

HUDSON TECHNOLOGIES INC /NY
Form 424B5
December 05, 2016

**Filed Pursuant to Rule 424(b)(5)
Registration No. 333-207969**

This preliminary prospectus supplement relates to an effective registration statement under the Securities Act of 1933, but is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities and we are not soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

**SUBJECT TO COMPLETION, DATED DECEMBER 5,
2016**

**PROSPECTUS SUPPLEMENT
(To prospectus dated December 18, 2015)**

\$49,000,000

Hudson Technologies, Inc.

Common Stock

We are offering up to \$45.0 million of shares of our common stock pursuant to this prospectus supplement and the accompanying prospectus. The selling shareholders identified in this prospectus supplement are offering up to \$4.0 million of shares of our common stock pursuant to this prospectus supplement and the accompanying prospectus. We will not receive any of the proceeds from the sale of the shares being sold by the selling shareholders.

Our common stock is traded on the NASDAQ Capital Market under the symbol HDSN. On December 2, 2016, the last reported sale price of our common stock on the NASDAQ Capital Market was \$7.97.

Investing in our common stock involves a high degree of risk. See Risk Factors beginning on page S-5 of this prospectus supplement to read about factors you should consider before buying any shares.

	Per Share	Total
Public offering price	\$	\$
Underwriting discounts and commissions ⁽¹⁾	\$	\$
Proceeds, before expenses, to us	\$	\$
Proceeds, before expenses, to the selling shareholders	\$	\$

(1) See Underwriting beginning on page S-11 for a description of the compensation payable to the underwriters. **Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement is accurate or complete. Any**

representation to the contrary is a criminal offense.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional \$7,350,000 of shares of our common stock solely to cover over-allotments, if any. If the underwriters exercise the option in full, the total public offering price will be \$, the total underwriting discounts and commissions payable by us will be \$, and our total proceeds, before expenses, will be \$. Delivery of the shares of common stock is expected to be made on or about December , 2016.

Book-Running Managers

William Blair

Craig-Hallum Capital Group

Co-Managers

Roth Capital Partners

B. Riley & Co.

The date of this prospectus supplement is December , 2016

TABLE OF CONTENTS

TABLE OF CONTENTS

Prospectus Supplement

	Page
<u>About this Prospectus Supplement</u>	<u>S-1</u>
<u>Prospectus Supplement Summary</u>	<u>S-2</u>
<u>Risk Factors</u>	<u>S-5</u>
<u>Forward-Looking Statements</u>	<u>S-6</u>
<u>Use of Proceeds</u>	<u>S-7</u>
<u>Dilution</u>	<u>S-8</u>
<u>Description of the Securities We Are Offering</u>	<u>S-9</u>
<u>Selling Shareholders</u>	<u>S-10</u>
<u>Underwriting</u>	<u>S-11</u>
<u>Legal Matters</u>	<u>S-14</u>
<u>Experts</u>	<u>S-14</u>
<u>Where You Can Find More Information</u>	<u>S-14</u>
<u>Information Incorporated by Reference</u>	<u>S-15</u>

S-i

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS SUPPLEMENT

A registration statement on Form S-3 (File No. 333-207969) utilizing a shelf registration process relating to the securities described in this prospectus supplement was initially filed with the Securities and Exchange Commission, or the SEC, on November 12, 2015 and, as amended, was declared effective on December 18, 2015.

This document is in two parts. The first part is this prospectus supplement, which describes the terms of this offering of our common stock and also adds, updates and changes information contained in the accompanying prospectus and the documents incorporated by reference. The second part is the accompanying prospectus, which gives more general information, some of which may not apply to this offering. To the extent the information contained in this prospectus supplement differs or varies from the information contained in the accompanying prospectus or any document filed prior to the date of this prospectus supplement and incorporated by reference, the information in this prospectus supplement will control.

You should rely only on the information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus. We have not, the selling shareholders have not, and the underwriters have not, authorized anyone to provide you with information that is different. This prospectus supplement is not an offer to sell or solicitation of an offer to buy these securities in any circumstances under which the offer or solicitation is unlawful.

We and the selling shareholders are offering to sell, and seeking offers to buy, our securities only in jurisdictions where offers and sales are permitted. You should not assume that the information we have included in this prospectus supplement or the accompanying prospectus is accurate as of any date other than the date of this prospectus supplement or the accompanying prospectus, respectively, or that any information we have incorporated by reference is accurate as of any date other than the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement and the accompanying prospectus or of any of our securities.

We obtained the industry and market data in this prospectus supplement, the accompanying prospectus and the incorporated documents from our own research as well as from industry and general publications, surveys and studies conducted by third parties. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such data.

S-1

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained elsewhere or incorporated by reference into this prospectus supplement and accompanying prospectus. This summary does not contain all of the information that you should consider before investing in our securities. You should carefully read the entire prospectus supplement and the accompanying prospectus, including the Risk Factors section, starting on page S-5 of this prospectus supplement, as well as the financial statements and the other information incorporated by reference herein before making an investment decision. In this prospectus supplement and the accompanying prospectus, reference to we, us, our, and the Company refer to Hudson Technologies, Inc. and its consolidated subsidiaries.

Overview

We are a refrigerant services company providing innovative solutions to recurring problems within the refrigeration industry. Our products and services are primarily used in commercial air conditioning, industrial processing and refrigeration systems, and include (i) refrigerant and industrial gas sales, (ii) refrigerant management services consisting primarily of reclamation of refrigerants and (iii) RefrigerantSide® Services performed at a customer's site, consisting of system decontamination to remove moisture, oils and other contaminants, and predictive and diagnostic services. We operate principally through our wholly-owned subsidiary, Hudson Technologies Company.

We sell reclaimed and virgin (new) refrigerants to a variety of customers in various segments of the air conditioning and refrigeration industry. We continue to sell reclaimed chlorofluorocarbon, or CFC, based refrigerants, which are no longer manufactured, as well as virgin, non-CFC based refrigerants, including hydrochlorofluorocarbon, or HCFC, refrigerants and hydrofluorocarbon, or HFC, refrigerants, which are purchased by us from several suppliers and resold by us, typically at wholesale. Additionally, we regularly purchase used or contaminated CFC, HCFC and HFC refrigerants from many different sources, which refrigerants are then reclaimed using our high speed proprietary Zugibeast® reclamation system, and then are resold by us. We believe we currently have approximately 25% market share in the reclamation of refrigerants, and that the overall reclamation market opportunity may reach \$1 billion by 2020.

We provide a complete offering of refrigerant management services, which primarily include reclamation of refrigerants, laboratory testing through our laboratory, which has been certified by the Air Conditioning, Heating and Refrigeration Institute, and refrigerant banking (storage) services tailored to individual customer requirements. We also separate crossed (*i.e.*, commingled) refrigerants and provide re-usable cylinder refurbishment and hydrostatic testing services.

We provide decontamination and recovery services that are performed at a customer's site through the use of portable, high volume, high-speed proprietary equipment. Certain of these RefrigerantSide® Services, which encompass system decontamination, and refrigerant recovery and reclamation, are also proprietary and are covered by process patents. In addition, RefrigerantSide® Services include predictive and diagnostic services for industrial and commercial refrigeration systems, which are designed to predict potential catastrophic problems and identify inefficiencies in an operating system. Our Chiller Chemistry®, Chill Smart®, Fluid Chemistry® and Performance Optimization are predictive and diagnostic service offerings. Our SmartEnergy OPS™ service is a web-based real time continuous monitoring service applicable to a facility's refrigeration systems and other energy systems.

As a component of our products and services, we also participate in the generation of carbon offset projects. CFC refrigerants are ozone depleting substances and are also highly weighted greenhouse gases that contribute to global

warming and climate change. The destruction of CFC refrigerants may be eligible for verified emission reductions that can be converted and monetized into carbon offset credits that may be traded in the emerging carbon offset markets.

The use of certified reclaimed HFC refrigerants, which are also highly weighted greenhouse gases, may also be eligible for the creation of emissions reductions that can be converted into carbon offset credits.

S-2

TABLE OF CONTENTS

Recent Developments

In conjunction with this offering, and given the proximity to the close of the fourth quarter of 2016, we have chosen to provide a range of estimated losses per share and revenues for the three months ending December 31, 2016, as well as additional refrigerant pricing trend information. While we do not provide quarterly guidance, with respect to the fourth quarter of 2016, we estimate that the total loss per share, excluding the impact of this offering, will be between (\$0.04) and (\$0.05) and our revenues for the three months ending December 31, 2016, will be between \$6.8 million and \$7.5 million, which revenues are comparable to the prior year period. In addition, we reiterate our expectation that the full-year 2017 will continue the trend of revenue growth and higher than average historical gross margins. Moreover, during the fourth quarter of 2016, we are continuing to see further price increases for R-22 refrigerant. No assurances can be given, however, that the results for the fourth quarter of 2016 will not differ from these estimated amounts. These estimated amounts and related trend information are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These estimated amounts and trends may or may not be realized, and they may be based upon judgments or assumptions that prove incorrect. Our results for this quarter or any future period may vary significantly from these amounts based on other unexpected issues in our business and operations.

Corporate Information

We were organized as a New York corporation in January 1991. Our principal executive offices are located at 1 Blue Hill Plaza, 14th floor, Pearl River, New York 10965 and our telephone number is (845) 735-6000. We maintain an internet website at <http://www.hudsonotech.com>. The information on our website or any other website is not incorporated by reference into this prospectus supplement or the accompanying prospectus and does not constitute a part of this prospectus supplement or the accompanying prospectus. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K and all amendments to such reports are made available free of charge through the Investor Relations section of our website as soon as reasonably practicable after they have been filed with or furnished to the SEC.

S-3

TABLE OF CONTENTS

The Offering

Common stock offered by us

shares of common stock (or shares of common stock if the underwriters exercise their option to purchase additional shares in full).

Common stock offered by the selling shareholders

shares of common stock.

Common stock to be outstanding after this offering

shares of common stock (or shares of common stock if the underwriters exercise their option to purchase additional shares in full).

Over-allotment option

shares of common stock

Use of proceeds

We expect the net proceeds from this offering to us will be approximately \$ million (or \$ million if the underwriters exercise their option to purchase additional shares in full), after deducting underwriting discounts and commissions, as described in Underwriting, and estimated offering expenses payable by us. We currently intend to use the net proceeds of this offering for working capital and general corporate purposes which may include, among other things, funding acquisitions, although we have no present commitments or agreements with respect to any such transactions. We may also use a portion of the proceeds to reduce or repay indebtedness under our loan agreement with our existing commercial lender. See Use of Proceeds on page_S-7. We will not receive any of the proceeds from the sale of the shares being sold by the selling shareholders.

Risk factors

See Risk Factors beginning on page_S-5 for a discussion of factors you should consider carefully when making an investment decision.

NASDAQ Capital Market symbol

HDSN

The number of shares of our common stock to be outstanding immediately after the closing of this offering is based on 34,013,664 shares of common stock outstanding as of September 30, 2016 and excludes, as of that date:

3,273,698 shares of common stock issuable upon the exercise of stock options outstanding prior to this offering under our stock option plans and stock incentive plans, at a weighted average exercise price of \$2.68 per share; and 3,251,340 shares of common stock available for future grants under our stock option plans and stock incentive plans.

S-4

TABLE OF CONTENTS

RISK FACTORS

Before deciding to invest in our securities, you should consider carefully the following discussion of risks and uncertainties affecting us and our securities, as well as the risks and uncertainties set forth in the accompanying prospectus and those incorporated by reference in this prospectus supplement and the accompanying prospectus from our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, and the other information contained or incorporated by reference in this prospectus supplement. If any of the events anticipated by these risks and uncertainties occur, our business, financial condition and results of operations could be materially and adversely affected, and the value of our securities could decline. The risks and uncertainties we discuss in the documents incorporated by reference in this prospectus supplement and the accompanying prospectus are those that we currently believe may materially affect our company. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may materially and adversely affect our business, financial condition and results of operations.

Since we have broad discretion in how we use the proceeds to us from this offering, we may use the proceeds in ways with which you disagree.

We have not allocated specific amounts of the net proceeds to us from this offering for any specific purpose. Accordingly, our management will have significant flexibility in applying the net proceeds to us of this offering. You will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used in ways you would agree with. It is possible that the net proceeds to us will be invested in a way that does not yield a favorable, or any, return for our company. The failure of our management to use such funds effectively could have a material adverse effect on our business, financial condition, operating results and cash flow.

If you purchase the common stock sold in this offering you will experience immediate and substantial dilution in your investment. You will experience further dilution if we issue additional equity securities in future fundraising transactions.

Based on the public offering price of \$ per share and our net tangible book value as of September 30, 2016, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$ per share with respect to the net tangible book value of the common stock. See the section titled Dilution in this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

Future sales of our common stock may cause the prevailing market price of our shares to decrease.

We have issued a substantial number of shares of common stock that are eligible for resale under Rule 144 of the Securities Act of 1933, as amended, and may become freely tradable. We have also registered 3,214,398 shares of common stock that are issuable upon the exercise of options outstanding as of December 1, 2016. If the holders of our options choose to exercise their purchase rights and sell the underlying shares of common stock in the public market, or if holders of currently restricted shares of our common stock choose to sell such shares in the public market under Rule 144 or otherwise, the prevailing market price for our common stock may decline. The sale of shares issued upon

the exercise of our options could also further dilute the holdings of our then existing shareholders. In addition, future public sales of shares of our common stock could impair our ability to raise capital by offering equity securities.

The volume of our common stock has been, and may continue to be, volatile, which could reduce the market price of our common stock.

The publicly traded shares of our common stock have experienced, and may continue to experience, significant volume and price volatility. This volatility could reduce the market price of our common stock, regardless of our operating performance. In addition, both the volume and the trading price of our common stock could change significantly over short periods of time in response to, among other things, actual or anticipated variations in our quarterly operating results, announcements by us and/or changes in national or regional economic conditions, making it more difficult for shares of our common stock to be sold at a favorable price or at all.

S-5

TABLE OF CONTENTS

FORWARD-LOOKING STATEMENTS

Some of the statements contained in this prospectus supplement and accompanying prospectus or incorporated by reference into this prospectus supplement and accompanying prospectus are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and are subject to the safe harbor created by the Securities Litigation Reform Act of 1995. We have based these forward-looking statements largely on our expectations and projections about future events and financial trends affecting the financial condition and/or operating results of our business. Words such as anticipates, expects, intends, plans, believes, seeks, estimates, the these words, or similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in, or implied by, any forward-looking statements. The risks and uncertainties include those noted under the heading Risk Factors above, in the documents incorporated herein by reference and in the accompanying prospectus. There are important factors which may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Such factors include, but are not limited to, changes in the laws and regulations affecting the industry, changes in the markets for refrigerants (including unfavorable market conditions adversely affecting the demand for, and the price of, refrigerants), our ability to source refrigerants, regulatory and economic factors, seasonality, competition, litigation, the nature of supplier or customer arrangements that become available to us in the future, adverse weather conditions, possible technological obsolescence of existing products and services, possible reduction in the carrying value of long-lived assets, estimates of the useful life of its assets, potential environmental liability, customer concentration, the ability to obtain financing, any delays or interruptions in bringing products and services to market, the timely availability of any requisite permits and authorizations from governmental entities and third parties as well as factors relating to doing business outside the United States, including changes in the laws, regulations, policies, and political, financial and economic conditions, including inflation, interest and currency exchange rates, of countries in which we may seek to conduct business, our ability to successfully integrate any assets we acquire from third parties into our operations, and other risks detailed in Risk Factors above and in our periodic reports filed with the SEC that are incorporated herein and in the accompanying prospectus by reference. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statement was made.

We do not intend to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Past financial or operating performance is not necessarily a reliable indicator of future performance, and you should not use our historical performance to anticipate results or future period trends.

S-6

TABLE OF CONTENTS

USE OF PROCEEDS

We expect the net proceeds to us from this offering to be approximately \$ million (or \$ million if the underwriters exercise their option to purchase additional shares in full), after deducting underwriting discounts and commissions, as described in Underwriting, and estimated offering expenses payable by us. We currently intend to use the net proceeds to us of this offering for working capital and general corporate purposes which may include, among other things, funding acquisitions, although we have no present commitments or agreements with respect to any such transactions. We may also use a portion of these proceeds to reduce or repay indebtedness under our loan agreement, which we refer to as the PNC Facility, with PNC Bank, National Association, our existing commercial lender. Interest charges under the loans are equal to (A) with respect to domestic rate loans, the sum of (i) a rate per annum equal to the higher of (1) the base commercial lending rate of PNC, (2) the federal funds open rate plus 0.5% and (3) the daily LIBOR plus 1%, plus (ii) 0.5% and (B) with respect to Eurodollar rate loans, the sum of the Eurodollar rate plus 2.25%. The effective interest rate under the PNC Facility was 3.5% at September 30, 2016, and the PNC Facility will expire on June 30, 2018, unless terminated sooner following an event of default. See Part I Item 2 Management s Discussion and Analysis of Financial Condition and Results of Operations-Liquidity and Capital Resources of our Form 10-Q for the quarter ended September 30, 2016, which is incorporated herein by reference, for additional information regarding our indebtedness described above.

Pending application of such proceeds, we expect to invest the proceeds in short-term, interest bearing, investment-grade marketable securities or money market obligations.

We cannot estimate precisely the allocation of the net proceeds to us from this offering among these uses. The amounts and timing of the expenditures may vary significantly, depending on numerous factors, including the amount of cash generated internally from operations and the terms and availability of financing arrangements, as well as the amount of cash used in our operations. Our management will have broad discretion in the application of the net proceeds to us of this offering. We reserve the right to change the use of proceeds as a result of certain contingencies such as competitive or economic developments and other factors.

We will not receive any of the proceeds from the sale of the shares being sold by the selling shareholders.

S-7

TABLE OF CONTENTS**DILUTION**

Our net tangible book value on September 30, 2016 was approximately \$60.9 million, or approximately \$1.79 per share of common stock. Net tangible book value per share is determined by dividing our net tangible book value, which consists of tangible assets less total liabilities, by the number of shares of common stock outstanding on that date. Without taking into account any other changes in the net tangible book value after September 30, 2016, other than to give effect to our receipt of the estimated net proceeds to us from the sale of shares of our common stock at a public offering price of \$ per share of common stock, less the underwriting fees and our estimated offering expenses, our as adjusted net tangible book value as of September 30, 2016, after giving effect to the items above, would have been approximately \$, or \$ per share of common stock. This represents an immediate increase in the net tangible book value of \$ per share of common stock to existing shareholders and an immediate dilution of \$ per share of common stock to new investors. The following table illustrates this per share dilution:

Public offering price per share of common stock		\$
Net tangible book value per share as of September 30, 2016	\$ 1.79	
Increase in net tangible book value per share attributable to this offering	\$	
As adjusted net tangible book value per share as of September 30, 2016 after giving effect to this offering		\$
Dilution in net tangible book value per share to new investors		\$

The above table is based on 34,013,664 shares of our common stock outstanding as of September 30, 2016 and excludes, as of that date:

3,273,698 shares of common stock issuable upon the exercise of stock options outstanding prior to this offering under our stock option plans and stock incentive plans, at a weighted average exercise price of \$2.68 per share; and 3,251,340 shares of common stock available for future grants under our stock option plans and stock incentive plans. To the extent that any options are exercised, new options are issued under our stock option or stock incentive plans, or we otherwise issue additional shares of common stock in the future, there will be further dilution to new investors. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

TABLE OF CONTENTS

DESCRIPTION OF THE SECURITIES WE ARE OFFERING

In this offering, we are offering up to shares of common stock (or shares of common stock if the underwriters exercise their option to purchase additional shares in full).

Common Stock

The material terms and provisions of our common stock and each other class of our securities which qualifies or limit our common stock are described under the caption Description of Capital Stock starting on page 8 of the accompanying prospectus.

S-9

TABLE OF CONTENTS**SELLING SHAREHOLDERS**

The following information supplements the information set forth under the caption "Selling Shareholders" in the accompanying base prospectus to reflect the shares of our common stock being offered by the selling shareholders in this offering. The information is based on information provided by the selling shareholders to us and is as of the date of this prospectus supplement. The percentage of shares beneficially owned by the selling shareholders is based on 34,072,964 shares of our common stock outstanding as of December 1, 2016.

The following table sets forth the number of shares of common stock owned by the selling shareholders prior to this offering, the number of shares of common stock to be offered for sale by the selling shareholders in this offering, the number of shares of common stock to be owned by the selling shareholders after completion of the offering and the percentage of common stock to be owned by the selling shareholders after giving effect to the completion of the offering as of the date hereof. The beneficial ownership of our common stock by the selling shareholders set forth in the table is determined as of December 1, 2016 in accordance with Rule 13d-3 under the Exchange Act.

Name of Selling Shareholder	Number of Shares Beneficially Owned Prior to the Offering	Percentage of Shares Beneficially Owned Prior to the Offering	Number of Shares Being Offered	Assuming the Underwriters Option to Purchase Is Not Exercised Number of Shares Beneficially Owned After the Offering	Percentage of Shares Beneficially Owned After the Offering
Kevin J. Zugibe	4,521,043 ⁽¹⁾	12.9 %			
Brian F. Coleman	953,083 ⁽²⁾	2.8 %			
Stephen P. Mandracchia	1,628,961 ⁽³⁾	4.7 %			

(1) Includes (i) 195,000 shares that may be purchased at \$0.85 per share; (ii) 78,000 shares which may be purchased at \$1.26 per share; (iii) 28,145 shares which may be purchased at \$3.55 per share; (iv) 251,855 shares which may be purchased at \$3.23 per share; (v) 28,490 shares which may be purchased at \$3.86 per share; and (vi) 521,510 shares which may be purchased at \$3.51 per share, under immediately exercisable options. Mr. Zugibe is a Director, Chairman and Chief Executive Officer of Hudson.

(2) Includes (i) 106,300 shares which may be purchased at \$0.85 per share; (ii) 75,000 shares which may be purchased at \$1.26 per share; (iii) 200,000 shares which may be purchased at \$3.23 per share; and (iv) 200,000 shares which may be purchased at \$3.51 per share, under immediately exercisable options. Mr. Coleman is a Director, President and Chief Operating Officer of Hudson.

(3) Includes (i) 747,961 shares held of record in the name of Mr. Mandracchia's wife, Theresa Mandracchia, over which Mr. Mandracchia has sole voting power and shared dispositive power; and (ii) the following shares which may be purchased by Mr. Mandracchia upon the exercise of options previously granted to him: (a) 125,000 shares that may be purchased at \$0.85 per share; (b) 58,000 shares which may be purchased at \$1.26 per share; (c) 28,145 shares which may be purchased at \$3.55 per share; (d) 76,855 shares which may be purchased at \$3.23 per share;

(e) 28,490 shares which may be purchased at \$3.86 per share; and (f) 121,510 shares which may be purchased at \$3.51 per share, under immediately exercisable options. Mr. Mandracchia is Vice President Legal and Regulatory, and Secretary, of Hudson.

S-10

TABLE OF CONTENTS**UNDERWRITING**

The underwriters named below, for which William Blair & Company, L.L.C. and Craig-Hallum Capital Group LLC are acting as representatives, have severally agreed, subject to the terms and conditions set forth in the underwriting agreement by and among the underwriters, us and the selling shareholders, to purchase from us and the selling shareholders, the respective number of shares of common stock set forth opposite each underwriters name in the table below.

Underwriter	Number of Shares
William Blair & Company, L.L.C.	
Craig-Hallum Capital Group LLC	
Roth Capital Partners, LLC	
B. Riley & Co. LLC	
Total	

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

If the underwriters sell more shares than the total number set forth in the table above, the underwriters have an option to buy up to an additional shares from us on the same terms and conditions solely to cover over-allotments, if any.

The underwriters can exercise this option at any time within 30 days after the offering.

The following table shows the per share and total public offering price, underwriting discounts and commissions and proceeds, before expenses, to us. Such amounts are shown assuming both no exercise and full exercise of the underwriters over-allotment option.

	Per Share	Total	
		No Exercise	Full Exercise
Public offering price	\$	\$	\$
Underwriting discounts and commissions payable by us	\$	\$	\$
Proceeds, before expenses, to us	\$	\$	\$
Underwriting discounts and commissions payable by the selling shareholders	\$	\$	\$
Proceeds, before expenses, to the selling shareholders	\$	\$	\$

We estimate that our offering expenses will be approximately \$, including up to \$115,000 that we have agreed to reimburse to the underwriters for reasonably documented, actual out-of-pocket expenses reasonably incurred by the underwriters, including reasonable fees and expenses of its counsel.

We and the selling shareholders have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act. If we or the selling shareholders are unable to provide this indemnification, we or the selling shareholders, as applicable, have agreed to contribute to payments the underwriters may be required to make in respect of those liabilities.

Shares sold by the underwriters to the public will initially be offered at the public offering price set forth on the cover of this prospectus. The underwriters propose to offer the shares of common stock initially at the public offering price

on the cover page of this prospectus and to selling group members at that price less a selling concession of \$ per share. After the offering, the underwriters may reduce the initial public offering price and concession to dealers. No such reduction will change the amount of proceeds received by us as set forth on the cover page. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We and each of our executive officers and directors have agreed with the underwriters, subject to certain exceptions, not to (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant for the sale of, or otherwise dispose of or transfer

S-11

TABLE OF CONTENTS

any shares of common stock or any securities convertible into or exchangeable or exercisable for shares of common stock, whether now owned or subsequently acquired or with respect to which we have acquired the power of disposition, or (ii) cause to be filed, any registration statement under the Securities Act with respect to any of the foregoing or (iii) enter into any swap or any other agreement or any transaction that transfers, in whole or in part, directly or indirectly, the economic consequence of ownership of the common stock, whether any such swap or transaction is to be settled by delivery of common stock or other securities, in cash or otherwise, during the period from the date of this prospectus supplement continuing through the date 90 days after the date of this prospectus supplement, except with the prior written consent of William Blair & Company, L.L.C.

Our common stock is listed on the NASDAQ Capital Market under the symbol HDSN.

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering. Covered short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares from us in the offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option granted to them by us. Naked short sales are any sales in excess of such option. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own account, may have the effect of preventing or retarding a decline in the market price of our common stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If these activities are commenced, they may be discontinued at any time. These transactions may be effected on the NASDAQ Capital Market, in the over-the-counter market or otherwise.

Relationships

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and

financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments of ours. The underwriters and their respective affiliates may also make investment recommendations and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

S-12

TABLE OF CONTENTS

Notice to Investors in the European Economic Area

In relation to each Member State of the European Economic Area that has implemented the Prospectus Directive, each, a Relevant Member State, each underwriter represents and agrees that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State, or the Relevant Implementation Date, it has not made and will not make an offer of our common stock to the public in that Relevant Member State prior to the publication of a prospectus in relation to our common stock that has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of our common stock to the public in that Relevant Member State at any time:

to any legal entity which is a qualified investor as defined in the Prospectus Directive; to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining the prior consent of the manager for any such offer; or in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of our common stock shall require the publication by the issuer or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer to the public in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and our common stock to be offered so as to enable an investor to decide to purchase or subscribe our common stock, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC (and amendments thereto, including Directive 2010/73/EU, to the extent implemented in each Relevant Member State) and includes any relevant implementing measure in each Relevant Member State.

Notice to Prospective Investors in Canada

The common stock may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 *Prospectus Exemptions* or subsection 73.3(1) of the *Securities Act* (Ontario), and are permitted clients, as defined in National Instrument 31-103 *Registration Requirements, Exemptions and Ongoing Registrant Obligations*. Any resale of the common stock must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 *Underwriting Conflicts (NI 33-105)*, the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

TABLE OF CONTENTS

LEGAL MATTERS

Certain legal matters relating to the validity of the securities offered by us hereby will be passed upon for us by Wiggin and Dana LLP, Stamford, Connecticut. Certain legal matters relating to the validity of the securities offered by the selling shareholders hereby will be passed upon for the selling shareholders by Wiggin and Dana LLP, Stamford, Connecticut. Goodwin Procter LLP, New York, New York is counsel for the underwriters in connection with this offering.

EXPERTS

The financial statements as of December 31, 2015 and 2014 and for the years then ended and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2015 incorporated by reference in this prospectus supplement have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act and, therefore, we file annual, quarterly and current reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at www.sec.gov. The SEC's website contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the SEC. You may also read and copy any document we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the SEC. Please call the SEC at 1-800-SEC-0330 for further information on the operation of its Public Reference Room.

This prospectus supplement constitutes a part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act. This prospectus supplement does not contain all of the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. For further information about us and our securities we refer you to the registration statement and the accompanying exhibits and schedules. The registration statement may be inspected at the Public Reference Room maintained by the SEC at the address set forth above. Statements contained in this prospectus supplement regarding the contents of any contract or any other document filed as an exhibit are not necessarily complete. In each instance, reference is made to the copy of such contract or document filed as an exhibit to the registration statement, and each statement is qualified in all respects by that reference.

S-14

TABLE OF CONTENTS

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement certain information we file with it, which means we can disclose important information to you by referring you to documents we have filed with the SEC.

The information we incorporate by reference into this prospectus supplement is legally deemed to be a part of this prospectus supplement, except for any information superseded by other information contained in, or incorporated by reference into, this prospectus supplement. Our file number for filings we make with the SEC under the Exchange Act is 001-13412.

Any statement contained in this prospectus supplement or in a document incorporated or deemed to be incorporated by reference in this prospectus supplement is deemed to be modified or superseded to the extent that a statement contained in this prospectus supplement, or in any other document we subsequently file with the SEC, modifies or supersedes that statement. If any statement is modified or superseded, it does not constitute a part of this prospectus supplement and the accompanying prospectus, except as modified or superseded. Information that is furnished to the SEC shall not be deemed filed with the SEC and shall not be deemed incorporated by reference into this prospectus supplement or the accompanying prospectus of which it is a part.

This prospectus supplement incorporates by reference the following reports and statements filed by us with the SEC:

- (a) Our Annual Report on Form 10-K for the fiscal year ended December 31, 2015, filed with the SEC on March 11, 2016;
- (b) The description of our common stock contained in our Registration Statement on Form 8-A together with any amendments thereto;
- (c) Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2016, June 30, 2016 and September 30, 2016, filed with the SEC on May 6, 2016, August 3, 2016 and November 4, 2016, respectively; and
 - (d) Our Current Reports on Form 8-K, as filed with the SEC on April 14, 2016, May 18, 2016, July 18, 2016, August 10, 2016, August 30, 2016, and September 9, 2016.

We are also incorporating by reference any future filings we make with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus supplement and the accompanying prospectus and prior to the termination of this offering, except for information furnished under Item 2.02 or Item 7.01 of our Current Reports on Form 8-K which is not deemed to be filed and not incorporated by reference herein.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference, including exhibits to these documents. You should direct any requests for documents to Hudson Technologies, Inc., Attention: Stephen Mandracchia, One Blue Hill Plaza, Pearl River, New York 10965, telephone: (845) 735-6000.

TABLE OF CONTENTS

PROSPECTUS

HUDSON TECHNOLOGIES, INC.

\$50,000,000
Common Stock
Preferred Stock
Warrants
Debt Securities
Units

**500,000 Shares of Common Stock
Offered by the Selling Shareholders**

From time to time, we may offer and sell common stock, preferred stock, warrants or debt securities and/or any combination of securities described in this prospectus, either individually or in units, at prices and on terms described in one or more supplements to this prospectus. The aggregate public offering price of the securities offered by us under this prospectus, sometimes referred to as the shelf securities, will not exceed \$50,000,000.

In addition, the selling shareholders set forth in this prospectus under the heading **Selling Shareholders** beginning on page 7 of this prospectus may, from time to time, use this prospectus to sell in one or more offerings an aggregate of up to 500,000 shares of our common stock, sometimes referred to as resale shares, in the amounts and at the times determined solely by the selling shareholders.

This prospectus provides you with a general description of the securities that we and the selling shareholders may offer in one or more offerings. Each time we offer securities, we will provide a supplement to this prospectus that will contain more specific information about the terms of that offering. We may also add, update or change in a prospectus supplement any of the information contained in this prospectus.

You should read both this prospectus and the applicable prospectus supplement, as well as any documents incorporated by reference in this prospectus and/or the applicable prospectus supplement, before you make your investment decision.

Our common stock is traded on the Nasdaq Capital Market under the trading symbol HDSN. On December 17, 2015, the last reported sale price of our common stock on the Nasdaq Capital Market was \$2.75 per share.

Investing in our securities involves risks. See the risks and uncertainties described under the heading **Risk Factors beginning on page 3 of this prospectus, in any applicable prospectus supplement and under similar headings in the other documents that are incorporated by reference into this prospectus.**

This prospectus may not be used by us to sell any securities unless accompanied by a prospectus supplement.

The securities offered by this prospectus may be sold directly to investors, through agents designated from time to time or to or through one or more underwriters or dealers or in other manners as set forth under the heading Plan of Distribution. Each time we offer shelf securities in a primary offering, or any selling shareholder offers resale shares in a manner other than as set forth in the Plan of Distribution, a supplement to this prospectus applicable to such offering will provide the specific terms of the plan of distribution for such offering and the net proceeds that we expect to receive from any such primary offering. We will not receive any proceeds from the sale of the resale shares covered by this prospectus. We are bearing all of the expenses in connection with this registration statement, but all selling and other expenses incurred by the selling shareholders, including commissions and discounts, if any, attributable to the sale or disposition of the resale shares, will be borne by them.

As of November 6, 2015, the aggregate market value of our outstanding common stock held by non-affiliates was approximately \$82,430,807, which was calculated based on 26,335,721 shares of outstanding common stock held by non-affiliates as of such date at a price per share of \$3.13, the closing sale price of our common stock on November 6, 2015. We have not sold any securities pursuant to General Instruction I.B.6 of Form S-3 during the 12 calendar months prior to, and including, the date of this registration statement.

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

The date of this prospectus is December 18, 2015.

TABLE OF CONTENTS

TABLE OF CONTENTS

	Page
<u>About this Prospectus</u>	<u>1</u>
<u>About Hudson Technologies, Inc.</u>	<u>2</u>
<u>Risk Factors</u>	<u>3</u>
<u>Cautionary Note Regarding Forward-Looking Statements</u>	<u>5</u>
<u>Use of Proceeds</u>	<u>6</u>
<u>Selling Shareholders</u>	<u>7</u>
<u>Description of Capital Stock</u>	<u>8</u>
<u>Description of Warrants</u>	<u>12</u>
<u>Description of Debt Securities</u>	<u>14</u>
<u>Description of Units</u>	<u>20</u>
<u>Plan of Distribution</u>	<u>21</u>
<u>Legal Matters</u>	<u>24</u>
<u>Experts</u>	<u>24</u>
<u>Where You Can Find More Information</u>	<u>24</u>
<u>Information Incorporated by Reference</u>	<u>25</u>

i

TABLE OF CONTENTS

ABOUT THIS PROSPECTUS

The information contained in this prospectus is not complete and may be changed. You should rely only on the information provided in or incorporated by reference in this prospectus, any prospectus supplement or documents to which we otherwise refer you. We and the selling shareholders have not authorized anyone else to provide you with different information. We and the selling shareholders are not making an offer of any securities in any jurisdiction where the offer is not permitted, and this document may only be used where it is legal to sell the securities described herein. You should not assume that the information in this prospectus, any prospectus supplement or any document incorporated by reference is accurate as of any date other than the date of the document in which such information is contained or such other date referred to in such document, regardless of the time of any sale or issuance of the securities.

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, to register an indeterminable number of shares of common stock, preferred stock, warrants and debt securities as may from time to time be offered for sale by us, either individually or in units, at indeterminate prices (up to an aggregate maximum offering price for all such securities of \$50,000,000), and up to 500,000 shares of common stock by the selling shareholders, using a shelf registration process. By using a shelf registration statement, we and the selling shareholders may offer and sell from time to time in one or more offerings the securities described in this prospectus.

This prospectus provides you with some of the general terms that may apply to an offering of our securities. Each time we sell securities under this shelf registration we will provide a prospectus supplement that will contain specific information about the terms of that specific offering, including the number and price per security (or exercise price) of the securities to be offered and sold in that offering and the specific manner in which such securities may be offered. We may also provide a prospectus supplement to the extent any selling shareholder offers resale shares in a manner other than as set forth in the Plan of Distribution in order to provide the specific terms of the plan of distribution for such offering. A prospectus supplement may also add to, update or change any of the information contained in this prospectus. If there is an inconsistency between the information in this prospectus and a prospectus supplement, you should rely on the information in the prospectus supplement.

You should read carefully both this prospectus and the applicable prospectus supplement, together with the additional information incorporated by reference herein as described under the heading Information Incorporated by Reference, before making an investment decision.

The registration statement that contains this prospectus (including the exhibits to the registration statement) contains additional information about us and the securities offered under this prospectus. The registration statement can be read at the SEC web site (www.sec.gov) or at the SEC offices mentioned under the heading Where You Can Find More Information.

TABLE OF CONTENTS

ABOUT HUDSON TECHNOLOGIES, INC.

We are a refrigerant services company providing innovative solutions to recurring problems within the refrigeration industry. Our products and services are primarily used in commercial air conditioning, industrial processing and refrigeration systems, including (i) refrigerant sales, (ii) refrigerant management services consisting primarily of reclamation of refrigerants and (iii) RefrigerantSide® Services performed at a customer's site, consisting of system decontamination to remove moisture, oils and other contaminants. In addition, RefrigerantSide® Services include predictive and diagnostic services for industrial and commercial refrigeration applications designed to predict potential catastrophic problems and identify inefficiencies in an operating system. Our Chiller Chemistry®, Chill Smart®, Fluid Chemistry, and Performance Optimization are predictive and diagnostic service offerings. As a component of our products and services, we also participate in the generation of carbon offset projects. We operate principally through our wholly-owned subsidiary, Hudson Technologies Company. Unless the context requires otherwise, references to the Company, Hudson, we, us, our, or similar pronouns refer to Hudson Technologies and its subsidiaries.

We were incorporated under the laws of the State of New York. Our executive offices are located at One Blue Hill Plaza, Pearl River, New York and our telephone number is (845) 735-6000.

TABLE OF CONTENTS

RISK FACTORS

Any investment in our securities involves a high degree of risk. You should consider carefully the risk factors described in our periodic reports filed with the SEC, including the risks, uncertainties and assumptions discussed under the heading "Risk Factors" included in our most recent annual report on Form 10-K, as such may be revised or supplemented prior to the completion of this offering by more recently filed quarterly reports on Form 10-Q, each of which is or upon filing will be incorporated herein by reference, and which may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future, and those identified in any applicable prospectus supplement, as well as other information in this prospectus and any applicable prospectus supplement and the documents incorporated by reference herein before purchasing any of our securities. Each of these risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business, operating results, prospects or financial condition. The additional risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements.

Our existing and future debt obligations could impair our liquidity and financial condition.

Our existing credit facility, which currently expires in June 2018, is secured by substantially all of our assets and contains formulas that limit the amount of our borrowings under the facility. Moreover, the terms of our credit facility also include negative covenants that, among other things, may limit our ability to incur additional indebtedness. If we violate any loan covenants and do not obtain a waiver from our lender, our indebtedness under the credit facility would become immediately due and payable, and the lender could foreclose on its security, which could materially adversely affect our business and future financial condition and could require us to curtail or otherwise cease our existing operations.

We may need additional financing to satisfy our future capital requirements, which may not be readily available to us.

Our capital requirements may be significant in the future. In the future, we may incur additional expenses in the development and implementation of our operations. Due to fluctuations in the price, demand and availability of new refrigerants, our existing credit facility that expires in June 2018 may not in the future be sufficient to provide all of the capital that we need to acquire and manage our inventories of new refrigerant. As a result, we may be required to seek additional equity or debt financing in order to develop our RefrigerantSide® Services business, our refrigerant sales business, and our other businesses. We have no current arrangements with respect to, or sources of, additional financing other than our existing credit facility. There can be no assurance that we will be able to obtain any additional financing on terms acceptable to us or at all. Our inability to obtain financing, if and when needed, could materially adversely affect our business and future financial condition and could require us to curtail or otherwise cease our existing operations.

We will have broad discretion over the use of the proceeds to us from any primary offering and may apply the proceeds to uses that do not improve our operating results or the value of your securities.

We will have broad discretion to use the net proceeds to us from a primary offering, if any, and investors will be relying solely on the judgment of our board of directors and management regarding the application of these proceeds. Although we expect to use the net proceeds from a primary offering for general corporate purposes, including without limitation additions to our working capital, capital expenditures and potential acquisitions of, or investments in, companies and technologies that complement our businesses, we have not allocated these net proceeds for specific purposes. Investors will not have the opportunity, as part of their investment decision, to assess whether the proceeds are being used appropriately. Our use of any such proceeds may not improve our operating results or increase the value of the securities being offered hereby.

TABLE OF CONTENTS

Future sales of shares of our common stock may cause the prevailing market price of our shares to decrease and could harm our ability to raise additional capital.

We have previously issued a substantial number of shares of common stock, which are eligible for resale under Rule 144 of the Securities Act of 1933, or Securities Act, and may become freely tradable. We have also registered shares that are issuable upon the exercise of warrants and options. If holders of warrants and options choose to exercise their purchase rights and sell shares of common stock in the public market, or if holders of currently restricted common stock choose to sell such shares of common stock in the public market under Rule 144 or otherwise, or attempt to publicly sell such shares all at once or in a short time period, the prevailing market price for our common stock may decline. The sale of shares of common stock issued upon the exercise of our securities could also dilute the holdings of our existing shareholders. The market price of our common stock could drop due to sales of a large number of shares or the perception that such sales could occur. These factors also could make it more difficult to raise funds through future offerings of our securities.

TABLE OF CONTENTS

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain statements that we believe are forward-looking statements as that term is used in the Private Securities Litigation Reform Act of 1995 and are intended to enjoy protection of the safe harbor for forward-looking statements provided by that Act. These forward-looking statements are based on our current expectations, assumptions, estimates and projections about our business and our industry. Forward-looking statements include statements regarding our future financial position, performance and achievements, business strategy, and plans and objectives of management for future operations.

In some cases, you can identify forward-looking statements by terms such as may, should, will, could, estimate, project, predict, potential, continue, anticipate, believe, plan, seek, expect, future and intend or other comparable expressions which are intended to identify forward-looking statements. These statements are only predictions and are not guarantees of future performance. They are subject to known and unknown risks, uncertainties and other factors, some of which are beyond our control and difficult to predict and could cause our actual results to differ materially from those expressed or forecasted in, or implied by, the forward-looking statements. In evaluating these forward-looking statements, you should carefully consider the risks and uncertainties referred to under the caption Risk Factors above and elsewhere in this prospectus, including those described in documents incorporated by reference herein, and those described in any applicable prospectus supplement. Given these uncertainties, you should not place undue reliance on these forward-looking statements. In addition, these forward-looking statements reflect our view only as of the date they are made.

Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons actual results could differ materially from those anticipated in these forward-looking statements, even if new information becomes available in the future.

All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements.

TABLE OF CONTENTS

USE OF PROCEEDS

Except as described in any prospectus supplement, we currently intend to use the net proceeds from the sale of shelf securities under this prospectus for general corporate purposes, including without limitation additions to our working capital, capital expenditures and, although we have no present understandings, commitments or agreements to do so, potential acquisitions of, or investments in, companies and technologies that complement our businesses. The prospectus supplement with respect to an offering of the shelf securities may identify different or additional uses for the proceeds of that offering. Pending any such uses, we may temporarily invest the net proceeds.

We will not receive any of the proceeds from the sale of resale shares offered by the selling shareholders.

TABLE OF CONTENTS**SELLING SHAREHOLDERS**

The resale shares offered under this prospectus may be sold from time to time for the account of the selling shareholders named in the following table. The table also contains information, to our knowledge, regarding each selling shareholder's beneficial ownership of shares of our common stock as of December 16, 2015, and as adjusted to give effect to the assumed sale of all of the resale shares registered hereby. As of December 16, 2015, we had 32,797,116 shares of common stock outstanding. A person is deemed to be the beneficial owner of securities that can be acquired by such person within 60 days from December 16, 2015. Accordingly, each beneficial owner's percentage ownership is determined by assuming that options and warrants that are held by such person (but not held by any other person) and which are exercisable within 60 days from December 16, 2015 have been exercised. Except as otherwise indicated, each person shown in the table has sole voting and investment power with respect to the shares of common stock listed next to his name. The address for each selling shareholder, unless otherwise noted, is c/o Hudson Technologies, Inc. at P.O. Box 1541, One Blue Hill Plaza, Pearl River, New York 10965.

Name of Shareholder	Beneficial Ownership of Shares of Common Stock		Number of Shares Registered for Resale*	Shares Beneficially Owned Assuming Sale of Shares Registered	
	Number of Shares	Percentage		Number of Shares	Percentage
Kevin J. Zugibe	4,589,793 ⁽¹⁾	13.7 %	250,000	4,339,793	13.0 %
Brian F. Coleman	955,767 ⁽²⁾	2.9 %	100,000	855,767	2.6 %
Stephen P. Mandracchia	1,828,661 ⁽³⁾	5.5 %	150,000	1,678,661	5.1 %
	7,374,221	21.6 %	500,000	6,874,221	20.1 %

The shares registered for resale were among the shares of common stock purchased by the selling shareholders from *Fleming US Discovery Fund III, L.P. for a purchase price of \$0.65 per share on June 28, 2007 in private transactions.

Includes (i) 35,000 shares which may be purchased at \$1.40 per share; (ii) 9,300 shares which may be purchased at \$1.02 per share; (iii) 195,000 shares that may be purchased at \$0.85 per share; (iv) 78,000 shares which may be purchased at \$1.26 per share; (v) 28,145 shares which may be purchased at \$3.55 per share; and (vi) 251,855 shares which may be purchased at \$3.23 per share, under immediately exercisable options. Mr. Zugibe is a Director, Chairman and Chief Executive Officer of Hudson.

Includes (i) 32,500 shares which may be purchased at \$1.40 per share; (ii) 8,100 shares which may be purchased at \$1.02 per share; (iii) 180,000 shares which may be purchased at \$0.85 per share; (iv) 75,000 shares which may be purchased at \$1.26 per share; and (v) 200,000 shares which may be purchased at \$3.23 per share, under immediately exercisable options. Mr. Coleman is a Director, President and Chief Operating Officer of Hudson.

Includes (i) 1,097,661 shares held of record in the name of Mr. Mandracchia's wife, Theresa Mandracchia, over which Mr. Mandracchia has sole voting power and shared dispositive power; and (ii) the following shares which may be purchased by Mr. Mandracchia upon the exercise of options previously granted to him: (a) 125,000 shares that may be purchased at \$0.85 per share; (b) 58,000 shares which may be purchased at \$1.26 per share; (c) 28,145 shares which may be purchased at \$3.55 per share; and (d) 76,855 shares which may be purchased at \$3.23 per share, under immediately exercisable options. Mr. Mandracchia is Vice President Legal and Regulatory, and Secretary, of Hudson.

TABLE OF CONTENTS

DESCRIPTION OF CAPITAL STOCK

The following description summarizes the material terms of our capital stock. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description, you should refer to the applicable prospectus supplement, our certificate of incorporation, as amended, and amended and restated by-laws and to the applicable provisions of New York law.

Common Stock

As of the date of this prospectus, Hudson is authorized to issue 100,000,000 shares of common stock. As of December 16, 2015, there were 32,797,116 shares of common stock outstanding.

The holders of common stock are entitled to one vote for each share held of record on all matters to be voted on by shareholders. There is no cumulative voting with respect to the election of directors, with the result that the holders of more than 50% of the shares voting for the election of directors can elect all of the directors then up for election. The holders of common stock are entitled to receive dividends when, as and if declared by our board of directors out of funds legally available therefor. In the event of liquidation, dissolution or winding up of Hudson, the holders of common stock are entitled to share in all assets remaining which are available for distribution to them after payment of liabilities and after provision has been made for each class of stock, if any, having preference over the common stock. Holders of shares of common stock have no conversion, preemptive or other subscription rights, and there are no redemption provisions applicable to the common stock. All of the outstanding shares of common stock are fully paid and non-assessable.

Our common stock is listed on the Nasdaq Capital Market under the symbol HDSN.

Transfer Agent

The transfer agent and registrar for the common stock is Continental Stock Transfer & Trust Company, New York, New York.

Preferred Stock

As of the date of this prospectus, Hudson is authorized to issue 5,000,000 shares of preferred stock. As of December 15, 2015, there were 150,000 shares of preferred stock designated as Series A Convertible Preferred Stock and no shares of preferred stock outstanding. Hudson has no intent to issue any shares of its Series A Convertible Preferred Stock.

This section describes the general terms of our preferred stock to which any prospectus supplement may relate. A prospectus supplement will describe the terms relating to any preferred stock to be offered by us in greater detail, and may provide information that is different from this prospectus. If the information in the prospectus supplement with respect to the particular preferred stock being offered differs from this prospectus, you should rely on the information in the prospectus supplement. A copy of our certificate of incorporation, as amended, has been incorporated by reference from our filings with the SEC as an exhibit to the registration statement of which this prospectus is a part. A certificate of amendment to our certificate of incorporation will specify the terms of any preferred stock being offered, and will be filed or incorporated by reference from a report that we file with the SEC.

Under our certificate of incorporation, as amended, we have the authority to issue 5,000,000 shares of preferred stock. The authorized preferred stock can be issued from time to time in one or more series. Our board of directors has the power, without shareholder approval, to issue shares of one or more series of preferred stock, at any time, for such consideration and with such relative rights, privileges, preferences and other terms as the board may determine, including terms relating to dividend rates, redemption rates, liquidation preferences and voting, sinking fund and conversion or other rights. The rights and terms relating to any new series of preferred stock could adversely affect the voting power or other rights of the holders of the common stock or could be utilized, under certain circumstances, as a method of discouraging, delaying or preventing a change in control of Hudson.

The following description of our preferred stock, and any description of our preferred stock in a prospectus supplement, may not be complete and is subject to, and qualified in its entirety by reference to, New York law and the actual terms and provisions contained in our certificate of incorporation and bylaws, each as amended from time to time.

TABLE OF CONTENTS

Terms

Our board of directors will fix the rights, preferences, privileges, qualifications and restrictions of the preferred stock of each series that we sell under this prospectus and applicable prospectus supplements in the amendment to our certificate of incorporation relating to that series. We will incorporate by reference into the registration statement, of which this prospectus is a part, the form of any amendment to our certificate of incorporation that describes the terms of the series of preferred stock we are offering before the issuance of the related series of preferred stock. This description of the preferred stock in the amendment to our certificate of incorporation and any applicable prospectus supplement may include:

- the number of shares of preferred stock to be issued and the offering price of the preferred stock;
- the title and stated value of the preferred stock;
- dividend rights, including dividend rates, periods, or payment dates, or methods of calculation of dividends applicable to the preferred stock;
- whether dividends will be cumulative or non-cumulative, and if cumulative the date from which distributions on the preferred stock shall accumulate;
 - the right to convert the preferred stock into a different type of security;
 - voting rights, if any, attributable to the preferred stock;
 - rights and preferences upon our liquidation or winding up of our affairs;
 - terms of redemption;
 - preemption rights, if any;
- the procedures for any auction and remarketing, if any, for the preferred stock;
- the provisions for a sinking fund, if any, for the preferred stock;
- any listing of the preferred stock on any securities exchange;
- the terms and conditions, if applicable, upon which the preferred stock will be convertible into our common stock, including the conversion price (or manner of calculation thereof);
 - a discussion of federal income tax considerations applicable to the preferred stock, if material;
- the relative ranking and preferences of the preferred stock as to dividend or other distribution rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuance of any series of preferred stock ranking senior to or on a parity with the series of preferred stock being offered as to distribution rights and rights upon the liquidation, dissolution or winding up or our affairs;
- and
 - any other specific terms, preferences, rights, limitations or restrictions of the preferred stock.

Unless otherwise indicated in the applicable supplement to this prospectus, shares of our preferred stock will rank, with respect to payment of distributions and rights upon our liquidation, dissolution or winding up, and allocation of our earnings and losses:

- senior to all classes or series of our common stock, and to all of our equity securities ranking junior to the preferred stock;
- on a parity with all equity securities issued by us, the terms of which specifically provide that these equity securities rank on a parity with the preferred stock; and
- junior to all equity securities issued by us, the terms of which specifically provide that these equity securities rank senior to the preferred stock.

TABLE OF CONTENTS

Distributions

Subject to any preferential rights of any outstanding stock or series of stock, our preferred shareholders are entitled to receive distributions, when and as authorized by our board of directors, out of legally available funds, and share pro rata based on the number of shares of preferred stock, common stock and other equity securities outstanding.

Voting Rights

Unless otherwise indicated in the applicable supplement to this prospectus, or otherwise required under New York law, holders of our preferred stock will not have any voting rights.

Liquidation Preference

Upon the voluntary or involuntary liquidation, dissolution or winding up of our affairs, then, before any distribution or payment shall be made to the holders of any common stock or any other class or series of stock ranking junior to the preferred stock in our distribution of assets upon any liquidation, dissolution or winding up, the holders of each series of our preferred stock are entitled to receive, after payment or provision for payment of our debts and other liabilities, out of our assets legally available for distribution to shareholders, liquidating distributions in the amount of the liquidation preference per share (set forth in the applicable supplement to this prospectus), plus an amount, if applicable, equal to all distributions accrued and unpaid thereon (which shall not include any accumulation in respect of unpaid distributions for prior distribution periods if the preferred stock does not have a cumulative distribution).

Unless otherwise indicated in the applicable supplement to this prospectus, after payment of the full amount of the liquidating distributions to which they are entitled, the holders of preferred stock will have no right or claim to any of our remaining assets. In the event that, upon our voluntary or involuntary liquidation, dissolution or winding up, the legally available assets are insufficient to pay the amount of the liquidating distributions on all of our outstanding preferred stock and the corresponding amounts payable on all of our stock of other classes or series of equity security ranking on a parity with the preferred stock in the distribution of assets upon liquidation, dissolution or winding up, then the holders of our preferred stock and all other such classes or series of equity securities will share ratably in the distribution of assets in proportion to the full liquidating distributions to which they would otherwise be respectively entitled.

If the liquidating distributions are made in full to all holders of preferred stock, our remaining assets will be distributed among the holders of any other classes or series of equity security ranking junior to the preferred stock upon our liquidation, dissolution, or winding up, according to their respective rights and preferences and in each case according to their respective number of shares of stock.

Conversion Rights

The terms and conditions, if any, upon which shares of any series of preferred stock are convertible into other securities will be set forth in the applicable supplement to this prospectus. These terms will include the amount and type of security into which the shares of preferred stock are convertible, the conversion price (or manner of calculation thereof), the conversion period, provisions as to whether conversion will be at the option of the holders of the preferred stock or us, the events, if any, requiring an adjustment of the conversion price and provisions, if any, affecting conversion in the event of the redemption of that preferred stock.

Redemption

If so provided in the applicable supplement to this prospectus, our preferred stock will be subject to mandatory redemption or redemption at our option, in whole or in part, in each case upon the terms, at the times and at the redemption prices set forth in such supplement to this prospectus.

10

TABLE OF CONTENTS

Anti-Takeover Considerations and Special Provisions of our Certificate of Incorporation and our By-laws

A number of provisions of both our certificate of incorporation, as amended, and our amended and restated by-laws concern matters of corporate governance and the rights of our shareholders. Our board of directors is divided into two classes. Each class is to have a term of two years, with the term of each class expiring in successive years, and is to consist, as nearly as possible, of one-half of the number of directors constituting the entire board. Under certain circumstances, at least two annual meetings of shareholders, instead of one, may be required to effect a change in a majority of our board of directors. The classification of our board into two separate classes could discourage, delay, or prevent a takeover of us thereby preserving control by the current shareholders. In addition, provisions that grant our board of directors the ability to issue shares of preferred stock and to set the voting rights, preferences and other terms thereof may discourage takeover attempts that are not first approved by our board of directors, including takeovers which may be considered by some shareholders to be in their best interests. Certain provisions could delay or impede the removal of incumbent directors or the assumption of control by shareholders, even if such removal or assumption would be beneficial to our shareholders. These provisions also could discourage or make more difficult a merger, tender offer or proxy contest, even if they could be favorable to the interests of shareholders, and could potentially depress the market price of our common stock. Our board of directors believes that these provisions are appropriate to protect our interests and the interests of our shareholders.

TABLE OF CONTENTS

DESCRIPTION OF WARRANTS

Outstanding Warrants

As of December 16, 2015, an aggregate of 1,168,750 shares of our common stock were issuable upon the exercise of outstanding warrants, at a weighted average exercise price of \$2.60 per share.

None of the warrants described in this section have been listed for trading on any securities exchange.

General

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus.

While the terms we have summarized below will apply generally to any warrants that we may offer under this prospectus, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. The terms of any warrants offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of warrant agreement, which may include a form of warrant certificate, that describes the terms of the particular series of warrants we are offering before the issuance of the related series of warrants. The following summary of material provisions of the warrants and the warrant agreements are subject to, and qualified in their entirety by reference to, all the provisions of the warrant agreement and warrant certificate applicable to a particular series of warrants. We urge you to read the applicable prospectus supplements related to the particular series of warrants that we sell under this prospectus, as well as the complete warrant agreements and warrant certificates that contain the terms of the warrants.

We will describe in the applicable prospectus supplement the terms relating to warrants being offered including:

- the offering price and aggregate number of warrants offered;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreements and warrants may be modified;
- federal income tax consequences of holding or exercising the warrants, if material;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including, in the case of warrants to purchase common stock or preferred stock, the

right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up of our affairs or to exercise voting rights, if any.

TABLE OF CONTENTS

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We intend to set forth in any warrant agreement and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent.

Upon receipt of the required payment and any warrant certificate or other form required for exercise properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant or warrant certificate are exercised, then we will issue a new warrant or warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

TABLE OF CONTENTS

DESCRIPTION OF DEBT SECURITIES

We may issue debt securities, in one or more series, which may be senior or convertible debt. While the terms we have summarized below we expect will apply generally to any debt securities that we may offer under this prospectus, we will describe the particular terms of any debt securities that we may offer in more detail in the applicable prospectus supplement. The terms of any debt securities offered under a prospectus supplement may differ from the terms described below. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, forms of debt securities and/or any indentures containing the terms of the debt securities being offered. Any debt securities which we offer by this prospectus will be exempt under the Trust Indenture Act of 1939, as amended, or Trust Indenture Act. Therefore, we may not use an indenture (and, thus a trustee) or, if we use an indenture, it may not fully comply with the requirements of the Trust Indenture Act.

The documentation governing the debt securities may provide for an agent to act for and on behalf of the holders of the debt securities. We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, supplemental forms of debt securities and/or indentures containing the terms of the debt securities being offered.

The following summaries of material provisions of the debt securities we may issue are subject to, and qualified in their entirety by reference to, all of the provisions of the documentation applicable to a particular series of debt securities. We urge you to read any applicable prospectus supplements.

General

We will describe in the applicable prospectus supplement the terms of the debt securities being offered, including:

- the title;
- the principal amount being offered, and if a series, the total amount authorized and the total amount outstanding; any limit on the amount that may be issued;
- whether or not we will issue the series of debt securities in global form, the terms and who the depository will be the maturity date;
- the terms of the conversion rights;
- the annual interest rate, which may be fixed or variable, or the method for determining the rate and the date interest will begin to accrue, the dates interest will be payable and the regular record dates for interest payment dates or the method for determining such dates;
- whether or not the debt securities will be secured or unsecured, and the terms of any secured debt;
- the terms of the subordination of any series of subordinated debt;
- the place where payments will be payable;
- if payment of principal and interest on the debt securities may be paid in our securities rather than, or in addition to, cash and the terms of any such rights;
- restrictions on transfer, sale or other assignment, if any;
- our right, if any, to defer payment of interest and the maximum length of any such deferral period;
- the date, if any, after which, and the price at which, we may, at our option, redeem the series of debt securities pursuant to any optional or provisional redemption provisions and the terms of those redemption provisions;

14

TABLE OF CONTENTS

the date, if any, on which, and the price at which we are obligated, pursuant to any mandatory sinking fund or analogous fund provisions or otherwise, to redeem, or at the holder's option to purchase, the series of debt securities and the currency or currency unit in which the debt securities are payable;

whether the debt securities will restrict our ability and/or the ability of our subsidiaries to:

incur additional indebtedness;

issue additional securities;

create liens;

pay dividends and make distributions in respect of our capital stock and the capital stock of our subsidiaries;

redeem capital stock;

place restrictions on our subsidiaries' ability to pay dividends, make distributions or transfer assets;

make investments or other restricted payments;

sell or otherwise dispose of assets;

enter into sale-leaseback transactions;

engage in transactions with shareholders and affiliates;

issue or sell stock of our subsidiaries; or

effect a consolidation or merger;

whether the debt securities will require us to maintain any interest coverage, fixed charge, cash flow-based, asset-based or other financial ratios;

a discussion of any material United States federal income tax considerations applicable to the debt securities;

information describing any book-entry features;

provisions for a sinking fund purchase or other analogous fund, if any;

the applicability of the provisions in the debt securities on discharge;

the denominations in which we will issue the series of debt securities, if other than denominations of \$1,000 and any integral multiple thereof;

the currency of payment of debt securities if other than U.S. dollars and the manner of determining the equivalent amount in U.S. dollars; and

any other specific terms, preferences, rights or limitations of, or restrictions on, the debt securities, including any events of default or covenants provided with respect to the debt securities, and any terms that may be required by us or advisable under applicable laws or regulations.

Conversion or Exchange Rights

We will set forth in the prospectus supplement the terms on which a series of debt securities may be convertible into or exchangeable for our common stock or our other securities. We will include provisions as to whether conversion or exchange is mandatory, at the option of the holder or at our option. We may include provisions pursuant to which the number of shares of our common stock or our other securities that the holders of the series of debt securities receive would be subject to adjustment.

Consolidation, Merger or Sale

We do not currently expect our debt securities to contain any covenant that restricts our ability to merge or consolidate, or sell, convey, transfer or otherwise dispose of all or substantially all of our assets. However,

TABLE OF CONTENTS

any successor to or acquirer of such assets may be required to assume all of our obligations under the debt securities, as appropriate. If the debt securities are convertible into or exchangeable for our other securities or securities of other entities, the person with whom we consolidate or merge or to whom we sell all or substantially all of our assets may be required to make provisions for the conversion of the debt securities into securities that the holders of the debt securities would have received if they had converted the debt securities before the consolidation, merger or sale.

Events of Default Under the Debt Securities

Unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities or the debt agreement or indenture governing the debt securities, the following are events of default with respect to any series of debt securities that we may issue:

if we fail to pay interest when due and payable and our failure continues for 90 days and the time for payment has not been extended or deferred;

if we fail to pay the principal, premium or sinking fund payment, if any, when due and payable and the time for payment has not been extended or delayed;

if we fail to observe or perform any other covenant contained in the debt securities, other than a covenant specifically relating to another series of debt securities, and our failure continues for 90 days after we receive notice from the debt securities agent or holders of at least 25% in aggregate principal amount of the outstanding debt securities of the applicable series;

if specified events of bankruptcy, insolvency or reorganization occur; and

any other event of default provided in or pursuant to the applicable agreement or indenture, if any, or prospectus supplement with respect to the debt securities of that series.

The holders of a majority in principal amount of the outstanding debt securities of an affected series may waive any default or event of default with respect to the series and its consequences, except defaults or events of default regarding payment of principal, premium, if any, or interest, unless we have cured the default or event of default in accordance with the form of debt security and/or agreement or indenture. Any waiver shall cure the default or event of default.

The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to such holders with respect to the debt securities of that series.

Subject to the terms of the debt securities, if an event of default thereunder shall occur and be continuing, the debt securities agent will be under no obligation to exercise any of its rights or powers under such debt securities at the request or direction of any of the holders of the applicable series of debt securities, unless such holders have offered the debt securities agent reasonable indemnity. The holders of a majority in principal amount of the outstanding debt securities of any series will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the debt securities agent, or exercising any trust or power conferred on the debt securities agent, with respect to the debt securities of that series, provided that:

the direction so given by the holder is not in conflict with any law or the applicable debt securities; and the debt securities agent need not take any action that might involve it in personal liability or might be unduly prejudicial to the holders not involved in the proceeding.

A holder of the debt securities of any series will have the right to institute a proceeding under the debt securities or to appoint a receiver or trustee, or to seek other remedies only if:

the holder has given written notice to the debt securities agent of a continuing event of default with respect to that series;

16

TABLE OF CONTENTS

the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holders have offered reasonable indemnity to the debt securities agent to institute the proceeding as trustee; and
the debt securities agent does not institute the proceeding, and does not receive from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series other conflicting directions within 90 days after the notice, request and offer.

These limitations do not apply to a suit instituted by a holder of debt securities if we default in the payment of the principal, premium, if any, or interest on, the debt securities.

We may periodically file statements with the debt securities agent regarding our compliance with specified covenants in the documentation regarding such debt securities.

Modification; Waiver

We and the debt securities agent may change the form of debt security and/or indenture without the consent of any holders with respect to specific matters:

to fix any ambiguity, defect or inconsistency in the documentation governing the debt securities;
to comply with the provisions described above under Description of Debt Securities Consolidation, Merger or Sale;
to add to, delete from or revise the conditions, limitations, and restrictions on the authorized amount, terms, or purposes of issue, authentication and delivery of debt securities, as set forth in the documentation governing such debt securities;
to provide for the issuance of and establish the form and terms and conditions of the debt securities of any series as provided under Description of Debt Securities General to establish the form of any certifications required to be furnished pursuant to the terms of any series of debt securities, or to add to the rights of the holders of any series of debt securities;

to evidence and provide for the acceptance of appointment thereunder by a successor debt securities agent;
to provide for uncertificated debt securities in addition to or in place of certificated debt securities and to make all appropriate changes for such purpose;
to add to our covenants new covenants, restrictions, conditions or provisions for the protection of the holders, and to make the occurrence, or the occurrence and the continuance, of a default in any such additional covenants, restrictions, conditions or provisions an event of default; or
to change anything that does not materially adversely affect the interests of any holder of debt securities of any series. In addition, the rights of holders of a series of debt securities may be changed by us and the debt securities agent with the written consent of the holders of at least a majority in aggregate principal amount of the outstanding debt securities of each series that is affected. However, unless we provide otherwise in the prospectus supplement applicable to a particular series of debt securities, we and the debt securities agent may make the following changes only with the consent of each holder of any outstanding debt securities affected:

extending the fixed maturity of the series of debt securities;
reducing the principal amount, reducing the rate of or extending the time of payment of interest, or reducing any premium payable upon the redemption of any debt securities; or
reducing the percentage of debt securities, the holders of which are required to consent to any amendment, supplement, modification or waiver.

TABLE OF CONTENTS

Discharge

The documentation governing the debt securities may provide that we can elect to be discharged from our obligations with respect to one or more series of debt securities, except for specified obligations, including obligations to:

register the transfer or exchange of debt securities of the series;
replace stolen, lost or mutilated debt securities of the series;
maintain paying agencies;
hold monies for payment in trust;
recover excess money held by the debt securities agent;
indemnify the debt securities agent; and
appoint any successor debt securities agent.

In order to exercise our rights to be discharged, we must deposit with the debt securities agent money or government obligations sufficient to pay all the principal of, any premium, if any, and interest on, the debt securities of the series on the dates payments are due.

Form, Exchange and Transfer

We will issue the debt securities of each series only in fully registered form without coupons and, unless we provide otherwise in the applicable prospectus supplement, in denominations of \$1,000 and any integral multiple thereof.

At the option of the holder, subject to the terms of the debt securities set forth in the applicable prospectus supplement, the holder of the debt securities of any series can exchange the debt securities for other debt securities of the same series, in any authorized denomination and of like tenor and aggregate principal amount.

Subject to the terms of the debt securities set forth in the applicable prospectus supplement, holders of the debt securities may present the debt securities for exchange or for registration of transfer, duly endorsed or with the form of transfer endorsed thereon duly executed if so required by us or the security registrar, at the office of the security registrar or at the office of any transfer agent designated by us for this purpose. Unless otherwise provided in the debt securities that the holder presents for transfer or exchange, we will impose no service charge for any registration of transfer or exchange, but we may require payment of any taxes or other governmental charges.

We will name in the applicable prospectus supplement the security registrar, and any transfer agent in addition to the security registrar, that we initially designate for any debt securities. We may at any time designate additional transfer agents or rescind the designation of any transfer agent or approve a change in the office through which any transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

If we elect to redeem the debt securities of any series, we will not be required to:

issue, register the transfer of, or exchange any debt securities of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption of any debt securities that may be selected for redemption and ending at the close of business on the day of the mailing; or
register the transfer of or exchange any debt securities so selected for redemption, in whole or in part, except the unredeemed portion of any debt securities we are redeeming in part.

Information Concerning the Debt Securities Agent

The debt securities agent, if any, other than during the occurrence and continuance of an event of default under the debt securities, may undertake to perform only those duties as are specifically set forth in the applicable documentation for such debt securities. Upon an event of default under the debt securities, the debt

18

TABLE OF CONTENTS

securities agent must use the same degree of care as a prudent person would exercise or use in the conduct of his or her own affairs. Subject to this provision, the debt securities agent is under no obligation to exercise any of the powers given it by the debt securities at the request of any holder of debt securities unless it is offered reasonable security and indemnity against the costs, expenses and liabilities that it might incur.

Payment and Paying Agents

Unless we otherwise indicate in the applicable prospectus supplement, we will make payment of the interest on any debt securities on any interest payment date to the person in whose name the debt securities, or one or more predecessor securities, are registered at the close of business on the regular record date for the interest.

We will pay principal of and any premium and interest on the debt securities of a particular series at the office of the paying agents designated by us, except that unless we otherwise indicate in the applicable prospectus supplement, we will make interest payments by check that we will mail to the holder or by wire transfer to certain holders. We will name in the applicable prospectus supplement any paying agents that we initially designate for the debt securities of a particular series.

All money we pay to a paying agent or the debt securities agent for the payment of the principal of or any premium or interest on any debt securities that remains unclaimed at the end of two years after such principal, premium or interest has become due and payable will be repaid to us, and the holder of the debt security thereafter may look only to us for payment thereof.

Governing Law

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

TABLE OF CONTENTS

DESCRIPTION OF UNITS

As specified in the applicable prospectus supplement, we may issue units consisting of one or more of the following: shares of common stock and/or preferred stock, warrants, debt securities, or any combination of such securities. The applicable prospectus supplement will describe:

the terms of the units and of any of our common shares, preferred shares, warrants or debt securities comprising the units, including whether and under what circumstances the securities comprising the units may be traded separately;

- a description of the terms of any unit agreement governing the units;
- a description of the provisions for the payment, settlement, transfer or exchange of the units; and
- if applicable, a discussion of any material United States federal income tax considerations.

20

TABLE OF CONTENTS

PLAN OF DISTRIBUTION

We and the selling shareholders may sell the securities covered by this prospectus from time to time. Registration of our securities covered by this prospectus does not mean, however, that those securities will necessarily be offered or sold.

We and the selling shareholders may sell the securities:

to or through one or more underwriters or dealers;
directly to one or more purchasers, through agents, in private or open market transactions; or
through a combination of any of these methods of sale.

We and the selling shareholders may distribute securities:

from time to time in one or more transactions at a fixed price or prices, which may be changed from time to time;
at market prices prevailing at the times of sale;
at prices related to such prevailing market prices; or
at negotiated prices.

The method of distribution of the securities will be described in any applicable prospectus supplement.

The selling shareholders may also sell resale shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

Underwriters, dealers or agents may receive compensation in the form of discounts, concessions or commissions from us, or from the selling shareholders, as the case may be, or purchasers (as their agents in connection with the sale of the securities). In addition, underwriters may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they act as agent. These underwriters, dealers or agents may be considered to be underwriters under the Securities Act. As a result, discounts, commissions, or profits on resale received by the underwriters, dealers or agents may be treated as underwriting discounts and commissions. Each applicable prospectus supplement will identify any such underwriter, dealer or agent, and describe any compensation received by them from us. Any initial public offering price and any discounts or concessions allowed or re-allowed or paid to dealers may be changed from time to time. We and the selling shareholders may use underwriters with whom we and the selling shareholders have a material relationship. We will describe the nature of the relationship in an applicable prospectus supplement, naming the underwriter.

Broker-dealers engaged by the selling shareholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling shareholders (or, if any broker-dealer acts as agent for the purchaser of resale shares, from the purchaser) in amounts to be negotiated, but, except as set forth in a supplement to this prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with Financial Industry Regulatory Authority, or FINRA, Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

We and the selling shareholders may authorize agents or underwriters to solicit offers by certain types of institutional investors to purchase securities from us or the selling shareholders at the public offering price set forth in an applicable prospectus supplement pursuant to delayed delivery contracts providing for payment and delivery on a specified date in the future. We will describe the conditions to these contracts and the commissions we and the selling shareholders must pay for solicitation of these contracts in the prospectus supplement.

We and the selling shareholders may enter into agreements that provide for indemnification against certain civil liabilities, including liabilities under the Securities Act, or for contribution with respect to payments made by the underwriters, dealers or agents and to reimburse these persons for certain expenses.

TABLE OF CONTENTS

All shelf securities we offer, other than common stock, will be new issues of securities with no established trading market. If the shelf securities are traded after their initial issuance, they may trade at a discount from their initial offering price, depending upon prevailing interest rates, the market for similar securities and other factors. Any underwriters may make a market in our securities, but will not be obligated to do so and may discontinue any market making at any time without notice. Therefore, no assurance can be given as to whether an active trading market will develop for any new shelf securities. We have no current plans for listing of the preferred stock on any securities exchange or quotation system; any such listing with respect to the preferred stock will be described in the applicable prospectus supplement or pricing supplement, as the case may be. We cannot guarantee the liquidity of the trading markets for any of our securities.

We and the selling shareholders may grant underwriters who participate in the distribution of the securities an option to purchase additional securities to cover over-allotments, if any, in connection with the distribution. Underwriters, broker dealers or agents and their associates may be customers of, engage in transactions with, or perform services for us or the selling shareholders in the ordinary course of business for which they receive compensation.

Any underwriter may engage in over-allotment, stabilizing transactions, short covering transactions and penalty bids in accordance with Regulation M under the Securities Exchange Act of 1934, as amended, or Exchange Act.

Over-allotment involves sales in excess of the offering size, which create a short position. Stabilizing transactions permit bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Short covering transactions involve purchase of the securities in the open market after the distribution is completed to cover short positions. Penalty bids permit the underwriters to reclaim a selling concession from a dealer when the securities originally sold by the dealer are purchased in a covering transaction to cover short positions. Those activities may cause the price of the securities to be higher than it would otherwise be. If commenced, the underwriters may discontinue any of these activities at any time.

Because selling shareholders may be deemed to be underwriters within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act, including Rule 172 thereunder.

Any underwriters who are qualified market makers on the Nasdaq Capital Market may engage in passive market making transactions in our common stock on the Nasdaq Capital Market in accordance with Rule 103 of Regulation M, during the business day prior to the pricing of the offering, before the commencement of offers or sales of common stock. Passive market makers must comply with applicable volume and price limitations and must be identified as passive market makers. In general, a passive market maker must display its bid at a price not in excess of the highest independent bid for such security; if all independent bids are lowered below the passive market maker's bid, however, the passive market maker's bid must then be lowered when certain purchase limits are exceeded. Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale shares may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the selling shareholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of shares of common stock by the selling shareholders or any other person. We will make copies of this prospectus available to the selling shareholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

We make no representation or prediction as to the direction or magnitude of any effect that any of the foregoing activities may have on the price of our common stock or, if applicable, the price for any of our other securities. For a description of these activities, see the information under the heading "Underwriting or Plan of Distribution" in the applicable prospectus supplement. We will pay all expenses related to this registration statement, but all selling and

other expenses incurred by the selling shareholders, including commissions and discounts, if any attributable to the sale or disposition of the resale shares, will be borne by them. We have agreed to indemnify the selling shareholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

TABLE OF CONTENTS

In compliance with the current guidelines of FINRA, the maximum compensation to be received by any FINRA member or independent broker dealer may not exceed 8% of the aggregate amount of the securities offered pursuant to this prospectus and any applicable prospectus supplement.

23

TABLE OF CONTENTS

LEGAL MATTERS

The validity of the securities being offered by this prospectus will be passed upon for us by Stephen P. Mandracchia and for any underwriters, dealers or agents by counsel named in the applicable prospectus supplement. Mr. Mandracchia currently holds the positions of Vice-President Legal and Regulatory and Secretary, of the Company and is a Hudson shareholder and a selling shareholder included in this prospectus.

EXPERTS

The financial statements as of December 31, 2014 and 2013 and for each of the years then ended incorporated by reference herein have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, incorporated herein by reference, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Exchange Act, and we file reports and other information with the SEC.

You may read and copy any of the reports, statements, or other information we file with the SEC at its Public Reference Section at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330. The SEC also maintains a Web site at <http://www.sec.gov> that contains reports, proxy statements and other information regarding issuers that file electronically with the SEC. In addition, the Nasdaq Stock Market maintains a Web site at <http://www.nasdaq.com> that contains reports, proxy statements and other information filed by us.

We make available free of charge, on or through our web site, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Our internet address is www.hudsonotech.com. Information contained on or that can be accessed through our web site is not part of this prospectus.

This prospectus constitutes a part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act. This prospectus does not contain all of the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. For further information about us and our securities we refer you to the registration statement and the accompanying exhibits and schedules. The registration statement may be inspected at the Public Reference Room maintained by the SEC at the address set forth in the first paragraph of this section or on the SEC's Web site. Statements contained in this prospectus regarding the contents of any contract or any other document filed as an exhibit are not necessarily complete. In each instance, reference is made to the copy of such contract or document filed as an exhibit to the registration statement, and each statement is qualified in all respects by that reference.

TABLE OF CONTENTS

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus the information we file with them. This means that we may disclose important information to you by referring you to other documents filed separately with the SEC. The information we incorporate by reference into this prospectus is legally deemed to be a part of this prospectus, except for any information superseded by other information contained in, or incorporated by reference into, this prospectus.

Any statement contained in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus. Our SEC File Number for documents we file under the Exchange Act is 001-13412. The following documents filed by us with the SEC are hereby incorporated by reference in this prospectus:

our annual report on Form 10-K (including the information incorporated by reference therein) for the fiscal year ended December 31, 2014;

our quarterly reports on Form 10-Q for the quarters ended March 31, 2015, June 30, 2015 and September 30, 2015;

our current reports on Form 8-K filed with the SEC on January 21, 2015, July 8, 2015 and August 26, 2015; and the description of our common stock contained in our registration statement on Form 8-A, filed with the SEC pursuant to Section 12(g) of the Exchange Act and all amendments or reports filed by us for the purpose of updating those descriptions.

All reports and other documents subsequently filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act (i) after the date of the initial registration statement and before effectiveness of the registration statement and (ii) after the date of this prospectus and prior to the termination of this offering also shall be deemed to be incorporated by reference in this prospectus and to be part hereof from the dates of filing of such reports and other documents; provided, however, that we are not incorporating any information furnished under either Item 2.02 or Item 7.01 of any current report on Form 8-K.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any and all of the information that has been or may be incorporated by reference in this prospectus, other than exhibits to such documents, unless the exhibits are specifically incorporated by reference into the documents that this prospectus incorporates. Requests for such copies should be directed to our corporate secretary, at the following address or by calling the following telephone number:

Hudson Technologies, Inc.
P.O. Box 1541
One Blue Hill Plaza
Pearl River, NY 10965
Telephone: (845) 735-6000

TABLE OF CONTENTS

\$49,000,000

**Hudson Technologies, Inc.
Common Stock**

Prospectus Supplement

December , 2016

Book-Running Managers

William Blair

Craig-Hallum Capital Group
Co-Managers

Roth Capital Partners

B. Riley & Co.
