; June 30, 2004 and September 30, 2004;

Proxy Statement for the 2004 Annual Meeting of Stockholders of Hexcel Corporation filed on April 23, 2004; and

Current Reports on Form 8-K dated April 22, 2004; July 23, 2004; September 29, 2004; October 1, 2004; October 22, 2004; and November 22, 2004 (except any materials only "furnished" to the SEC).

You may request a copy of these filings at no cost by writing or telephoning Hexcel at: Two Stamford Plaza, 281 Tresser Boulevard, Stamford, Connecticut 06901, (203) 969-0666, Attention: Investor Relations.

You should rely only upon the information provided in this prospectus or incorporated by reference into this prospectus. We have not authorized anyone to provide you with different information. You should not assume that the information in this prospectus, including any information incorporated by reference, is accurate as of any date other than the date of this prospectus.

1

MARKET AND INDUSTRY DATA

Industry and market data used throughout this prospectus was obtained through company research, surveys and studies conducted by third parties and industry and general publications. We have not independently verified market and industry data from third-party sources. While we believe that our internal surveys are reliable and that industry descriptions are appropriate, neither these surveys nor these descriptions have been verified by any independent sources.

FORWARD-LOOKING STATEMENTS

This prospectus includes and incorporates by reference 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 the use of terms and phrases such as "anticipate," "believe," "could," "estimate," "expect," "intend," "may," "plan," "predict," "project," "should," "will" and similar terms and phrases, including references to assumptions. Such statements are based on current expectations, are inherently uncertain and are subject to changing assumptions. These statements are contained in sections entitled "Risk Factors," "Business" and other sections of this prospectus and in the documents incorporated by reference in this prospectus.

Such forward-looking statements include, but are not limited to:

estimates of the trend in commercial aerospace production and delivery rates, including those of Airbus and Boeing;

expectations regarding the growth in the production of military aircraft, helicopters and launch vehicle programs in 2004 and beyond;

expectations regarding future business trends in the electronics fabrics industry;

expectations regarding the demand for body armor made of aramid and specialty fabrics;

expectations regarding growth in sales of composite materials for wind energy, recreation and other industrial applications;

estimates of changes in net sales by market compared to 2003;

expectations regarding our equity in the earnings (losses) of joint ventures, as well as joint venture investments and loan guarantees;

expectations regarding working capital trends and capital expenditures;

the availability and sufficiency of our senior credit facility and other financial resources to fund our worldwide operations in 2004 and beyond;

expectations about refinancing BHA Aero Composite Parts Co., Ltd.; and

the impact of various market risks, including fluctuations in the interest rates underlying our variable-rate debt, fluctuations in currency exchange rates, fluctuations in commodity prices and fluctuations in the market price of our common stock.

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 or Boeing; changes in sales mix; changes in government defense procurement budgets; changes in military aerospace programs or technology; industry capacity; competition; disruptions of established supply channels; manufacturing capacity constraints; the availability, terms and deployment of capital; and the other factors described under "Risk Factors." Additional information regarding these factors is contained in our Annual Report on Form 10-K for the year ended December 31, 2003.

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, could have an adverse impact on our stock price. We do not undertake an obligation to update such forward-looking statements or risk factors to reflect future events or circumstances.

SUMMARY

This summary may not contain all of the information that may be important to you. You should read the entire prospectus, including the financial data and related notes, before making an investment decision. The terms "Hexcel," the "Company," "we" and "us" in this prospectus refer to Hexcel Corporation and its subsidiaries, unless the context otherwise requires. You should pay special attention to the "Risk Factors" section beginning on page 14 of this prospectus to determine whether an investment in our common stock is appropriate for you. Unless otherwise noted, all references in this prospectus to a number or percentage of shares outstanding are based on 40,381,080 shares of our common stock outstanding as of November 22, 2004. Unless otherwise noted, the information in this prospectus assumes that the underwriters' over-allotment option to purchase a maximum of 3,149,998 additional shares is not exercised.

Overview

We are a leading producer of advanced structural materials. We develop, manufacture and market lightweight composite materials, high-performance reinforcement products, and composite structures for use in the commercial aerospace, industrial, space and defense and electronics markets. Our products are used in a wide variety of end products, such as commercial and military aircraft, space launch vehicles and satellites, wind turbine blades, printed wiring boards for computers and telecommunications, body armor, high-speed trains and ferries, cars and trucks, window blinds, bikes, skis and a wide variety of recreational equipment. Our advanced structural materials enable our customers to build structures that are lighter, stiffer and/or stronger than structures built with traditional materials without the problems of fatigue or corrosion associated with metals. The following charts summarize our fiscal 2003 net sales by manufactured location, business segment and end market:

For the fiscal year ended December 31, 2003, we generated net sales of \$896.9 million. For the nine months ended September 30, 2004, we generated net sales of \$798.1 million.

Our business is organized around three strategic business segments:

Composites: This segment manufactures and produces carbon fibers, honeycomb and fiber reinforced matrix materials, structural adhesives and specially machined honeycomb details and composite panels that are incorporated into many applications including military and commercial aircraft, wind turbine blades and recreation products;

Reinforcements: This segment manufactures carbon fiber reinforcement fabrics for composites, fiberglass fabrics for printed wiring board substrates, woven fabrics for ballistics protection and other carbon, aramid and glass reinforcement materials that are the foundation of composite materials, parts and structures or are used in other industrial applications; and

Structures: This segment engineers and produces composite parts for structures and interiors of commercial and military aircraft.

With 18 manufacturing facilities located in six countries around the world and joint ventures in the United States and Asia, we are well positioned to take advantage of opportunities for growth worldwide. For the fiscal year ended December 31, 2003, 45% of our products were manufactured outside the United States. We serve our international markets through manufacturing facilities and sales offices located in the United States and Europe and through sales offices located in Asia and Australia.

We believe that we have achieved a degree of vertical integration unmatched by any competitor. This vertical integration enhances our control over the cost, quality and delivery of our products and enables us to offer a variety of solutions to our customers' mission critical, structural materials needs. We have maintained longstanding relationships with our key customers, including Boeing and the European Aeronautic Defence and Space Company ("EADS"), the parent company of Airbus, DHB Industries, Vestas Wind Systems, Isola Laminate Systems, Park Electrochemical, Lockheed Martin, BAE Systems and GKN.

Competitive Strengths

We believe that our competitive position is attributable to a number of key strengths, including the following:

Industry Leader with Comprehensive Product Capabilities

We believe that we are:

the world's largest integrated producer of advanced structural materials for both the commercial and military aerospace industries;

a global leader in the manufacture of carbon fibers for military aircraft applications, as well as a global leader in the manufacture of fiber reinforced matrix materials, reinforcement fabrics and honeycomb products for commercial and military aircraft applications; and

the world's leading producer of reinforcement fabrics for body armor.

We have been an industry leader for more than 50 years and attribute the strength and longevity of our leading position to our reputation for high quality and engineering excellence across the broad range of our product offerings. We are a vertically integrated manufacturer, with a supply chain that provides us with a greater ability to control the cost, quality and delivery of our products. In addition, because we develop, manufacture and sell products at each level of our vertically integrated manufacturing process, we are able to provide the broadest possible range of overall materials solutions to our customers. Currently, we consume approximately 50% of our

carbon fiber production and 25% of our reinforcement fabric production internally and sell the balance of our production to our customers.

Strong Position as Qualified Supplier

Generally, before advanced structural materials may be utilized in commercial and military aerospace applications, they must be qualified for use by the aircraft original equipment manufacturers ("OEMs") such as Airbus, Boeing and Lockheed Martin. The qualification process is typically time consuming and costly and requires that the product specification and manufacturing processes be certified and documented. This qualification process is focused on ensuring consistent manufacturing and the traceability of products and is part of the support aircraft manufacturers require to certify an aircraft with governmental agencies such as the Federal Aviation Administration or the Department of Defense. To limit variation, OEMs qualify a limited number of suppliers for any given product. Further, they rely upon a database of prior usage of a product in selecting materials to use in the manufacture of new aircraft programs. Airbus and Boeing, the largest commercial aircraft manufacturers in the world, use our qualified products in all of their commercial aircraft, and our carbon fiber is the only qualified carbon fiber on many U.S. and Western European military aircraft programs currently in production. We believe that we have the broadest range of product qualifications of any advanced structural materials manufacturer in the aerospace industry and have qualified products for use in a significant number of western commercial and military aircraft programs. In addition, aircraft programs typically have very long life cycles, with production runs often lasting 20 to 30 years or more. As a result of the high cost and increased risk associated with the qualification of a new supplier, as well as the strong relationships that develop with existing suppliers over time, OEMs generally do not add new suppliers once a program enters production.

Visibility into the OEM Recovery

The lead times for the manufacture of modern commercial and military aircraft are long. Changes in aircraft build rates are decided well in advance of changes in production as they take months to implement. Suppliers are notified very early in the planning stage regarding any changes in production requirements and periodically participate in rate readiness studies to determine whether the supply chain can support increases in aircraft production. We believe that knowing these production planning requirements gives us significant visibility into the expected demand for our products for the next twelve to eighteen months. Hexcel's advanced structural materials are typically delivered four to nine months prior to the production of an aircraft, whereas finished composite structures are delivered while an aircraft is being assembled. We are currently delivering materials that will be used to support the increase in commercial aircraft production well into 2005. Our close relationships with all the key OEMs and involvement in their production planning give us confidence in the near to mid-term prospects for our businesses.

Industry and Geographic Diversity

Approximately 43% of our net sales for the fiscal year ended December 31, 2003 were derived from the commercial aerospace industry; 20% from the space and defense industry; 6% from the electronics industry; and 31% from a wide range of industrial applications, including body armor products, wind turbine blades and recreational and automotive products. We believe that these industries are influenced by different factors that do not move in tandem, providing added diversification and stability to our business. Our revenues from market applications outside aerospace represented 37% of our 2003 sales. During the same period, we manufactured 55% of our products in the United States and 45% outside the United States, which offers additional

diversification benefits. We believe that this industry and geographic diversity provides us with growth platforms that allow us to serve the global needs of our customers.

Growing Share of Growing Markets

Many of the markets we serve with advanced structural materials, such as aerospace, wind energy and ballistic materials, have long-term positive fundamental growth trends. The use of advanced structural materials in aerospace and wind energy applications tends to expand faster than the market as our products are substituted for traditional materials such as aluminum, steel and wood. In commercial aerospace, for example, composite materials are increasingly being used to replace aluminum and other metals throughout the airframe. We believe that this substitution effect represents a long-term trend in the commercial and military aerospace industries, with composites representing an increasingly higher percentage of the total value of the airframe in each new aircraft generation. Early versions of commercial jet aircraft, like the Boeing 707, which was developed in the early-1950s, contained almost no composite materials. One of the first aircraft to use a meaningful amount of composite materials, the Boeing 767, entered service in 1983, and was built with an airframe containing approximately 6% composite materials. The airframe of Boeing's most recently developed aircraft, the 777, which entered service in 1995, is approximately 11% composite. By comparison, the newest generation of aircraft in development, including the Airbus A380 and Boeing 7E7, is expected to be built with airframes containing approximately 22% and 50% composite materials, respectively. Hexcel has been awarded contracts to supply substantial quantities of its products to the A380, including the materials to build the central wing box and aft fuselage. While Boeing has chosen another supplier to provide one advanced structural material product form for the wings and fuselage of the 7E7, the remaining opportunities for advanced structural materials are significant, and we believe that this will be an important aircraft for Hexcel. We believe that, following the 7E7, future generations of aircraft will contain increasingly higher percentages of composite materials. As a global leader in the production of advanced structural materials for the commercial aerospace industry, we believe that we are well positioned to benefit from these trends.

Significant Operating Leverage

Following the industry downturn that began in late 2001, we restructured our company, reducing our annual cash fixed costs by 23%, or \$66.4 million, in 2002, primarily through company-wide reductions in managerial, professional, indirect manufacturing and administrative employees along with organizational rationalization. In the last two years, we have maintained the lean organization we created so that any increase in sales will result in a proportionally greater increase in our profitability. Our 2004 year-to-date operating performance has demonstrated the operating leverage we can extract from revenue growth with operating income for the nine months ended September 30, 2004 increasing by 38% on revenue growth of 18% when compared with the same period in 2003. As our commercial aircraft revenue grows as a result of increasing aircraft production rates, we should continue to benefit from our controlled fixed costs, further expanding margins and generating increased amounts of free cash flow.

Manufacturing and Technical Expertise

We have been a leader in advanced structural materials technology for over 50 years. We believe that the range of technologies and products that we have developed over this period gives us a depth of manufacturing expertise and breadth of products and approvals that would be difficult for competition to replicate in our industry. Our manufacturing and development facilities in the U.S. and Europe offer local support to our customers' needs while leveraging our global capabilities and experience. Our technically oriented sales force and research and development staff work with new

and existing customers to identify and engineer solutions to meet our customers' needs, particularly by identifying areas where new and existing advanced structural materials may beneficially replace traditional materials.

Experienced, Proven and Motivated Management Team

We believe that our management team provides broad experience and expertise in the advanced structural materials business and its industries. David E. Berges, our Chairman, President and Chief Executive Officer, has over 30 years of experience with manufacturing organizations serving aerospace, automotive and industrial applications. Prior to joining us, Mr. Berges served as President of Honeywell's (formerly AlliedSignal) Automotive Products Group, Vice President of their Aerospace Engine Systems and Accessories groups and served as President and Chief Operating Officer of Barnes Aerospace, Barnes Group Inc. following 15 years of operational and commercial leadership roles at General Electric Company. Our Executive Vice President and Chief Financial Officer, Stephen C. Forsyth, has been with Hexcel for 24 years in general management and financial positions and has been Chief Financial Officer for eight years. Our three business unit presidents have accumulated over 65 years of experience with Hexcel and our predecessor companies. A substantial portion of our management's total compensation is based on cash incentive awards linked primarily to the achievement of financial targets and on equity awards.

Growth Strategy

Our growth strategy is focused on maintaining our strong competitive differentiation while growing market share and revenue and enhancing profitability. Key elements of our growth strategy include the following:

Expand Leadership Position in Commercial Aerospace Industry

Commercial aerospace remains the largest market for advanced structural materials. We are the leading supplier of advanced structural materials to this industry, with strong positions at both Airbus and Boeing. We believe that underlying trends in the commercial aerospace market will drive growth in the future, and with it growth in the corresponding demand for advanced structural materials.

Significant trends in the commercial aerospace market include the following:

increased usage of advanced structural materials in each new generation of commercial aircraft;

increased aircraft retirement rates as a result of operating costs, noise reduction regulation and a desire to standardize fleets;

increased emphasis on fuel efficiency and the design of new aircraft;

increased air travel worldwide and, in particular, the Asian emerging economies, most notably China;

European aviation deregulation; and

the move to all new aircraft fleets by low cost carriers.

The commercial airline industry saw an upturn in air travel in 2003, and this trend has continued in 2004, bringing global revenue passenger miles back to 2000 levels. The positive trend continued in the first nine months of 2004 as global air traffic increased by approximately 18% over the first nine months of 2003, led by growth of approximately 29% in the Middle East region, 25% in the Asia-Pacific region and 17% in North America. In response to this increase in passenger traffic,

the global airline industry increased capacity by approximately 13% during the first nine months of 2004, led by capacity growth of approximately 24% in the Middle East region, 18% in the Asia-Pacific region and 11% in North America. The commercial aircraft industry is expected to remain a growth market over the long term, with industry sources projecting worldwide air traffic to grow at a compounded average rate of 5.6% during the 2003-2020 period, increasing annual revenue passenger miles from approximately 2 trillion in 2003 to approximately 5 trillion in 2020. The growth in revenue passenger miles will require substantial expansion of the worldwide fleet and OEM production rates. According to the July 2004 Airline Monitor, new deliveries of large commercial aircraft by Airbus and Boeing are expected to grow to 605 in 2004 from 573 in 2003, and then to 670 in 2005, 775 in 2006, 800 in 2007 and 835 in 2008. Industry experts expect that the worldwide fleet of commercial airlines will more than double over the 17-year period ending 2020.

We continue to pursue the increased use of advanced structural materials in each new generation of commercial aircraft. The Airbus A340-500/600 models for the first time utilize advanced structural materials to fabricate the keel beam and the rear pressure bulkhead. The Airbus A380 reflects further penetration of advanced structural materials because the airframe contains more than 10 times the composite content of the Boeing 747 with which it will compete. Boeing is currently developing the 7E7 aircraft that will utilize more advanced structural materials than any previous large commercial aircraft. We believe that the 7E7 will set the standard for the design of future commercial aircraft and the usage of advanced structural materials in their manufacture. We believe that we are well positioned to capitalize on growth trends in the commercial aerospace industry by continuing to produce a wide variety of advanced structural materials for use in the manufacture of commercial aircraft.

Capitalize on Growing Military Aerospace Markets

We continue to capitalize on the growth of military aircraft production. Military aircraft generally use a higher percentage of advanced structural materials and higher value products than commercial aircraft, and we are uniquely qualified to supply materials for a broad range of military aircraft and helicopters. After a slowdown in military aircraft production during the 1990s, a new generation of military aircraft has now entered production, driven in part by the need to replace aging fighter and transport aircraft platforms. The new programs include the F-22 (Raptor), the F/A-18E/F (Hornet), the C-17 transport, the European Fighter Aircraft (Typhoon), the V-22 (Osprey) tiltrotor aircraft and the NH90 helicopter. In the coming years, we expect to see the benefit of additional programs such as the F-35 Joint Strike Fighter ("JSF") and the A400M transport in Europe as well as from unmanned aerial vehicles. Military aircraft lead the trend of increasing usage of advanced structural materials. We estimate that while the airframe of the F/A-18 C/D had 13% composite content, the newer F/A-18E/F version is now 27% composite content. Newer aircraft such as the Eurofighter or the JSF will exceed 40% composite content. While the relative size of each program will be subject to government funding, the requirement to replace existing aircraft and the increased defense spending resulting from the war on terrorism are expected to result in military aircraft production this decade that will be significantly higher than during the last decade. We are the sole supplier of carbon fiber on a significant number of U.S.-based military aircraft programs, and therefore we are uniquely positioned to capitalize on the growth of these aircraft platforms.

Capture Significant Share of Growing Wind Energy Market

We believe that we are well positioned to generate revenue growth from the rapid expansion of the wind energy market. The American Wind Energy Association ("AWEA") has reported that global wind energy generating capacity has grown from 6,259 megawatts ("MW") in 1996 to 39,294 MW in 2003, representing a compounded annual growth rate of 30%. In 2003, 8,133 MW of capacity were installed, representing a 26% increase over installed capacity at the end of 2002. At the end of

2003, Europe as a whole, where we are the largest supplier of pre-impregnated composite materials ("prepregs") for these applications, represented approximately 74% of global installed capacity. German installed capacity, representing 37% of global installed capacity at the end of 2003, increased by 22% in 2003 to 14,609 MW. The growth in demand in Europe for renewable wind energy is driving the construction of large offshore wind farms, which benefit from more consistent wind patterns and the development of larger wind turbines and longer blades. The United States had the second largest installed capacity at the end of 2003, with approximately 6,374 MW, having increased by 36% in 2003. Key to the continuing growth of this market in the United States is the U.S. production tax credit for wind energy, which was renewed by Congress on September 28, 2004. The vast majority of blades on modern wind turbines are fabricated from fiber reinforced structural materials and with each new generation the sizes of the blades increase, creating the opportunity for greater use of our advanced structural materials. We believe that the combination of the superior technology of our products and the strength of our existing relationships in the wind energy industry will enable us to capitalize on the long term growth of this market.

Expand Applications for Advanced Structural Materials

We are committed to expanding the application of our advanced materials both within existing market applications and into new application markets. To date, advanced structural materials have found their greatest use in aerospace and recreation applications, where their performance properties have shown the most demonstrable value. We believe that these materials have potential uses in other structural engineering applications. Over the last two years, in addition to wind energy, we have generated significant growth in sales of our ballistics products from the expanded replacement programs by the U.S. military for body armor used by military personnel. As of the nine months ended September 30, 2004, ballistics sales have increased 80% compared to the same period in 2003. We are also pursuing growth opportunities in other military applications such as ground vehicles, naval vessels and platform armoring. To rise to these opportunities, we are continually improving our existing materials and developing new materials as well as seeking to drive down the end component cost for our customers. Recent developments have included:

new generation of toughened and self-adhesive prepreg systems;

HexMC®, a carbon fiber/epoxy sheet moulding compound that enables medium sized composite components to be produced in mass; and

NC2, a unique mutli-axial reinforcement and binders for use in resin infusion applications.

We believe the breadth and depth of our advanced materials capabilities will serve us well in exploiting the potential of advanced structural materials.

Other Information About Our Business

We are incorporated under the laws of the State of Delaware. Our principal executive offices are located at Two Stamford Plaza, 281 Tresser Boulevard, Stamford, Connecticut 06901. Our general telephone number is 203-969-0666. The address of our website is *www.hexcel.com*. The information on our website is not part of this prospectus. For further information about our business, we refer you to our Annual Report on Form 10-K for the year ended December 31, 2003, and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2004, June 30, 2004 and September 30, 2004, each of which is incorporated into this prospectus by reference.

The Offering

Securities offered 21,000,000 shares of common stock, par value \$0.01 per share.

Over-allotment option granted by the selling

stockholders

3,149,998 shares to be provided by the Berkshire/Greenbriar investors (as defined

below).

Selling stockholders All the shares of common stock offered by this prospectus are to be sold by the selling

stockholders listed in "Selling Stockholders." We will not offer any shares of common

stock in this offering.

Shares of common stock outstanding before this

offering

40,381,080 shares.

Shares of common stock outstanding after this

offering

50,280,994 shares.

Use of proceeds We will not receive any proceeds from the sale of the shares of common stock being

offered by this prospectus.

NYSE symbol HXL.

Accelerated charge We will record an "accelerated charge" immediately upon the conversion of the

14,466 shares of series A convertible preferred stock and 77,875 shares of series B convertible preferred stock into common stock. Assuming the preferred stock conversion took place as of September 30, 2004, the accelerated charge would be \$11.2 million. See the notes to the accompanying unaudited pro forma financial

information.

Risk Factors

Investing in our common stock involves substantial risk. See "Risk Factors" for a description of certain of the risks you should consider before investing in our common stock.

Selling Stockholders

Investment entities controlled by The Goldman Sachs Group, Inc., which we refer to in this prospectus as the "Goldman Sachs investors," hold capital stock representing approximately 37.0% of Hexcel's total voting power as of November 22, 2004. Affiliates of Berkshire Partners LLC and Greenbriar Equity Group LLC, which we refer to in this prospectus collectively as the "Berkshire/Greenbriar investors," hold preferred stock representing approximately 34.4% of Hexcel's total voting power as of November 22, 2004. The selling stockholders offering shares of common stock pursuant to this prospectus are the Goldman Sachs investors listed in the table under "Selling Stockholders" and the Berkshire/Greenbriar investors listed in the table under "Selling Stockholders." See "Selling Stockholders" for a description of each of the selling stockholders and "Certain Relationships and Related Transactions" for a discussion of our relationships with the Goldman Sachs investors and the Berkshire/Greenbriar investors. Immediately following the sale of the shares by the selling stockholders as contemplated by this prospectus, the Goldman Sachs investors will hold common stock and preferred stock representing 24.7% of the Company's total voting power and the Berkshire/Greenbriar investors will hold preferred stock representing 23.4% of the Company's total voting power, in each case assuming that the underwriters do not exercise their over-allotment option.

Summary Financial Data

The following table presents summary financial and other data with respect to the Company and has been derived from (1) the audited consolidated financial statements of the Company as of and for the three years ended December 31, 2003, (2) the unaudited condensed consolidated financial statements of the Company as of and for the nine months ended September 30, 2004 and 2003 and (3) the unaudited pro forma financial statements. The information set forth below should be read together with other information contained under the captions "Capitalization," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements, unaudited pro forma financial information and the related notes thereto included or incorporated in this prospectus. Certain prior period gains on sales of assets have been reclassified to other (income) expense, net to conform to the 2004 presentation.

	Year Ended						Nine Months Ended			Nine Months Ended September 30, 2004
	December 31, 2001			December 31, 2002	December 31, 2003		September 30, 2003		September 30, 2004	vs. Nine Months Ended September 30, 2003 % Change
				(In millions, except 1			r share data)			
Statements of Operations Data: Net sales Cost of sales	\$	1,009.4 818.6	\$	850.8 689.5	\$ 896.9 722.4		675.5 542.3	\$	798.1 627.1	18.1%
Gross margin Operating expenses: Selling, general and		190.8		161.3	174.5		133.2		171.0	28.4
administrative Research and technology		120.9 18.6		85.9 14.7	95.0 17.7		70.5 13.2		82.6 15.2	
Business consolidation and restructuring Impairment of goodwill		58.4		0.5	4.0		2.4		2.0	
and other purchased intangibles Other (income) expense, net(a)		309.1			(2.2))	(2.2)		3.0	
Operating income (loss) Interest expense, net Non-operating (income)		(316.2) 64.8		60.2 62.8	60.0 53.6		49.3 41.1		68.2 36.3	38.3
expense, net(b)		2.7		(10.3)	2.6		2.6		0.6	
Income (loss) before income taxes Provision for income taxes		(383.7) 40.5		7.7 11.3	3.8 13.5		5.6 5.9		31.3 10.9	458.9
Income (loss) before equity in earnings (losses) Equity in earnings (losses) of and write-downs of an		(424.2)		(3.6)	(9.7))	(0.3)		20.4	
investment in affiliated companies		(9.5)		(10.0)	(1.4)) _	(1.1)		0.8	
Net income (loss)		(433.7)		(13.6)	(11.1))	(1.4)		21.2	
Deemed preferred dividends and accretion					(9.6)) _	(6.6)		(9.4)	
	\$	(433.7)	\$	(13.6)	\$ (20.7)	\$	(8.0)	\$	11.8	

Net income (loss) available to common stockholders Net income (loss) per						Nine Months Ended September 30, 2004 vs. Nine Months Ended September 30,
common share:	(4.5 A) A	(0.25) A	(0.51) #	(0.04) (6	0.20	2003
Basic	\$ (11.54) \$	(0.35) \$	(0.54) \$	(0.21) \$	0.30	% Change
Diluted	\$ (11.54) \$	(0.35) \$	(0.54) \$	(0.21) \$	0.23	% Change
Weighted average common shares outstanding: Basic Diluted	37.6 37.6	38.4 38.4	38.6 38.6	38.6 38.6	39.2 91.5	
		12				

			Year Ended	Nine Mont	Nine Months Ended			
	December 31, 2001		December 31, 2002	December 31, 2003	September 30, 2003	September 30, 2004		
			(In mil	llions, except per sha	are data)	_		
Balance Sheet Data (end of period):								
Cash and cash equivalents	\$	11.6 \$	8.2	\$ 41.	7 \$ 28.9	\$ 51.5		
Property, plant and equipment, net		329.2	309.4	293.	9 291.9	272.0		
Working capital		83.7	(530.8)	140.	7 132.0	160.4		
Total assets		789.4	708.1	722.		750.6		
Total debt		685.9	621.7	483.	4 487.3	457.4		
Mandatorily redeemable convertible preferred stock, 0.125 shares of Series A and 0.125 shares of Series B,								
authorized, issued and outstanding				106.	0 103.0	115.4		
Stockholders' equity (deficit)		(132.6)	(127.4)	(93.	4) (95.4)	(83.1)		
Pro Forma, as Adjusted(c): Net income (loss) available to common stockholders				\$ (18.	9)	\$ 13.6		
Net income (loss) per common share:								
Basic				\$ (0.4		\$ 0.28		
Diluted				\$ (0.4)	-1)	\$ 0.23		
Weighted average common shares outstanding: Basic				46.		49.1		
Diluted				46.	4	91.5		
Other Financial Data:	d.	(7.2 ¢	51.2	ф. 55	7. 0. 40.2	D 41.5		
Depreciation and amortization	\$	67.2 \$ 38.8	51.2 14.9	\$ 55. 21.	7 \$ 40.3 \$ 12.5	\$ 41.5 20.3		
Capital expenditures Cash flows provided by operations		38.8 35.0	65.9	21. 46.		20.3 45.5		
Cash flows provided by (used for) investing		(38.3)	(2.3)	40. 9.		(12.3)		
Cash flows provided by (used for) financing		8.6	(67.3)	(26.		(23.7)		
<u>-</u>			. /	`	` ′	. ,		

(a) Other (income) expense, net consists of the following:

		Year Ended	Nine Months Ended			
	December 31, 2001	December 31, 2002	December 31, 2003	September 30, 2003	September 30, 2004	
			(In millions)			
Gain on asset sales Accrual for certain legal matters	\$	\$	\$ (2.2) \$ (2.2) \$	(4.0) 7.0	
Total	\$	\$	\$ (2.2) \$ (2.2)		