UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

ROPER TECHNOLOGIES, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

51-0263696 (IRS Employer Identification No.)

6901 Professional Parkway East, Suite 200 Sarasota, Florida 34240 (Address of Principal Executive Offices)

Roper Technologies, Inc. 2016 Incentive Plan

(Full Title of the Plan)

David B. Liner Vice President, General Counsel and Secretary Roper Technologies, Inc. 6901 Professional Parkway East, Suite 200 Sarasota, Florida 34240 (941) 556-2601 (Name, Address and Telephone Number, including Area Code, of Agent for Service)

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

Large accelerated filer b ANN Non-accelerated filer (Do not check if a smaller reporting company)

Accelerated filer Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of	Amount to	Proposed Maximum	Proposed Maximum	Amount of
Securities to be	be Registered (1)	Offering Price	Aggregate	Registration Fee (2)(3)
Registered		Per Share (2)	Offering Price (2)	
Common Stock (par value \$0.01 per	10,000,000	\$175.65	\$1,756,500,000	\$176,879.55
share)				

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, this Registration Statement also covers such indeterminate number of additional shares of common stock as may be issuable by reason of the antidilution provisions of the 2016 Incentive Plan as a result of any merger, reorganization, recapitalization, combination, stock split, stock dividend or similar transaction.
- (2) Computed solely for the purpose of determining the registration fee pursuant to Rule 457(h) and based on the average of the high and low prices of the Company's common stock on the New York Stock Exchange on May 23, 2016.
- (3) This Registration Statement covers 7,924,932 previously unregistered shares of common stock, plus 2,075,068 unissued shares previously registered on the Company's Registration Statement on Form S-8 (File No. 333-182779) filed on July 20, 2012, with respect to which the Company paid a registration fee of \$22,505.66. Pursuant to Rule 457(p) of the Securities Act of 1933, the amount of the registration fee relating to this Form S-8 is being offset by the dollar amount of the registration fees already paid by the Company in respect of such previously registered and unissued shares. Accordingly, the net registration fee relating to this Form S-8 is \$154,373.89, as adjusted by the offset amount.

PART I INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The documents containing the information specified in Part I of Form S-8 will be delivered to employees as specified by Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act"). Such documents are not being filed with the Securities and Exchange Commission (the "Commission") either as part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 of the Securities Act. Such documents and the documents incorporated by reference in this Registration Statement pursuant to Item 3 of Part II hereof, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act.

PART II INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed with the Commission are hereby incorporated herein by reference (to the extent that they are filed, but not furnished):

(a) Roper Technologies, Inc.'s (the "Company's") Annual Report on Form 10-K for the fiscal year ended December 31, 2015.

(b) The Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.

(c) The Company's Current Reports on Form 8-K dated March 9, 2016.

(d) The description of the Company's common stock contained in the Company's Form 8-A filed with the Commission on October 7, 1996 pursuant to the Exchange Act, including any amendment thereto or report filed for the purpose of updating such description.

All reports and other documents filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15 (d) of the Exchange Act of 1934 (the "Exchange Act") after the date of this Registration Statement and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities remaining unsold, shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents. Any statements contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes hereof to the extent that a statement contained herein (or in any other subsequently filed document which is also incorporated by reference herein) modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed to constitute a part hereof except as so modified or superseded.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel.

The validity of the issuance of the common stock registered hereby is being passed upon by David B. Liner, Vice President, General Counsel and Secretary of the Company. Mr. Liner beneficially owns shares of Company common stock and has options to purchase shares of Company common stock.

Item 6. Indemnification of Directors and Officers.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, our amended and restated certificate of incorporation includes a provision that eliminates the personal liability of each of our directors for monetary damages breach of such director's fiduciary duty as a director, except for liability: (a) for any breach of the director's duty of loyalty to us or our stockholders; (b) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law; (c) under Section 174 of the Delaware General Corporation Law; or (d) for transactions from which the director derived an improper personal benefit. The directors' liability will be further limited to the extent permitted by any future amendments to the Delaware General Corporation law authorizing the further limitation or elimination of the liability of directors.

In addition, as permitted by Section 145 of the Delaware General Corporation Law, our amended and restated by-laws provide that: (i) we are required to indemnify our directors and officers to the fullest extent permitted by Delaware law, including those circumstances in which indemnification would otherwise be discretionary; (ii) we are required to advance expenses, as incurred, to such directors and officers in connection with defending a proceeding (except that it is not required to advance expenses to a person against whom we bring a claim for breach of the duty of loyalty, failure to act in good faith, intentional misconduct, knowing violation of the law or deriving an improper personal benefit); and (iii) the rights conferred in our amended and restated by-laws are not exclusive and we are authorized to enter into indemnification agreements with such directors, officers and employees.

We have entered into indemnification agreements with our directors and a number of our officers containing provisions which provide for the indemnification of such director or officer, as applicable, to the fullest extent permitted by Delaware law.

The indemnification provisions in our amended and restated by-laws, and any indemnification agreements entered into between us and our directors or officers, may be sufficiently broad to permit indemnification of our directors and officers for liabilities arising under the Securities Act.

The Company also maintains insurance coverage relating to certain liabilities of directors and officers.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit No.	Description
4.1	Amended and Restated Certificate of Incorporation of Roper Technologies, Inc. Incorporated by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K/A for the year ended December 31, 2013 and filed with the SEC on April 28, 2014 (file no. 12273).
4.2	By-Laws of Roper Technologies, Inc. Amended and Restated March 9, 2016. Incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K dated March 9, 2016 and filed March 14, 2016 (file no. 12273).
*5.1	Opinion of David B. Liner.
*23.1	Consent of PricewatershouseCoopers LLP.
*23.2	Consent of David B. Liner, which is included as part of Exhibit 5.1.
*24	Power of Attorney, included on the signatures page of this Registration Statement on Form S-8.

Roper Technologies, Inc. 2016 Incentive Plan. Incorporated by reference to Appendix B of the Company's Definitive Proxy Statement on Schedule 14A filed with the SEC on April 26, 2016.

*Filed herewith.

Item 9. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent posteffective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;

provided, however, that paragraphs (i) and (ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrants pursuant to the foregoing provisions, or otherwise, the Registrants have been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrants will, unless in the opinion of their counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Company certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Sarasota and the State of Florida on this 27th day of May, 2016.

ROPER TECHNOLOGIES, INC.

/s/ David B. Linef	/s/	David	В.	LINER
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By

David B. Liner Vice President, General Counsel and Secretary

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Brian D. Jellison, John Humphrey and David B. Liner, and each of them, his or her true and lawful attorneys-in-fact and agents, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or would do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or his or their substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
/s/ Brian D. Jellison Brian D. Jellison	President, Chief Executive Officer and Chairman of the Board of Director (Principal Executive Officer)	May 27, 2016
/s/ John Humphrey John Humphrey	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	May 27, 2016
/s/ Paul J. Soni Paul J. Soni	Vice President and Controller (Principal Accounting Officer)	May 27, 2016

/s/ Amy Woods Brinkley Amy Woods Brinkley	Director	May 27, 2016
/s/ John F. Fort III John F. Fort III	Director	May 27, 2016
/s/ Robert D. Johnson Robert D. Johnson	Director	May 27, 2016
/s/ Robert E. Knowling, Jr. Robert E. Knowling, Jr.	Director	May 27, 2016
/s/ Wilbur J. Prezzano Wilbur J. Prezzano	Director	May 27, 2016
/s/ Laura G. Thatcher Laura G. Thatcher	Director	May 27, 2016
/s/ Richard F. Wallman Richard F. Wallman	Director	May 27, 2016
/s/ Christopher Wright	Director	May 27, 2016

INDEX TO EXHIBITS

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*Filed herewith.

Re: Registration Statement on Form S-8 2016 Incentive Plan

Ladies and Gentlemen:

I am acting as your counsel in connection with the Registration Statement on Form S-8 under the Securities Act of 1933, as amended, registering an aggregate of 10,000,000 shares of common stock, \$0.01 par value (the "Shares"), of Roper Technologies, Inc., a Delaware corporation (the "Company"), which may be issued pursuant to the terms of the Company's 2016 Incentive Plan (the "Plan").

I am Vice President, General Counsel and Secretary of the Company and have acted in connection with the preparation of the Registration Statement. I have been requested to furnish an opinion to be included as Exhibit 5.1 to the Registration Statement. In conjunction with the furnishing of this opinion, I or other professionals on my staff who report to me have examined and are familiar with originals or copies, certified or otherwise identified to my satisfaction, of such documents or corporate records, and have made such investigation of matters of fact and law, as I have deemed necessary or advisable to render this opinion. This opinion is subject to the following qualifications, which are in addition to any other qualifications contained herein:

A. I have assumed without verification the genuineness of all signatures on all documents, the authority of the parties (other than the Company) executing such documents, the authenticity of all documents submitted to me as originals, and the conformity to original documents of all documents submitted to me as copies.

B. I express no opinion as to the effect or application of any laws or regulations other than the Delaware General Corporation Law as in effect on this date and current federal law. I am not a member of the Bar of the State of Delaware and have not obtained any opinions of local counsel.

C. The opinions set forth herein are based on existing laws, ordinances, rules, regulations, and judicial and administrative decisions as they presently have been interpreted, and I assume no obligation to revise or supplement the opinion rendered in this letter if present laws or the interpretation thereof are changed in respect of any circumstances or events subsequent to the date hereof.

Based on and subject to the foregoing, I am of the opinion that the Plan has been duly authorized by appropriate corporate action and the Shares, when issued pursuant to further action by the Board of Directors of the Company or an appropriate committee thereof and in accordance with the provisions of the Plan, will be validly issued, fully paid and nonassessable, assuming that the exercise price of stock options is not less than par value and that prior to awarding shares of restricted stock there is a determination by the Company's Board of Directors or an appropriate committee thereof that the Company has received consideration having a value not less than the par value of the shares awarded.

This letter is given for the sole benefit of the Company and does not address any matters other than those expressly addressed herein. No one else is entitled to rely hereupon. This letter speaks only as of the date hereof. I undertake no responsibility to update or supplement it after such date.

I hereby consent to the filing of this opinion as Exhibit 5.1 to the Company's Registration Statement on Form S-8.

Very truly yours,

/s/ David B. Liner

David B. Liner Vice President, General Counsel and Secretary

Consent of Independent Registered Certified Public Accounting Firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 26, 2016 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in Roper Technologies, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015.

/s/ PricewaterhouseCoopers LLP Tampa, Florida May 27, 2016