

ALLEGHENY TECHNOLOGIES INC

Form 424B5

May 19, 2016

Table of Contents**CALCULATION OF REGISTRATION FEE**

Title of each class of securities offered	Amount to be registered	Maximum offering price per unit	Maximum aggregate offering price	Amount of registration fee⁽¹⁾
4.75% Convertible Senior Notes due 2022	\$287,500,000(1)	100%	\$287,500,000	\$28,951.25(2)
Common Stock, par value \$0.10 per share	(3)	(3)	(3)	(3)

(1) Includes 4.75% Convertible Senior Notes due 2022 that may be purchased by the underwriters pursuant to their option to purchase additional 4.75% Convertible Senior Notes due 2022 to cover over-allotments, if any.

(2) Calculated in accordance with Rule 457(o) and Rule 457(r) under the Securities Act and relates to the Registration Statement on Form S-3 (File No. 333-204209) filed by Allegheny Technologies Incorporated on May 15, 2015.

(3) There also are being registered hereby an indeterminate number of shares of common stock into which the 4.75% Convertible Senior Notes due 2022 may be converted. Pursuant to Rule 457(i) under the Securities Act, no separate registration fee is payable where convertible securities and the securities into which conversion is offered are registered at the same time and no additional consideration is to be received in connection with the exercise of the conversion privilege.

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PROSPECTUS SUPPLEMENT

(To Prospectus Dated May 15, 2015)

\$250,000,000

Allegheny Technologies Incorporated

4.75% Convertible Senior Notes due 2022

Allegheny Technologies Incorporated is offering \$250,000,000 aggregate principal amount of its 4.75% Convertible Senior Notes due 2022 (the "notes") under this prospectus supplement. Interest on the notes will be payable semiannually in arrears on January 1 and July 1 of each year, beginning on January 1, 2017. The notes will mature on July 1, 2022.

Holder may convert their notes at their option at any time prior to the close of business on the business day immediately preceding the stated maturity date for the notes. The initial conversion rate for the notes will be 69.2042 shares of our common stock per \$1,000 principal amount of notes, equivalent to an initial conversion price of \$14.45 per share of common stock. The conversion rate will be subject to adjustment in certain events but will not be adjusted for accrued interest.

Following certain corporate transactions, we will increase the applicable conversion rate for a holder that elects to convert its notes in connection with such corporate transaction by a number of additional shares of our common stock as described in this prospectus supplement.

We may not redeem the notes prior to their stated maturity date. If we undergo a fundamental change, holders may require us to repurchase the notes in whole or in part for cash at a price equal to 100% of the principal amount of the notes to be purchased plus any accrued and unpaid interest to, but excluding, the repurchase date.

We do not intend to apply for listing of the notes on any securities exchange. Our common stock, par value \$0.10 per share, is listed on the New York Stock Exchange under the trading symbol "ATI". The last reported sale price of our common stock on the New York Stock Exchange on May 18, 2016 was \$11.56 per share.

The notes will be our unsecured senior obligations and will rank equally with all of our other unsecured senior indebtedness.

Investing in the notes involves certain risks. See **Risk Factors** beginning on page S-9 of this prospectus supplement and the reports we file with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934 incorporated by reference in this prospectus supplement and the accompanying prospectus to read about factors you should consider before making an investment in the notes.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the notes or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Note	Total
Public offering price(1)	100.00%	\$ 250,000,000
Underwriting discounts and commissions	3.00%	\$ 7,500,000
Proceeds, before expenses, to us	97.00%	\$ 242,500,000

(1) Plus accrued interest, if any, from May 24, 2016

The underwriters will have the option to purchase within 30 days from the date of this prospectus supplement up to an additional \$37,500,000 aggregate principal amount of notes from us at the public offering price less the underwriting discounts and commissions to cover over-allotments, if any.

We expect that delivery of the notes will be made to investors in book-entry form only through the facilities of The Depository Trust Company on or about May 24, 2016.

Joint Book-Running Managers

Citigroup

BofA Merrill Lynch
Co-Managers

J.P. Morgan

BNY Mellon Capital Markets, LLC

Credit Suisse

HSBC

MUFG

PNC Capital Markets LLC

May 18, 2016

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ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is this prospectus supplement, which describes certain matters relating to us and this offering. The second part, the accompanying prospectus dated May 15, 2015, gives more general information about debt securities we may offer from time to time, some of which may not apply to the notes offered by this prospectus supplement and the accompanying prospectus. For information about the notes, see [Description of Notes](#) in this prospectus supplement and [Description of Debt Securities](#) in the accompanying prospectus.

We are responsible for the information contained and incorporated by reference in this prospectus supplement and the accompanying prospectus and in any related free writing prospectus we prepare or authorize. We have not authorized anyone to give you any other information, and we take no responsibility for any other information that others may give you. We are not, and the underwriters are not, making an offer of these notes in any jurisdiction where the offer or sale is not permitted. You should not assume that the information contained in this prospectus supplement, the accompanying prospectus or the documents incorporated by reference in this prospectus supplement or the accompanying prospectus is accurate as of any date other than their respective dates. Our business, financial condition, results of operations and prospects may have changed since those dates.

Before you invest in the notes, you should carefully read this prospectus supplement and the accompanying prospectus. You should also read the documents we have referred you to under [Where You Can Find More Information](#) for information about us. The shelf registration statement described in the accompanying prospectus, including the exhibits thereto, can be read at the Securities and Exchange Commission's (the "SEC") web site or at the SEC's Public Reference Room as described under [Where You Can Find More Information](#).

If the information set forth in this prospectus supplement varies in any way from the information set forth in the accompanying prospectus, you should rely on the information contained in this prospectus supplement. If the information set forth in this prospectus supplement varies in any way from the information set forth in a document we have incorporated by reference, you should rely on the information in the more recent document.

Unless indicated otherwise, or the context otherwise requires, references in this document to Allegheny Technologies, ATI, the Company, we, us and our are to Allegheny Technologies Incorporated and its consolidated subsidiaries. References to dollars and \$ are to United States dollars.

This prospectus supplement and accompanying prospectus include registered trademarks, trade names and service marks of the Company and its subsidiaries.

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We file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information that we file with the SEC can be read and copied at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 to obtain further information on the operation of the Public Reference Room. The SEC maintains a web site that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC, including us. The SEC's web site is <http://www.sec.gov>. In addition, our common stock is listed on the New York Stock Exchange, and our reports and other information can be inspected at the offices of the New York Stock Exchange, 20 Broad Street, New York, New York 10005. Our web site is www.atimetals.com. Information contained on our web site is not part of, and should not be construed as being incorporated by reference into, this prospectus supplement and the accompanying prospectus.

Incorporation by Reference

The SEC allows us to incorporate by reference information that we file with it. This means that we can disclose important information to you by referring you to other documents. Any information we incorporate in this manner is considered part of this prospectus supplement and the accompanying prospectus except to the extent updated and superseded by information contained in this prospectus supplement and the accompanying prospectus. Some information that we file with the SEC after the date of this prospectus supplement and until we sell all of the securities covered by this prospectus supplement will automatically update and supersede the information contained in this prospectus supplement and the accompanying prospectus.

We incorporate by reference the following documents that we have filed with the SEC and any filings that we make with the SEC in the future under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act), until we sell all of the securities covered by this prospectus supplement, including between the date of this prospectus supplement and the date on which the offering of the securities under this prospectus supplement is terminated, except as noted in the paragraph below:

Our SEC Filings (File No. 1-12001)	Period for or Date of Filing
Annual Report on Form 10-K	Year Ended December 31, 2015
Quarterly Report on Form 10-Q	Quarter Ended March 31, 2016
Current Reports on Form 8-K	February 26 and March 2 and 10 and May 11, 16 and 17, 2016
Registration Statement on Form 8-A	July 30, 1996

Pursuant to General Instruction B of Form 8-K, any information submitted under Item 2.02, Results of Operations and Financial Condition, or Item 7.01, Regulation FD Disclosure, of Form 8-K is not deemed to be filed for the purpose of Section 18 of the Exchange Act, and we are not subject to the liabilities of Section 18 with respect to information deemed furnished (and not filed) in accordance with SEC rules, including information submitted under Item 2.02 or Item 7.01 of Form 8-K. We are not incorporating by reference any information deemed furnished (and not filed) in accordance with SEC rules, including information submitted under Item 2.02 or Item 7.01 of Form 8-K, into any filing under the Securities Act of 1933, as amended (the Securities Act), or the Exchange Act or into this prospectus supplement or the accompanying prospectus.

Statements contained in this prospectus supplement or the accompanying prospectus as to the contents of any contract, agreement or other document referred to in this prospectus supplement or the accompanying prospectus do not purport to be complete, and where reference is made to the particular provisions of that contract, agreement or other document, those references are qualified in all respects by reference to all of the provisions contained in that contract or other document. For a more complete understanding and description of each such contract, agreement or other document, we urge you to read the documents contained in the exhibits to the registration statement of which the accompanying prospectus is a part.

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Any statement contained in a document incorporated by reference, or deemed to be incorporated by reference, into this prospectus supplement and the accompanying prospectus will be deemed to be modified or superseded for purposes of this prospectus supplement and the accompanying prospectus to the extent that a statement contained herein, therein or in any other subsequently filed document which also is incorporated by reference in this prospectus supplement and the accompanying prospectus modifies or supersedes that statement. Any such statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement and the accompanying prospectus.

We will provide without charge, upon written or oral request, a copy of any or all of the documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus and a copy of any or all other contracts, agreements or documents which are referred to in this prospectus supplement or the accompanying prospectus. Requests should be directed to: Allegheny Technologies Incorporated, 1000 Six PPG Place, Pittsburgh, PA 15222-5479, Attention: Corporate Secretary; telephone number: (412) 394-2800. You also may review a copy of the registration statement, its exhibits and the documents that are incorporated by reference into this prospectus supplement and the accompanying prospectus at the SEC's Public Reference Room in Washington, D.C., as well as through the SEC's web site.

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FORWARD-LOOKING STATEMENTS

You should carefully review the information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus. In this prospectus supplement and the accompanying prospectus, statements that are not reported financial results or other historical information are forward-looking statements. Forward-looking statements give current expectations or forecasts of future events and are not guarantees of future performance. They are based on our management's expectations that involve a number of business risks and uncertainties, any of which could cause actual results to differ materially from those expressed in or implied by the forward-looking statements.

You can identify these forward-looking statements by the fact that they do not relate strictly to historic or current facts. They use words such as anticipates, believes, estimates, expects, would, should, will, will likely result, outlook, projects, and similar expressions in connection with any discussion of future operating or financial performance.

We cannot guarantee that any forward-looking statements will be realized, although we believe that we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and assumptions that may prove to be inaccurate. Among others, the factors discussed in the Risk Factors section of our Annual Report on Form 10-K for our fiscal year ended December 31, 2015 or under Risk Factors in this prospectus supplement could cause actual results to differ from those in forward-looking statements included in or incorporated by reference into this prospectus supplement and the accompanying prospectus or that we otherwise make. Important factors that could cause actual results to differ materially from those in the forward-looking statements include: (a) material adverse changes in economic or industry conditions generally, including global supply and demand conditions and prices for our specialty materials; (b) material adverse changes in the markets we serve, including the aerospace and defense, oil and gas/chemical process industry, electrical energy, medical, automotive, construction and mining, and other markets; (c) our inability to achieve the level of cost savings, productivity improvements, synergies, growth or other benefits anticipated by management, from strategic investments and the integration of acquired businesses, whether due to significant increases in energy, raw materials or employee benefits costs, the possibility of project cost overruns or unanticipated costs and expenses, or other factors; (d) continued decline in, or volatility of, prices and availability of supply, of the raw materials that are critical to the manufacture of our products; (e) declines in the value of our defined benefit pension plan assets or unfavorable changes in laws or regulations that govern pension plan funding; (f) significant legal proceedings or investigations adverse to us; (g) labor disputes or work stoppage; and (h) other risk factors summarized in our Annual Report on Form 10-K for the year ended December 31, 2015, and in other reports filed with the Securities and Exchange Commission. Should known or unknown risks or uncertainties materialize, or should underlying assumptions prove to be inaccurate, actual results could vary materially from those anticipated, estimated or projected. You should bear this in mind as you consider any forward-looking statements.

We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. You are advised, however, to consider any additional disclosures that we may make on related subjects in future filings with the SEC. You should understand that it is not possible to predict or identify all factors that could cause our actual results to differ. Consequently, you should not consider any list of factors to be a complete set of all potential risks or uncertainties.

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SUMMARY

This summary highlights information about us and the notes being offered by this prospectus supplement and the accompanying prospectus. This summary is not complete and may not contain all of the information that you should consider prior to investing in the notes and our common stock. For a more complete understanding of our company, we encourage you to read this entire document, including the information incorporated by reference into this document.

Our Company

We are one of the largest and most diversified specialty materials and components producers in the world. Our high-value products include titanium and titanium alloys, nickel-based alloys and specialty steels, precision forgings, castings and machined components, zirconium and related alloys and precision and engineered stainless steel strip. Our standard products include specialty stainless sheet, stainless steel sheet, and stainless steel plate. Our specialty materials are produced in a wide range of alloys and product forms and are selected for use in applications that demand materials having exceptional hardness, toughness, strength, resistance to heat, corrosion or abrasion, or a combination of these characteristics. ATI is a fully integrated supplier from raw material (for titanium sponge) and melt (for other specialty alloy systems) through highly engineered finished components.

ATI's strategic vision is to be an aligned and integrated specialty materials and components company. Our strategies target the products and global growth markets that require and value ATI's technical and manufacturing capability leadership. These differentiated products serve key global markets including aerospace and defense, oil & gas/chemical & hydrocarbon processing industry, electrical energy, medical and automotive.

We have undertaken a multi-phase program over several years to enhance and expand our capabilities to produce premium specialty materials aimed at these strategic, global markets. We are near the end of this multi-year cycle of capital expenditures on major strategic investments. Since 2004, we have transformed ATI by investing \$4.7 billion in capital expenditures and acquisitions. This program has included acquisitions to forward integrate into producing forgings, castings and components and the construction and qualification of facilities to expand manufacturing capabilities for producing specialty materials and components that enable ATI to continue to innovate and develop new products to maintain our technological advantage in these differentiated markets. These investments have included expansions of our premium titanium alloy melt and remelt capability; nickel-based alloy and superalloy melt and remelt capability; titanium and specialty alloy plate production capability; and premium titanium and nickel-based superalloy forging capability. Also, we purchased assets that added advanced nickel-based alloy and titanium alloy powders to our product portfolio. In 2014, we acquired precision flowform process technologies to produce thin-walled components in net or near-net shapes across multiple alloy systems, and we acquired capabilities for manufacturing precision machine parts and components, which reinforce our important aerospace supply chain role.

We made significant progress in 2015 in qualifying and fully integrating a long-term strategic capital project involving what we believe to be the world's most advanced and powerful Hot-Rolling and Processing Facility (HRPF) in the specialty materials flat rolled products industry. The HRPF was fully integrated into our manufacturing operations in 2015, and is a critical part of our strategy to transform our flat rolled products business into a more competitive and consistently profitable business.

Our common stock is quoted on the New York Stock Exchange under the symbol **ATI**.

High Performance Materials & Components Segment

Our High Performance Materials & Components segment produces, converts and distributes a wide range of high performance materials, including titanium and titanium-based alloys, nickel- and cobalt-based alloys and superalloys, zirconium and related alloys including hafnium and niobium, advanced powder alloys and other specialty materials, in long product forms such as ingot, billet, bar, rod, wire, shapes and rectangles, and seamless

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tubes, plus precision forgings and castings, components and machined parts. These products are designed for the high performance requirements of major end markets such as aerospace and defense (engines and airframes), oil & gas/chemical & hydrocarbon processing industry, electrical energy, and medical. We are integrated from raw materials (titanium sponge) to melt, remelt, finish processing, forging, investment casting, and machining of our titanium and titanium alloys, and zirconium and hafnium alloy products. Most of the products in this segment are sold directly to end-use customers, and a significant portion of our High Performance Materials & Components segment products are sold under multi-year agreements.

Flat Rolled Products Segment

Our Flat Rolled Products segment produces, converts and distributes stainless steel, nickel-based alloys, specialty alloys, and titanium and titanium-based alloys, in a variety of product forms including plate, sheet, engineered strip, and Precision Rolled Strip® products. The major end markets for our flat rolled products are oil & gas/ chemical & hydrocarbon processing industry, automotive, food processing equipment and appliances, construction and mining, electronics, communication equipment and computers, and aerospace and defense.

Our Strengths

We believe that we are well-positioned for long-term growth, profitability and cash flow generation as a result of numerous factors, including:

Leading Diversified Specialty Materials and Components Producer. We are a world leader in the manufacture of both high-value and commodity specialty materials and component products and have one of the most diversified product offerings in the specialty metals industry. We believe that our size, market position and technical and manufacturing capabilities enable us to more effectively serve the needs of our customers, further improve our cost structure through economies of scale, and position us to profitably grow our business on a long-term basis.

Diverse End Markets. Our differentiated products serve key global markets, including aerospace and defense, oil & gas/chemical & hydrocarbon processing industry, electrical energy, medical and automotive. In the aerospace industry, we are a world leader in the production of premium titanium alloys, nickel-based and cobalt-based alloys and superalloys, and vacuum-melted specialty alloys used in the manufacture of components for both commercial and military jet engines, as well as replacement parts for those engines. We also produce titanium alloys, vacuum-melted specialty alloys, and high-strength stainless alloys for use in commercial and military airframes, airframe components and missiles. Both of our business segments produce specialty materials that are widely used in the oil & gas industry and the chemical & hydrocarbon processing industry. Our specialty materials are also widely used in the automotive and global electrical power generation industries, as well as in various medical device products.

High Value-Added Product Offering and Strong Competitive Position. Our specialty materials are produced in a wide range of alloys and product forms and are selected for use in applications that demand materials having exceptional hardness, toughness, strength, resistance to heat, corrosion or abrasion, or a combination of these characteristics. We have continued our strategic focus on high-value, differentiated products, which accounted for approximately 83% of our sales in 2015.

Close, Long Standing Relationships with Blue-Chip Customers. We believe that our focus on providing high quality products to our customers has led to long standing relationships with many of the industry leaders in the end markets we serve. We believe that we have an excellent reputation with our customers for providing high quality products and customer service, as well as for timely delivery. In 2014 and early 2015, we reached agreement on several long-term agreements with aerospace market OEMs that total over \$4 billion in expected revenue. These long-term agreements

are for our specialty materials mill products, forgings and investment castings required for both next-generation and legacy aircraft platforms. Our largest customers include The Boeing Company, Airbus S.A.S. (an Airbus Group company), Bombardier Aerospace (a division of Bombardier

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Inc.), and Embraer (Empresa Brasileira de Aeronáutica S.A.) for airframes, and GE Aviation (a division of General Electric Company (GE)), Rolls-Royce plc, Snecma (SAFRAN Group) and Pratt & Whitney (a division of United Technologies Corporation), and various joint ventures that manufacture jet engines.

Experienced, Committed Management Team. Our business is managed by an experienced team of executive officers led by Richard J. Harshman, our Chairman, President and Chief Executive Officer. Our management team includes many other experienced officers in key functional areas, including technical, operations, sales, marketing, accounting, finance and legal. Our executive officers and other members of our management team are committed to growing our business, reducing costs, and pursuing other initiatives to deliver sustained growth in earnings and cash flow generation.

Business Strategy

We intend to build upon our competitive strengths to continue our growth through the execution of our focused business strategy.

Continuously Seek to Innovate and Develop. We maintain our commitment to develop innovative alloys to better serve the needs of our end market users. ATI's 718Plu[®] nickel-based superalloy, Rene 65 near-powder superalloy (developed with GE), and our powder alloys have won significant share in the current and next-generation engines for the aerospace and defense market. Additionally, both of our business segments produce specialty materials that are widely used in to the oil & gas industry and the chemical & hydrocarbon processing industry. Our specialty materials, including titanium and titanium alloys, nickel-based alloys, zirconium alloys, stainless and duplex alloys and other specialty alloys, have the strength and wear corrosion-resistant properties necessary for difficult environments.

Maintain Emphasis on Continuous Operational Improvement. We made significant operational progress in 2015 in qualifying and fully integrating long-term strategic capital projects that we believe will position us to grow our high-value product offering. Additionally, we believe that our recent rightsizing and restructuring initiatives in our Flat Rolled Products segment will have a positive impact on that business in the second half of 2016, as we focus on the products and global markets that value our technical leadership and manufacturing capability.

Capitalize on Future Growth in Our Key End Markets. We define the key markets in which we operate as the aerospace and defense, oil & gas and chemical & hydrocarbon processing, electrical energy, automotive and medical industries. Our participation in the aerospace and defense industry has expanded significantly in recent years, from approximately 27% of our sales in 2010 to approximately 41% in 2015, as we believe we are a strategic supplier to the airframe and engine original equipment manufacturers with deep product and technological knowledge. We have long-term agreements which secure significant growth on both legacy and next-generation aircraft, with 300 new parts representing over \$1 billion of new business through 2020.

Expand Our Global Presence. Approximately 42% of our sales in 2015 came from markets outside the United States in which we believe have attractive growth prospects. Additionally, we believe that at least 50% of our 2015 sales were driven by global markets when we consider exports of our customers. Our High Performance Materials & Components segment has manufacturing capabilities for melting, remelting, forging and finishing nickel-based alloys and specialty alloys in the United Kingdom, and manufacturing capabilities for precision forging and machining in Poland, primarily serving the construction, transportation and aerospace and oil & gas markets. Within our Flat Rolled Products segment, our STAL joint venture in the People's Republic of China produces Precision Rolled Strip[®] products, which enables us to offer these products more effectively to markets in China and other Asian countries. Our Uniti LLC joint venture allows us to offer titanium products to industrial markets more effectively worldwide.

Preserve Liquidity Position and Engage in Proactive Liability Management. We seek to maintain a conservative balance sheet and believe that we have sufficient liquidity to fully support our daily operations. As of March 31, 2016, we had approximately \$157 million of cash and cash equivalents and, after giving effect to

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the recent amendment to our senior secured credit facility (the Credit Facility) described under the caption Summary - Recent Developments, we have available liquidity of approximately \$275 million under the Credit Facility. We have no significant debt maturities until 2019. We recently entered into a new four-year labor agreement with a majority of employees represented by the USW, which includes important changes to retirement benefit programs, including a freeze to new entrants to our defined benefit pension plan and the elimination of retiree medical benefits for new employees. As a result of the changes, we will ratably recognize approximately \$8 million of lower retirement benefit expense in the Flat Rolled Products segment for the remainder of 2016. We believe that this benefit change will favorably impact our results of operations in future years.

Recent Developments

On May 13, 2016, Allegheny Technologies Incorporated and certain of its wholly owned domestic subsidiaries entered into a First Amendment to Revolving Credit and Security Agreement, dated as of May 13, 2016 (the Credit Agreement Amendment), amending that certain Revolving Credit and Security Agreement, dated as of September 15, 2015 (the Credit Agreement), by and among the borrowers party thereto, the guarantors party thereto, the lenders party thereto, PNC Bank, National Association, as Agent, and PNC Capital Markets LLC, as Sole Lead Arranger and Sole Bookrunner. The Credit Agreement Amendment amended the Credit Agreement to, among other things, (i) add a term loan (the Term Loan) in the amount of \$100,000,000 to the Credit Facility and (ii) amend certain of the covenants in the Credit Agreement and related defined terms. All amounts owed with respect to the Term Loan will be due and payable on November 13, 2017 if not earlier prepaid. The borrowers under the Term Loan may prepay all amounts owed with respect to the Term Loan on a one-time basis on or after May 13, 2017. We used the proceeds of the Term Loan to repay amounts outstanding under the revolving credit facility under the Credit Agreement. For more information regarding the Credit Agreement Amendment, see our Current Report on Form 8-K filed on May 16, 2016, which is incorporated by reference in this prospectus supplement and the accompanying prospectus.

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The Offering

The following summary is provided solely for your convenience and is not intended to be complete. You should read the full text and more specific details contained elsewhere in this prospectus supplement and the accompanying prospectus. For purposes of this offering summary, references to Allegheny Technologies Incorporated, we, our and us refer only to Allegheny Technologies Incorporated and not its subsidiaries. For a more detailed description of the notes, see Description of Notes in this prospectus supplement and Description of Debt Securities in the accompanying prospectus.

Issuer	Allegheny Technologies Incorporated, a Delaware corporation
Notes Offered	\$250,000,000 aggregate principal amount of 4.75% Convertible Senior Notes due 2022. We have also granted the underwriters an option to purchase within 30 days after the date of this prospectus supplement up to an additional \$37,500,000 aggregate principal amount of notes, solely to cover over-allotments, if any.
Maturity	July 1, 2022.
Interest Payment Dates	January 1 and July 1 of each year, beginning on January 1, 2017.
Ranking	<p>The notes will be</p> <p>our unsecured senior obligations;</p> <p>effectively junior to any of our existing and future secured indebtedness to the extent of the assets securing such indebtedness, and structurally subordinated to any indebtedness and other liabilities of our subsidiaries;</p> <p><i>pari passu</i> in right of payment with all of our existing and future senior debt;</p> <p>senior in right of payment to all of our existing and future subordinated obligations.</p>

After giving effect to this offering, the application of the proceeds from this offering as described under the caption Use of Proceeds and the transactions contemplated by the Credit Agreement Amendment, as described under the caption Summary Recent Developments, we would have had an aggregate of approximately \$1,890.2 million of indebtedness outstanding (or \$1,926.6 million if the underwriters exercise in full their option to purchase additional notes).

Optional Redemption

We may not redeem the notes prior to their stated maturity date.

Conversion Rights

Holders may convert the notes at their option at any time prior to the close of business on the business day immediately preceding the stated maturity date of the notes in equal multiples of \$1,000 principal amount.

The initial conversion rate for the notes will be 69.2042 shares of our common stock per \$1,000 principal amount of notes, equivalent to an initial conversion price of \$14.45 per share of common stock. Such conversion rate will be subject to adjustment in certain events but will not be adjusted for accrued interest.

In addition, following certain corporate transactions, we will increase the applicable conversion rate for a holder who elects to convert in

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connection with such corporate transaction by a number of additional shares of our common stock as described under Description of Notes Conversion Rights Adjustment to Conversion Rate Upon Certain Fundamental Changes.

Fundamental Change

Under certain circumstances following a fundamental change, we will be required to make an offer to purchase all of the notes at a purchase price of 100% of the principal amount, plus accrued and unpaid interest, if any, to the date of repurchase.

Use of Proceeds

We intend to use the net proceeds from this offering for general corporate purposes, which may include voluntary or required contributions to our defined benefit pension trust or repurchases, repayment or refinancing of debt. See Use of Proceeds.

Trading Symbol for Our Common Stock

Our common stock is listed on the New York Stock Exchange under the symbol ATI.

Risk Factors

You should carefully consider the information set forth in the section entitled Risk Factors and the other information included or incorporated by reference into this prospectus supplement and the accompanying prospectus in deciding whether to purchase the notes.

Governing Law

The indenture and the notes will be governed by and construed in accordance with the laws of the State of New York.

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We derived the summary consolidated financial data shown below as of December 31, 2013, 2014 and 2015 and for each of the years then ended from our audited consolidated financial statements. We derived the summary consolidated financial data shown below as of March 31, 2015 and 2016 and for each of the three-month periods then ended from our unaudited consolidated financial statements. The unaudited financial statements from which we derived this data were prepared on the same basis as the audited consolidated financial data and include all adjustments, consisting only of normal recurring adjustments, necessary to present fairly our results of operations and financial condition as of the periods presented. The results of operations for interim periods are not necessarily indicative of the operating results for any future period. You should read the following financial information in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements and the related notes in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 and our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2016, which are incorporated by reference in this prospectus supplement and the accompanying prospectus.

	Year Ended December 31,			Three Months Ended March 31,	
	2013	2014	2015	2015	2016
	(Dollars in Millions)				
	(Unaudited)				
Statement of income data:					
Sales:					
High Performance Metals & Components	\$ 1,944.8	\$ 2,006.8	\$ 1,985.9	\$ 542.8	\$ 493.0
Flat Rolled Products	2,098.7	2,216.6	1,733.7	582.7	264.5
Total sales	4,043.5	4,223.4	3,719.6	1,125.5	757.5
Segment operating profit (loss):					
High Performance Metals & Components	159.6	234.8	157.1	72.9	29.1
Flat Rolled Products	(147.8)	(47.0)	(241.9)	(6.8)	(109.6)
Total segment operating profit (loss)	11.8	187.8	(84.8)	66.1	(80.5)
Income (loss) from continuing operations	(91.2)	10.2	(365.9)	12.6	(98.1)
Income (loss) from discontinued operations, net of tax	252.8	(0.6)			
Net income (loss)	161.6	9.6	(365.9)	12.6	(98.1)
Less: Net income attributable to noncontrolling interests					
Net income (loss) attributable to ATI	7.6	12.2	12.0	2.6	3.1
Net income (loss) attributable to ATI	154.0	(2.6)	(377.9)	10.0	(101.2)
Balance sheet data (at end of period):					
Working capital(1)	\$ 1,743.3	\$ 1,584.4	\$ 1,181.1	\$ 1,599.4	\$ 972.0
Total assets(1)	6,885.0	6,571.7	5,751.7	6,546.2	5,719.1
Long-term debt(1)	1,513.9	1,498.2	1,491.8	1,498.5	1,492.7
Total debt(1)	1,933.8	1,516.0	1,495.7	1,516.4	1,649.2
Cash and cash equivalents	1,026.8	269.5	149.8	238.0	156.9
Total stockholders' equity	2,994.7	2,709.3	2,184.4	2,708.0	2,098.4

Cash flow information:

Cash flow provided by (used in) operating activities	\$ 368.4	\$ 55.9	\$ 131.4	\$ 12.0	\$ (61.5)
Cash flow used in investing activities	(11.0)	(316.2)	(145.1)	(22.5)	(68.7)
Cash flow provided by (used in) financing activities	364.8	(497.0)	(106.0)	(21.0)	137.3

Other data:

Ratio of earnings to fixed charges(2)	(3)	(3)	(3)	1.6x	(3)
EBITDA (unaudited)(4)	\$ 89.3	\$ 282.7	\$ (179.5)	\$ 92.0	\$ (60.7)
Adjusted EBITDA (unaudited)(5)	\$ 212.3	\$ 320.8	\$ 166.1	\$ 104.4	\$ (25.3)

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- (1) Information as presented in our Annual Report on Form 10-K for the fiscal year ended December 31, 2013 and in our Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015 has been restated to reflect the adoption on a retrospective basis in the fourth quarter of fiscal year 2015 of new accounting guidance for the balance sheet classification of deferred taxes and for debt issuance costs.
- (2) For purposes of determining the ratio of earnings to fixed charges, earnings include pre-tax income plus fixed charges (excluding capitalized interest). Fixed charges consist of interest on all indebtedness (including capitalized interest) plus that portion of operating lease rentals representative of the interest factor (deemed to be one-third of operating lease rentals).
- (3) For the years ended December 31, 2015, 2014 and 2013 and the quarter ended March 31, 2016, fixed charges exceeded earnings by \$492.1 million, \$7.1 million, \$192.8 million and \$135.9 million, respectively.
- (4) We define EBITDA as income (loss) from continuing operations before interest, other income and income taxes, plus depreciation and amortization. We define Adjusted EBITDA as EBITDA excluding goodwill impairment charges, restructuring charges including acquisition costs, net realizable value (NRV) inventory valuation charges, start-up and qualification costs for the HRPF and the Rowley, UT premium-quality (PQ) titanium sponge production facility, and costs associated with the work stoppage and return-to-work provisions of collective bargaining agreements. EBITDA and Adjusted EBITDA are not measures of financial performance under generally accepted accounting principles. EBITDA and Adjusted EBITDA are not calculated in the same manner by all companies and, accordingly, are not necessarily comparable to similarly titled measures of other companies and may not be an appropriate measure of performance relative to other companies. Interest expense, net as presented includes reductions for interest expense capitalized on construction in progress and is net of interest income. We have presented EBITDA and Adjusted EBITDA in this prospectus supplement solely as a supplemental disclosure because we believe it allows for a more complete analysis of our results of operations. We believe that EBITDA and Adjusted EBITDA are useful to investors because these measures are commonly used to analyze companies on the basis of operating performance, leverage and liquidity. Furthermore, analogous measures are used by industry analysts to evaluate operating performance. EBITDA and Adjusted EBITDA are not intended to be measures of free cash flow for management's discretionary use, as they do not consider certain cash requirements such as interest payments, tax payments and capital expenditures. EBITDA and Adjusted EBITDA are not intended to represent, and should not be considered more meaningful than, or as an alternatives to, a measure of operating performance as determined in accordance with generally accepted accounting principles. The definitions of EBITDA and Adjusted EBITDA will differ from the amounts calculated under the definition of Consolidated EBITDA that is contained in the Credit Facility. **We do not intend to provide EBITDA or Adjusted EBITDA information for future periods in earnings press releases, filings with the SEC or in response to inquiries.** EBITDA and Adjusted EBITDA are calculated as follows: