

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended December 31, 2016

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

For the transition period from ___ to ___

Commission File Number 1-12273

ROPER TECHNOLOGIES, INC.
(Exact name of Registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

51-0263969
(I.R.S. Employer Identification No.)

6901 Professional Parkway East, Suite 200
Sarasota, Florida 34240
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(941) 556-2601**

SECURITIES REGISTERED PURSUANT TO SECTION 12(b) OF THE ACT:

Title of Each Class	Name of Each Exchange On Which Registered
Common Stock, \$0.01 Par Value	New York Stock Exchange

SECURITIES REGISTERED PURSUANT TO SECTION 12(g) OF THE ACT: None

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§223.405) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company (as defined in Rule 12b-2 of the Exchange Act). Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

Indicate by check mark if the registrant is a shell company (as defined in Rule 12-b2 of the Act). Yes No

Based on the closing sale price on the New York Stock Exchange on June 30, 2016, the aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant was: \$16,984,404,742.

Number of shares of registrant's Common Stock outstanding as of February 16, 2017: 101,874,232.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement to be furnished to Stockholders in connection with its Annual Meeting of Stockholders to be held on June 8, 2017, are incorporated by reference into Part III of this Annual Report on Form 10-K.

ROPER TECHNOLOGIES, INC.

FORM 10-K FOR THE FISCAL YEAR ENDED DECEMBER 31, 2016

Table of Contents

	<u>Page</u>
PART I	
Item 1. Business	4
Item 1A. Risk Factors	8
Item 1B. Unresolved Staff Comments	13
Item 2. Properties	14
Item 3. Legal Proceedings	15
Item 4. Mine Safety Disclosures	15
PART II	
Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	15
Item 6. Selected Financial Data	17
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	18
Item 7A. Quantitative and Qualitative Disclosures about Market Risk	29
Item 8. Financial Statements and Supplementary Data	30
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	61
Item 9A. Controls and Procedures	61

Item 9B.	Other Information	62
PART III		
Item 10.	Directors, Executive Officers and Corporate Governance	62
Item 11.	Executive Compensation	62
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	63
Item 13.	Certain Relationships and Related Transactions and Director Independence	63
Item 14.	Principal Accountant Fees and Services	63
PART IV		
Item 15.	Exhibits and Financial Statement Schedules	64
Item 16.	Form 10-K Summary	66
	Signatures	67

Information About Forward-Looking Statements

This Annual Report on Form 10-K ("Annual Report") includes and incorporates by reference "forward-looking statements" within the meaning of the federal securities laws. In addition, we, or our executive officers on our behalf, may from time to time make forward-looking statements in reports and other documents we file with the U.S. Securities and Exchange Commission ("SEC") or in connection with oral statements made to the press, potential investors or others. All statements that are not historical facts are "forward-looking statements." Forward-looking statements may be indicated by words or phrases such as "anticipate," "estimate," "plans," "expects," "projects," "should," "will," "believes" or "intends" and similar words and phrases. These statements reflect management's current beliefs and are not guarantees of future performance. They involve risks and uncertainties that could cause actual results to differ materially from those expressed or implied in any forward-looking statement.

Examples of forward-looking statements in this report include but are not limited to statements regarding operating results, the success of our operating plans, our expectations regarding our ability to generate cash and reduce debt and associated interest expense, profit and cash flow expectations, the prospects for newly acquired businesses to be integrated and contribute to future growth and our expectations regarding growth through acquisitions. Important assumptions relating to the forward-looking statements include, among others, demand for our products, the cost, timing and success of product upgrades and new product introductions, raw material costs, expected pricing levels, expected outcomes of pending litigation, competitive conditions and general economic conditions. These assumptions could prove inaccurate. Although we believe that the estimates and projections reflected in the forward-looking statements are reasonable, our expectations may prove to be incorrect. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, but are not limited to:

- general economic conditions;
- difficulty making acquisitions and successfully integrating acquired businesses;
- any unforeseen liabilities associated with future acquisitions;
- limitations on our business imposed by our indebtedness;
- unfavorable changes in foreign exchange rates;
- difficulties associated with exports;
- risks and costs associated with our international sales and operations;
- rising interest rates;
- product liability and insurance risks;
- increased warranty exposure;
- future competition;
- the cyclical nature of some of our markets;
- reduction of business with large customers;
- risks associated with government contracts;
- changes in the supply of, or price for, raw materials, parts and components;
- environmental compliance costs and liabilities;
- risks and costs associated with asbestos-related litigation;
- potential write-offs of our substantial goodwill and other intangible assets;
- our ability to successfully develop new products;
- failure to protect our intellectual property;
- the effect of, or change in, government regulations (including tax);
- economic disruption caused by terrorist attacks, including cybersecurity threats, health crises or other unforeseen events; and
- the factors discussed in Item 1A to this Annual Report under the heading "Risk Factors."

We believe these forward-looking statements are reasonable. However, you should not place undue reliance on any forward-looking statements, which are based on current expectations. Further, forward-looking statements speak only as of the date they are made, and we undertake no obligation to publicly update any of them in light of new information or future events.

PART I

ITEM 1. BUSINESS

Our Business

Roper Technologies, Inc. ("Roper," the "Company," "we," "our" or "us") is a diversified technology company. We operate businesses that design and develop software (both license and software-as-a-service) and engineered products and solutions for a variety of niche end markets; including healthcare, transportation, commercial construction, food, energy, water, education and academic research.

We pursue consistent and sustainable growth in earnings by emphasizing continuous improvement in the operating performance of our existing businesses and by acquiring other businesses that offer high value-added software, services, engineered products and solutions that we believe are capable of achieving growth and maintaining high margins. We compete in many niche markets and believe we are the market leader or a competitive alternative to the market leader in most of these markets.

We were incorporated on December 17, 1981 under the laws of the State of Delaware.

Market Share, Market Expansion, and Product Development

Leadership with Engineered Content for Niche Markets - We maintain a leading position in many of our markets. We believe our market positions are attributable to the technical sophistication of our products and software, the applications expertise used to create our advanced products and systems, and our distribution and service capabilities. Our operating units grow their businesses through new product development and development of new applications and services to satisfy customer needs. In addition, our operating units grow our customer base by expanding our access to customers and entering adjacent markets.

Diversified End Markets and Geographic Reach - We have a global presence, with sales to customers outside the U.S. totaling \$1.2 billion in 2016. Information regarding our international operations is set forth in Note 13 of the Notes to Consolidated Financial Statements included in this Annual Report.

Research and Development - We conduct applied research and development to improve the quality and performance of our products and to develop new technologies and products. Our research and development spending was \$195 million in 2016 as compared to \$164 million and \$148 million in 2015 and 2014, respectively.

Our Business Segments

Our operations are reported in four segments based upon common customers, markets, sales channels, technologies and common cost opportunities. The segments are: Medical & Scientific Imaging, RF Technology, Industrial Technology and Energy Systems & Controls. Financial information about our business segments is presented in Note 13 of the Notes to Consolidated Financial Statements included in this Annual Report.

Medical and Scientific Imaging

Our Medical & Scientific Imaging segment offers products and software in medical applications, and high performance digital imaging products. These products and solutions are provided through eleven reporting units. For 2016, this segment had net sales of \$1.36 billion, representing 36.0% of our total net sales.

Medical Products and Software - We provide diagnostic and laboratory software solutions to healthcare providers and services and technologies to support the diverse and complex needs of alternate site health care providers who deliver services outside of an acute care hospital setting. We also manufacture and sell patient positioning devices and related software for use in radiation oncology, 3-D measurement technology in computer-assisted surgery and supply diagnostic and therapeutic disposable products used in ultrasound imaging for minimally invasive medical procedures. We design and manufacture a non-invasive instrument for portable ultrasound bladder volume measurement and a video laryngoscope designed to enable rapid intubation even in the most difficult settings. In addition, we provide a cloud-based financial analytics and performance software platform to healthcare providers.

Digital Imaging Products and Software - We manufacture and sell extremely sensitive, high-performance electron filters, charged couple device ("CCD") and complementary metal oxide semiconductor ("CMOS") cameras, detectors and related software for a variety of scientific and industrial uses, which require high resolution and/or high speed digital video, including electron microscopy and spectroscopy applications. We sell these products for use within academic, government research, semiconductor, security and other end-user markets such as biological and material science. They are frequently incorporated into products by original equipment manufacturers ("OEMs").

Our Medical & Scientific Imaging segment companies have lead times of up to several months on some of their product sales, although standard products are often shipped within two weeks of receipt of order. Blanket purchase orders are placed by certain OEM and end-users, with continuing requirements for fulfillment over specified periods of time.

RF Technology

Our RF Technology segment provides radio frequency identification ("RFID") communication technology and software solutions that are used primarily in toll and traffic systems, security and access control, campus card systems, card readers, software-as-a-service in the freight matching, commercial construction and food industries, comprehensive application management software for legal and construction firms and metering and remote monitoring applications. These products and solutions are provided through ten reporting units. This segment had sales of \$1.21 billion for the year ended December 31, 2016, representing 31.9% of our total net sales.

Toll and Traffic Systems - We manufacture and sell toll tags and monitoring systems as well as provide transaction and violation processing services for toll and traffic systems to both governmental and private sector entities. In addition, we provide intelligent traffic systems that assist customers in improving traffic flow and infrastructure utilization.

Card Systems/Integrated Security Solutions - We provide card systems and integrated security solutions primarily to education and health care markets. We also provide an integrated nutrition management solution used by food service customers.

RFID Card Readers - We design, develop and manufacture RFID card readers that support most smart cards worldwide. The readers are used in numerous applications and OEM solutions including: attendance management, multi-function printers, mobile, physical access, manufacturing, dispensing, kiosks, point-of-sale and computer logon.

Software-as-a-Service - We maintain electronic marketplaces that connect 1) available capacity of trucking units with the available loads of freight to be moved from location to location throughout North America, 2) food suppliers, distributors and vendors, primarily in the perishable food sector and 3) construction industry professionals.

Comprehensive Application Management Software - We provide 1) enterprise software and information solutions for government contractors, professional services firms and other project-based businesses, 2) comprehensive management software solutions for law and other professional services firms, including business development, calendar/docket matter management, time and billing and case management and 3) construction project management solutions for construction firms which encompass the end-to-end construction process.

Metering and Remote Monitoring - We manufacture and sell meter reading, data logging and pressure control products for use primarily in water and gas applications. We also provide network monitoring, leakage reduction and pressure control services in water and gas distribution networks.

The RF Technology segment companies' product sales reflect a combination of standard products, large engineered projects, and multi-year operations and maintenance contracts. Standard products generally ship within two weeks of receipt of order, and large engineered projects may have lead times of several months. As such, backlog may fluctuate depending upon the timing of large project awards.

Industrial Technology

Our Industrial Technology segment produces fluid handling pumps, materials analysis equipment and consumables, leak testing equipment, flow measurement and metering equipment and water meter and automatic meter reading ("AMR") products and systems. These products and solutions are provided through six reporting units. For 2016, this segment had net sales of \$707 million, representing 18.6% of our total net sales.

Fluid Handling Pumps - We manufacture and sell a wide variety of pumps. These pumps vary significantly in complexity and in pumping method employed, which allows for the movement and application of a diverse range of low and high viscosity liquids, high solids content slurries and chemicals. Our pumps are used in end markets such as oil and gas, agricultural, water and wastewater, chemical and general industrial.

Materials Analysis Equipment and Consumables - We manufacture and sell equipment and supply consumables necessary to prepare material samples for testing and analysis. These products are used mostly within the material science, steel, automotive, electronics, mining and research end-user markets.

Water Meter and AMR Products and Systems - We manufacture and distribute water meter products serving the residential, commercial and industrial water management markets, and several lines of automatic meter reading products and systems serving these markets.

The Industrial Technology segment companies' sales reflect a combination of standard products and specially engineered, application-specific products. Standard products are typically shipped within two weeks of receipt of order. Application-specific products typically ship within 6 to 12 weeks following receipt of order. However, larger project orders and blanket purchase orders for certain OEMs may extend shipment for longer periods.

Energy Systems & Controls

Our Energy Systems & Controls segment principally produces control systems, fluid properties testing equipment, industrial valves and controls, vibration sensors and controls and non-destructive inspection and measurement products and solutions, which are provided through six reporting units. For 2016, this segment had net sales of \$510 million, representing 13.5% of our total net sales.

Control Systems - We manufacture control systems and provide related engineering and commissioning services for turbomachinery applications, primarily in energy markets.

Fluid Properties Testing Equipment - We manufacture and sell test equipment to determine physical and elemental properties, such as sulfur and nitrogen content, flash point, viscosity, freeze point and distillation range of liquids and gases primarily for the petroleum industry.

Sensors, Controls and Valves - We manufacture sensors and control equipment including pressure sensors, temperature sensors, measurement instruments and control software for global rubber, plastics and process industries. We also manufacture and distribute valves, sensors, switches and control products used on engines, compressors, turbines and other powered equipment for the oil and gas, pipeline, power generation, marine engine and general industrial markets. Many of these products are designed for use in hazardous environments.

Non-destructive Inspection and Measurement Instrumentation - We manufacture non-destructive inspection and measurement solutions including measurement probes, robotics, vibration sensors, switches and transmitters. These solutions are applied principally in nuclear energy markets. Many of these products are designed for use in hazardous environments.

The Energy Systems & Controls segment companies' sales reflect a combination of standard products and large engineered projects. Standard products generally ship within two weeks of receipt of order, and large engineered projects may have lead times of several months. As such, backlog may fluctuate depending upon the timing of large project awards.

Materials and Suppliers

We believe most materials and supplies we use are readily available from numerous sources and suppliers throughout the world. However, some components and sub-assemblies are currently available from a limited number of suppliers. Some high-performance components for digital imaging products can be in short supply and/or suppliers have occasional difficulty manufacturing such components to our specifications. We regularly investigate and identify alternative sources where possible, and we believe these conditions equally affect our competitors. Supply shortages have not had a material adverse effect on our sales although delays in shipments have occurred following such supply interruptions.

Backlog

Our backlog includes only firm unfilled orders expected to be recognized as revenue within twelve months. Backlog was \$1.6 billion at December 31, 2016, and \$1.1 billion at December 31, 2015.

Distribution and Sales

Distribution and sales occur through direct sales offices, manufacturers' representatives and distributors. In addition, our Medical & Scientific Imaging segment also sells through value added resellers ("VARs") and OEMs.

Environmental Matters and Other Governmental Regulation

Our operations and properties are subject to laws and regulations relating to environmental protection, including those governing air emissions, water discharges, waste management and workplace safety. We use, generate and dispose of hazardous substances and waste in our operations and could be subject to material liabilities relating to the investigation and clean-up of contaminated properties and related claims. We are required to conform our operations and properties to these laws and adapt to regulatory requirements in all countries as these requirements change. In connection with our acquisitions, we may assume significant environmental liabilities, some of which we may not be aware of, or may not be quantifiable, at the time of acquisition. In addition, new laws and regulations, the discovery of previously unknown contamination or the imposition of new requirements could increase our costs or subject us to new or increased liabilities.

Customers

No customer accounted for 10% or more of net sales for 2016 for any of our segments or for our company as a whole.

Competition

Generally, our products and solutions face significant competition, usually from a limited number of competitors. We believe that we are a leader in most of our markets, and no single company competes with us over a significant number of product lines. Competitors might be large or small in size, often depending on the size of the niche market we serve. We compete primarily on product quality, performance, innovation, technology, price, applications expertise, system and service flexibility, distribution channel access and customer service capabilities.

Patents and Trademarks

In addition to trade secrets, unpatented know-how, and other intellectual property rights, we own or license the rights under a number of patents, trademarks and copyrights relating to certain of our products and businesses. We also employ various methods, including confidentiality and non-disclosure agreements with individuals and companies we do business with, employees, distributors, representatives and customers to protect our trade secrets and know-how. We believe our operating units are not substantially dependent on any single patent, trademark, copyright, or other item of intellectual property or group of patents, trademarks or copyrights.

Employees

As of December 31, 2016, we had 14,155 employees, with 10,751 located in the United States. We have 172 employees who are subject to collective bargaining agreements. We have not experienced any work stoppages and consider our relations with our employees to be good.

Available Information

All reports we file electronically with the SEC, including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and our annual proxy statements, as well as any amendments to those reports, are accessible at no cost on our website at www.ropertech.com as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. These filings are also accessible on the SEC's website at www.sec.gov. You may also read and copy any material we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our Corporate Governance Guidelines; the charters of our Audit Committee, Compensation Committee, and Nominating and Governance Committee; and our Code of Business Conduct and Ethics are also available on our website. Any amendment to the Code of Business Conduct and Ethics and any waiver applicable to our directors, executive officers or senior financial officers will be posted on our website within the time period required by the SEC and the New York Stock Exchange (the "NYSE"). The information posted on our website is not incorporated into this Annual Report.

We have included the Chief Executive Officer and the Chief Financial Officer certifications regarding our public disclosure required by Section 302 of the Sarbanes-Oxley Act of 2002 as Exhibits 31.1 and 31.2 of this report. Additionally, we filed with the NYSE the Chief Executive Officer certification regarding our compliance with the NYSE's Corporate Governance Listing Standards (the "Listing Standards") pursuant to Section 303A.12(a) of the Listing Standards. We filed the certification with the NYSE on June 21, 2016 and our Chief Executive Officer indicated that he was not aware of any violations of the Listing Standards by us.

ITEM 1A. RISK FACTORS

Risks Relating to Our Business

Our indebtedness may affect our business and may restrict our operating flexibility.

As of December 31, 2016, we had \$6.2 billion in total consolidated indebtedness. In addition, we had \$535 million undrawn availability under our senior unsecured credit facility. Subject to restrictions contained in our credit facility, we may incur additional indebtedness in the future, including indebtedness incurred to finance acquisitions.

Our level of indebtedness and the debt servicing costs associated with that indebtedness could have important effects on our operations and business strategy. For example, our indebtedness could:

- place us at a competitive disadvantage relative to our competitors, some of which have lower debt service obligations and greater financial resources;
- limit our ability to borrow additional funds;
- limit our ability to complete future acquisitions;
- limit our ability to pay dividends;
- limit our ability to make capital expenditures; and
- increase our vulnerability to general adverse economic and industry conditions.

Our ability to make scheduled principal payments of, to pay interest on, or to refinance our indebtedness and to satisfy our other debt obligations will depend upon our future operating performance, which may be affected by factors beyond our control. In addition, there can be no assurance that future borrowings or equity financing will be available to us on favorable terms for the payment or refinancing of our indebtedness. If we are unable to service our indebtedness, our business, financial condition and results of operations would be materially adversely affected.

Our credit facility contains covenants requiring us to achieve certain financial and operating results and maintain compliance with specified financial ratios. Our ability to meet the financial covenants or requirements in our credit facility may be affected by events beyond our control, and we may not be able to satisfy such covenants and requirements. A breach of these covenants or our inability to comply with the financial ratios, tests or other restrictions contained in our facility could result in an event of default under this facility. Upon the occurrence of an event of default under our credit facility, and the expiration of any grace periods, the lenders could elect to declare all amounts outstanding under the facility, together with accrued interest, to be immediately due and payable. If this were to occur, our assets may not be sufficient to fully repay the amounts due under this facility or our other indebtedness.

Unfavorable changes in foreign exchange rates may harm our business.

Several of our operating companies have transactions and balances denominated in currencies other than the U.S. dollar. Most of these transactions and balances are denominated in euros, Canadian dollars, British pounds or Danish kroner. Sales by our operating companies whose functional currency is not the U.S. dollar represented 20% of our total net sales for each of the years ended December 31, 2016 and 2015. Unfavorable changes in exchange rates between the U.S. dollar and those currencies could significantly reduce our reported sales and earnings.

We export a significant portion of our products. Difficulties associated with the export of our products could harm our business.

Sales to customers outside the U.S. by our businesses located in the U.S. account for a significant portion of our net sales. These sales accounted for 12% of our net sales for the year ended December 31, 2016 and 13% for the year ended December 31, 2015. We are subject to risks that could limit our ability to export our products or otherwise reduce the demand for these products in our foreign markets. Such risks include, without limitation, the following:

- unfavorable changes in or noncompliance with U.S. and other jurisdictions' export requirements;
- restrictions on the export of technology and related products;
- unfavorable changes in or noncompliance with U.S. and other jurisdictions' export policies to certain countries;
- unfavorable changes in the import policies of our foreign markets; and
- a general economic downturn in our foreign markets.

The occurrence of any of these events could reduce the foreign demand for our products or could limit our ability to export our products and, therefore, could have a material negative effect on our future sales and earnings.

Economic, political and other risks associated with our international operations could adversely affect our business.

As of and for the year ended December 31, 2016, 21% of our net sales and 13% of our long-lived assets, excluding goodwill and intangibles, were attributable to operations outside the U.S. We expect our international operations to contribute materially to our business for the foreseeable future. Our international operations are subject to varying degrees of risk inherent in doing business outside the U.S. including, without limitation, the following:

- adverse changes in a specific country's or region's political or economic conditions, particularly in emerging markets;
- oil price shocks;
- trade protection measures and import or export requirements;
- subsidies or increased access to capital for firms that are currently, or may emerge as, competitors in countries in which we have operations;
- partial or total expropriation;
- potentially negative consequences from changes in tax laws;
- difficulty in staffing and managing widespread operations;
- differing labor regulations;
- differing protection of intellectual property; and
- unexpected changes in regulatory requirements.

The occurrence of any of these events could materially harm our business.

Our growth strategy includes acquisitions. We may not be able to identify suitable acquisition candidates, complete acquisitions or integrate acquisitions successfully.

Our future growth is likely to depend to some degree on our ability to acquire and successfully integrate new businesses. We intend to seek additional acquisition opportunities, both to expand into new markets and to enhance our position in existing markets. There are no assurances, however, that we will be able to successfully identify suitable candidates, negotiate appropriate terms, obtain financing on acceptable terms, complete proposed acquisitions, successfully integrate acquired businesses or expand into new markets. Once acquired, operations may not achieve anticipated levels of revenues or profitability.

Acquisitions involve risks, including difficulties in the integration of the operations, technologies, services and products of the acquired companies and the diversion of management's attention from other business concerns. Although our management will endeavor to evaluate the risks inherent in any particular transaction, there are no assurances that we will properly ascertain all such risks. In addition, prior acquisitions have resulted, and future acquisitions could result, in the incurrence of substantial additional indebtedness and other expenses. Future acquisitions may also result in potentially dilutive issuances of equity securities. Difficulties encountered with acquisitions may have a material adverse effect on our business, financial condition and results of operations.

Product liability, insurance risks and increased insurance costs could harm our operating results.

Our business exposes us to product liability risks in the design, manufacturing and distribution of our products. In addition, certain of our products are used in hazardous environments. We currently have product liability insurance; however, we may not be able to maintain our insurance at a reasonable cost or in sufficient amounts to adequately protect us against losses. We also maintain other insurance policies, including directors' and officers' liability insurance. We believe we have adequately accrued estimated losses, principally related to deductible amounts under our insurance policies, with respect to all product liability and other claims, based upon our past experience and available facts. However, a successful product liability or other claim or series of claims brought against us could have a material adverse effect on our business, financial condition and results of operations. In addition, a significant increase in our insurance costs could have an adverse impact on our operating results.

Our operating results could be adversely affected by a reduction of business with our large customers.

In some of our businesses, we derive a significant amount of revenue from large customers. The loss or reduction of any significant contracts with any of these customers could materially reduce our revenue and cash flows. Additionally, many of our customers are government entities. In many situations, government entities can unilaterally terminate or modify our existing contracts without cause and without penalty to the government agency.

We face intense competition. If we do not compete effectively, our business may suffer.

We face intense competition from numerous competitors. Our products compete primarily on the basis of product quality, performance, innovation, technology, price, applications expertise, system and service flexibility, distribution channel access and established customer service capabilities. We may not be able to compete effectively on all of these fronts or with all of our competitors. In addition, new competitors may emerge, and product lines may be threatened by new technologies or market trends that reduce the value of these product lines. To remain competitive, we must develop new products, respond to new technologies and enhance our existing products in a timely manner. We anticipate that we may have to adjust prices to stay competitive.

Changes in the supply of, or price for, raw materials, parts and components used in our products could affect our business.

The availability and prices of raw materials, parts and components are subject to curtailment or change due to, among other things, suppliers' allocations to other purchasers, interruptions in production by suppliers, changes in exchange rates and prevailing price levels. Some high-performance components for digital imaging products may be in short supply and/or suppliers may have occasional difficulty manufacturing these components to meet our specifications. In addition, some of our products are provided by sole source suppliers. Any change in the supply of, or price for, these parts and components, as well as any increases in commodity prices, particularly copper, could affect our business, financial condition and results of operations.

Environmental compliance costs and liabilities could increase our expenses and adversely affect our financial condition.

Our operations and properties are subject to laws and regulations relating to environmental protection, including air emissions, water discharges, waste management and workplace safety. These laws and regulations can result in the imposition of substantial fines and sanctions for violations and could require the installation of pollution control equipment or operational changes to limit pollution emissions and/or decrease the likelihood of accidental hazardous substance releases. We must conform our operations and properties to these laws and adapt to regulatory requirements in the countries in which we operate as these requirements change.

We use and generate hazardous substances and wastes in our operations and, as a result, could be subject to potentially material liabilities relating to the investigation and clean-up of contaminated properties and to claims alleging personal injury. We have experienced, and expect to continue to experience, costs relating to compliance with environmental laws and regulations. In connection with our acquisitions, we may assume significant environmental liabilities, some of which we may not be aware of at the time of acquisition. In addition, new laws and regulations, stricter enforcement of existing laws and regulations, the discovery of previously unknown contamination or the imposition of new clean-up requirements could require us to incur costs or become the basis for new or increased liabilities that could have a material adverse effect on our business, financial condition and results of operations.

Some of the industries in which we operate are cyclical, and, accordingly, our business is subject to changes in the economy.

Some of the business areas in which we operate are subject to specific industry and general economic cycles. Certain businesses are subject to industry cycles, including but not limited to, the industrial and energy markets. Accordingly, a downturn in these or other markets in which we participate could materially adversely affect us. If demand changes and we fail to respond accordingly, our results of operations could be materially adversely affected. The business cycles of our different operations may occur contemporaneously. Consequently, the effect of an economic downturn may have a magnified negative effect on our business.

Our goodwill and intangible assets are valued at an amount that is high relative to our total assets, and a write-off of our intangible assets would negatively affect our results of operations and total capitalization.

Our total assets reflect substantial intangible assets, primarily goodwill. At December 31, 2016, goodwill totaled \$8.6 billion compared to \$5.8 billion of stockholders' equity, and represented 60% of our total assets of \$14.3 billion. The goodwill results from our acquisitions, representing the excess of cost over the fair value of the net assets we have acquired. We assess at least annually whether there has been an impairment in the value of our goodwill and indefinite economic life intangible assets. If future operating performance at one or more of our business units were to fall significantly below current levels, if competing or alternative technologies emerge, if interest rates rise or if business valuations decline, we could incur a non-cash charge to operating earnings. Any determination requiring the write-off of a significant portion of goodwill or unamortized intangible assets would negatively affect our results of operations and total capitalization, the effect of which could be material.

We depend on our ability to develop new products, and any failure to develop or market new products could adversely affect our business.

The future success of our business will depend, in part, on our ability to design and manufacture new competitive products and to enhance existing products so that our products can be sold with high margins. This product development may require substantial internal investment. There can be no assurance that unforeseen problems will not occur with respect to the development, performance or market acceptance of new technologies or products or that we will otherwise be able to successfully develop and market new products. Failure of our products to gain market acceptance or our failure to successfully develop and market new products could reduce our margins, which would have an adverse effect on our business, financial condition and results of operations.

Our technology is important to our success and our failure to protect this technology could put us at a competitive disadvantage.

Many of our products rely on proprietary technology; therefore we believe that the development and protection of intellectual property rights through patents, copyrights, trade secrets, trademarks, confidentiality agreements and other contractual provisions are important to the future success of our business. Despite our efforts to protect proprietary rights, unauthorized parties or competitors may copy or otherwise obtain and use our products or technology. Actions to enforce these rights may result in substantial costs and diversion of resources and we make no assurances that any such actions will be successful.

We rely on information and technology for many of our business operations which could fail and cause disruption to our business operations.

Our business operations are dependent upon information technology networks and systems to securely transmit, process and store electronic information and to communicate among our locations around the world and with clients and vendors. A shutdown of, or inability to access, one or more of our facilities, a power outage or a failure of one or more of our information technology, telecommunications or other systems could significantly impair our ability to perform such functions on a timely basis. Computer viruses, cyberattacks, other external hazards and human error could result in the misappropriation of assets or sensitive information, corruption of data or operational disruption. If sustained or repeated, such a business interruption, system failure, service denial or data loss and damage could result in a deterioration of our ability to write and process business, provide customer service or perform other necessary business functions.

With the types of licensing vehicles we use to deliver our products to market, including subscription and on-demand pricing for our software and services, the recognition of revenue for the products and services we sell could be delayed from one period to another.

As we continue to vary the ways in which we deliver our products to the market, including expanded use of subscription, term and SaaS offerings, we may be required under existing accounting rules to defer the recognition of revenue from one period to another. The deferral of perpetual licenses revenue may result in significant timing differences between the completion of a sale and the actual recognition of the revenue related to that sale. As a result, the revenue we recognize in a particular period may not be reflective of our actual success in selling our products and solutions in the market.

Offering our products on a SaaS basis presents execution risks.

We offer a number of our products in a SaaS-based environment, and we expect to expand those offerings in the future. As more of our solutions are delivered as SaaS-based solutions, it is uncertain whether our strategies will generate the revenue required to be successful. Any significant costs we incur may reduce the operating margins we have previously achieved. Whether we are successful in this new business model depends on our execution in a number of areas, including ensuring that our SaaS-based offerings meet the performance, reliability and cost expectations of our customers and maintain the security of their data. If we are unable to execute on this strategy, our revenue or financial results may be materially adversely affected.

A breach in the security of our software could harm our reputation, result in a loss of current and potential customers, and subject us to material claims, which could materially harm our operating results and financial condition.

If our security measures are breached, an unauthorized party may obtain access to our data or our users' or customers' data. In addition, cyber-attacks and similar acts could lead to interruptions and delays in customer processing or a loss or breach of a customer's data. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. The risk that these types of events could seriously harm our business is likely to increase as we expand the number of web-based products and services we offer, and operate in more countries.

Regulatory authorities around the world are considering a number of legislative and regulatory proposals concerning data protection. In addition the interpretation and application of consumer and data protection laws in the United States, Europe and elsewhere are often uncertain and in flux. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our data practices. If so, in addition to the possibility of fines, this could result in an order requiring that we change our data practices, which could have an adverse effect on our business and results of operations.

Any security breaches for which we are, or are perceived to be, responsible, in whole or in part, could subject us to legal claims or legal proceedings, including regulatory investigations, which could harm our reputation and result in significant litigation costs and damage awards or settlement amounts. Any imposition of liability, particularly liability that is not covered by insurance or is in excess of insurance coverage, could materially harm our operating results and financial condition. Security breaches also could cause us to lose current and potential customers, which could have an adverse effect on our business. Moreover, we might be required to expend significant financial and other resources to protect further against security breaches or to rectify problems caused by any security breach.

Any business disruptions due to political instability, armed hostilities, incidents of terrorism or natural disasters could adversely impact our financial performance.

If terrorist activity, armed conflict, political instability or natural disasters occur in the U.S. or other locations, such events may negatively impact our operations, cause general economic conditions to deteriorate or cause demand for our products to decline. A prolonged economic slowdown or recession could reduce the demand for our products, and therefore, negatively affect our future sales and profits. Any of these events could have a significant impact on our business, financial condition or results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2. PROPERTIES

Our corporate offices, consisting of 24,000 square feet of leased space, are located at 6901 Professional Parkway East, Sarasota, Florida. We have 120 principal locations around the world to support our operations, of which 51 are manufacturing, assembly and testing facilities, and the remaining 69 locations provide sales, programming, service and administrative support functions. We consider our facilities to be in good operating condition and adequate for their present use and believe we have sufficient capacity to meet our anticipated operating requirements.

The following table summarizes the size, location and usage of our principal properties as of December 31, 2016 (amounts in thousands of square feet).

Segment	Region	Office	Office & Manufacturing	
		Leased	Leased	Owned
Medical & Scientific Imaging	U.S.	309	298	127
	Canada	-	109	-
	Europe	32	64	-
	Asia-Pacific	21	-	-
	Mexico	-	44	-
RF Technology	U.S.	1,164	92	16
	Canada	27	-	-
	Europe	56	-	16
	Asia-Pacific	111	-	-
Industrial Technology	U.S.	18	260	478
	Canada	36	-	-
	Europe	13	136	43
	Asia-Pacific	23	-	-
	Mexico	-	60	-
Energy Systems & Controls	U.S.	-	343	-
	Canada	-	56	-
	Europe	29	28	128
	Asia-Pacific	6	30	33

ITEM 3. LEGAL PROCEEDINGS

Information pertaining to legal proceedings can be found in Note 12 to the Consolidated Financial Statements included in this Annual Report, and is incorporated by reference herein.

ITEM 4. MINE SAFETY DISCLOSURES

None

PART II**ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

Our common stock trades on the NYSE under the symbol "ROP". The table below sets forth the range of high and low sales prices for our common stock as reported by the NYSE as well as cash dividends declared during each of our 2016 and 2015 quarters.

		<u>High</u>	<u>Low</u>	<u>Cash Dividends Declared</u>
2016	4 th Quarter	\$ 188.04	\$ 167.91	\$ 0.35
	3 rd Quarter	182.84	163.33	0.30
	2 nd Quarter	184.66	164.77	0.30
	1 st Quarter	187.56	158.89	0.30
2015	4 th Quarter	\$ 194.83	\$ 157.75	\$ 0.30
	3 rd Quarter	177.08	152.93	0.25
	2 nd Quarter	177.79	167.08	0.25
	1 st Quarter	174.02	145.75	0.25

Based on information available to us and our transfer agent, we believe that as of February 16, 2017 there were 143 record holders of our common stock.

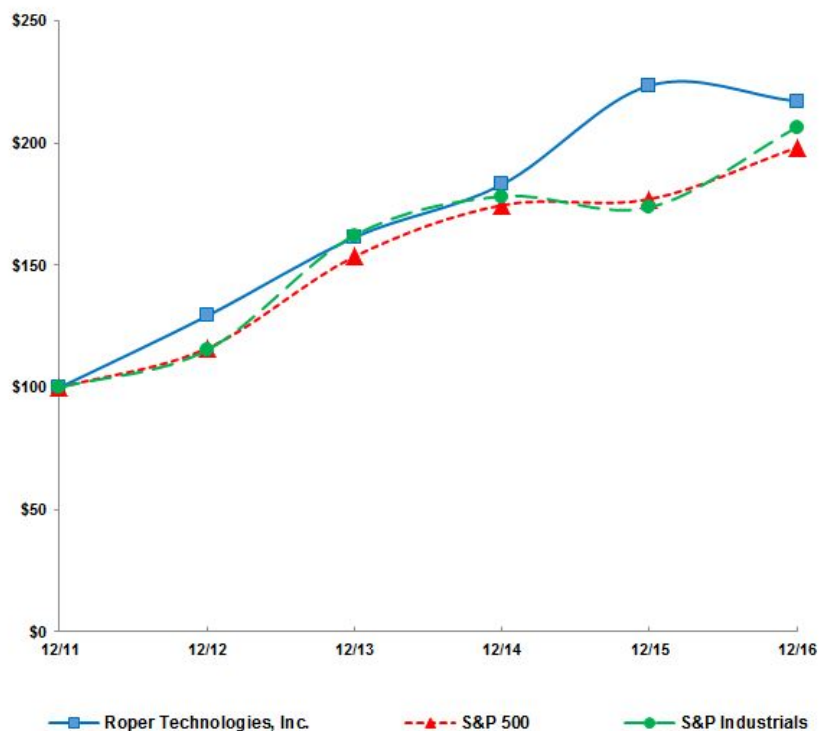
Dividends – We have declared a cash dividend in each quarter since our February 1992 initial public offering and we have annually increased our dividend rate since our initial public offering. In November 2016, our Board of Directors increased the quarterly dividend paid January 23, 2017 to \$0.35 per share from \$0.30 per share, an increase of 17%. The timing, declaration and payment of future dividends will be at the sole discretion of our Board of Directors and will depend upon our profitability, financial condition, capital needs, future prospects and other factors deemed relevant by our Board of Directors.

Recent Sales of Unregistered Securities - In 2016, there were no sales of unregistered securities.

Performance Graph - This performance graph shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act") or otherwise subject to the liabilities under that Section and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act of 1933, as amended, or under the Exchange Act.

The following graph compares, for the five year period ended December 31, 2016, the cumulative total stockholder return for our common stock, the Standard and Poor's 500 Stock Index (the "S&P 500") and the Standard and Poor's 500 Industrials Index (the "S&P 500 Industrials"). Measurement points are the last trading day of each of our fiscal years ended December 31, 2011, 2012, 2013, 2014, 2015 and 2016. The graph assumes that \$100 was invested on December 31, 2011 in our common stock, the S&P 500 and the S&P 500 Industrials and assumes reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

	<u>12/31/11</u>	<u>12/31/12</u>	<u>12/31/13</u>	<u>12/31/14</u>	<u>12/31/15</u>	<u>12/31/16</u>
Roper Technologies, Inc.	100.00	129.26	161.43	183.03	223.53	217.09
S&P 500	100.00	116.00	153.58	174.60	177.01	198.18
S&P 500 Industrials	100.00	115.35	162.27	178.21	173.70	206.46



The information set forth in Item 12 under the heading "Securities Authorized for Issuance under Equity Compensation Plans" is incorporated herein by reference.

ITEM 6. SELECTED FINANCIAL DATA

You should read the table below in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our Consolidated Financial Statements and related notes included in this Annual Report (amounts in thousands, except per share data).

	As of and for the Years ended December 31,				
	2016 ⁽¹⁾	2015 ⁽²⁾	2014 ⁽³⁾	2013 ⁽⁴⁾	2012 ⁽⁵⁾
Operations data:					
Net sales	\$ 3,789,925	\$ 3,582,395	\$ 3,549,494	\$ 3,238,128	\$ 2,993,489
Gross profit	2,332,410	2,164,646	2,101,899	1,882,928	1,671,717
Income from operations	1,054,563	1,027,918	999,473	842,361	757,587
Net earnings	658,645	696,067	646,033	538,293	483,360
Per share data:					
Basic earnings per share	\$ 6.50	\$ 6.92	\$ 6.47	\$ 5.43	\$ 4.95
Diluted earnings per share	6.43	6.85	6.40	5.37	4.86
Dividends declared per share	\$ 1.2500	\$ 1.0500	\$ 0.8500	0.6950	\$ 0.5775
Balance sheet data:					
Working capital ⁽⁶⁾	\$ 331,229	\$ 897,919	\$ 884,158	\$ 730,246	\$ 159,887
Total assets ⁽⁷⁾	14,324,927	10,168,365	8,400,185	8,169,120	7,059,975
Long-term debt, net of current portion ⁽⁷⁾	5,808,561	3,264,417	2,190,282	2,437,975	1,492,533
Stockholders' equity	5,788,865	5,298,947	4,755,360	4,213,050	3,687,726

(1) Includes results from the acquisitions of CliniSys Group Ltd. from January 7, 2016, PCI Medical Inc. from March 17, 2016, GeneInsight Inc. from April 1, 2016, iSqFt Holdings Inc. (d/b/a ConstructConnect) from October 31, 2016, UNICConnect LC from November 10, 2016 and Deltek Inc. from December 28, 2016.

(2) Includes results from the acquisitions of Strata Decision Technologies LLC from January 21, 2015, SoftWriters Inc. from February 9, 2015, Data Innovations LLC from March 4, 2015, On Center Software LLC from July 20, 2015, RF IDEas Inc. from September 1, 2015, Atlantic Health Partners LLC from September 4, 2015, Aderant Holdings Inc. from October 21, 2015, Atlas Database Software Corp. from October 26, 2015, Black Diamond Advanced Technologies through March 20, 2015 and Abel Pumps through October 2, 2015.

(3) Includes results from the acquisitions of Foodlink Holdings Inc. from July 2, 2014, Innovative Product Achievements LLC from August 5, 2014, Strategic Healthcare Programs Holdings LLC from August 14, 2014.

(4) Includes results from the acquisitions of Managed Health Care Associates Inc. from May 1, 2013 and Advanced Sensors Ltd. from October 4, 2013.

(5) Includes results from the acquisition of Sunquest Information Systems Inc. from August 22, 2012.

(6) At December 31, 2016, there were \$399 million of senior notes, net of debt issuance costs, due November 15, 2017 and at December 31, 2012, there were \$499 million of senior notes, net of debt issuance costs (adjusted due to the retrospective adoption of an accounting standard update which requires that our senior notes be shown net of debt issuance costs), that matured on August 15, 2013, thus requiring a classification as short-term debt, included in working capital.

(7) Total assets and Long-term debt, net of current portion for 2012 through 2014 have been adjusted due to the retrospective adoption of an accounting standard update which requires that our senior notes be shown net of debt issuance costs. The adjustment amounts were \$12,749, \$15,861 and \$10,574 for the years ended December 31, 2014, 2013 and 2012, respectively.

You should read the following discussion in conjunction with "Selected Financial Data" and our Consolidated Financial Statements and related notes included in this Annual Report.

Overview

We are a diversified technology company. We operate businesses that design and develop software (both license and software-as-a-service) and engineered products and solutions for a variety of niche end markets; including healthcare, transportation, commercial construction, food, energy, water, education and academic research.

We pursue consistent and sustainable growth in earnings and cash flow by emphasizing continuous improvement in the operating performance of our existing businesses and by acquiring other carefully selected businesses. Our acquisitions have represented both additions to existing businesses and new strategic platforms.

In 2016, we acquired CliniSys Group Ltd. ("CliniSys"), PCI Medical Inc., GeneInsight Inc., iSqFt Holdings Inc. (d/b/a ConstructConnect) ("ConstructConnect"), UNICconnect LC, and Project Diamond Holdings Corp. (d/b/a Deltek Inc). The acquisitions both expanded and complemented our existing technologies.

Application of Critical Accounting Policies

Our Consolidated Financial Statements are prepared in conformity with generally accepted accounting principles in the United States ("GAAP"). A discussion of our significant accounting policies can also be found in the notes to our Consolidated Financial Statements for the year ended December 31, 2016 included in this Annual Report.

GAAP offers acceptable alternative methods for accounting for certain issues affecting our financial results, such as determining inventory cost, depreciating long-lived assets and recognizing revenue. We have not changed the application of acceptable accounting methods or the significant estimates affecting the application of these principles in the last three years in a manner that had a material effect on our financial statements.

The preparation of financial statements in accordance with GAAP requires the use of estimates, assumptions, judgments and interpretations that can affect the reported amounts of assets, liabilities, revenues and expenses, the disclosure of contingent assets and liabilities and other supplemental disclosures.

The development of accounting estimates is the responsibility of our management. Our management discusses those areas that require significant judgments with the audit committee of our Board of Directors. The audit committee has reviewed all financial disclosures in our annual filings with the SEC. Although we believe the positions we have taken with regard to uncertainties are reasonable, others might reach different conclusions and our positions can change over time as more information becomes available. If an accounting estimate changes, its effects are accounted for prospectively or through a cumulative catch up adjustment.

Our most significant accounting uncertainties are encountered in the areas of accounts receivable collectibility, inventory valuation, future warranty obligations, revenue recognition (percentage-of-completion), income taxes and goodwill and indefinite-lived asset analyses. These issues affect each of our business segments and are evaluated using a combination of historical experience, current conditions and relatively short-term forecasting.

Accounts receivable collectibility is based on the economic circumstances of customers and credits given to customers after shipment of products, including in certain cases credits for returned products. Accounts receivable are regularly reviewed to determine customers who have not paid within agreed upon terms, whether these amounts are consistent with past experiences, what historical experience has been with amounts deemed uncollectible and the impact that economic conditions might have on collection efforts in general and with specific customers. The returns and other sales credit allowance is an estimate of customer returns, exchanges, discounts or other forms of anticipated concessions and is treated as a reduction in revenue. The returns and other sales credits histories are analyzed to determine likely future rates for such credits. At December 31, 2016, our allowance for doubtful accounts receivable was \$12.2 million and our allowance for sales returns and sales credits was \$2.3 million, for a total of \$14.5 million, or 2.3% of total gross accounts receivable. This percentage is influenced by the risk profile of the underlying receivables, and the timing of write-offs of accounts deemed uncollectible. The total allowance at December 31, 2016 was \$2.1 million higher than at December 31, 2015. The allowance will continue to fluctuate as a percentage of sales based on specific identification of allowances needed due to changes in our business, the write-off of uncollectible receivables, and the addition of reserve balances at acquired businesses.

We regularly compare inventory quantities on hand against anticipated future usage, which we determine as a function of historical usage or forecasts related to specific items in order to evaluate obsolescence and excessive quantities. When we use historical usage, this information is also qualitatively compared to business trends to evaluate the reasonableness of using historical information as an estimate of future usage. At December 31, 2016, inventory reserves for excess and obsolete inventory were \$37.2 million, or 17.0% of gross inventory cost, as compared to \$34.0 million, or 15.2% of gross inventory cost, at December 31, 2015. The inventory reserve as a percent of gross inventory cost will continue to fluctuate based upon specific identification of reserves needed based upon changes in our business as well as the physical disposal of obsolete inventory.

Most of our sales are covered by warranty provisions that generally provide for the repair or replacement of qualifying defective items for a specified period after the time of sale, typically 12 to 24 months. Future warranty obligations are evaluated using, among other factors, historical cost experience, product evolution and customer feedback. Our expense for warranty obligations was less than 1% of net sales for each of the years ended December 31, 2016, 2015 and 2014.

Revenues related to the use of the percentage-of-completion method of accounting are dependent on total costs incurred compared with total estimated costs for a project. During the years ended December 31, 2016, 2015 and 2014 we recognized revenue of \$241 million, \$253 million and \$266 million, respectively, using this method. Percentage-of-completion is used primarily for major turn-key, longer term toll and traffic and energy projects and installations of large software application projects. At December 31, 2016, \$260 million of revenue related to unfinished percentage-of-completion contracts had yet to be recognized. Contracts accounted for under this method are generally not significantly different in profitability from revenues accounted for under other methods.

Income taxes can be affected by estimates of whether and within which jurisdictions future earnings will occur and if, how and when cash is repatriated to the U.S., combined with other aspects of an overall income tax strategy. Additionally, taxing jurisdictions could retroactively disagree with our tax treatment of certain items, and some historical transactions have income tax effects going forward. Accounting rules require these future effects to be evaluated using current laws, rules and regulations, each of which can change at any time and in an unpredictable manner. During 2016, our effective income tax rate was 30.0%, which was 60 basis points lower than the 2015 rate of 30.6%. The decrease was due to the recognition of \$15.3 million in excess tax benefits in the current year in accordance with an accounting standards update related to stock compensation adopted in the first quarter of 2016 (see Note 1 of the Notes to Consolidated Financial Statements), as well as the non-recurrence of the 2015 taxable gain on the divestiture of Abel Pumps which was partially offset by discrete tax benefits from settlements of tax matters in 2015. We expect the effective tax rate for 2017 to be approximately 30%.

We account for goodwill in a purchase business combination as the excess of the cost over the estimated fair value of net assets acquired. Goodwill, which is not amortized, is tested for impairment on an annual basis in conjunction with our annual forecast process during the fourth quarter, (or an interim basis if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value).

When testing goodwill for impairment, we have the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If we elect to perform a qualitative assessment and determine that an impairment is more likely than not, we are then required to perform the two-step quantitative impairment test; otherwise, no further analysis is required. Under the qualitative assessment, we consider various qualitative factors, including macroeconomic conditions, relevant industry and market trends, cost factors, overall financial performance, other entity-specific events and events affecting the reporting unit that could indicate a potential change in the fair value of our reporting unit or the composition of its carrying values. We also consider the specific future outlook for the reporting unit.

We also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. The first step utilizes both an income approach (discounted cash flows) and a market approach consisting of a comparable company earnings multiples methodology to estimate the fair value of a reporting unit. To determine the reasonableness of the estimated fair values, we review the assumptions to ensure that neither the income approach nor the market approach provides significantly different valuations. If the estimated fair value exceeds the carrying value, no further work is required and no impairment loss is recognized. If the carrying value exceeds the estimated fair value, the goodwill of the reporting unit is potentially impaired and then the second step would be completed to measure the impairment loss by calculating the implied fair value of goodwill by deducting the fair value of all tangible and intangible net assets (including unrecognized intangible assets) of the reporting unit from the fair value of the reporting unit. If the implied fair value of goodwill is less than the carrying value of goodwill, an impairment loss would be recognized.

Key assumptions used in the income and market approaches are updated when the analysis is performed for each reporting unit. Various assumptions are utilized including forecasted operating results, strategic plans, economic projections, anticipated future cash flows, the weighted-average cost of capital, comparable transactions, market data and earnings multiples. While we use reasonable and timely information to prepare our cash flow and discount rate assumptions, actual future cash flows or market conditions could differ significantly and could result in future non-cash impairment charges related to recorded goodwill balances.

We have 33 reporting units with individual goodwill amounts ranging from zero to \$2.2 billion. In 2016, we performed our annual impairment test in the fourth quarter for all reporting units, excluding those acquired in the fourth quarter of 2016. We conducted our analysis qualitatively and assessed whether it was more likely than not that the respective fair value of these reporting units was less than the carrying amount. We determined that impairment of goodwill was not likely in 28 of our reporting units and thus we were not required to perform a quantitative analysis for these reporting units. For the remaining five reporting units we performed our quantitative analysis and concluded that the fair value of each of these five reporting units was substantially in excess of its carrying value with no impairment indicated as of December 31, 2016. Recently acquired reporting units generally represent the highest risk of impairment, which typically decreases as the businesses are integrated into our enterprise. Negative industry or economic trends, disruptions to our business, actual results significantly below projections, unexpected significant changes or planned changes in the use of the assets, divestitures and market capitalization declines may have a negative effect on the fair value of our reporting units.

Business combinations can also result in other intangible assets being recognized. Amortization of intangible assets, if applicable, occurs over their estimated useful lives. Trade names that are determined to have an indefinite useful economic life are not amortized, but separately tested for impairment during the fourth quarter of the fiscal year or on an interim basis if an event occurs that indicates the fair value is more likely than not below the carrying value. We first qualitatively assess whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If necessary, we conduct a quantitative review using the relief-from-royalty method, which we believe to be an acceptable methodology due to its common use by valuations specialists in determining the fair value of intangible assets. This methodology assumes that, in lieu of ownership, a third party would be willing to pay a royalty in order to exploit the related benefits of these assets. The fair value of each trade name is determined by applying a royalty rate to a projection of net sales discounted using a risk-adjusted rate of capital. Each royalty rate is determined based on the profitability of the reporting unit to which it relates and observed market royalty rates. Sales growth rates are determined after considering current and future economic conditions, recent sales trends, discussions with customers, planned timing of new product launches or other variables. Reporting units resulting from recent acquisitions generally represent the highest risk of impairment, which typically decreases as the businesses are integrated into our enterprise and positioned for improved future sales growth.

The assessment of fair value for impairment purposes requires significant judgments to be made by management. Although our forecasts are based on assumptions that are considered reasonable by management and consistent with the plans and estimates management uses to operate the underlying businesses, there is significant judgment in determining the expected results attributable to the reporting units. Changes in estimates or the application of alternative assumptions could produce significantly different results. No impairment resulted from the annual reviews performed in 2016.

We evaluate whether there has been an impairment of identifiable intangible assets with definite useful economic lives, or of the remaining life of such assets, when certain indicators of impairment are present. In the event that facts and circumstances indicate that the cost or remaining period of amortization of any asset may be impaired, an evaluation of recoverability would be performed. If an evaluation is required, the estimated future gross, undiscounted cash flows associated with the asset would be compared to the asset's carrying amount to determine if a write-down to fair value or a revision in the remaining amortization period is required.

Results of Operations

The following table sets forth selected information for the years indicated. Dollar amounts are in thousands and percentages are of net sales. Percentages may not foot due to rounding.

	Years ended December 31,		
	2016	2015	2014
Net sales:			
Medical & Scientific Imaging ⁽¹⁾	\$ 1,362,813	\$ 1,215,318	\$ 1,080,309
RF Technology ⁽²⁾	1,210,264	1,033,951	950,227
Industrial Technology ⁽³⁾	706,625	745,381	827,145
Energy Systems & Controls	510,223	587,745	691,813
Total	\$ 3,789,925	\$ 3,582,395	\$ 3,549,494
Gross margin:			
Medical & Scientific Imaging	73.2%	74.0%	72.1%
RF Technology	56.7	53.4	52.8
Industrial Technology	50.6	49.8	50.5
Energy Systems & Controls	57.1	58.1	58.3
Total	61.5%	60.4%	59.2%
Segment operating margin:			
Medical & Scientific Imaging	35.0%	36.4%	34.8%
RF Technology	30.8	30.2	28.5
Industrial Technology	28.7	28.8	29.9
Energy Systems & Controls	25.4	27.6	29.3
Total	31.2%	31.6%	30.9%
Corporate administrative expenses	(3.4)%	(2.9)%	(2.8)%
Income from continuing operations	27.8	28.7	28.2
Interest expense, net	(2.9)	(2.4)	(2.2)
Other income/(expense)	(0.1)	1.6	-
Income from continuing operations before taxes	24.8	28.0	26.0
Income taxes	(7.4)	(8.5)	(7.8)
Net earnings	17.4%	19.4%	18.2%

(1) Includes results from the acquisitions of Innovative Product Achievements LLC from August 5, 2014, Strategic Healthcare Programs Holdings LLC from August 14, 2014, Strata Decision Technologies LLC from January 21, 2015, SoftWriters Inc. from February 9, 2015, Data Innovations LLC from March 4, 2015, Atlantic Health Partners LLC from September 4, 2015, Atlas Database Software Corp. from October 26, 2015, CliniSys from January 7, 2016, PCI Medical from March 17, 2016, GeneInsight from April 1, 2016 and UNICConnect from November 10, 2016.

(2) Includes results from the acquisitions of Foodlink Holdings Inc. from July 2, 2014, On Center Software LLC from July 20, 2015, RF Ideas Inc. from September 1, 2015, Aderant Holdings Inc. from October 21, 2015, Black Diamant Advanced Technologies through March 20, 2015, ConstructConnect from October 31, 2016 and Deltek from December 28, 2016.

(3) Includes results from Abel Pumps through October 2, 2015.

Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

Net sales for the year ended December 31, 2016 were \$3.79 billion as compared to sales of \$3.58 billion for the year ended December 31, 2015, an increase of 5.8%. The increase was the result of contributions from acquisitions of 6.8%, negative organic growth of 0.3% and a negative foreign exchange impact of 0.7%.

Our Medical & Scientific Imaging segment reported a \$147 million or 12% increase in net sales for the year ended December 31, 2016 over the year ended December 31, 2015. Acquisitions contributed 9%, organic sales increased 4% and the negative foreign exchange impact was 1%. The increase in organic sales was due to increased sales in our medical businesses, led by NDI and Verathon. Gross margin decreased to 73.2% in the year ended December 31, 2016 from 74.0% in the year ended December 31, 2015, due primarily to product mix. Selling, general and administrative ("SG&A") expenses as a percentage of net sales increased to 38.2% in the year ended December 31, 2016 as compared to 37.7% in the year ended December 31, 2015, due to a higher SG&A structure in our medical businesses. Operating margin was 35.0% in the year ended December 31, 2016 as compared to 36.4% in the year ended December 31, 2015.

In our RF Technology segment, net sales for the year ended December 31, 2016 increased by \$176 million or 17% over the year ended December 31, 2015. Acquisitions net of the divestiture of the Black Diamond Advanced Technology business added 15%, organic sales increased by 3%, and the negative foreign exchange impact was 1%. The increase in organic sales was due primarily to increased sales in our software businesses offset in part by the completion of large service contracts in our toll and traffic businesses in 2015. Gross margin was 56.7% in 2016 as compared to 53.4% in the prior year due to product mix in our toll and traffic businesses as well as an increased percentage of sales at our software businesses which have a higher gross margin. SG&A expenses as a percentage of sales in the year ended December 31, 2016 increased to 25.9%, as compared to 23.3% in the prior year due primarily to an increased percentage of sales at our software businesses which have a higher SG&A structure. Operating margin was 30.8% in 2016 as compared to 30.2% in 2015.

Net sales for our Industrial Technology segment decreased by \$39 million or 5.2% for the year ended December 31, 2016 from the year ended December 31, 2015. The divestiture of the Abel Pumps business in 2015 accounted for a negative 3.1%, organic sales decreased by 1.5% and the negative foreign exchange impact was 0.6%. The decrease in organic sales was due primarily to decreased sales in those fluid handling businesses that serve oil and gas markets, offset in part by increased sales in our water metering business. Gross margin increased to 50.6% for the year ended December 31, 2016 as compared to 49.8% in the year ended December 31, 2015 due to product mix. SG&A expenses as a percentage of net sales were 21.9%, as compared to 21.0% in the prior year, due primarily to negative leverage on lower sales volume. The resulting operating margin was 28.7% in the year ended December 31, 2016 as compared to 28.8% in the year ended December 31, 2015.

In our Energy Systems & Controls segment, net sales for the year ended December 31, 2016 decreased by \$78 million or 13% from the year ended December 31, 2015. Organic sales decreased by 12% due to decreased sales in oil and gas products, including safety systems and valves, and the negative foreign exchange impact was 1%. Gross margin decreased to 57.1% in the year ended December 31, 2016 as compared to 58.1% in the year ended December 31, 2015 and SG&A expenses as a percentage of net sales increased to 31.7% as compared to 30.5% in the prior year, both of which were due negative leverage on lower sales volume. Operating margin was 25.4% in the year ended December 31, 2016 as compared to 27.6% in the year ended December 31, 2015.

Corporate expenses increased by \$24.7 million to \$127.5 million, or 3.4% of sales, in 2016 as compared to \$102.8 million, or 2.9% of sales, in 2015. The increase was due primarily to increased equity compensation costs as a result of both an increase in the number of shares granted in the current year and increases in our common stock price and increased costs related to acquisitions.

Interest expense increased \$27.3 million, or 32.5%, for the year ended December 31, 2016 compared to the year ended December 31, 2015. The increase is due primarily to higher average debt balances to fund current year acquisitions as well as higher average interest rates throughout 2016.

Other expense of \$1.5 million for the year ended December 31, 2016 was composed primarily of foreign exchange losses at our non-U.S. based companies, offset in part by royalty income. Other income of \$58.7 million for the year ended December 31, 2015 was composed primarily of the \$70.9 million gain from the divestiture of Abel Pumps (see Note 2 of the Notes to Consolidated Financial Statements included in this Annual Report), offset in part by a \$9.5 million impairment charge on a minority investment.

During 2016, our effective income tax rate was 30.0%, which was 60 basis points lower than the 2015 rate of 30.6%. The decrease was due to the recognition of \$15.3 million in excess tax benefits in the current year in accordance with an ASU related to stock compensation adopted in the first quarter of 2016 (see Note 1 of the Notes to Consolidated Financial Statements), as well as the non-recurrence of the 2015 taxable gain on the divestiture of Abel Pumps which was partially offset by discrete tax benefits from settlements of tax matters in 2015.

At December 31, 2016, the functional currencies of most of our non-U.S. subsidiaries were weaker, and the Canadian dollar was stronger, against the U.S. dollar compared to currency exchange rates at December 31, 2015. The net result of these changes led to a pre-tax decrease in the foreign exchange component of comprehensive earnings of \$115 million in the year ended December 31, 2016. Approximately \$52 million of this amount related to goodwill and is not expected to directly affect our projected future cash flows. For the entire year of 2016, operating profit decreased by less than 1% due to fluctuations in non-U.S. currencies.

The following table summarizes our net order information for the years ended December 31, 2016 and 2015 (dollar amounts in thousands).

	<u>2016</u>	<u>2015</u>	<u>change</u>
Medical & Scientific Imaging	\$ 1,399,007	\$ 1,235,143	13.3%
RF Technology	1,278,246	1,024,999	24.7
Industrial Technology	704,622	731,810	(3.7)
Energy Systems & Controls	514,300	555,672	(7.4)
Total	<u>\$ 3,896,175</u>	<u>\$ 3,547,624</u>	<u>9.8%</u>

The increase in orders was due to orders from acquisitions which added 8%, organic growth of 3% and a 1% negative foreign exchange impact.

The following table summarizes order backlog information at December 31, 2016 and 2015 (dollar amounts in thousands). We include in backlog only orders that are expected to be recognized as revenue within twelve months. The increase in backlog was due to acquisitions which added 37% and internal growth of 10%.

	<u>2016</u>	<u>2015</u>	<u>change</u>
Medical & Scientific Imaging	\$ 423,616	\$ 373,213	13.5%
RF Technology	991,212	538,877	83.9
Industrial Technology	65,259	68,002	(4.0)
Energy Systems & Controls	92,309	90,365	2.2
Total	<u>\$ 1,572,396</u>	<u>\$ 1,070,457</u>	<u>46.9%</u>

Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

Net sales for the year ended December 31, 2015 were \$3.58 billion as compared to sales of \$3.55 billion for the year ended December 31, 2014, an increase of 1%. The increase was the result of contributions from acquisitions of 4%, negative organic growth of 0.3% and a negative foreign exchange impact of 3%.

Our Medical & Scientific Imaging segment reported a \$135 million or 12.5% increase in net sales for the year ended December 31, 2015 over the year ended December 31, 2014. Acquisitions contributed 11.5%, organic sales increased 3.8% and the negative foreign exchange impact was 2.8%. The increase in organic sales was due to increased sales in our medical businesses, led by Verathon and Managed Health Care Associates ("MHA"). Gross margin increased to 74.0% in the year ended December 31, 2015 from 72.1% in the year ended December 31, 2014, due primarily to additional sales from medical products which have a higher gross margin. Selling, general and administrative ("SG&A") expenses as a percentage of net sales were relatively unchanged at 37.7% in the year ended December 31, 2015 as compared to 37.4% in the year ended December 31, 2014. Operating margin was 36.4% in the year ended December 31, 2015 as compared to 34.8% in the year ended December 31, 2014.

In our RF Technology segment, net sales for the year ended December 31, 2015 increased by \$84 million or 9% over the year ended December 31, 2014. Organic sales increased by 6%, acquisitions net of the divestiture of the Black Diamond Advanced Technology business added 4% and the negative foreign exchange impact was 1%. The increase in organic sales was due primarily to growth in our toll and traffic and freight matching businesses. Gross margin was 53.4% in 2015 as compared to 52.8% in the prior year due to leverage on higher sales volume and product mix. SG&A expenses as a percentage of sales in the year ended December 31, 2015 were 23.3%, a decrease from 24.3% in the prior year due to operating leverage on higher sales volume. Operating margin was 30.2% in 2015 as compared to 28.5% in 2014.

Net sales for our Industrial Technology segment decreased by \$82 million or 10% for the year ended December 31, 2015 from the year ended December 31, 2014. Organic sales decreased by 4%, the negative foreign exchange impact was 4% and the divestiture of the Abel Pumps business accounted for a negative 2%. The decrease in organic sales was due primarily to decreased sales in those fluid handling businesses that serve oil and gas markets. Gross margin decreased to 49.8% for the year ended December 31, 2015 as compared to 50.5% in the year ended December 31, 2014 due to negative leverage on lower sales volume. SG&A expenses as a percentage of net sales were 21.0%, as compared to 20.5% in the prior year, due primarily to negative leverage on lower sales volume. The resulting operating margin was 28.8% in the year ended December 31, 2015 as compared to 29.9% in the year ended December 31, 2014.

In our Energy Systems & Controls segment, net sales for the year ended December 31, 2015 decreased by \$104 million or 15% from the year ended December 31, 2014. Organic sales decreased by 10% due to decreased sales in oil and gas products, including safety systems and valves, and the negative foreign exchange impact was 5%. Gross margin was relatively unchanged at 58.1% in the year ended December 31, 2015, compared to 58.3% in the year ended December 31, 2014. SG&A expenses as a percentage of net sales were 30.5% as compared to 28.9% in the prior year due negative leverage on lower sales volume. Operating margin was 27.6% in the year ended December 31, 2015 as compared to 29.3% in the year ended December 31, 2014.

Corporate expenses increased by \$4.6 million to \$102.8 million, or 2.9% of sales, in 2015 as compared to \$98.2 million, or 2.8% of sales, in 2014. The increase was due primarily to increased costs related to acquisitions.

Interest expense increased \$5.6 million, or 7.1%, for the year ended December 31, 2015 compared to the year ended December 31, 2014. The increase is due primarily to higher average debt balances offset in part by lower average interest rates throughout 2015.

Other income of \$58.7 million for the year ended December 31, 2015 was composed primarily of the \$70.9 million gain from the divestiture of Abel Pumps (see Note 2 of the Notes to Consolidated Financial Statements included in this Annual Report), offset in part by a \$9.5 million impairment charge on a minority investment. Other income of \$0.6 million for the year ended December 31, 2014 was composed of royalty income and foreign exchange gains at our non-U.S. based companies, offset in part by losses from asset disposals.

During 2015, our effective income tax rate was 30.6%, which was 70 basis points higher than the 2014 rate of 29.9%. The taxable gain on the divestiture of Abel Pumps led to an increase of 130 basis points, and was offset in part by discrete tax benefits from settlements of tax matters.

At December 31, 2015, the functional currencies of most of our non-U.S. subsidiaries were weaker against the U.S. dollar compared to currency exchange rates at December 31, 2014. The net result of these changes led to a pre-tax decrease in the foreign exchange component of comprehensive earnings of \$146 million in the year ended December 31, 2015. Approximately \$62 million of this amount related to goodwill and is not expected to directly affect our projected future cash flows. For the entire year of 2015, operating profit decreased by approximately 2% due to fluctuations in non-U.S. currencies.

The following table summarizes our net order information for the years ended December 31, 2015 and 2014 (dollar amounts in thousands).

	<u>2015</u>	<u>2014</u>	<u>change</u>
Medical & Scientific Imaging	\$ 1,235,143	\$ 1,081,190	14.2%
RF Technology	1,024,999	955,831	7.2
Industrial Technology	731,810	808,921	(9.5)
Energy Systems & Controls	555,672	692,136	(19.7)
Total	<u>\$ 3,547,624</u>	<u>\$ 3,538,078</u>	<u>0.3%</u>

The increase in orders was due to orders from acquisitions which added 5%, offset by negative organic growth of 2% and a 3% negative foreign exchange impact.

The following table summarizes order backlog information at December 31, 2015 and 2014 (dollar amounts in thousands). We include in backlog only orders that are expected to be recognized as revenue within twelve months.

	<u>2015</u>	<u>2014</u>	<u>change</u>
Medical & Scientific Imaging	\$ 373,213	\$ 296,098	26.0%
RF Technology	538,877	520,727	3.5
Industrial Technology	68,002	97,507	(30.3)
Energy Systems & Controls	90,365	126,838	(28.8)
Total	<u>\$ 1,070,457</u>	<u>\$ 1,041,170</u>	<u>2.8%</u>

Financial Condition, Liquidity and Capital Resources

Selected cash flows for the years ended December 31, 2016, 2015 and 2014 are as follows (in millions):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Cash provided by/(used in):			
Operating activities	\$ 964	\$ 929	\$ 840
Investing activities	(3,753)	(1,698)	(348)
Financing activities	2,805	996	(298)

Operating activities - The increase in cash provided by operating activities in 2016 was primarily due to increased earnings net of non-cash charges and higher deferred revenue balances due to an increased percentage of revenue from software and other subscription based products, offset in part by income tax payments in the first quarter of 2016 related to the gain on the sale of the Abel Pumps business in the fourth quarter of 2015. The increase in cash provided by operating activities in 2015 was due to increased earnings net of intangible amortization related to acquisitions, the collection of \$49 million of receivables due from the Puerto Rico Highways and Transportation Authority and higher deferred revenue balances due to an increased percentage of revenue from software and other subscription based products.

Investing activities - Cash used in investing activities during 2016, 2015 and 2014 was primarily for business acquisitions. Cash received from investing activities in 2015 was primarily proceeds from the sale of the Abel Pumps business.

Financing activities - Cash used in financing activities in all periods presented was primarily debt repayments as well as dividends paid to stockholders. Cash provided by financing activities during 2016 was primarily from the issuance of \$1.2 billion of senior notes and revolving debt borrowings for acquisitions. Cash provided by financing activities during 2015 was primarily the issuance of \$900 million of senior notes and revolving debt borrowings for acquisitions.

Net working capital (current assets, excluding cash, less total current liabilities, excluding debt) was a negative \$25 million at December 31, 2016 compared to \$126 million at December 31, 2015, due primarily to increases in deferred revenue balances due to an increased percentage of revenue from software and other subscription based products. We acquired negative net working capital of \$128 million through business acquisitions during 2016. The negative acquired working capital was due primarily to \$203 million in deferred revenue balances.

Total debt was \$6.2 billion at December 31, 2016 (51.8% of total capital) compared to \$3.3 billion at December 31, 2015 (38.3% of total capital). Our increased debt at December 31, 2016 compared to December 31, 2015 was due to debt borrowings for 2016 acquisitions.

On December 19, 2016, we completed a public offering of \$500 million aggregate principal amount of 2.80% senior unsecured notes due December 15, 2021, issued at 99.843% of their principal amount, and \$700 million aggregate principal amount of 3.80% senior unsecured notes due December 15, 2026, issued at 99.984% of their principal amount. Net proceeds of \$1.19 billion were used in the acquisition of Deltek (see Note 2 of the Notes to Consolidated Financial Statements). The senior notes are unsecured senior obligations of the Company and rank senior in right of payment with all of our existing and future subordinated indebtedness and rank equally in right of payment with all of our existing and future unsecured senior indebtedness. The notes are effectively subordinated to any of our existing and future secured indebtedness to the extent of the value of the collateral securing such indebtedness. The notes are not guaranteed by any of our subsidiaries and are effectively subordinated to all existing and future indebtedness and other liabilities of our subsidiaries.

The notes bear interest at a fixed rate of 2.80% and 3.80% per year, respectively, payable semi-annually in arrears on June 15 and December 15 of each year, beginning June 15, 2017.

We may redeem some or all of these notes at any time or from time to time, at 100% of their principal amount, plus a make-whole premium based on a spread to U.S. Treasury securities.

On September 23, 2016, we entered into a new five-year unsecured credit facility (the "2016 Facility") with JPMorgan Chase Bank, N.A., as administrative agent, and a syndicate of lenders, which replaced our previous unsecured credit facility, dated as of July 27, 2012, as amended as of October 28, 2015 (the "2012 Facility"). The 2016 Facility comprises a five year \$2.50 billion revolving credit facility, which includes availability of up to \$150.0 million for letters of credit. We may also, subject to compliance with specified conditions, request term loans or additional revolving credit commitments in an aggregate amount not to exceed \$500 million. We recorded as other expense a \$0.9 million non-cash debt extinguishment charge in the fourth quarter related to the early termination of the 2012 Facility, which represented the unamortized fees associated with the 2012 Facility.

The 2016 Facility contains various affirmative and negative covenants which, among other things, limit our ability to incur new debt, enter into certain mergers and acquisitions, sell assets and grant liens, make restricted payments (including the payment of dividends on our common stock) and capital expenditures, or change our line of business. We also are subject to financial covenants which require us to limit our consolidated total leverage ratio and to maintain a consolidated interest coverage ratio. The most restrictive covenant is the consolidated total leverage ratio which is limited to 3.5 to 1.

On December 2, 2016, we amended the 2016 Facility to allow the consolidated total leverage ratio be increased, no more than twice during the term of the 2016 Facility, to 4.0 to 1 for a consecutive four quarter fiscal period per increase (or, for any portion of such four quarter fiscal period in which the maximum would be 4.25 to 1 pursuant to the 2016 facility amendment, 4.25 to 1). In conjunction with the Deltek acquisition (see Note 2 of the Notes to Consolidated Financial Statements), we increased the maximum consolidated total leverage ratio covenant to 4.25 to 1 through June 30, 2017 and 4.00 to 1 through December 31, 2017.

At December 31, 2016, we had \$4.3 billion of senior unsecured notes and \$1.93 billion of outstanding revolver borrowings. In addition, we had \$3.0 million of other debt in the form of capital leases and several smaller facilities that allow for borrowings or the issuance of letters of credit in foreign locations to support our non-U.S. businesses. We had \$74.1 million of outstanding letters of credit at December 31, 2016, of which \$34.8 million was covered by our lending group, thereby reducing our revolving credit capacity commensurately.

We were in compliance with all debt covenants related to our credit facility throughout the years ended December 31, 2016 and 2015.

See Note 8 of the Notes to Consolidated Financial Statements included in this Annual Report for additional information regarding our credit facility and senior notes.

Cash and cash equivalents at our foreign subsidiaries at December 31, 2016 totaled \$557 million. Repatriation of these funds under current regulatory and tax law for use in domestic operations would expose us to additional taxes. We consider this cash to be permanently reinvested. We expect existing cash and cash equivalents, cash generated by our U.S. operations, our unsecured credit facility, as well as our expected ability to access the capital markets, will be sufficient to fund operating requirements in the U.S. for the foreseeable future.

Capital expenditures of \$37.3 million, \$36.3 million and \$37.6 million were incurred during 2016, 2015 and 2014, respectively. In the future, we expect capital expenditures as a percentage of sales to be between 1.0% and 1.5% of annual net sales.

Contractual Cash Obligations and Other Commercial Commitments and Contingencies

The following tables quantify our contractual cash obligations and commercial commitments at December 31, 2016 (in thousands).

Contractual Cash Obligations ¹	Total	Payments Due in Fiscal Year					
		2017	2018	2019	2020	2021	Thereafter
Long-term debt	\$ 6,230,003	\$ 400,003	\$ 800,000	\$ 500,000	\$ 600,000	\$ 500,000	\$ 3,430,000
Senior note interest	719,557	139,900	129,325	106,608	85,025	67,269	191,430
Capital leases	2,986	1,592	840	407	147	-	-
Operating leases	248,530	60,536	46,080	35,341	29,726	25,177	51,670
Total	\$ 7,201,076	\$ 602,031	\$ 976,245	\$ 642,356	\$ 714,898	\$ 592,446	\$ 3,673,100

Other Commercial Commitments	Total Amount Committed	Amounts Expiring in Fiscal Year					
		2017	2018	2019	2020	2021	Thereafter
Standby letters of credit and bank guarantees	\$ 74,071	\$ 26,223	\$ 1,961	\$ 428	\$ 104	\$ 33,642	\$ 11,713

¹ We have excluded \$29 million related to the liability for uncertain tax positions from the tables as the current portion is not material, and we are not able to reasonably estimate the timing of the long-term portion of the liability. See Note 7 of the Notes to Consolidated Financial Statements included in this Annual Report.

As of December 31, 2016, we had \$521 million of outstanding surety bonds. Certain contracts, primarily those involving public sector customers, require us to provide a surety bond as a guarantee of its performance of contractual obligations.

We believe that internally generated cash flows and the remaining availability under our credit facility will be adequate to finance normal operating requirements and future acquisition activities. Although we maintain an active acquisition program, any future acquisitions will be dependent on numerous factors and it is not feasible to reasonably estimate if or when any such acquisitions will occur and what the impact will be on our activities, financial condition and results of operations. We may also explore alternatives to attract additional capital resources.

We anticipate that our businesses will generate positive cash flows from operating activities, and that these cash flows will permit the reduction of currently outstanding debt in accordance with the repayment schedule. However, the rate at which we can reduce our debt during 2017 (and reduce the associated interest expense) will be affected by, among other things, the financing and operating requirements of any new acquisitions and the financial performance of our existing companies. None of these factors can be predicted with certainty.

Off-Balance Sheet Arrangements

At December 31, 2016 and 2015, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Recently Issued Accounting Standards

See Note 1 of the Notes to Consolidated Financial Statements included in this Annual Report for information regarding the effect of new accounting pronouncements on our financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

We are exposed to interest rate risks on our outstanding revolving credit borrowings, and to foreign currency exchange risks on our transactions denominated in currencies other than the U.S. dollar. We are also exposed to equity market risks pertaining to the traded price of our common stock.

At December 31, 2016, we had \$4.3 billion of fixed rate borrowings with interest rates ranging from 1.85% to 6.25%. At December 31, 2016, the prevailing market rates for our long-term notes were between 0.9% higher and 2.9% lower than the fixed rates on our debt instruments. Our credit facility contains a \$2.5 billion variable-rate revolver with \$1.93 billion of outstanding borrowings at December 31, 2016.

Several of our businesses have transactions and balances denominated in currencies other than the U.S. dollar. Most of these transactions or balances are denominated in euros, Canadian dollars, British pounds or Danish kroner. Sales by companies whose functional currency was not the U.S. dollar were 20% of our total sales in 2016 and 61% of these sales were by companies with a European functional currency. If these currency exchange rates had been 10% different throughout 2016 compared to currency exchange rates actually experienced, the impact on our net earnings would have been approximately 2%.

The trading price of our common stock influences the valuation of stock award grants and the effects these grants have on our results of operations. The stock price also influences the computation of potentially dilutive common stock which includes both stock awards and the premium over the conversion price on senior subordinated convertible notes to determine diluted earnings per share. The stock price also affects our employees' perceptions of programs that involve our common stock. We believe the quantification of the effects of these changing prices on our future earnings and cash flows is not readily determinable.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

	Page
Consolidated Financial Statements:	
Report of Independent Registered Certified Public Accounting Firm (PricewaterhouseCoopers LLP)	31
Consolidated Balance Sheets as of December 31, 2016 and 2015	32
Consolidated Statements of Earnings for the Years ended December 31, 2016 , 2015 and 2014	33
Consolidated Statements of Comprehensive Income for the Years ended December 31, 2016 , 2015 and 2014	34
Consolidated Statements of Stockholders' Equity for the Years ended December 31, 2016 , 2015 and 2014	35
Consolidated Statements of Cash Flows for the Years ended December 31, 2016 , 2015 and 2014	36
Notes to Consolidated Financial Statements	38
Supplementary Data:	
Schedule II - Consolidated Valuation and Qualifying Accounts for the Years ended December 31, 2016 , 2015 and 2014	61

To the Stockholders of Roper Technologies, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of earnings, of comprehensive income, of stockholders' equity, and of cash flows, present fairly, in all material respects, the financial position of Roper Technologies, Inc. and its subsidiaries (the "Company") at December 31, 2016 and December 31, 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework* 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements, on the financial statement schedule and on the Company's internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. As described in Management's Report on Internal Control over Financial Reporting, management has excluded acquisitions completed during 2016 from its assessment of internal control over financial reporting as of December 31, 2016 because they were acquired by the Company in purchase business combinations during 2016. We have also excluded acquisitions completed during 2016 from our audit of internal control over financial reporting. These acquisitions are wholly-owned subsidiaries whose total assets and total revenues represent 2.1% and 2.6%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2016.

/s/ PricewaterhouseCoopers LLP
Tampa, Florida
February 27, 2017

CONSOLIDATED BALANCE SHEETS

December 31, 2016 and 2015

(in thousands, except per share data)

	<u>2016</u>	<u>2015</u>
Assets		
Cash and cash equivalents	\$ 757,200	\$ 778,511
Accounts receivable, net	619,854	488,271
Inventories, net	181,952	189,868
Income taxes receivable	31,679	-
Unbilled receivables	129,965	122,042
Other current assets	55,851	39,355
Total current assets	<u>1,776,501</u>	<u>1,618,047</u>
Property, plant and equipment, net	141,318	105,510
Goodwill	8,647,142	5,824,726
Other intangible assets, net	3,655,843	2,528,996
Deferred taxes	30,620	31,532
Other assets	73,503	59,554
Total assets	<u>\$ 14,324,927</u>	<u>\$ 10,168,365</u>
Liabilities and Stockholders' Equity		
Accounts payable	\$ 152,067	\$ 139,737
Accrued compensation	161,730	119,511
Deferred revenue	488,399	267,030
Other accrued liabilities	219,339	168,513
Income taxes payable	22,762	18,532
Current portion of long-term debt, net	400,975	6,805
Total current liabilities	<u>1,445,272</u>	<u>720,128</u>
Long-term debt, net of current portion	5,808,561	3,264,417
Deferred taxes	1,178,205	810,856
Other liabilities	104,024	74,017
Total liabilities	<u>8,536,062</u>	<u>4,869,418</u>
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Preferred stock, \$0.01 par value per share; 1,000 shares authorized; none outstanding	-	-
Common stock, \$0.01 par value per share; 350,000 shares authorized; 103,578 shares issued and 101,672 outstanding at December 31, 2016 and 102,795 shares issued and 100,870 outstanding at December 31, 2015	1,036	1,028
Additional paid-in capital	1,489,067	1,419,262
Retained earnings	4,642,402	4,110,530
Accumulated other comprehensive earnings	(324,739)	(212,779)
Treasury stock, 1,906 shares at December 31, 2016 and 1,925 shares at December 31, 2015	(18,901)	(19,094)
Total stockholders' equity	<u>5,788,865</u>	<u>5,298,947</u>
Total liabilities and stockholders' equity	<u>\$ 14,324,927</u>	<u>\$ 10,168,365</u>

See accompanying notes to consolidated financial statements.

CONSOLIDATED STATEMENTS OF EARNINGS
 Years ended December 31, 2016, 2015 and 2014
 (Dollar and share amounts in thousands, except per share data)

	Years ended December 31,		
	2016	2015	2014
Net sales	\$ 3,789,925	\$ 3,582,395	\$ 3,549,494
Cost of sales	1,457,515	1,417,749	1,447,595
Gross profit	2,332,410	2,164,646	2,101,899
Selling, general and administrative expenses	1,277,847	1,136,728	1,102,426
Income from operations	1,054,563	1,027,918	999,473
Interest expense, net	111,559	84,225	78,637
Loss on extinguishment of debt	871	-	-
Other income/(expense), net	(1,481)	58,652	620
Earnings before income taxes	940,652	1,002,345	921,456
Income taxes	282,007	306,278	275,423
Net earnings	<u>\$ 658,645</u>	<u>\$ 696,067</u>	<u>\$ 646,033</u>
Earnings per share:			
Basic	\$ 6.50	\$ 6.92	\$ 6.47
Diluted	\$ 6.43	\$ 6.85	\$ 6.40
Weighted-average common shares outstanding:			
Basic	101,291	100,616	99,916
Diluted	102,464	101,597	100,884

See accompanying notes to consolidated financial statements.

ROPER TECHNOLOGIES, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
 Years ended December 31, 2016, 2015 and 2014
 (in thousands)

	Years ended December 31,		
	2016	2015	2014
Net earnings	\$ 658,645	\$ 696,067	\$ 646,033
Other comprehensive income, net of tax:			
Foreign currency translation adjustments	(111,960)	(139,789)	(115,010)
Unrecognized pension gain	-	(1,063)	-
Total other comprehensive loss, net of tax	(111,960)	(140,852)	(115,010)
Comprehensive income	\$ 546,685	\$ 555,215	\$ 531,023

See accompanying notes to consolidated financial statements.

ROPER TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Years ended December 31, 2016, 2015 and 2014
(in thousands, except per share data)

	Common Stock		Additional paid-in capital	Retained earnings	Accumulated other comprehensive earnings	Treasury stock	Total stockholders' equity
	Shares	Amount					
Balances at December 31, 2013	99,312	\$ 1,013	\$ 1,229,233	\$ 2,959,196	\$ 43,083	\$ (19,475)	\$ 4,213,050
Net earnings	-	-	-	646,033	-	-	646,033
Stock option exercises	581	6	32,517	-	-	-	32,523
Treasury stock sold	20	-	2,549	-	-	202	2,751
Currency translation adjustments, net of \$3,916 tax	-	-	-	-	(115,010)	-	(115,010)
Stock based compensation	-	-	63,025	-	-	-	63,025
Restricted stock activity	213	2	(22,064)	-	-	-	(22,062)
Stock option tax benefit, net of shortfalls	-	-	21,481	-	-	-	21,481
Conversion of senior subordinated convertible notes	-	-	(1,403)	-	-	-	(1,403)
Dividends declared (\$0.85 per share)	-	-	-	(85,028)	-	-	(85,028)
Balances at December 31, 2014	<u>100,126</u>	<u>\$ 1,021</u>	<u>\$ 1,325,338</u>	<u>\$ 3,520,201</u>	<u>\$ (71,927)</u>	<u>\$ (19,273)</u>	<u>\$ 4,755,360</u>
Net earnings	-	-	-	696,067	-	-	696,067
Stock option exercises	402	4	33,002	-	-	-	33,006
Treasury stock sold	18	-	2,710	-	-	179	2,889
Currency translation adjustments, net of \$6,658 tax	-	-	-	-	(139,789)	-	(139,789)
Stock based compensation	-	-	61,766	-	-	-	61,766
Restricted stock activity	324	3	(14,697)	-	-	-	(14,694)
Stock option tax benefit, net of shortfalls	-	-	22,175	-	-	-	22,175
Conversion of senior subordinated convertible notes	-	-	(11,032)	-	-	-	(11,032)
Post-retirement benefit plan adjustments	-	-	-	-	(1,063)	-	(1,063)
Dividends declared (\$1.05 per share)	-	-	-	(105,738)	-	-	(105,738)
Balances at December 31, 2015	<u>100,870</u>	<u>\$ 1,028</u>	<u>\$ 1,419,262</u>	<u>\$ 4,110,530</u>	<u>\$ (212,779)</u>	<u>\$ (19,094)</u>	<u>\$ 5,298,947</u>
Net earnings	-	-	-	658,645	-	-	658,645
Stock option exercises	372	4	27,970	-	-	-	27,974
Treasury stock sold	19	-	3,147	-	-	193	3,340
Currency translation adjustments, net of \$2,570 tax	-	-	-	-	(111,960)	-	(111,960)
Stock based compensation	-	-	77,860	-	-	-	77,860
Restricted stock activity	411	4	(17,980)	-	-	-	(17,976)
Stock option tax benefit, net of shortfalls	-	-	(8,081)	-	-	-	(8,081)
Conversion of senior subordinated convertible notes	-	-	(13,111)	-	-	-	(13,111)
Dividends declared (\$1.25 per share)	-	-	-	(126,773)	-	-	(126,773)
Balances at December 31, 2016	<u>101,672</u>	<u>\$ 1,036</u>	<u>\$ 1,489,067</u>	<u>\$ 4,642,402</u>	<u>\$ (324,739)</u>	<u>\$ (18,901)</u>	<u>\$ 5,788,865</u>

See accompanying notes to consolidated financial statements.

ROPER TECHNOLOGIES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
Years ended December 31, 2016, 2015 and 2014
(in thousands)

	Years ended December 31,		
	2016	2015	2014
Cash flows from operating activities:			
Net earnings	\$ 658,645	\$ 696,067	\$ 646,033
Adjustments to reconcile net earnings to cash flows from operating activities:			
Depreciation and amortization of property, plant and equipment	37,299	38,185	40,890
Amortization of intangible assets	203,154	166,076	156,394
Amortization of deferred financing costs	5,612	4,136	4,003
Non-cash stock compensation	78,827	61,766	63,027
Gain on disposal of a business	-	(70,860)	-
Changes in operating assets and liabilities, net of acquired businesses:			
Accounts receivable	(20,734)	52,597	(404)
Unbilled receivables	(1,202)	(21,844)	(10,305)
Inventories	6,353	(1,150)	6,349
Accounts payable and accrued liabilities	20,176	(8,392)	7,747
Deferred revenue	25,190	8,239	(28,202)
Income taxes	(47,589)	3,069	(46,619)
Other, net	(1,946)	936	1,528
Cash provided by operating activities	<u>963,785</u>	<u>928,825</u>	<u>840,441</u>
Cash flows from investing activities:			
Acquisitions of businesses, net of cash acquired	(3,721,758)	(1,762,883)	(305,379)
Capital expenditures	(37,305)	(36,260)	(37,644)
Capitalized software expenditures	(2,801)	(2,439)	(2,588)
Proceeds from disposal of a business	-	105,624	-
Proceeds from sale of assets	870	1,126	1,506
Other, net	8,138	(3,500)	(4,000)
Cash used in investing activities	<u>(3,752,856)</u>	<u>(1,698,332)</u>	<u>(348,105)</u>
Cash flows from financing activities:			
Proceeds from senior notes	1,200,000	900,000	-
Borrowings/(payments) under revolving line of credit, net	1,750,000	180,000	(250,000)
Principal payments on convertible notes	(4,284)	(4,006)	(561)
Debt issuance costs	(17,266)	(8,044)	-
Cash dividends to stockholders	(121,130)	(100,334)	(79,859)
Treasury stock sales	3,340	2,889	2,751
Stock award tax excess windfall benefit	-	22,228	21,081
Proceeds from stock based compensation, net	9,998	18,312	10,463
Redemption premium on convertible debt	(14,166)	(13,126)	(1,518)
Other	(1,229)	(1,677)	(461)
Cash provided by/(used in) financing activities	<u>2,805,263</u>	<u>996,242</u>	<u>(298,104)</u>
Effect of exchange rate changes on cash	<u>(37,503)</u>	<u>(58,654)</u>	<u>(43,522)</u>
Net increase/(decrease) in cash and cash equivalents	(21,311)	168,081	150,710
Cash and cash equivalents, beginning of year	778,511	610,430	459,720
Cash and cash equivalents, end of year	<u>\$ 757,200</u>	<u>\$ 778,511</u>	<u>\$ 610,430</u>

Supplemental disclosures:

Cash paid for:

Interest	\$ 104,928	\$ 79,225	\$ 74,446
Income taxes, net of refunds received	<u>\$ 329,596</u>	<u>\$ 280,801</u>	<u>\$ 300,969</u>

Noncash investing activities:

Net assets of businesses acquired:

Fair value of assets, including goodwill	\$ 4,433,085	\$ 1,876,984	\$ 324,717
Liabilities assumed	<u>(711,327)</u>	<u>(114,101)</u>	<u>(19,338)</u>
Cash paid, net of cash acquired	<u>\$ 3,721,758</u>	<u>\$ 1,762,883</u>	<u>\$ 305,379</u>

See accompanying notes to consolidated financial statements.

(1) Summary of Accounting Policies

Basis of Presentation - These financial statements present consolidated information for Roper Technologies, Inc. and its subsidiaries ("Roper" or the "Company"). All significant intercompany accounts and transactions have been eliminated.

Nature of the Business - Roper is a diversified technology company. The Company operates businesses that design and develop software (both license and software-as-a-service) and engineered products and solutions for a variety of niche end markets; including healthcare, transportation, commercial construction, food, energy, water, education and academic research.

Recent Accounting Pronouncements - The Financial Accounting Standards Board ("FASB") establishes changes to accounting principles under GAAP in the form of accounting standards updates (ASU's") to the FASB's Accounting Standards Codification. The Company considers the applicability and impact of all ASUs. Any ASUs not listed below were assessed and determined to be either not applicable or are expected to have an immaterial impact on the Company's results of operations, financial position or cash flows.

Recently Adopted Accounting Pronouncements

In March 2016, the FASB issued an update on stock compensation. The ASU simplifies several aspects of the accounting for employee share-based payment awards, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. This standard is effective for annual reporting periods beginning after December 15, 2016. The Company elected to early adopt this standard on a prospective basis in the quarter ended March 31, 2016. The impact of the early adoption resulted in the following:

- The Company recorded tax benefits of \$15.3 million within income tax expense for the year ended December 31, 2016 related to the excess tax benefit on share-based awards. Prior to adoption this amount would have been recorded as a reduction of additional paid-in capital. This change adds volatility to the Company's effective tax rate.
- The Company no longer reclassifies the excess tax benefit from operating activities to financing activities in the statement of cash flows. The Company elected to apply this change in presentation prospectively and thus prior periods have not been adjusted.
- The Company elected not to change its policy on accounting for forfeitures and continued to estimate the total number of awards for which the requisite service period will not be rendered.
- The Company excluded the excess tax benefits from the assumed proceeds available to repurchase shares in the computation of its diluted earnings per share since adoption. This resulted in an increase in diluted weighted average common shares outstanding of 278,829 shares for the year ended December 31, 2016.

In March 2016, the FASB issued an update amending the equity method of accounting, eliminating the requirement that an entity retroactively adopt the equity method of accounting if an investment qualifies for the equity method as a result of an increase in the level of ownership or degree of influence. The amendments in the update, to be applied prospectively, are effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted. The Company elected to early adopt on a prospective basis effective January 1, 2016. The update did not have a material impact on its results of operations, financial condition or cash flows.

In September 2015, the FASB issued an update providing guidance to simplify the accounting for measurement period adjustments. This update, effective for fiscal years beginning after December 15, 2015, including interim periods within those fiscal years, requires that an acquirer recognize adjustments to provisional amounts that are identified during the measurement period in the reporting period in which the adjustment amounts are determined. The Company adopted the update effective January 1, 2016. The update did not have a material impact on its results of operations, financial condition or cash flows.

In April 2015, the FASB issued an update providing guidance to determine whether the fee paid by an entity for a cloud computing arrangement includes a software license. If a cloud computing arrangement includes a software license, then the software license element of the arrangement should be accounted for consistently with the acquisition of other software licenses. A cloud computing arrangement that does not include a software license should be accounted for as a service contract. The update is effective for annual periods beginning after December 15, 2015, and may be adopted prospectively or retrospectively. The Company adopted the update prospectively effective January 1, 2016. The update did not have a material impact on its results of operations, financial condition or cash flows.

In June 2014, the FASB issued an update to the accounting for stock compensation. This update, effective for fiscal years beginning after December 15, 2015, modifies the accounting for share-based payments when the terms of an award provide that a performance target could be achieved after the requisite service period. The Company adopted the update prospectively effective January 1, 2016. The update did not have a material impact on its results of operations, financial condition or cash flows.

Recently Released Accounting Pronouncements

In January 2017, the FASB issued an update simplifying the test for goodwill impairment. This update, effective on a prospective basis for annual or interim goodwill impairment tests performed in fiscal years beginning after December 15, 2019, eliminates Step 2 from the goodwill impairment test. Under the amendments in the update, an entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. Additionally, an entity should consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is evaluating the impact of the update on its results of operations, financial condition or cash flows.

In August 2016, the FASB issued an update clarifying the classification of certain cash receipts and cash payments in the statement of cash flows. This update, effective for annual reporting periods after December 15, 2017, including interim periods within those annual periods, addresses the following eight specific cash flow issues: Debt prepayment or debt extinguishment costs; settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing; contingent consideration payments made after a business combination; proceeds from the settlement of insurance claims; proceeds from the settlement of corporate-owned life insurance policies (including bank-owned life insurance policies); distributions received from equity method investees; beneficial interests in securitization transactions; and separately identifiable cash flows and application of the predominance principle. The Company does not expect the update to have a material impact on its results of operations, financial condition or cash flows.

In February 2016, the FASB issued an update on lease accounting. The update, effective for annual reporting periods after December 15, 2018, including interim periods within those annual periods, provides amendments to current lease accounting. These amendments include the recognition of lease assets and lease liabilities on the balance sheet and disclosing other key information about leasing arrangements. The Company is evaluating the impact of the update on its results of operations, financial condition and cash flows.

In July 2015, the FASB issued an update providing guidance to simplify the measurement of inventory. This update, effective for fiscal years beginning after December 15, 2016, requires that inventory within the scope of the update be measured at the lower of cost and net realizable value. The Company does not expect the update to have a material impact on its results of operations, financial condition or cash flows.

In May 2014, the FASB issued updates on accounting and disclosures for revenue from contracts with customers. These updates, effective for annual reporting periods after December 15, 2017, create a single, comprehensive revenue recognition model for all contracts with customers. The model is based on changes in contract assets (rights to receive consideration) and liabilities (obligations to provide a good or service). Revenue will be recognized based on the satisfaction of performance obligations, which occurs when control of a good or service transfers to a customer and enhanced disclosures will be required regarding the nature, amount, timing and uncertainty of revenue and cash flows arising from an entity's contracts with customers. Either a retrospective or cumulative effect transition method is permitted; the Company has not yet made an election regarding the transition method to be adopted.

The Company is still finalizing its analysis to quantify the adoption impact of the provisions of the new standard, but does not currently expect it to have a material impact on its results of operations, financial condition or cash flows. Based on the evaluation of current contracts and revenue streams, most will be recorded consistently under both the current and new standard. The FASB has issued, and may issue in the future, interpretive guidance which may cause the evaluation to change. The Company believes it is following an appropriate timeline to allow for proper recognition, presentation and disclosure upon adoption effective the beginning of fiscal year 2018.

Accounts Receivable - Accounts receivable are stated net of an allowance for doubtful accounts and sales allowances of \$14.5 million and \$12.4 million at December 31, 2016 and 2015, respectively. Outstanding accounts receivable balances are reviewed periodically, and allowances are provided at such time that management believes it is probable that an account receivable is uncollectible. The returns and other sales credit allowance is an estimate of customer returns, exchanges, discounts or other forms of anticipated concessions and is treated as a reduction in revenue.

Cash and Cash Equivalents - Roper considers highly liquid financial instruments with remaining maturities at acquisition of three months or less to be cash equivalents. Roper had no cash equivalents at December 31, 2016 and December 31, 2015.

Contingencies - Management continually assesses the probability of any adverse judgments or outcomes to its potential contingencies. Disclosure of the contingency is made if there is at least a reasonable possibility that a loss or an additional loss may have been incurred. In the assessment of contingencies as of December 31, 2016, management concluded that no accrual was necessary and that there were no matters for which there was a reasonable possibility of a material loss.

Earnings per Share - Basic earnings per share were calculated using net earnings and the weighted-average number of shares of common stock outstanding during the respective year. Diluted earnings per share were calculated using net earnings and the weighted-average number of shares of common stock and potential common stock outstanding during the respective year. Potentially dilutive common stock consisted of stock options and the premium over the conversion price on Roper's senior subordinated convertible notes based upon the trading price of the Company's common stock. Effective January 1, 2016, Roper adopted the provisions of an accounting standards update on a prospective basis which increased the number of potentially dilutive stock options as there is no longer a tax benefit in the calculation of dilutive stock options. See the caption "Recent Accounting Pronouncements" elsewhere in this Note for additional information regarding the ASU. The effects of potential common stock were determined using the treasury stock method (in thousands):

	Years ended December 31,		
	2016	2015	2014
Basic weighted-average shares outstanding	101,291	100,616	99,916
Effect of potential common stock:			
Common stock awards	1,126	887	816
Senior subordinated convertible notes	47	94	152
Diluted weighted-average shares outstanding	<u>102,464</u>	<u>101,597</u>	<u>100,884</u>

As of and for the years ended December 31, 2016, 2015 and 2014, there were 1,144,350, 618,220 and 764,333 outstanding stock options, respectively, that were not included in the determination of diluted earnings per share because doing so would have been antidilutive.

Estimates - The preparation of financial statements in conformity with generally accepted accounting principles in the United States ("GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Foreign Currency Translation and Transactions - Assets and liabilities of subsidiaries whose functional currency is not the U.S. dollar were translated at the exchange rate in effect at the balance sheet date, and revenues and expenses were translated at average exchange rates for the period in which those entities were included in Roper's financial results. Translation adjustments are reflected as a component of other comprehensive income. Foreign currency transaction gains and losses are recorded in the consolidated statement of earnings as other income/(expense). The gain or loss included in pre-tax income was a net loss of \$2.9 million for the year ended December 31, 2016, a net loss of \$0.7 million for the year ended December 31, 2015 and a net gain of \$0.2 million for the year ended December 31, 2014.

Goodwill and Other Intangibles - Roper accounts for goodwill in a purchase business combination as the excess of the cost over the estimated fair value of net assets acquired. Business combinations can also result in other intangible assets being recognized. Amortization of intangible assets, if applicable, occurs over their estimated useful lives. Goodwill, which is not amortized, is tested for impairment on an annual basis (or an interim basis if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value). When testing goodwill for impairment, the Company has the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If the Company elects to perform a qualitative assessment and determines that an impairment is more likely than not, then performance of the two-step quantitative impairment test is required. The first step of the quantitative process utilizes both an income approach (discounted cash flows) and a market approach consisting of a comparable public company earnings multiples methodology to estimate the fair value of a reporting unit. To determine the reasonableness of the estimated fair values, the Company reviews the assumptions to ensure that neither the income approach nor the market approach provides significantly different valuations. If the estimated fair value exceeds the carrying value, no further work is required and no impairment loss is recognized. If the carrying value exceeds the estimated fair value, the goodwill of the reporting unit is potentially impaired and then the second quantitative step would be completed in order to measure the impairment loss by calculating the implied fair value of goodwill by deducting the fair value of all tangible and intangible net assets (including unrecognized intangible assets) of the reporting unit from the fair value of the reporting unit. If the implied fair value of goodwill is less than the carrying value of goodwill, a non-cash impairment loss is recognized.

When performing the quantitative assessment, key assumptions used in the income and market methodologies are updated when the analysis is performed for each reporting unit. Various assumptions are utilized including forecasted operating results, strategic plans, economic projections, anticipated future cash flows, the weighted-average cost of capital, comparable transactions, market data and earnings multiples. The assumptions that have the most significant effect on the fair value calculations are the anticipated future cash flows, discount rates, and the earnings multiples. While the Company uses reasonable and timely information to prepare its cash flow and discount rate assumptions, actual future cash flows or market conditions could differ significantly resulting in future impairment charges related to recorded goodwill balances.

Roper has 33 reporting units with individual goodwill amounts ranging from zero to \$2.2 billion. In 2016, the Company performed its annual impairment test in the fourth quarter for all reporting units, excluding those acquired during the fourth quarter of 2016. The Company conducted its analysis qualitatively and assessed whether it was more likely than not that the respective fair value of these reporting units was less than the carrying amount. The Company determined that impairment of goodwill was not likely in 28 of its reporting units and thus was not required to perform a quantitative analysis for these reporting units. For the remaining five reporting units, the Company performed its quantitative analysis and concluded that the fair value of each of these five reporting units was substantially in excess of its carrying value, with no impairment indicated as of December 31, 2016. Recently acquired reporting units generally represent the highest risk of impairment, which typically decreases as the businesses are integrated into the enterprise. Negative industry or economic trends, disruptions to its business, actual results significantly below expected results, unexpected significant changes or planned changes in the use of the assets, divestitures and market capitalization declines may have a negative effect on the fair value of Roper's reporting units.

The following events or circumstances, although not comprehensive, would be considered to determine whether interim testing of goodwill would be required:

- a significant adverse change in legal factors or in the business climate;
- an adverse action or assessment by a regulator;
- unanticipated competition;
- a loss of key personnel;
- a more-likely-than-not expectation that a reporting unit or a significant portion of a reporting unit will be sold or otherwise disposed of;
- the testing for recoverability under the Impairment or Disposal of Long-Lived Assets of a significant asset group within a reporting unit; and
- recognition of a goodwill impairment loss in the financial statements of a subsidiary that is a component of a reporting unit.

Business combinations can also result in other intangible assets being recognized. Amortization of intangible assets, if applicable, occurs over their estimated useful lives. Trade names that are determined to have an indefinite useful economic life are not amortized, but separately tested for impairment during the fourth quarter of the fiscal year or on an interim basis if an event occurs that indicates the fair value is more likely than not below the carrying value. Roper first qualitatively assesses whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If necessary, Roper conducts a quantitative review using the relief-from-royalty method, which management believes to be an acceptable methodology due to its common use by valuations specialists in determining the fair value of intangible assets. This methodology assumes that, in lieu of ownership, a third party would be willing to pay a royalty in order to exploit the related benefits of these assets. The fair value of each trade name is determined by applying a royalty rate to a projection of net sales discounted using a risk adjusted rate of capital. Each royalty rate is determined based on the profitability of the reporting unit to which it relates and observed market royalty rates. Sales growth rates are determined after considering current and future economic conditions, recent sales trends, discussions with customers, planned timing of new product launches or other variables. Reporting units resulting from recent acquisitions generally represent the highest risk of impairment, which typically decreases as the businesses are integrated into Roper's enterprise and positioned for improved future sales growth.

The assessment of fair value for impairment purposes requires significant judgments to be made by management. Although forecasts are based on assumptions that are considered reasonable by management and consistent with the plans and estimates management uses to operate the underlying businesses, there is significant judgment in determining the expected results attributable to the reporting units. Changes in estimates or the application of alternative assumptions could produce significantly different results. No impairment resulted from the annual reviews performed in 2016.

Roper evaluates whether there has been an impairment of identifiable intangible assets with definite useful economic lives, or of the remaining life of such assets, when certain indicators of impairment are present. In the event that facts and circumstances indicate that the cost or remaining period of amortization of any asset may be impaired, an evaluation of recoverability would be performed. If an evaluation is required, the estimated future gross, undiscounted cash flows associated with the asset would be compared to the asset's carrying amount to determine if a write-down to fair value or a revision in the remaining amortization period is required.

Impairment of Long-Lived Assets - The Company determines whether there has been an impairment of long-lived assets, excluding goodwill and identifiable intangible assets, that are determined to have indefinite useful economic lives, when certain indicators of impairment are present. In the event that facts and circumstances indicate that the cost or life of any long-lived assets may be impaired, an evaluation of recoverability would be performed. If an evaluation is required, the estimated future gross, undiscounted cash flows associated with the asset would be compared to the asset's carrying amount to determine if a write-down to fair value or revision to remaining life is required. Future adverse changes in market conditions or poor operating results of underlying long-lived assets could result in losses or an inability to recover the carrying value of the long-lived assets that may not be reflected in the assets' current carrying value, thereby possibly requiring an impairment charge or acceleration of depreciation or amortization expense in the future.

Income Taxes - Roper is a U.S.-based multinational company and the calculation of its worldwide provision for income taxes requires analysis of many factors, including income tax systems that vary from country to country, and the United States' treatment of non-U.S. earnings. The Company provides U.S. income taxes for unremitted earnings of foreign subsidiaries that are not considered permanently reinvested overseas. As of December 31, 2016, the amount of earnings of foreign subsidiaries that the Company considers permanently reinvested and for which deferred taxes have not been provided was approximately \$1.37 billion. Because of the availability of U.S. foreign tax credits, it is not practicable to determine the U.S. federal income tax liability that would be payable if such earnings were not reinvested indefinitely.

Although it is the Company's intention to permanently reinvest these earnings indefinitely there are certain events that would cause these earnings to become taxable. These events include, but are not limited to, changes in U.S. tax laws, dividends paid between foreign subsidiaries in the absence of Section 954(c) (6) of the Internal Revenue Code of 1986, as amended ("IRC"), foreign subsidiary guarantees of U.S. parent debt and the liquidation of foreign subsidiaries or actual distributions by foreign subsidiaries into a U.S. affiliate.

The Company early adopted the provisions of an ASU related to stock compensation on a prospective basis in the first quarter of 2016. The ASU simplifies several aspects of the accounting for employee share-based payment awards, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. No prior periods were adjusted. See the caption "Recent Accounting Pronouncements" elsewhere in this Note for additional information regarding the ASU.

The Company recognizes in the consolidated financial statements only those tax positions determined to be "more likely than not" of being sustained upon examination based on the technical merits of the positions. Interest and penalties related to unrecognized tax benefits are classified as a component of income tax expense.

The Company records a valuation allowance to reduce its deferred tax assets if, based on the weight of available evidence, both positive and negative, for each respective tax jurisdiction, it is more likely than not that some portion or all of such deferred tax assets will not be realized. Available evidence which is considered in determining the amount of valuation allowance required includes, but is not limited to, the Company's estimate of future taxable income and any applicable tax-planning strategies.

Certain assets and liabilities have different bases for financial reporting and income tax purposes. Deferred income taxes have been provided for these differences at the tax rates expected to be paid.

Interest Rate Risk - The Company manages interest rate risk by maintaining a combination of fixed- and variable-rate debt, which may include interest rate swaps to convert fixed-rate debt to variable-rate debt, or to convert variable-rate debt to fixed-rate debt. Interest rate swaps are recorded at fair value in the balance sheet as an asset or liability, and the changes in fair values of both the swap and the hedged item are recorded as interest expense in current earnings. There were no interest rate swaps outstanding at December 31, 2016.

Inventories - Inventories are valued at the lower of cost or market. Cost is determined using the first-in, first-out method. The Company writes down its inventory for estimated obsolescence or excess inventory equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions.

Other Comprehensive Income - Comprehensive income includes net earnings and all other non-owner sources of changes in a company's net assets.

Product Warranties - The Company sells certain of its products to customers with a product warranty that allows customers to return a defective product during a specified warranty period following the purchase in exchange for a replacement product, repair at no cost to the customer or the issuance of a credit to the customer. The Company accrues its estimated exposure to warranty claims based upon current and historical product sales data, warranty costs incurred and any other related information known to the Company.

Property, Plant and Equipment and Depreciation and Amortization - Property, plant and equipment is stated at cost less accumulated depreciation and amortization. Depreciation and amortization are provided for using principally the straight-line method over the estimated useful lives of the assets as follows:

Buildings	20-30 years
Machinery	8-12 years
Other equipment	3-5 years

Research and Development - Research and development ("R&D") costs include salaries and benefits, rents, supplies, and other costs related to products under development. Research and development costs are expensed in the period incurred and totaled \$195.4 million, \$164.2 million and \$147.9 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Revenue Recognition - The Company recognizes revenue when all of the following criteria are met:

- persuasive evidence of an arrangement exists;
- delivery has occurred or services have been rendered;
- the seller's price to the buyer is fixed or determinable; and
- collectibility is reasonably assured.

In addition, the Company recognizes revenue from the sale of product when title and risk of loss pass to the customer, which is generally when product is shipped. The Company recognizes revenue from services when such services are rendered or, if applicable, upon customer acceptance. Revenues under certain relatively long-term and relatively large-value construction and software projects are recognized under the percentage-of-completion method using the ratio of costs incurred to total estimated costs as the measure of performance. The Company recognized revenues of \$241 million, \$253 million and \$266 million for the years ended December 31, 2016, 2015 and 2014, respectively, using this method. Estimated losses on any projects are recognized as soon as such losses become known.

Capitalized Software - The Company accounts for capitalized software under applicable accounting guidance which, among other provisions, requires capitalization of certain internal-use software costs once certain criteria are met. Overhead, general and administrative and training costs are not capitalized. Capitalized software balances, net of accumulated amortization, were \$4.4 million and \$4.6 million at December 31, 2016 and 2015, respectively.

Stock-Based Compensation - The Company recognizes expense for the grant date fair value of its employee stock awards on a straight-line basis (or, in the case of performance-based awards, on a graded basis) over the employee's requisite service period (generally the vesting period of the award). The fair value of option awards is estimated using the Black-Scholes option valuation model. Due to the adoption of an ASU in 2016, cash flows resulting from the tax benefits arising from tax deductions in excess of the compensation cost recognized for stock award exercises (excess tax benefits) are no longer classified as financing cash flows. Prior periods were not adjusted, as the ASU was adopted on a prospective basis. See the the caption "Recent Accounting Pronouncements" elsewhere in this Note for additional information regarding the ASU.

(2) Business Acquisitions and Divestitures

2016 Acquisitions – During the year ended December 31, 2016, Roper completed six business combinations. Roper acquired the businesses in order to both expand and complement its existing technologies. The results of operations of the acquired companies have been included in Roper's consolidated results since the date of each acquisition. Purchase price allocations are preliminary pending final intangibles valuations and tax-related adjustments.

The largest of the 2016 acquisitions was Deltek Inc., a global provider of enterprise software and information solutions for government contractors, professional services firms and other project-based businesses. Roper acquired 100% of the shares of Project Diamond Holdings Corp. (the parent company of Deltek) on December 27, 2016, in a \$2.8 billion all-cash transaction. Deltek is reported in the RF Technology segment.

The following table (in thousands) summarizes the fair values of the assets acquired and liabilities assumed at the date of acquisition.

Accounts receivable	\$	94,506
Other current assets		37,558
Identifiable intangibles		972,000
Goodwill		2,234,549
Other assets		43,098
Total assets acquired		3,381,711
Deferred revenue		166,393
Other current liabilities		57,433
Long-term deferred tax liability		349,810
Other liabilities		7,935
Net assets acquired	\$	<u>2,800,140</u>

The majority of the goodwill is not expected to be deductible for tax purposes. Of the \$972 million of acquired intangible assets acquired, \$145 million was assigned to trade names that are not subject to amortization and \$62 million was assigned to in process research and development. The remaining \$765 million of acquired intangible assets have a weighted-average useful life of 12 years. The intangible assets that make up that amount include customer relationships of \$625 million (13 year weighted-average useful life) and unpatented technology of \$140 million (6 year weighted-average useful life).

The Company expensed transaction costs of \$4.3 million related to the Deltek acquisition as corporate general and administrative expenses, as incurred.

Roper's results for the year ended December 31, 2016 included results from Deltek between December 28, 2016 and December 31, 2016. In that period, Deltek contributed \$7.9 million in revenue and \$0.8 million of earnings to Roper's results. The following unaudited pro forma summary presents consolidated information as if the acquisition of Deltek had occurred on January 1, 2015 (amounts in millions, except per share data):

	Pro forma	
	Year ended December 31,	
	2016	2015
Sales	\$ 4,268,052	\$ 4,012,030
Net income	656,404	647,089
Earnings per share, basic	6.48	6.43
Earnings per share, diluted	6.41	6.37

Pro forma earnings were adjusted by \$47.4 million and \$37.2 million for the years ended December 31, 2016 and 2015, respectively, for non-recurring acquisition and other costs. Adjustments were also made for recurring changes in amortization, interest expense and taxes related to the acquisition.

During the year ended December 31, 2016, Roper completed five other acquisitions which were immaterial. The aggregate purchase price of these acquisitions totaled \$920 million of cash. The Company recorded \$372 million in other identifiable intangibles and \$642 million in goodwill in connection with these acquisitions. Supplemental pro forma information has not been provided as the acquisitions did not have a material impact on Roper's consolidated results of operations individually or in aggregate.

The results of the following acquisitions are reported in the Medical & Scientific Imaging segment:

- Clinisys - On January 7, 2016, Roper acquired 100% of the shares of CliniSys Group Ltd. ("CliniSys"), a provider of clinical laboratory software headquartered in the United Kingdom.
- PCI Medical - On March 17, 2016, Roper acquired the assets of PCI Medical Inc., a provider of medical probe and scope disinfection products.
- GeneInsight - On April 1, 2016, the Company acquired 100% of the shares of GeneInsight Inc., a provider of software for managing the analysis, interpretation and reporting of genetic tests.
- UNICConnect - On November 10, 2016, Roper acquired the assets of UNICConnect LC, a provider of process management software for molecular laboratories.

ConstructConnect - On October 31, 2016, Roper acquired 100% of the shares of iSqFt Holdings Inc. (d/b/a ConstructConnect), a provider of cloud-based data, collaboration, and workflow automation solutions to the commercial construction industry. ConstructConnect is reported in the RF Technology segment.

The Company expensed transaction costs of \$4.2 million related to the acquisitions as corporate general and administrative expenses, as incurred.

The majority of the goodwill recorded for these five companies is not expected to be deductible for tax purposes. Of the \$372 million of intangible assets acquired, \$34 million was assigned to trade names that are not subject to amortization. The remaining \$338 million of acquired intangible assets have a weighted-average useful life of 12 years. The intangible assets that make up that amount include customer relationships of \$242 million (14 year weighted-average useful life), unpatented technology of \$66 million (6 year weighted-average useful life) and software of \$30 million (9 year weighted-average useful life).

2015 Acquisitions – During the year ended December 31, 2015, Roper completed eight business combinations. The results of operations of the acquired companies have been included in Roper's consolidated results since the date of each acquisition. Supplemental pro forma information has not been provided as the acquisitions did not have a material impact on Roper's consolidated results of operations individually or in aggregate.

The results of the following acquisitions are reported in the Medical & Scientific Imaging segment:

- *Strata* - On January 21, 2015, Roper acquired 100% of the shares of Strata Decision Technologies LLC ("Strata"), a provider of planning and budget software for health care providers.
- *Softwriters* - On February 9, 2015, Roper acquired 100% of the shares of Softwriters Inc., a provider of long-term care pharmacy operating software.
- *Data Innovations* - On March 4, 2015, Roper acquired 100% of the shares of Data Innovations LLC, a provider of clinical and blood laboratory middleware.
- *AHP* - On September 4, 2015, Roper acquired the assets of Atlantic Health Partners LLC ("AHP"), a group purchasing organization specializing in vaccines for the physician marketplace.
- *Atlas* - On October 26, 2015, Roper acquired 100% of the shares of Atlas Database Software Corp. ("Atlas"), a provider of clinical process integration to private and public health sectors.

The results of the following acquisitions are reported in the RF Technology segment:

- *On Center* - On July 20, 2015, Roper acquired 100% of the shares of On Center Software LLC ("On Center"), a provider of construction automation technology.
- *RF IDEas* - On September 1, 2015, Roper acquired 100% of the shares of RF IDEas, Inc., a provider of proprietary identification card technology solutions.
- *Aderant* - On October 21, 2015, Roper acquired 100% of the shares of Aderant Holdings, Inc. ("Aderant"), a provider of comprehensive software solutions for law and other professional services firms.

The aggregate purchase price for the 2015 acquisitions was \$1.8 billion, paid in cash. Roper purchased the businesses to expand upon existing software, supply chain and medical platforms.

The Company expensed transaction costs of \$5.9 million related to the acquisitions as corporate general and administrative expenses, as incurred.

The Company recorded \$1.2 billion in goodwill and \$731 million in other identifiable intangibles in connection with the acquisitions. The majority of the goodwill recorded is not expected to be deductible for tax purposes. Of the \$731 million of intangible assets acquired, \$51 million was assigned to trade names that are not subject to amortization. The remaining \$680 million of acquired intangible assets have a weighted-average useful life of 17 years. The intangible assets that make up that amount include customer relationships of \$541 million (19 year weighted-average useful life), unpatented technology of \$100 million (8 year weighted-average useful life) and software of \$39 million (6 year weighted-average useful life).

Divestiture of Abel - On October 2, 2015, Roper completed the sale of Abel Pumps ("Abel") for \$106 million (€95 million), net of cash divested. The pretax gain on the divestiture was \$70.9 million, which is reported as Other income/(expense), net on the consolidated statement of earnings. The gain resulted in tax expense of \$46 million as well as a future tax benefit of \$11 million.

The year to date pretax income of Abel was \$5.9 million for the period ended October 2, 2015, and \$10.3 million and \$9.2 million for the years ended December 31, 2014 and 2013, respectively. Abel was reported in the Industrial Technology segment.

2014 Acquisitions – During the year ended December 31, 2014, Roper completed three business combinations. The results of operations of the acquired companies have been included in Roper's consolidated results since the date of each acquisition. Supplemental pro forma information has not been provided as the acquisitions did not have a material impact on Roper's consolidated results of operations individually or in aggregate.

Roper acquired 100% of the shares of Foodlink Holdings Inc. ("Foodlink"), Innovative Product Achievements LLC ("IPA") and Strategic Healthcare Programs Holdings LLC ("SHP") on July 2, August 5, and August 14, 2014, respectively. The aggregate purchase price was \$303 million, paid in cash. Roper purchased the businesses to expand upon existing supply chain and medical platforms. SHP and IPA are reported in the Medical & Scientific Imaging segment, and Foodlink is reported in the RF Technology segment.

The Company expensed transaction costs of \$2.8 million related to the acquisitions as corporate general and administrative expenses, as incurred.

The Company recorded \$208 million in goodwill and \$99 million in other identifiable intangibles in connection with the acquisitions. The majority of the goodwill recorded is not expected to be deductible for tax purposes. Of the \$99 million of intangible assets acquired, \$7 million was assigned to trade names that are not subject to amortization. The remaining \$92 million of acquired intangible assets have a weighted-average useful life of 17 years. The intangible assets that make up that amount include customer relationships of \$82 million (19 year weighted-average useful life), unpatented technology of \$7 million (6 year weighted-average useful life), software of \$2 million (4 year weighted-average useful life) and backlog of \$1 million (1 year weighted-average useful life).

(3) Inventories

The components of inventories at December 31 were as follows (in thousands):

	<u>2016</u>	<u>2015</u>
Raw materials and supplies	\$ 113,632	\$ 120,811
Work in process	24,290	22,979
Finished products	81,263	80,118
Inventory reserves	(37,233)	(34,040)
	<u>\$ 181,952</u>	<u>\$ 189,868</u>

(4) Property, Plant and Equipment

The components of property, plant and equipment at December 31 were as follows (in thousands):

	<u>2016</u>	<u>2015</u>
Land	\$ 2,404	\$ 2,488
Buildings	88,201	79,182
Machinery and other equipment	221,325	223,561
Computer equipment	70,110	57,338
Software	54,451	38,517
	436,491	401,086
Accumulated depreciation	(295,173)	(295,576)
	<u>\$ 141,318</u>	<u>\$ 105,510</u>

Depreciation and amortization expense related to property, plant and equipment was \$37,299, \$38,185 and \$40,890 for the years ended December 31, 2016, 2015 and 2014, respectively.

(5) Goodwill and Other Intangible Assets

The carrying value of goodwill by segment was as follows (in thousands):

	<u>Medical & Scientific Imaging</u>	<u>RF Technology</u>	<u>Industrial Technology</u>	<u>Energy Systems & Controls</u>	<u>Total</u>
Balances at December 31, 2014	\$ 2,594,356	\$ 1,280,788	\$ 408,964	\$ 426,583	\$ 4,710,691
Goodwill acquired	476,106	720,345	-	-	1,196,451
Goodwill written off related to divestiture of business	-	-	(20,524)	-	(20,524)
Currency translation adjustments	(31,556)	(7,667)	(14,407)	(8,386)	(62,016)
Reclassifications and other	291	(167)	-	-	124
Balances at December 31, 2015	<u>\$ 3,039,197</u>	<u>\$ 1,993,299</u>	<u>\$ 374,033</u>	<u>\$ 418,197</u>	<u>\$ 5,824,726</u>
Goodwill acquired	166,768	2,710,223	-	-	2,876,991
Currency translation adjustments	(19,100)	(15,118)	(10,055)	(7,774)	(52,047)
Reclassifications and other	(1,794)	(734)	-	-	(2,528)
Balances at December 31, 2016	<u>\$ 3,185,071</u>	<u>\$ 4,687,670</u>	<u>\$ 363,978</u>	<u>\$ 410,423</u>	<u>\$ 8,647,142</u>

Reclassifications and other during the year ended December 31, 2016 were due primarily to tax adjustments for 2015 acquisitions, and during the year ended December 31, 2015 were due primarily to tax and intangible adjustments for 2014 acquisitions. See Note 2 for information regarding acquisitions and divestitures.

Other intangible assets were comprised of (in thousands):

	<u>Cost</u>	<u>Accum. amort.</u>	<u>Net book value</u>
Assets subject to amortization:			
Customer related intangibles	\$ 2,448,509	\$ (602,615)	\$ 1,845,894
Unpatented technology	270,170	(117,405)	152,765
Software	161,201	(44,298)	116,903
Patents and other protective rights	24,160	(18,659)	5,501
Backlog	700	(700)	-
Trade names	595	(122)	473
Assets not subject to amortization:			
Trade names	407,460	-	407,460
Balances at December 31, 2015	<u>\$ 3,312,795</u>	<u>\$ (783,799)</u>	<u>\$ 2,528,996</u>
Assets subject to amortization:			
Customer related intangibles	\$ 3,272,081	\$ (712,718)	\$ 2,559,363
Unpatented technology	462,152	(144,025)	318,127
Software	184,761	(56,882)	127,879
Patents and other protective rights	24,656	(20,399)	4,257
Trade names	6,591	(653)	5,938
Assets not subject to amortization:			
Trade names	578,279	-	578,279
In process research and development	62,000	-	62,000
Balances at December 31, 2016	<u>\$ 4,590,520</u>	<u>\$ (934,677)</u>	<u>\$ 3,655,843</u>

Amortization expense of other intangible assets was \$201 million, \$164 million, and \$153 million during the years ended December 31, 2016, 2015 and 2014, respectively. Amortization expense is expected to be \$289 million in 2017, \$283 million in 2018, \$277 million in 2019, \$268 million in 2020 and \$256 million in 2021.

(6) Accrued Liabilities

Accrued liabilities at December 31 were as follows (in thousands):

	<u>2016</u>	<u>2015</u>
Interest	\$ 21,742	\$ 19,776
Customer deposits	16,707	15,094
Commissions	9,144	12,079
Warranty	10,548	10,183
Accrued dividend	36,077	30,436
Rebates	19,414	16,511
Billings in excess of cost	12,381	5,464
Other	93,326	58,970
	<u>\$ 219,339</u>	<u>\$ 168,513</u>

(7) Income Taxes

Earnings before income taxes for the years ended December 31, 2016, 2015 and 2014 consisted of the following components (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
United States	\$ 721,000	\$ 710,614	\$ 665,219
Other	219,652	291,731	256,237
	<u>\$ 940,652</u>	<u>\$ 1,002,345</u>	<u>\$ 921,456</u>

Components of income tax expense for the years ended December 31, 2016, 2015 and 2014 were as follows (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Current:			
Federal	\$ 239,217	\$ 229,224	\$ 218,302
State	21,779	22,041	37,155
Foreign	54,937	71,507	56,107
Deferred:			
Federal	(26,760)	6,710	(27,357)
State	189	(16,844)	(3,307)
Foreign	(7,355)	(6,360)	(5,477)
	<u>\$ 282,007</u>	<u>\$ 306,278</u>	<u>\$ 275,423</u>

Reconciliations between the statutory federal income tax rate and the effective income tax rate for the years ended December 31, 2016, 2015 and 2014 were as follows:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Federal statutory rate	35.0%	35.0%	35.0%
Foreign rate differential	(3.2)	(3.3)	(3.9)
R&D tax credits	(0.7)	(0.5)	(0.4)
State taxes, net of federal benefit	1.9	2.0	2.0
Section 199 deduction	(1.5)	(1.3)	(1.6)
Other, net	(1.5)	(1.3)	(1.2)
	<u>30.0%</u>	<u>30.6%</u>	<u>29.9%</u>

The deferred income tax balance sheet accounts arise from temporary differences between the amount of assets and liabilities recognized for financial reporting and tax purposes.

Components of the deferred tax assets and liabilities at December 31 were as follows (in thousands):

	<u>2016</u>	<u>2015</u>
Deferred tax assets:		
Reserves and accrued expenses	\$ 186,120	\$ 146,014
Inventories	8,967	9,309
Net operating loss carryforwards	87,010	45,616
R&D credits	7,933	8,504
Foreign tax credits	9,203	7,940
Valuation allowance	(26,009)	(19,338)
Total deferred tax assets	<u>\$ 273,224</u>	<u>\$ 198,045</u>
Deferred tax liabilities:		
Reserves and accrued expenses	\$ 13,915	\$ 11,222
Amortizable intangible assets	1,400,792	962,143
Plant and equipment	6,102	4,004
Total deferred tax liabilities	<u>\$ 1,420,809</u>	<u>\$ 977,369</u>

At December 31, 2016, the Company had approximately \$51.5 million of tax-effected U.S. federal net operating loss carryforwards that if not utilized will expire in years 2023 through 2036. The U.S. federal net operating loss carryforwards increased from 2015 to 2016 primarily due to additional net operating losses obtained through recent acquisitions. In recent acquisitions, the consolidated group obtained U.S. federal net operating losses subject to an IRC Section 382 limitation; however, the Company expects to utilize the losses in their entirety prior to expiration. The Company has approximately \$18.4 million of tax-effected state net operating loss carryforwards (without regard to federal benefit of state) that if not utilized will expire in years 2017 through 2036. The state net operating loss carryforwards are primarily related to Florida and New Jersey, but the Company has smaller net operating losses in various other states. The Company has approximately \$23.4 million of tax-effected foreign net operating loss carryforwards that if not utilized will begin to expire in 2017. Additionally, the Company has \$10.9 million of U.S. federal and state research and development tax credit carryforwards (without regard to federal benefit of state) that will expire in years 2019 through 2036 and \$9.1 million of U.S. federal foreign tax credits that, if not utilized, will expire in 2026.

As of December 31, 2016, the Company determined that a total valuation allowance of \$26.0 million was necessary to reduce U.S. deferred tax assets by \$8.7 million and foreign deferred tax assets by \$17.3 million, where it was more likely than not that some portion or all of such deferred tax assets will not be realized. As of December 31, 2016, based on the Company's estimates of future taxable income and any applicable tax-planning strategies within various tax jurisdictions, the Company believes that it is more likely than not that the remaining net deferred tax assets will be realized.

The Company recognizes in the consolidated financial statements only those tax positions determined to be "more likely than not" of being sustained upon examination based on the technical merits of the positions. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Beginning balance	\$ 26,140	\$ 28,567	\$ 26,924
Additions for tax positions of prior periods	3,450	3,525	6,532
Additions for tax positions of the current period	9,012	3,299	5,571
Additions due to acquisitions	5,049	6,177	-
Reductions for tax positions of prior periods	(1,165)	(12,206)	(1,008)
Reductions for tax positions of the current period			
Settlements with taxing authorities	(568)	(142)	(518)
Lapse of applicable statute of limitations	(3,240)	(3,080)	(8,934)
Ending balance	<u>\$ 38,678</u>	<u>\$ 26,140</u>	<u>\$ 28,567</u>

The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate is \$36.8 million. Interest and penalties related to unrecognized tax benefits are classified as a component of income tax expense and totaled a benefit of \$0.4 million in 2016. Accrued interest and penalties were \$3.8 million at December 31, 2016 and \$3.4 million at December 31, 2015. During the next twelve months, the unrecognized tax benefits are expected to decrease by a net \$6.8 million, due mainly to anticipated statute of limitations lapses in various jurisdictions.

The Company and its subsidiaries are subject to U.S. federal income tax as well as income taxes of multiple state, city and foreign jurisdictions. The Company's federal income tax returns for 2013 through the current period remain subject to examination and the relevant state, city and foreign statutes vary. At December 31, 2016, the Internal Revenue Service has been and is continuing to examine the Company's income tax returns for the years 2013 and 2014. The Company does not expect the assessment of any significant additional tax in excess of amounts reserved.

As of December 31, 2016, the amount of earnings of foreign subsidiaries that the Company considers permanently reinvested and for which deferred taxes have not been provided was approximately \$1.37 billion. Because of the availability of U.S. foreign tax credits, it is not practicable to determine the U.S. federal income tax liability that would be payable if such earnings were not reinvested indefinitely.

(8) Long-Term Debt

On September 23, 2016, Roper entered into a new five-year \$2.5 billion unsecured credit facility (the "2016 Facility") with JPMorgan Chase Bank, N.A., as administrative agent, and a syndicate of lenders, which replaced its previous \$1.85 billion unsecured credit facility dated as of July 27, 2012, as amended as of October 28, 2015 (the "2012 Facility"). The 2016 Facility comprises a five year \$2.50 billion revolving credit facility, which includes availability of up to \$150 million for letters of credit. Roper may also, subject to compliance with specified conditions, request term loans or additional revolving credit commitments in an aggregate amount not to exceed \$500 million. At December 31, 2016, there were \$1.93 billion of outstanding borrowings under the 2016 Facility. The Company incurred a debt extinguishment charge of \$0.9 million which represented the unamortized fees associated with the 2012 Facility.

The 2016 Facility contains affirmative and negative covenants which, among other things, limit Roper's ability to incur new debt, enter into certain mergers and acquisitions, sell assets and grant liens, make restricted payments (including the payment of dividends on our common stock) and capital expenditures, or change its line of business. Roper is also subject to financial covenants which require the Company to limit its consolidated total leverage ratio and to maintain a consolidated interest coverage ratio. The most restrictive covenant is the consolidated total leverage ratio which is limited to 3.5 to 1.

On December 2, 2016, Roper amended the 2016 facility to allow the consolidated total leverage ratio be increased, no more than twice during the term of the 2016 facility, to 4.0 to 1 for a consecutive four quarter fiscal period per increase (or, for any portion of such four quarter fiscal period in which the maximum would be 4.25 to 1 pursuant to the 2016 facility amendment, 4.25 to 1). In conjunction with the Deltek acquisition (see Note 2), the Company increased the maximum consolidated total leverage ratio covenant to 4.25 to 1 through June 30, 2017 and 4.00 to 1 through December 31, 2017.

The Company was in compliance with its debt covenants throughout the years ended December 31, 2016 and 2015.

On December 19, 2016, the Company completed a public offering of \$500 million aggregate principal amount of 2.80% senior unsecured notes due December 15, 2021 and \$700 million aggregate principal amount of 3.80% senior unsecured notes due December 15, 2026. The notes bear interest at a fixed rate of 2.80% and 3.80% per year, respectively, payable semi-annually in arrears on June 15 and December 15 of each year, beginning June 15, 2017.

On December 7, 2015, the Company completed a public offering of \$600 million aggregate principal amount of 3.00% senior unsecured notes due December 15, 2020 and \$300 million aggregate principal amount of 3.85% senior unsecured notes due December 15, 2025. The notes bear interest at a fixed rate of 3.00% and 3.85% per year, respectively, payable semi-annually in arrears on June 15 and December 15 of each year, beginning June 15, 2016.

On June 6, 2013, the Company completed a public offering of \$800 million aggregate principal amount of 2.05% senior unsecured notes due October 1, 2018. The notes bear interest at a fixed rate of 2.05% per year, payable semi-annually in arrears on April 1 and October 1 of each year, beginning October 1, 2013.

On November 21, 2012, Roper completed a public offering of \$400 million aggregate principal amount of 1.85% senior unsecured notes due November 15, 2017 and \$500 million aggregate principal amount of 3.125% senior unsecured notes due November 15, 2022. The notes bear interest at a fixed rate of 1.85% and 3.125% per year, respectively, payable semi-annually in arrears on May 15 and November 15 of each year, beginning May 15, 2013.

In September 2009, the Company completed a public offering of \$500 million aggregate principal amount of 6.25% senior unsecured notes due September 1, 2019. The notes bear interest at a fixed rate of 6.25% per year, payable semi-annually in arrears on March 1 and September 1 of each year, beginning March 1, 2010.

Roper may redeem some or all of these notes at any time or from time to time, at 100% of their principal amount, plus a make-whole premium based on a spread to U.S. Treasury securities.

The Company's senior notes are unsecured senior obligations of the Company and rank equally in right of payment with all of Roper's existing and future unsecured and unsubordinated indebtedness. The notes are effectively subordinated to any of its existing and future secured indebtedness to the extent of the value of the collateral securing such indebtedness. The notes are not guaranteed by any of Roper's subsidiaries and are effectively subordinated to all existing and future indebtedness and other liabilities of Roper's subsidiaries.

In December 2003, the Company issued through a public offering \$230 million of 3.75% subordinated convertible notes due 2034 (the "Convertible Notes"). During the year ended December 31, 2016, the balance of the Convertible Notes were converted for \$18.5 million in cash.

Total debt at December 31 consisted of the following (in thousands):

	2016	2015
2016 Facility	\$ 1,930,000	\$ -
2012 Facility	-	180,000
\$400 million 1.850% senior notes due 2017	400,000	400,000
\$800 million 2.050% senior notes due 2018	800,000	800,000
\$500 million 6.250% senior notes due 2019	500,000	500,000
\$600 million 3.000% senior notes due 2020	600,000	600,000
\$500 million 2.800% senior notes due 2021	500,000	-
\$500 million 3.125% senior notes due 2022	500,000	500,000
\$300 million 3.850% senior notes due 2025	300,000	300,000
\$700 million 3.800% senior notes due 2026	700,000	-
Senior subordinated convertible notes	-	4,179
Other	2,989	4,435
Less unamortized debt issuance costs	(23,453)	(17,392)
Total debt	<u>6,209,536</u>	<u>3,271,222</u>
Less current portion, net of issuance costs	400,975	6,805
Long-term debt	<u>\$ 5,808,561</u>	<u>\$ 3,264,417</u>

The 2016 Facility and Roper's \$4.3 billion senior notes provide substantially all of Roper's daily external financing requirements. The interest rate on the borrowings under the 2016 Facility is calculated based upon various recognized indices plus a margin as defined in the credit agreement. At December 31, 2016, Roper's debt consisted of \$4.3 billion of senior notes, \$3.0 million of other debt in the form of capital leases, several smaller facilities that allow for borrowings or the issuance of letters of credit in foreign locations to support Roper's non-U.S. businesses and \$74 million of outstanding letters of credit at December 31, 2016.

Future maturities of total debt during each of the next five years ending December 31 and thereafter were as follows (in thousands):

2017	\$ 401,595
2018	800,840
2019	500,407
2020	600,147
2021	500,000
Thereafter	3,430,000
Total	\$ 6,232,989

(9) Fair Value

Roper's debt at December 31, 2016 included \$4.3 billion of fixed-rate senior notes with the following fair values (in millions):

\$400 million 1.850% senior notes due 2017	\$ 401
\$800 million 2.050% senior notes due 2018	803
\$500 million 6.250% senior notes due 2019	551
\$600 million 3.000% senior notes due 2020	605
\$500 million 2.800% senior notes due 2021	497
\$500 million 3.125% senior notes due 2022	497
\$300 million 3.850% senior notes due 2025	303
\$700 million 3.800% senior notes due 2026	702

The fair values of the senior notes are based on the trading prices of the notes, which the Company has determined to be Level 2 in the FASB fair value hierarchy. Most of Roper's other borrowings at December 31, 2016 were at various interest rates that adjust relatively frequently under its credit facility. The fair value for these borrowings at December 31, 2016 was estimated to be the face value of these borrowings.

(10) Retirement and Other Benefit Plans

Roper maintains four defined contribution retirement plans under the provisions of Section 401(k) of the IRC covering substantially all U.S. employees not subject to collective bargaining agreements. Roper partially matches employee contributions. Costs related all such plans were \$23.7 million, \$20.4 million and \$19.5 million for 2016, 2015 and 2014, respectively.

Roper also maintains various defined benefit retirement plans covering employees of non-U.S. and certain U.S. subsidiaries and a plan that supplements certain employees for the contribution ceiling applicable to the Section 401(k) plans. The costs and accumulated benefit obligations associated with each of these plans were not material.

(11) Stock-Based Compensation

The Roper Technologies, Inc. 2016 Incentive Plan ("2016 Plan") is a stock-based compensation plan used to grant incentive stock options, nonqualified stock options, restricted stock, stock appreciation rights or equivalent instruments to Roper's employees, officers and directors. The 2016 Plan was approved by shareholders at the Annual Meeting of Shareholders on May 27, 2016. The 2016 Plan replaces the Roper Technologies, Inc. Amended and Restated 2006 Incentive Plan ("2006 Plan"), and no additional grants will be made from the 2006 Plan. The number of shares reserved for issuance under the 2016 Plan is 7,924,932, plus 2,073,894 remaining shares that were available to grant under the 2006 Plan at May 27, 2016, plus any shares underlying outstanding awards under the 2006 Plan that terminate or expire unexercised, or are cancelled, forfeited or lapse for any reason subsequent to May 27, 2016. At December 31, 2016, 9,190,273 shares were available to grant.

Under the Roper Technologies, Inc., Employee Stock Purchase Plan ("ESPP"), all employees in the U.S. and Canada are eligible to designate up to 10% of eligible earnings to purchase Roper's common stock at a 5% discount to the average closing price of its common stock at the beginning and end of a quarterly offering period. Common stock sold to the employees may be either treasury stock, stock purchased on the open market, or newly issued shares.

Stock based compensation expense for the years ended December 31, 2016, 2015 and 2014 was as follows (in millions):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Stock based compensation	\$ 78.8	\$ 61.8	\$ 63.0
Tax benefit recognized in net income	27.6	21.6	22.1
Windfall tax benefit, net	-	22.2	21.5

Windfall tax benefits are no longer calculated due to the adoption of the ASU related to stock compensation (see Note 1), as all tax benefits are recognized in net income.

Stock Options – Stock options are typically granted at prices not less than 100% of market value of the underlying stock at the date of grant. Stock options typically vest over a period of three to five years from the grant date and expire ten years after the grant date. The Company recorded \$20.1 million, \$15.3 million, and \$16.6 million of compensation expense relating to outstanding options during 2016, 2015 and 2014, respectively, as a component of general and administrative expenses, primarily at corporate.

The Company estimates the fair value of its option awards using the Black-Scholes option valuation model. The stock volatility for each grant is measured using the weighted-average of historical daily price changes of the Company's common stock over the most recent period equal to the expected life of the grant. The expected term of options granted is derived from historical data to estimate option exercises and employee forfeitures, and represents the period of time that options granted are expected to be outstanding. The risk-free rate for periods within the contractual life of the option is based on the U.S. Treasury yield curve in effect at the time of grant. The weighted-average fair value of options granted in 2016, 2015 and 2014 were calculated using the following weighted-average assumptions:

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Weighted-average fair value (\$)	34.57	33.98	34.95
Risk-free interest rate (%)	1.44	1.53	1.63
Average expected option life (years)	5.20	5.10	5.22
Expected volatility (%)	21.35	22.17	27.01
Expected dividend yield (%)	0.70	0.62	0.58

The following table summarizes the Company's activities with respect to its share-based compensation plans for the years ended December 31, 2016 and 2015:

	<u>Number of shares</u>	<u>Weighted-average exercise price per share</u>	<u>Weighted-average contractual term</u>	<u>Aggregate intrinsic value</u>
Outstanding at January 1, 2015	2,981,111	\$ 90.48		
Granted	628,155	162.77		
Exercised	(400,050)	82.50		
Canceled	(91,600)	142.36		
Outstanding at December 31, 2015	<u>3,117,616</u>	104.54	6.08	\$ 265,782,636
Granted	743,250	172.23		
Exercised	(371,853)	75.23		
Canceled	(69,416)	159.97		
Outstanding at December 31, 2016	<u>3,419,597</u>	121.31	6.15	\$ 211,369,740
Exercisable at December 31, 2016	<u>1,954,306</u>	\$ 89.37	4.28	\$ 183,136,309

The following table summarizes information for stock options outstanding at December 31, 2016:

Exercise price	Outstanding options			Exercisable options	
	Number	Average exercise price	Average remaining life (years)	Number	Average exercise price
\$ 38.46 - 57.68	689,289	\$ 53.28	1.5	689,289	\$ 53.28
57.69 - 76.91	259,460	72.55	4.2	259,460	72.55
76.92 - 96.14	249,281	93.34	5.0	249,281	93.34
96.15 - 115.37	283,069	114.99	6.0	283,069	114.99
115.38 - 134.60	503,778	130.72	7.0	368,456	129.96
134.61- 153.82	259,370	144.19	7.7	75,334	141.95
153.83 - 173.05	916,725	167.80	8.8	25,334	157.81
173.06 - 192.28	258,625	179.42	9.5	4,083	175.47
<u>\$ 38.46 - 192.28</u>	<u>3,419,597</u>	<u>\$ 121.31</u>	<u>6.2</u>	<u>1,954,306</u>	<u>\$ 89.37</u>

At December 31, 2016, there was \$29.8 million of total unrecognized compensation expense related to nonvested options granted under the Company's share-based compensation plans. That cost is expected to be recognized over a weighted-average period of 2.1 years. The total intrinsic value of options exercised in 2016, 2015 and 2014 was \$38.9 million, \$36.9 million and \$50.3 million, respectively. Cash received from option exercises under all plans in 2016 and 2015 was \$28.0 million and \$33.0 million, respectively.

Restricted Stock Grants - During 2016 and 2015, the Company granted 555,730 and 437,035 shares, respectively, of restricted stock to certain employee and director participants under its share-based compensation plans. Restricted stock grants generally vest over a period of 1 to 3 years. The Company recorded \$57.8 million, \$46.5 million and \$46.4 million of compensation expense related to outstanding shares of restricted stock held by employees and directors during 2016, 2015 and 2014, respectively. A summary of the Company's nonvested shares activity for 2016 and 2015 is as follows:

	Number of shares	Weighted-average grant date fair value
Nonvested at December 31, 2014	542,555	\$ 130.29
Granted	437,035	159.32
Vested	(243,423)	183.10
Forfeited	(26,892)	148.82
Nonvested at December 31, 2015	<u>709,275</u>	<u>\$ 146.64</u>
Granted	555,730	172.67
Vested	(287,233)	141.27
Forfeited	(25,100)	139.56
Nonvested at December 31, 2016	<u>952,672</u>	<u>\$ 164.62</u>

At December 31, 2016, there was \$92.9 million of total unrecognized compensation expense related to nonvested awards granted to both employees and directors under the Company's share-based payment plans. That cost is expected to be recognized over a weighted-average period of 2.6 years. Unrecognized compensation expense related to nonvested shares of restricted stock grants is recorded as a reduction to additional paid-in capital in stockholder's equity at December 31, 2016.

Employee Stock Purchase Plan - During 2016, 2015 and 2014, participants of the ESPP purchased 19,448, 18,132 and 20,368 shares, respectively, of Roper's common stock for total consideration of \$3.3 million, \$2.9 million, and \$2.8 million, respectively. All of these shares were purchased from Roper's treasury shares. The Company had no compensation expense relating to the stock purchase plan during 2016, 2015 and 2014.

(12) Contingencies

Roper, in the ordinary course of business, is the subject of, or a party to, various pending or threatened legal actions, including product liability and employment practices that, in general, are based upon claims of the kind that have been customary over the past several years and which the Company is vigorously defending. After analyzing the Company's contingent liabilities on a gross basis and, based upon past experience with resolution of its product liability and employment practices claims and the limits of the primary, excess, and umbrella liability insurance coverages that are available with respect to pending claims, management believes that adequate provision has been made to cover any potential liability not covered by insurance, and that the ultimate liability, if any, arising from these actions should not have a material adverse effect on Roper's consolidated financial position, results of operations or cash flows.

Roper or its subsidiaries have been named defendants along with numerous industrial companies in asbestos-related litigation claims in certain U.S. states. No significant resources have been required by Roper to respond to these cases and Roper believes it has valid defenses to such claims and, if required, intends to defend them vigorously. Given the state of these claims it is not possible to determine the potential liability, if any.

Roper's rent expense was \$44.9 million, \$40.2 million and \$38.4 million for 2016, 2015 and 2014, respectively. Roper's future minimum property lease commitments are as follows (in millions):

2017	\$	53.8
2018		41.0
2019		32.4
2020		28.7
2021		24.9
Thereafter		51.6
Total	<u>\$</u>	<u>232.4</u>

A summary of the Company's warranty accrual activity is presented below (in thousands):

	<u>2016</u>	<u>2015</u>	<u>2014</u>
Balance, beginning of year	\$ 10,183	\$ 9,537	\$ 14,336
Additions charged to costs and expenses	15,950	14,284	13,396
Deductions	(15,513)	(13,059)	(18,078)
Other	(72)	(579)	(117)
Balance, end of year	<u>\$ 10,548</u>	<u>\$ 10,183</u>	<u>\$ 9,537</u>

Other included warranty balances at acquired businesses at the dates of acquisition, the effects of foreign currency translation adjustments, reclassifications and other.

As of December 31, 2016, Roper had \$74 million of letters of credit issued to guarantee its performance under certain services contracts or to support certain insurance programs and \$521 million of outstanding surety bonds. Certain contracts, primarily those involving public sector customers, require Roper to provide a surety bond as a guarantee of its performance of contractual obligations.

(13) Segment and Geographic Area Information

Roper's operations are reported in four segments around common customers, markets, sales channels, technologies and common cost opportunities. The segments are: Medical & Scientific Imaging, RF Technology, Industrial Technology and Energy Systems & Controls. The Medical & Scientific Imaging segment offers medical products and software, high performance digital imaging products and software. The RF Technology segment includes products and systems related to comprehensive toll and traffic systems and processing, security and access control, campus card systems, card readers, software-as-a-service applications in the freight matching, commercial construction and food industries, comprehensive business software for legal and construction firms and utility metering and remote monitoring applications. Products included within the Industrial Technology segment are water and fluid handling pumps, flow measurement and metering equipment, industrial valves and controls, materials analysis equipment and consumables and industrial leak testing. The Energy Systems & Controls segment's products include control systems, equipment and consumables for fluid properties testing, vibration sensors and other non-destructive inspection and measurement products and services. Roper's management structure and internal reporting are aligned consistently with these four segments.

There were no material transactions between Roper's business segments during 2016, 2015 and 2014. Sales between geographic areas are primarily of finished products and are accounted for at prices intended to represent third-party prices. Operating profit by business segment and by geographic area is defined as net sales less operating costs and expenses. These costs and expenses do not include unallocated corporate administrative expenses. Items below income from operations on Roper's statement of earnings are not allocated to business segments.

Identifiable assets are those assets used primarily in the operations of each business segment or geographic area. Corporate assets are principally comprised of cash and cash equivalents, deferred tax assets, recoverable insurance claims, deferred compensation assets and property and equipment.

Selected financial information by business segment for 2016, 2015 and 2014 follows (in thousands):

	<u>Medical & Scientific Imaging</u>	<u>RF Technology</u>	<u>Industrial Technology</u>	<u>Energy Systems & Controls</u>	<u>Corporate</u>	<u>Total</u>
2016						
Net sales	\$ 1,362,813	\$ 1,210,264	\$ 706,625	\$ 510,223	\$ -	\$ 3,789,925
Operating profit	477,548	372,467	202,451	129,602	(127,505)	1,054,563
Assets:						
Operating assets	282,437	487,936	182,430	164,349	11,788	1,128,940
Intangible assets, net	4,660,298	6,634,964	493,924	513,799	-	12,302,985
Other	154,838	156,413	88,130	134,976	358,645	893,002
Total						14,324,927
Capital expenditures	16,098	11,536	6,590	2,218	863	37,305
Depreciation and other amortization	119,248	82,653	18,573	19,701	278	240,453
2015						
Net sales	\$ 1,215,318	\$ 1,033,951	\$ 745,381	\$ 587,745	\$ -	\$ 3,582,395
Operating profit	441,931	312,112	214,538	162,128	(102,791)	1,027,918
Assets:						
Operating assets	265,520	293,004	182,544	194,898	9,080	945,046
Intangible assets, net	4,451,028	2,848,911	513,155	540,628	-	8,353,722
Other	121,461	117,596	67,832	113,014	449,694	869,597
Total						10,168,365
Capital expenditures	12,642	10,758	9,179	3,276	405	36,260
Depreciation and other amortization	105,928	56,877	19,912	21,254	290	204,261
2014						
Net sales	\$ 1,080,309	\$ 950,227	\$ 827,145	\$ 691,813	\$ -	\$ 3,549,494
Operating profit	375,867	271,177	247,596	203,021	(98,188)	999,473
Assets:						
Operating assets	232,380	270,458	220,115	219,284	7,002	949,239
Intangible assets, net	3,842,180	1,720,977	557,593	568,670	-	6,689,420
Other*	147,529	65,636	120,681	223,831	203,849	761,526
Total*						8,400,185
Capital expenditures	11,430	10,521	10,713	4,634	346	37,644
Depreciation and other amortization	93,683	58,702	21,135	23,281	483	197,284

*Other assets as of December 31, 2014 have been adjusted by \$12,749 due to the adoption of a recent ASU regarding presentation of debt issuance costs (see Note 1).

Summarized data for Roper's U.S. and foreign operations (principally in Canada, Europe and Asia) for 2016, 2015 and 2014, based upon the country of origin of the Roper entity making the sale, was as follows (in thousands):

	<u>United States</u>	<u>Non-U.S.</u>	<u>Eliminations</u>	<u>Total</u>
2016				
Sales to unaffiliated customers	\$ 2,978,496	\$ 811,429	\$ -	\$ 3,789,925
Sales between geographic areas	137,276	109,370	(246,646)	-
Net sales	<u>\$ 3,115,772</u>	<u>\$ 920,799</u>	<u>\$ (246,646)</u>	<u>\$ 3,789,925</u>
Long-lived assets	<u>\$ 145,996</u>	<u>\$ 21,020</u>	<u>\$ -</u>	<u>\$ 167,016</u>
2015				
Sales to unaffiliated customers	\$ 2,829,752	\$ 752,643	\$ -	\$ 3,582,395
Sales between geographic areas	135,363	119,006	(254,369)	-
Net sales	<u>\$ 2,965,115</u>	<u>\$ 871,649</u>	<u>\$ (254,369)</u>	<u>\$ 3,582,395</u>
Long-lived assets	<u>\$ 133,522</u>	<u>\$ 21,960</u>	<u>\$ -</u>	<u>\$ 155,482</u>
2014				
Sales to unaffiliated customers	\$ 2,661,470	\$ 888,024	\$ -	\$ 3,549,494
Sales between geographic areas	159,049	119,175	(278,224)	-
Net sales	<u>\$ 2,820,519</u>	<u>\$ 1,007,199</u>	<u>\$ (278,224)</u>	<u>\$ 3,549,494</u>
Long-lived assets	<u>\$ 134,855</u>	<u>\$ 30,781</u>	<u>\$ -</u>	<u>\$ 165,636</u>

Export sales from the U.S. during the years ended December 31, 2016, 2015 and 2014 were \$460 million, \$481 million and \$477 million, respectively. In the year ended December 31, 2016, these exports were shipped primarily to Asia (37%), Europe (19%), Canada (16%), Middle East (16%) and other (12%).

Sales to customers outside the U.S. accounted for a significant portion of Roper's revenues. Sales are attributed to geographic areas based upon the location where the product is ultimately shipped. Roper's net sales for the years ended December 31, 2016, 2015 and 2014 are shown below by region, except for Canada, which is presented separately as it is the only country in which Roper has had greater than 5% of total sales for any of the three years presented (in thousands):

	<u>Medical & Scientific Imaging</u>	<u>RF Technology</u>	<u>Industrial Technology</u>	<u>Energy Systems & Controls</u>	<u>Total</u>
2016					
Canada	\$ 21,993	\$ 52,703	\$ 60,551	\$ 22,360	\$ 157,607
Europe	228,058	71,673	89,229	119,032	507,992
Asia	111,843	11,988	52,087	126,769	302,687
Middle East	10,107	50,605	2,997	37,491	101,200
Rest of the world	21,549	17,067	20,675	46,202	105,493
Total	<u>\$ 393,550</u>	<u>\$ 204,036</u>	<u>\$ 225,539</u>	<u>\$ 351,854</u>	<u>\$ 1,174,979</u>
2015					
Canada	\$ 23,737	\$ 45,506	\$ 65,826	\$ 23,883	\$ 158,952
Europe	167,698	57,581	97,938	129,021	452,238
Asia	112,732	10,019	60,817	132,088	315,656
Middle East	15,877	54,165	4,220	50,227	124,489
Rest of the world	20,417	10,761	24,471	55,074	110,723
Total	<u>\$ 340,461</u>	<u>\$ 178,032</u>	<u>\$ 253,272</u>	<u>\$ 390,293</u>	<u>\$ 1,162,058</u>
2014					
Canada	\$ 24,997	\$ 45,811	\$ 106,598	\$ 31,831	\$ 209,237
Europe	185,263	54,330	121,909	157,391	518,893
Asia	107,695	7,555	61,552	143,524	320,326
Middle East	9,997	34,241	3,824	42,988	91,050
Rest of the world	28,722	9,333	26,134	78,186	142,375
Total	<u>\$ 356,674</u>	<u>\$ 151,270</u>	<u>\$ 320,017</u>	<u>\$ 453,920</u>	<u>\$ 1,281,881</u>

(14) Concentration of Risk

Financial instruments which potentially subject the Company to credit risk consist primarily of cash, cash equivalents and trade receivables.

The Company maintains cash and cash equivalents with various major financial institutions around the world. Cash equivalents include investments in commercial paper of companies with high credit ratings, investments in money market securities and securities backed by the U.S. Government. The Company limits the amount of credit exposure with any one financial institution and believes that no significant concentration of credit risk exists with respect to cash investments.

Trade receivables subject the Company to the potential for credit risk with customers. To reduce credit risk, the Company performs ongoing evaluations of its customers' financial condition.

(15) Quarterly Financial Data (unaudited)

	<u>First Quarter</u>	<u>Second Quarter</u>	<u>Third Quarter</u>	<u>Fourth Quarter</u>
	(in thousands, except per share data)			
2016				
Net sales	\$ 902,423	\$ 931,558	\$ 945,144	\$ 1,010,800
Gross profit	559,519	567,520	578,493	626,878
Income from operations	244,991	253,078	267,390	289,104
Net earnings	151,416	158,069	167,079	182,081
Earnings from continuing operations per common share:				
Basic	1.50	1.56	1.65	1.79
Diluted	1.48	1.54	1.63	1.78
2015				
Net sales	\$ 865,281	\$ 889,541	\$ 883,933	\$ 943,640
Gross profit	518,161	533,911	533,483	579,091
Income from operations	246,896	251,974	250,371	278,677
Net earnings	155,773	171,280	160,417	208,597
Earnings from continuing operations per common share:				
Basic	1.55	1.70	1.59	2.07
Diluted	1.54	1.69	1.58	2.05

The sum of the four quarters may not agree with the total for the year due to rounding.

ROPER TECHNOLOGIES, INC. AND SUBSIDIARIES

Schedule II – Consolidated Valuation and Qualifying Accounts
Years ended December 31, 2016, 2015 and 2014

	<u>Balance at beginning of year</u>	<u>Additions charged to costs and expenses</u>	<u>Deductions</u>	<u>Other</u>	<u>Balance at end of year</u>
	(in thousands)				
Allowance for doubtful accounts and sales allowances					
2016	\$ 12,404	\$ 1,791	\$ (2,794)	\$ 3,088	\$ 14,489
2015	13,694	1,536	(4,128)	1,302	12,404
2014	14,992	2,357	(3,355)	(300)	13,694
Reserve for inventory obsolescence					
2016	\$ 34,040	\$ 10,071	\$ (6,540)	\$ (338)	\$ 37,233
2015	38,879	8,616	(9,049)	(4,406)	34,040
2014	43,452	8,621	(11,833)	(1,361)	38,879

Deductions from the allowance for doubtful accounts represented the net write-off of uncollectible accounts receivable. Deductions from the inventory obsolescence reserve represented the disposal of obsolete items.

Other included the allowance for doubtful accounts and reserve for inventory obsolescence of acquired businesses at the dates of acquisition, the effects of foreign currency translation adjustments for those companies whose functional currency was not the U.S. dollar, reclassifications and other.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

There have been no changes in accountants or disagreements with accountants on accounting and financial disclosures.

ITEM 9A. CONTROLS AND PROCEDURES

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in Internal Control-Integrated Framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2016. Our internal control over financial reporting as of December 31, 2016 has been audited by PricewaterhouseCoopers LLP, an independent registered certified public accounting firm, as stated in their report which is included herein.

Our management excluded acquisitions completed during 2016 from its assessment of internal control over financial reporting as of December 31, 2016. These acquisitions are wholly-owned subsidiaries whose excluded aggregate assets represent 2.1%, and whose aggregate total revenues represent 2.6%, of the related consolidated financial statement amounts as of and for the year ended December 31, 2016.

Evaluation of Disclosure Controls and Procedures

As required by SEC rules, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. This evaluation was carried out under the supervision and with the participation of our management, including our principal executive officer and principal financial officer. Based on this evaluation, we have concluded that our disclosure controls and procedures were effective as of December 31, 2016; however, through an administrative oversight, we late filed a required Current Report on Form 8-K related to the closing of Deltek acquisition that was due on January 3, 2017 and have since taken appropriate steps to remediate the deficiency in our disclosure controls and procedures

Disclosure controls and procedures are our controls and other procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act are accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the fourth quarter of 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

There were no disclosures of any information required to be filed on Form 8-K during the fourth quarter of 2016 that were not filed.

PART III

Except as otherwise indicated, the following information required by the Instructions to Form 10-K is incorporated herein by reference from the sections of the Roper Proxy Statement for the annual meeting of shareholders to be held on June 8, 2017 ("2017 Proxy Statement"), as specified below:

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

We incorporate the information required by this item by reference to our 2017 Proxy Statement.

ITEM 11. EXECUTIVE COMPENSATION

We incorporate the information required by this item by reference to our 2017 Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Other than the information set forth below, we incorporate the information required by this item by reference to our 2017 Proxy Statement.

Securities Authorized for Issuance under Equity Compensation Plans

The following table provides information as of December 31, 2016 regarding compensation plans (including individual compensation arrangements) under which our equity securities are authorized for issuance.

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity Compensation Plans Approved by Shareholders ⁽¹⁾			
Stock options	3,419,597	\$ 121.31	
Restricted stock awards ⁽²⁾	952,672	-	
Subtotal	4,372,269		9,190,273
Equity Compensation Plans Not Approved by Shareholders	-	-	-
Total	4,372,269	\$ -	9,190,273

(1) Consists of the Amended and Restated 2006 Incentive Plan (no additional equity awards may be granted under this plan) and the 2016 Incentive Plan.

(2) The weighted-average exercise price is not applicable to restricted stock awards.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

We incorporate the information required by this item by reference to our 2017 Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

We incorporate the information required by this item by reference to our 2017 Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are filed as a part of this Annual Report.

(1) Consolidated Financial Statements: The following consolidated financial statements are included in Part II, Item 8 of this report.

Consolidated Balance Sheets as of December 31, 2016 and 2015

Consolidated Statements of Earnings for the Years ended December 31, 2016 , 2015 and 2014

Consolidated Statements of Comprehensive Income for the Years ended December 31, 2016 , 2015 and 2014

Consolidated Statements of Stockholders' Equity for the Years ended December 31, 2016 , 2015 and 2014

Consolidated Statements of Cash Flows for the Years ended December 31, 2016 , 2015 and 2014

Notes to Consolidated Financial Statements

(2) Consolidated Valuation and Qualifying Accounts for the Years ended December 31, 2016 , 2015 and 2014

(b) Exhibits

Exhibit No.	Description of Exhibit
(a)2.1	Agreement and Plan of Merger dated as of December 6, 2016, by and among Project Diamond Holdings Corporation, the Company, Dash I, Inc. and Thoma Bravo, LLC, as representative of the stockholders of Project Diamond Holdings Corporation and holders of outstanding options to acquire common stock of Project Diamond Holdings Corporation.
(b)3.1	Restated Certificate of Incorporation as amended through April 24, 2015.
(c)3.2	Amended and Restated By-Laws.
(d)4.2	Indenture between Registrant and SunTrust Bank, dated as of November 28, 2003.
4.3	Form of Debt Securities (included in Exhibit 4.2).
(e)4.4	First Supplemental Indenture between Registrant and SunTrust Bank, dated as of December 29, 2003.
(f)4.5	Second Supplemental Indenture between Registrant and SunTrust Bank, dated as of December 7, 2004.
(g)4.6	Indenture between Registrant and Wells Fargo Bank, dated as of August 4, 2008.
(h)4.7	Form of Note.
(i)4.8	Form of 2.05% Senior Notes due 2018.
(j)4.9	Form of 6.25% Senior Notes due 2019.
(k)4.10	Form of 1.85% Senior Notes due 2017.
4.11	Form of 3.125% Senior Notes due 2022 (included in Exhibit 4.10).
(l)4.12	Form of 3.00% Senior Notes due 2020.
4.13	Form of 3.85% Senior Notes due 2025 (included in Exhibit 4.12).
(m)4.14	Form of 2.800% Senior Notes due 2021.
4.15	Form of 3.800% Senior Notes due 2026 (included in Exhibit 4.14)
(n)10.01	Form of Amended and Restated Indemnification Agreement. †
(o)10.02	Employee Stock Purchase Plan, as amended and restated. †
(p)10.03	2000 Stock Incentive Plan, as amended. †
(p)10.04	Non-Qualified Retirement Plan, as amended. †
(q)10.05	Brian D. Jellison Employment Agreement, dated as of December 29, 2008. †

- (t)10.06 Credit Agreement, dated as of September 23, 2016 among Registrant, the foreign subsidiary borrowers from time to time party thereto, the financial institutions party thereto, JPMorgan Chase Bank, N.A., as administrative agent, Wells Fargo Bank, N.A. and Bank of America, N.A. as syndication agents, and The Bank of Tokyo-Mitsubishi UFJ, Ltd. and Mizuho Bank, Ltd., PNC Bank, National Association, SunTrust Bank and TD Bank, N.A. as co-documentation agents.
 - (s)10.07 Amendment No. 1 to Credit Agreement dated December 2, 2016, to Credit Agreement dated as of September 23, 2016 by and among Registrant, the foreign subsidiary borrowers party thereto from time to time, the lenders party thereto from time to time, JP Morgan Chase Bank, N.A., as Administrative Agent, and the other agents and parties thereto.
 - (t)10.08 Form of Executive Officer Restricted Stock Award Agreement. †
 - (t)10.09 Brian D. Jellison Restricted Stock Unit Award Agreement. †
 - (u)10.10 Offer letter for John Humphrey, dated March 31, 2006. †
 - (v)10.11 Amended and Restated 2006 Incentive Plan. †
 - (w)10.12 Form of Restricted Stock Agreement for Non-Employee Directors. †
 - (w)10.13 Form of Restricted Stock Agreement for Employees. †
 - (w)10.14 Form of Non-Statutory Stock Option Agreement. †
 - (x)10.15 David B. Liner Retirement Agreement and General Release dated November 18, 2016. †
 - (y)10.16 Amendment to John Humphrey offer letter. †
 - 10.17 Offer letter to John K. Stipancich, filed herewith. †
 - (z)10.18 Form of director and officer indemnification agreement. †
 - (aa)10.19 2016 Stock Incentive Plan. †
 - 10.20 Amendment No. 1 to the 2016 Stock Incentive Plan, filed herewith. †
 - 10.21 Form of Cash Settled Restricted Stock Unit Award Agreement for Non-US Employees, under the 2016 Stock Incentive Plan, filed herewith. †
 - 10.22 Form of Non-Statutory Stock Option Agreement, under the 2016 Stock Incentive Plan, filed herewith. †
 - 10.23 Form of Restricted Stock Award Agreement, under the 2016 Stock Incentive Plan, filed herewith. †
 - (bb)10.24 Director Compensation Plan, under 2016 Stock Incentive Plan. †
 - 10.25 Form of Restricted Stock Unit Award Agreement for Non-Employee Directors, under the 2016 Stock Incentive Plan (included in Exhibit 10.24). †
 - 21.1 List of Subsidiaries, filed herewith.
 - 23.1 Consent of Independent Registered Public Accountants, filed herewith.
 - 31.1 Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer, filed herewith.
 - 31.2 Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer, filed herewith.
 - 32.1 Section 1350 Certification of Chief Executive and Chief Financial Officers, filed herewith.
 - 101.INS XBRL Instance Document, furnished herewith.
 - 101.SCH XBRL Taxonomy Extension Schema Document, filed herewith.
 - 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document, filed herewith.
 - 101.DEF XBRL Taxonomy Extension Definition Linkbase Document, filed herewith.
 - 101.LAB XBRL Taxonomy Extension Label Linkbase Document, filed herewith.
 - 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document, filed herewith.
-
- a) Incorporated herein by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on December 6, 2016 (file no. 1-12273).
 - b) Incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on April 24, 2015 (file no. 1-12273).
 - c) Incorporated herein by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed March 14, 2016 (file no. 1-12273).
 - d) Incorporated herein by reference to Exhibit 4.2 to the Company's Pre-Effective Amendment No. 1 to the Registration Statement on Form S-3 filed November 28, 2003 (file no. 333-110491).
 - e) Incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed January 13, 2004 (file no. 1-12273).
 - f) Incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed December 7, 2004 (file no. 1-12273).

- g) Incorporated herein by reference to Exhibit 4.2 to the Company's Quarterly Report on Form 10-Q filed on November 7, 2008 (file no. 1-12273).
- h) Incorporated herein by reference to Exhibit 4.1 to the Registration Statement on Form S-3/ASR filed November 25, 2015 (file no. 333-208200).
- i) Incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed June 6, 2013 (file no. 1-12273).
- j) Incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed September 2, 2009 (file no. 1-12273).
- k) Incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed November 21, 2012 (file no. 1-12273).
- l) Incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed December 7, 2015 (file no. 1-12273).
- m) Incorporated herein by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed December 19, 2016 (file no. 1-12273).
- n) Incorporated herein by reference to Exhibit 10.04 to the Company's Quarterly Report on Form 10-Q filed August 31, 1999 (file no. 1-12273).
- o) Incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed November 5, 2010 (file no. 1-12273).
- p) Incorporated herein by reference to Exhibit 10.06 to the Company's Annual Report on Form 10-K filed March 2, 2009 (file no. 1-12273).
- q) Incorporated herein by reference to Exhibit 10.07 to the Company's Annual Report on Form 10-K filed March 2, 2009 (file no. 1-12273).
- r) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed September 23, 2016 (file no. 1-12273).
- s) Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed December 7, 2016 (file no. 1-12273).
- t) Incorporated herein by reference to Exhibits 99.1 and 99.2 to the Company's Current Report on Form 8-K filed December 30, 2004 (file no. 1-12273).
- u) Incorporated herein by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q filed August 9, 2006 (file no. 1-12273).
- v) Incorporated herein by reference to Appendix A to the Company's Definitive Proxy Statement on Schedule 14A filed April 30, 2012 (file no. 1-12273).
- w) Incorporated herein by reference to Exhibits 10.2, 10.3 and 10.4 to the Company's Current Report on Form 8-K filed December 6, 2006 (file no. 1-12273).
- x) Incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed November 23, 2016 (file no. 1-12273).
- y) Incorporated herein by reference to Exhibit 10.01 to the Company's Quarterly Report on Form 10-Q filed May 7, 2009 (file no. 1-12273).
- z) Incorporated herein by reference to Exhibit 10 to the Current Report on Form 8-K filed November 20, 2015 (file no. 1-12273).
- aa) Incorporated by reference to Appendix B to the Company's Definitive Proxy Statement on Schedule 14A filed April 26, 2016 (file no. 1-12273).
- bb) Incorporated by reference to Exhibit 10.2 to the Company's Form 10Q filed August 5, 2016 (file no. 1-12273).
- † Management contract or compensatory plan or arrangement.

ITEM 16. FORM 10-K SUMMARY

None

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, Roper has duly caused this Report to be signed on its behalf by the undersigned, therewith duly authorized.

ROPER TECHNOLOGIES, INC.
(Registrant)

By: /S/ BRIAN D. JELLISON
Brian D. Jellison, President and Chief Executive Officer

February 27, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of Roper and in the capacities and on the dates indicated.

<u>/S/ BRIAN D. JELLISON</u> Brian D. Jellison	President, Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	February 27, 2017
<u>/S/ JOHN HUMPHREY</u> John Humphrey	Executive Vice President, Chief Financial Officer (Principal Financial Officer)	February 27, 2017
<u>/S/ PAUL J. SONI</u> Paul J. Soni	Vice President and Controller (Principal Accounting Officer)	February 27, 2017
<u>/S/ AMY WOODS BRINKLEY</u> Amy Woods Brinkley	Director	February 27, 2017
<u>/S/ JOHN F. FORT, III</u> John F. Fort, III	Director	February 27, 2017
<u>/S/ ROBERT D. JOHNSON</u> Robert D. Johnson	Director	February 27, 2017
<u>/S/ ROBERT E. KNOWLING</u> Robert E. Knowling	Director	February 27, 2017
<u>/S/ WILBUR J. PREZZANO</u> Wilbur J. Prezzano	Director	February 27, 2017
<u>/S/ LAURA G. THATCHER</u> Laura G. Thatcher	Director	February 27, 2017
<u>/S/ RICHARD F. WALLMAN</u> Richard F. Wallman	Director	February 27, 2017
<u>/S/ CHRISTOPHER WRIGHT</u> Christopher Wright	Director	February 27, 2017

Name of Subsidiary	Jurisdiction of Incorporation/Organization
3089554 Nova Scotia ULC	Canada
AC Analytical Controls B.V.	Netherlands
AC Analytical Controls Holding B.V.	Netherlands
AC Analytical Controls Services B.V.	Netherlands
Acton Research Corporation	Delaware
Acumen PM, LLC	Texas
Aderant Canada Company	Canada
Aderant Case Management, LLC	Delaware
Aderant CM, LLC	Delaware
Aderant CompuLaw, LLC	Delaware
Aderant CRM, LLC	Delaware
Aderant DoD, LLC	Delaware
Aderant Enterprise Holdings, Inc.	Delaware
Aderant FM, LLC	Delaware
Aderant Holdings, Inc.	Delaware
Aderant Imaging, LLC	Delaware
Aderant International Holdings, Inc.	Delaware
Aderant Legal Holdings, Inc.	Delaware
Aderant Legal Holdings (AUS) Pty Ltd	Australia
Aderant Legal Holdings (NZ) ULC	New Zealand
Aderant Legal (UK) Limited	United Kingdom
Aderant North America, Inc.	Florida
Aderant Parent Holdings, Inc.	Delaware
Aderant RainMaker, LLC	Delaware
Aderant Redwood, LLC	Delaware
Advanced Sensors Limited	United Kingdom
Alpha Holdings of Delaware I LLC	Delaware
Alpha Holdings of Delaware II LLC	Delaware
Alpha Technologies B.V.	Netherlands
Alpha Technologies GmbH	Germany
Alpha Technologies Japan LLC	Delaware
Alpha Technologies Services LLC	Delaware
Alpha Technologies U.K.	United Kingdom
Alpha Technologies, s.r.o.	Czech Republic
Alpha UK Holdings LLC	Delaware
Amot Controls Corporation	Delaware
Amot Controls GmbH	Germany
Amot/Metrix Investment Company, Inc.	Delaware
Amphire Solutions, Inc.	Delaware
Amtech Systems (Hong Kong) Limited	Hong Kong
Amtech Systems, LLC	Delaware
Amtech World Corporation	Delaware
Ascension Technology Corporation	Delaware
Atlantic Health Partners, Inc.	Delaware
Atlas Database Software Corp.	California
Atlas Healthcare Software India Private Limited	India
Axium Holdco, Inc.	Delaware
BidClerk, Inc.	Delaware
Bid News Construction Reports LLC	Oklahoma
CBORD Holdings Corp.	Delaware
CDC Publishing, LLC	Delaware
Centurion Research Solutions, LLC	Virginia
Civco Holding, Inc.	Delaware
Civco Medical Instruments Co., Inc.	Iowa
CIVCO Medical Solutions B.V.	Netherlands
Clinisys Group Limited	United Kingdom
Clinisys Scotland Limited	United Kingdom
Clinisys Solutions Limited	United Kingdom
CMD Holdco, Inc.	Delaware
Compressor Controls (Beijing) Corporation Ltd.	China
Compressor Controls Corporation	Iowa
Compressor Controls Corporation B.V.	Netherlands
Compressor Controls Corporation Middle East	Delaware
Compressor Controls Corporation S.r.l.	Italy
Compressor Controls Mauritius Ltd.	Mauritius
Compressor Controls Pty Ltd.	Australia
Construction Datafax, Inc.	Alabama
Construction Market Data Group Inc.	Canada
Construction Market Data Group LLC	Delaware
Cornell Pump Company	Delaware
Cornell Pump Europe GmbH	Germany
C/S Solutions, Inc.	California

DAP Technologies Corp.	Delaware
DAP Technologies Limited	United Kingdom
DAP Technologies LTD	Canada
Dash I, Inc.	Delaware
DAT Solutions, LLC	Delaware
Data Innovations LLC	Delaware
Data Innovations Cooperatief U.A.	Netherlands
Data Innovations Europe S.A.	Belgium
Data Innovations Latin America Ltda	Brazil
Dawning Technologies, LLC	Delaware
DCMH Group Holdings, Inc.	Delaware
DCMH Group Holdings, LLC	Delaware
DCMH Holdings, Inc.	Delaware
Deltek Asia Pacific (HK) Limited	Hong Kong
Deltek Australia Pty Ltd.	Australia
Deltek Belgie BVBA	Belgium
Deltek Danmark A/S	Denmark
Deltek France SAS	France
Deltek GB Limited	United Kingdom
Deltek GmbH	Germany
Deltek Holdings Limited	United Kingdom
Deltek, Inc.	Delaware
Deltek Nederland B.V.	Netherlands
Deltek Netherlands B.V.	Netherlands
Deltek Norge AS	Norway
Deltek Systems (Canada), Inc.	Canada
Deltek Systems (Colorado) Inc.	Wyoming
Deltek Systems (Philippines) Ltd.	Virginia
Deltek Systems (UK) Ltd.	United Kingdom
Deltek Sverige AB	Sweden
Deltek UK Limited	United Kingdom
Deltek US, Inc.	Delaware
Deltek WST LLC	Texas
DI Acquisition Subsidiary, Inc.	Delaware
DI Dutch Holdings LLC	Delaware
DI Hong Kong Limited	Hong Kong
Dynamic Instruments, Inc.	California
Dynisco Enterprises GmbH	Germany
Dynisco Enterprises, LLC	Delaware
Dynisco Europe GmbH	Germany
Dynisco Holding GmbH	Germany
Dynisco Hong Kong Holdings, Limited	Hong Kong
Dynisco Instruments LLC	Delaware
Dynisco Instruments S.a.r.l.	France
Dynisco LLC	Delaware
Dynisco Parent, Inc.	Delaware
Dynisco S.r.l.	Italy
Dynisco Shanghai Sensor and Instrument Co., Ltd.	China
Dynisco –Viatran (M) Sdn Bhd	Malaysia
Dynisco Viatran LLC	Delaware
Dynisco-Viatran Instrument Sdn Bhd	Malaysia
Fluid Metering, Inc.	Delaware
FMS Purchasing & Services, Inc.	Florida
Foodlink Holdings, Inc.	California
Foodlink IT India Private Limited	India
Fresco Automation & IT Consultancy	Belgium
FSI Holdings, Inc.	Virginia
FTI Flow Technology, Inc.	Delaware
Gatan GmbH	Germany
Gatan Inc.	Pennsylvania
Gatan Service Corporation	Pennsylvania
GeneInsight, Inc.	Delaware
Getloaded Corporation	Delaware
Guangzhou MEDTEC Medical Device Co., Ltd	China
Hansco Automatisering B.V.	Netherlands
Hansen Technologies Corporation	Illinois
Hansen Technologies Europe GmbH	Germany
Harbour Holding Corp.	Delaware
Hardy Process Solutions	California
Horizon Software International, LLC	Georgia
HRsmart Canada Inc.	Canada
HRsmart Czech Republic	Czech Republic
HRsmart France SAS	France
HRsmart Germany GmbH	Germany
HRsmart, Inc.	Delaware
HRsmart International	Cayman Islands

HRsmart International Holdings LLC	Texas
HRsmart Mexico	Mexico
HRsmart Philippines	Philippines
HRsmart SA (Pty) Ltd.	South Africa
HRsmart Talent Management Solutions Europe Limited	United Kingdom
HRsmart Ventures LLC	Texas
Innovative Product Achievements, LLC	Delaware
Inovonics Corporation	Colorado
INPUT, Inc.	Delaware
Input Limited	United Kingdom
Input S.A.R.L.	France
Instill Corporation	Delaware
Integrated Designs, L.P.	Delaware
Intellitrans Canada Ltd.	Canada
IntelliTrans Limited	United Kingdom
Intellitrans Sweden AB	Sweden
Intellitrans, LLC	Delaware
IPA Acquisition Subsidiary, Inc.	Delaware
ISL Finance SAS	France
ISL Holding, SAS	France
ISL Scientifique de Laboratorie - ISL, S.A.S.	France
iSqFt Holdings, Inc.	Delaware
iSqFt, Inc.	Delaware
iSqFt Parent Corporation	Delaware
iSqFt Sub, Inc.	Delaware
IT Canada Holdings, LLC	Delaware
iTradenetwork Limited	United Kingdom
iTradeNetwork, Inc.	Delaware
Job Access LTDA	Brazil
K/S Roper Finance	Denmark
K/S Roper Holding	Denmark
K/S Roper Investments	Denmark
Link Logistics Holding LLC	Delaware
Logitech Limited	United Kingdom
Lumenera Corporation	Canada
Managed Health Care Associates, Inc.	Delaware
Marumoto Struers K.K.	Japan
Med Group I, Inc.	Delaware
MED Group Parent, Inc.	Delaware
Med Holdings, LLC	Delaware
Med Operating, LLC	Delaware
Media Cybernetics, Inc.	Delaware
Medical Equipment Distributors II, L.P.	Texas
Medical Equipment Distributors, Inc.	Delaware
Medical Information Professional Systems GmbH	Germany
Medical Information Professional Systems NV	Belgium
MEDTEC, Inc.	Iowa
Metrix Instrument Co., L.P.	Delaware
MHA Long Term Care Network, Inc.	Delaware
MIPS Austria GesmbH	Austria
MIPS CZ s.r.o	Czech Republic
MIPS Deutschland GmbH & Co. KG	Germany
MIPS Deutschland Holding GmbH	Germany
MIPS France Sarl	France
MIPS Schweiz AG	Switzerland
MIPS Software Iberica SL	Spain
MPR Readers Inc.	Delaware
mySBX Corporation	Delaware
Navigator Group Purchasing, Inc.	Tennessee
NDI Europe GmbH	Germany
Neptune Technology Group (Canada) Limited	Canada
Neptune Technology Group Inc.	Delaware
Neptune Technology Group Mexico S.de R.L. de C.V.	Mexico
Neptune Technology Group Mexico Services S. de R.L. de C.V.	Mexico
Neptune Technology Group Services Inc.	Delaware
Nippon Roper K.K.	Japan
Northern Digital Inc.	Canada
Novient, Inc.	Georgia
Off-Campus Advantage, LLC	Delaware
Omega Legal Systems, Inc.	Arizona
On Center Holdings, Inc.	Delaware
On Center Intermediate Holdings, Inc.	Delaware
On Center Software, Inc.	Texas
PAC Denmark ApS	Netherlands
PAC GmbH	Germany
PAC Instruments Asia PTE. Ltd.	Singapore

PAC (Shanghai) Co. Ltd.	China
PB Bidco Limited	United Kingdom
PB Holdco Limited	United Kingdom
PB Midco Limited	United Kingdom
PB Topco Limited	United Kingdom
Petroleum Analyzer Company L.P.	Delaware
PGP UK Limited	Scotland
Project Diamond Intermediate Holdings Corporation	Delaware
QSC 1208 Limited	United Kingdom
QSC 1209 Limited	United Kingdom
Quantitative Imaging Corporation	Canada
Rebate Tracking Group, LLC	Florida
Redlake MASD, LLC	Delaware
RF IDEas, Inc.	Delaware
RI Marketing India Private Limited	India
RIL Holding Limited	United Kingdom
RMT, Inc.	Arizona
Roda Deaco Valve Inc.	Canada
Roper Brasil Comercio E Promocao De Productos E Servicios LTDA	Brazil
Roper Canada Finance LP	Canada
Roper Canada Holdings, Inc.	Canada
Roper Canada Holdings LP	Canada
Roper Canada Partners, Inc.	Canada
Roper Capital Deutschland GmbH	Germany
Roper Canada UK Limited	United Kingdom
Roper Denmark UK Limited	United Kingdom
Roper DK Sub Sarl	Luxembourg
Roper Engineering s.r.o.	Czech Republic
Roper Europe GmbH	Germany
Roper Finance Sarl & Co. KG	Germany
Roper Finance Scot LP	Scotland
Roper Germany GmbH	Germany
Roper Germany GmbH & Co. KG	Germany
Roper Germany UK Limited	United Kingdom
Roper GM Denmark Holdings ApS	Denmark
Roper Holdings Limited	United Kingdom
Roper Holdings, Inc.	Delaware
Roper Industrial Holdings LLC	Delaware
Roper Industrial Products Investment Company	Iowa
Roper Industries, Inc.	Delaware
Roper Industries Denmark ApS	Denmark
Roper Industries Deutschland GmbH	Germany
Roper Industries L.P.	Canada
Roper Industries Limited	United Kingdom
Roper Industries Manufacturing (Shanghai) Co., Ltd.	China
Roper Industries Mauritius Ltd.	Mauritius
Roper Industries UK Limited	United Kingdom
Roper International Holding, Inc.	Delaware
Roper LLC	Russian Federation
Roper Lux Sub S.a.r.l	Luxembourg
Roper Luxembourg Finance S.a.r.l.	Luxembourg
Roper Luxembourg Holdings S.a.r.l.	Luxembourg
Roper Luxembourg S.a.r.l.	Luxembourg
Roper Luxembourg UK Holdings S.a.r.l.	Luxembourg
Roper Middle East Ltd.	Dubai (FZE)
Roper Pump Company	Delaware
Roper Scientific B.V.	Netherlands
Roper Scientific GmbH	Germany
Roper Scientific SAS	France
Roper Scientific, Inc.	Delaware
Roper Scot LP	United Kingdom
Roper Southeast Asia LLC	Delaware
Roper UK Investments Limited	United Kingdom
Roper UK, Ltd.	United Kingdom
Roper-Mex, L.P.	Delaware
Ropintassco 1, LLC	Delaware
Ropintassco 2, LLC	Delaware
Ropintassco 3, LLC	Delaware
Ropintassco 4, LLC	Delaware
Ropintassco 5, LLC	Delaware
Ropintassco 6, LLC	Delaware
Ropintassco 7, LLC	Delaware
Ropintassco Holdings, L.P.	Delaware
RT Merger Sub, Inc.	Delaware
Shanghai Roper Industries Trading Co., Ltd.	China
SHP Group Holdings, Inc.	Delaware

Sinned Holding International B.V.	Netherlands
SIRA, LLC	Delaware
Societe de Distribution de Logiciels Medicaux	France
SoftWriters, Inc.	Delaware
Softwriters Holdings, Inc.	Delaware
Sohnar, Inc.	Delaware
Sohnar Limited	United Kingdom
Sohnar Pty Ltd	Australia
Star Purchasing Services, LLC	Wisconsin
Strata Acquisition Subsidiary, Inc.	Delaware
Strata Decision Technology Holdings LLC	Delaware
Strata Decision Technology LLC	Illinois
Strata Parallel II Inc.	Delaware
Strategic Healthcare Programs Blocker LLC	Delaware
Strategic Healthcare Programs Blocker 2, Inc.	Delaware
Strategic Healthcare Programs, L.L.C.	Delaware
Strategic Healthcare Programs Holdings, LLC	Delaware
Struers (Shanghai) International Trading Ltd.	China
Struers A/S	Denmark
Struers GmbH	Germany
Struers Inc.	Delaware
Struers Limited	United Kingdom
Struers Limited	Canada
Struers SAS	France
Student Advantage, LLC	Delaware
Sunquest Europe Limited	United Kingdom
Sunquest Holdings, Inc.	Delaware
Sunquest Information Systems (Europe) Limited	United Kingdom
Sunquest Information Systems (India) Private Limited	India
Sunquest Information Systems (International) Limited	United Kingdom
Sunquest Information Systems Canada, Inc.	Canada
Sunquest Information Systems, Inc.	Pennsylvania
Taupo Holdings, Inc.	Delaware
Technolog Group Limited	United Kingdom
Technolog Holdings Ltd.	United Kingdom
Technolog Limited	United Kingdom
Technolog SARL	France
Telomere Inc.	Delaware
The CBORD Group, Inc.	Delaware
The Tidewater Healthcare Shared Services Group, Inc.	Pennsylvania
The Washington Management Group, Inc.	District of Columbia
TLP Holdings, LLC	Delaware
Transcore Atlantic, Inc.	Delaware
Transcore CNUS, Inc.	Delaware
Transcore Holdings, Inc.	Delaware
Transcore ITS, LLC	Delaware
Transcore Link Logistics Corporation	Canada
Transcore Nova Scotia Corporation	Canada
Transcore Partners, LLC	Delaware
Transcore Quebec Corporation Inc.	Canada
TransCore Transportation Solutions India Private Limited	India
TransCore Transportation Systems Mauritius Private Limited	Mauritius
Transcore, LP	Delaware
Trinity Integrated Systems Limited	United Kingdom
UHF Purchasing Services, LLC	Delaware
United Controls Group, Inc.	Ohio
Uson L.P.	Delaware
Uson Limited	United Kingdom
Utilitec Limited	United Kingdom
Utilitec Services Limited	United Kingdom
Utility Data Services Limited	United Kingdom
Verathon Holdings (Delaware) Inc.	Delaware
Verathon Inc.	Washington
Verathon Medical (Australia) Pty Limited	Australia
Verathon Medical (Canada) ULC	Canada
Verathon Medical (Europe) B.V.	Netherlands
Verathon Medical (France) SARL	France
Verathon Medical (Hong Kong) Limited	Hong Kong
Verathon Medical (Japan) K.K.	Japan
Verathon Medical (UK) Ltd.	United Kingdom
Verathon Medical Inc.	Washington
ViaStar Services, LP	Texas
Viatran Corporation	New York
Walter Herzog GmbH	Germany
XTS Software Corporation	Oregon
Zetec (Shanghai) Co., Ltd.	China

Zetec France	France
Zetec Korea, Inc.	Delaware
Zetec Rental LLC	Delaware
Zetec Services, Inc.	Delaware
Zetec, Inc.	Washington

CONSENT OF INDEPENDENT REGISTERED CERTIFIED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-3 (No. 333-208200) and Form S-8 (Nos. 333-211671, 333-35648, 333-105919, 333-135700, 333-182779, 333-35666, 333-35672, 333-36897 and 333-105920) of Roper Technologies, Inc. of our report dated February 27, 2017 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Tampa, Florida
February 27, 2017



6901 Professional Parkway E.
 Telephone (941) 556-2601
 Sarasota, FL 34240
 Fax (941) 556-2670

June 17, 2016

Mr. John K. Stipancich
 810 Foxhollow Run
 Milton, GA 30004

Re: Offer Letter of Employment

Dear John:

This letter is to confirm our offer of employment to join Roper Technologies Inc. ("Roper" of the "Company") as Vice President, General Counsel and Secretary. You will report directly to me. We would like you to join the Company starting June 20, 2016.

Compensation:

- o Your base salary will be \$620,000 per year. Your performance will be measured and reviewed on an annual basis. The first such review will be during the first quarter of 2017.
- o Your annual bonus opportunity will be up to 100% of your annual base salary, with the payment based upon Company performance. Any bonus earned for 2016 will be paid no later than March 15, 2017.
- o A \$375,000 one-time payment (less applicable withholdings) will be provided once you have formally commenced employment with the Company. If you voluntarily terminate your employment with the Company before the end of two full years of employment, you must repay a pro-rated portion of the one-time payment to the Company.

Equity Incentive Awards:

As soon as practicable after your employment commences, you will be granted the following equity incentive awards pursuant to the Roper 2016 Incentive Plan:

- o **Stock Options:** You will receive an option to purchase 18,000 shares of Roper common stock with an exercise price not less than the fair market value of a share as of the grant date, and that will be scheduled to vest 50% on June 30, 2018, and the remaining 50% will vest on June 30, 2019, subject to your continued employment with the Company through each such vesting date.
- o **Restricted Shares:** You will receive 12,000 restricted shares of Roper common stock, which vest contingent on the Company attaining specific, pre-determined and objective performance goals, as certified by the Compensation Committee. If the goals are obtained, 1/3 of the shares will vest on November 30, 2017, 1/3 of the shares will vest on November 30, 2018 and the remaining 1/3 on November 30, 2019, subject to your continued employment with the Company through each such vesting period.

Employee Benefits:

- o You will be eligible for all Company employee benefits available to Roper's corporate officers including disability, health, dental, vision, life insurance, Non-Qualified Deferred Contribution Plan, and a 401(k) Plan. The Company currently makes base and matching contributions of up to 4.5%, as well as a 3% profit-sharing contribution as part of the 401(k) plan subject to participation. Details of these and other benefits will be provided in materials that will be sent to you. Coverage will commence on your start date with Roper to the extent permitted under the applicable plans.
- o Customary vacation, holidays and sick leave and business and professional expense reimbursement will be provided as per Company policy.
- o Roper will provide \$1,600 per month (taxable income) as a car allowance under its corporate program.

Relocation:

Roper will reimburse (and gross up) the customary moving and relocation expenses you incur at the time of your relocation as per Roper's policy for executives. Specific benefits include:

- o Real estate commission of up to 6% on the sale of your Milton, GA home and reasonable and customary seller's closing cost on the sale of your Milton, GA home
- o Shipment of household goods
- o Reasonable and customary closing costs for the purchase of a home in the Sarasota area
- o Lump sum payment of \$25,000 (1/2 months' salary, less applicable tax withholdings) to assist with miscellaneous expenses associated with the relocation

If you voluntarily terminate your employment during the first two years after relocation, you must repay a pro-rated portion of the relocation expenses, including lump sum payment, to the Company.

Severance:

- o If Roper terminates your employment without Cause (as used herein, "Cause" shall mean gross neglect of duty, prolonged absence from duty without the consent of the Company, intentionally engaging in any activity that is in conflict with or adverse to the business or other interests of the Company, or willful misconduct, misfeasance or malfeasance of duty which is reasonably determined to be detrimental to the Company), you will be entitled to receive one year of severance equal to your then-current monthly base salary, plus a pro-rated bonus, based upon Company performance, and one year of medical benefits coverage. All of these payments will be provided in a lump sum payment, less applicable withholdings.

This Employment is "at will" and either party can terminate the relationship at any time, with or without cause. In addition, The Immigration Reform and Control Act of 1986 require employers to verify that all associates are legally authorized to work in the United States. You will be required to provide two forms of ID when completing the I-9 form.

Please feel free to contact Greg Anderson, Vice-President, Human Resources to address any further questions that you may have about your transition to Roper.

John, we look forward to you joining the Roper team.

/s/ Brian D. Jellison
Brian D. Jellison
Chairman, President & Chief Executive Officer

Accepted by:

/s/ John K. Stipancich 18 June 2016
John K. Stipancich

**FIRST AMENDMENT TO ROPER TECHNOLOGIES, INC.
2016 INCENTIVE PLAN**

This First Amendment to the Roper Technologies, Inc. 2016 Incentive Plan (the "Plan") is made effective on November 16, 2016.

In order to clarify the limited number of individuals who may qualify for the provisions associated with Retirement prior to age 65, Article 2, Section 2.1(jj) of the Plan (and any corresponding definition in any predecessor equity plan) shall be amended by deleting the words "other retirement program" and replacing them with the words "deferred compensation plan in which the Participant participates at the time of such Retirement."

All other terms and conditions of the Plan shall remain in full force and effect.

/s/ John K. Stipancich
John K. Stipancich
Corporate Secretary

ROPER TECHNOLOGIES, INC.

NON-US EMPLOYEE

CASH-SETTLED RESTRICTED STOCK UNIT AWARD CERTIFICATE

Non-transferable
G R A N T T O

("Grantee")

by Roper Technologies, Inc. (the "Company") of

restricted stock units convertible into a cash payment equal to the value of an equal number of shares of the Company's common stock, \$0.01 par value per share (the "Units"), pursuant to and subject to the provisions of the Roper Technologies, Inc. 2016 Incentive Plan (the "Plan") and to the terms and conditions set forth on the following pages (the "Terms and Conditions"). By accepting this Award, Grantee shall be deemed to have agreed to the terms and conditions set forth in this Certificate and the Plan.

Unless sooner vested in accordance with Section 2 of the Term and Conditions or otherwise in the discretion of the Committee, the Units shall vest (become payable) in accordance with the following schedule; provided that Grantee is then still employed by the Company or any of its Affiliates:

Percentage of Shares	Vesting Date

IN WITNESS WHEREOF, Roper Technologies, Inc., acting by and through its duly authorized officers, has caused this Certificate to be executed.

ROPER TECHNOLOGIES, INC.

Grant Date: _____

By: _____
Its: President and Chief Executive Officer

Accepted by Grantee: _____

TERMS AND CONDITIONS

1. Grant of Units. The Company hereby grants to the Grantee named on the cover page hereof, subject to the restrictions and the other terms and conditions set forth in the Plan and in this Certificate, the number of restricted stock units indicated on the cover page hereof (the "Units") which represent the right to receive a cash payment equal to the Fair Market Value, as of the applicable Vesting Date, of an equal number of shares of the Company's \$0.01 value common stock ("Stock") on the terms set forth in this Certificate. Capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Plan.
2. Vesting of Units. The Units have been credited to a bookkeeping account on behalf of Grantee. The Units will vest and become non-forfeitable on the earliest to occur of the following (each, a "Vesting Date"):
 - (a) as to the percentages of the Units specified on the cover page hereof, on the respective Vesting Dates specified on the cover page hereof; provided Grantee is then still employed by the Company or an Affiliate, or
 - (b) the termination of Grantee's termination of employment by reason of death or Disability or, with the consent of the Committee, Grantee's Retirement.

If Grantee's employment terminates prior to a Vesting Date for any reason other than as described in (b) above, Grantee shall forfeit all right, title and interest in and to the unvested Units as of the date of such termination and the unvested Units will be reconveyed to the Company without further consideration or any act or action by Grantee.

3. Settlement in Cash. Any Units that vest in accordance with Section 2 above will entitle Grantee to receive to a cash payment equal to the Fair Market Value, as of the Vesting Date, of one share of Stock for each vested Unit. Such payment shall be made no later than the 15th day of the third month after the month in which the Vesting Date occurs.
4. Dividend Equivalents. If and when cash dividends or other cash distributions are paid with respect to the Shares while the Units are outstanding, the dollar amount of such dividends or distributions with respect to the number of Shares then underlying the Units will be credited by the Company to an account for Grantee, and shall be accumulated without interest ("Dividend Equivalents"). Dividend Equivalents credited to Grantee's account with respect to earned and vested Units shall be distributed to Grantee in cash at the same time that the vested Units are settled for cash. Grantee shall have no right to Dividend Equivalents accumulated with respect to Units that are forfeited, and any such unearned Dividend Equivalents will be reconveyed to the Company without further consideration or any act or action by Grantee.
5. Restrictions on Transfer and Pledge. No right or interest of Grantee in the Units may be pledged, encumbered, or hypothecated or be made subject to any lien, obligation, or liability of Grantee to any other party other than the Company or an Affiliate. The Units may not be sold, assigned, transferred or otherwise disposed of by Grantee other than by will or the laws of descent and distribution.
6. Restrictions on Settlement of Units. If at any time the Committee shall determine in its discretion, that registration, listing or qualification of the Units upon any securities exchange or similar self-regulatory organization or under any foreign, federal, or local law or practice, or the consent or approval of any governmental regulatory body, is necessary or desirable as a condition to the settlement of the Units, no payment shall be made hereunder unless and until such registration, listing, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee.
7. No Right of Continued Employment; No Rights to Compensation or Damages. Nothing in the Plan or this Certificate or any document executed under either of them shall interfere with or limit in any way the right of the Company or any Affiliate to terminate Grantee's employment without liability at any time, nor confer upon Grantee any right to continue in the employ of the Company or any Affiliate. By executing this Certificate, Grantee waives any and all rights to compensation or damages for the termination of his office or employment, or failure to provide sufficient notice of termination of his office or employment, with the Company or any Affiliate for any reason whatsoever insofar as those rights arise or may arise from the loss of Grantee's benefits or rights upon forfeiture of the Units in connection with such termination.
8. No Entitlement to Future Awards. The grant of the Units does not entitle Grantee to the grant of any additional units or other awards under the Plan in the future. Future grants, if any, will be at the sole discretion of the Company, including, but not limited to, the timing of any grant, the number of units, and vesting provisions. The grant of the Units is an extraordinary item of compensation outside the scope of any employment contract. As such, the Units are not part of normal or expected compensation for purposes of calculating severance, resignation, redundancy, end of service payments, bonuses, long-service awards, pension or retirement benefits or similar payments.
9. Transfer of Data. By executing this certificate, Grantee voluntarily acknowledges and consents to the collection, use, processing and transfer of personal data as described in this paragraph. Grantee is not obliged to consent to such collection, use, processing and transfer of personal data, but failure to provide the consent may affect Grantee's eligibility to receive awards under the Plan. The Company and its Affiliates hold certain personal information about Grantee, including name, home address and telephone number, date of birth, employee identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, and details of any rights or entitlements to shares of stock, for the purpose of managing and administering the Plan ("Data"). The Company and its Affiliates will transfer Data amongst themselves as necessary for the purpose of implementation, administration and management of Grantee's participation in the Plan, and the Company and any of its Affiliates may each further transfer Data to any third parties assisting in the implementation, administration and management of the Plan. These recipients may be located in the United States or elsewhere throughout the world. Grantee authorizes them to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing Grantee's participation in the Plan, including any requisite transfer of such Data as may be required for the administration of the Plan and/or the subsequent holding of shares of stock on Grantee's behalf to a broker or other third party with whom Grantee may elect to deposit any shares of stock acquired pursuant to the Plan. Grantee may, at any time, review Data, require any necessary amendments to it or withdraw the consents herein in writing by contacting the Company; however, by withdrawing his or her consent, Grantee will affect his or her ability to participate in the Plan.
10. Payment of Taxes. The Company or any Affiliate employing Grantee has the authority and the right to deduct or withhold, or require Grantee to remit to the employer, an amount sufficient to satisfy all applicable taxes (including Grantee's income tax and employee national insurance obligations) required by law to be withheld with respect to any taxable event arising as a result of the vesting or settlement of the Units. The obligations of the Company under this Certificate will be conditional on such payment or arrangements, and the Company, and, where applicable, its Affiliates will, to the extent permitted by law, have the right to deduct any such taxes from any payment of any kind otherwise due to Grantee.
11. Amendment. The Committee may amend, modify or terminate this Certificate without approval of Grantee; provided, however, that such amendment, modification or termination shall not, without Grantee's consent, reduce or diminish the value of this award determined as if it had been fully vested (i.e., as if the Units had vested) on the date of such amendment or termination.

12. Plan Controls. The terms contained in the Plan are incorporated into and made a part of this Certificate and this Certificate shall be governed by and construed in accordance with the Plan. Without limiting the foregoing, the terms and conditions of the Units are subject to adjustment as provided in Article 15 of the Plan. In the event of any actual or alleged conflict between the provisions of the Plan and the provisions of this Certificate, the provisions of the Plan shall be controlling and determinative.

13. Governing Law. This Certificate shall be construed in accordance with and governed by the laws of the State of Delaware, United States of America, regardless of the law that might be applied under principles of conflict of laws.

14. Severability. If any one or more of the provisions contained in this Certificate is deemed to be invalid, illegal or unenforceable, the other provisions of this Certificate will be construed and enforced as if the invalid, illegal or unenforceable provision had never been included.

15. Relationship to Other Benefits. The Shares shall not affect the calculation of benefits under any other compensation plan or program of the Company, except to the extent specially provided in such other plan or program.

16. Notice. Notices and communications hereunder must be in writing and either personally delivered or sent by registered or certified United States mail, return receipt requested, postage prepaid. Notices to the Company must be addressed to Roper Technologies, Inc., 6901 Professional Parkway East, Suite 200, Sarasota, Florida 34240; Attn: Secretary, or any other address designated by the Company in a written notice to Grantee. Notices to Grantee will be directed to the address of Grantee then currently on file with the Company, or at any other address given by Grantee in a written notice to the Company.

NONSTATUTORY STOCK OPTION CERTIFICATE

Non-transferable
GRANT TO

("Optionee")

the right to purchase from Roper Technologies, Inc. (the "Company")

_____ shares of its common stock, \$0.01 par value, at the price of \$_____ per share (the "Option")

pursuant to and subject to the provisions of the Roper Technologies, Inc. 2016 Incentive Plan (the "Plan") and to the terms and conditions set forth on the following page (the "Terms and Conditions"). By accepting the Option, Optionee shall be deemed to have agreed to the terms and conditions set forth in this Certificate and the Plan. Capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Plan.

Unless vesting is accelerated in accordance with the Plan or in the discretion of the Committee, the Option shall vest (become exercisable) in accordance with the following schedule:

Continuous Status as a Participant
after Grant Date

Percent of Option Shares Vested

<u>Continuous Status as a Participant after Grant Date</u>	<u>Percent of Option Shares Vested</u>

IN WITNESS WHEREOF, Roper Technologies, Inc., acting by and through its duly authorized officers, has caused this Certificate to be duly executed.

ROPER TECHNOLOGIES, INC.

By:
Its: President and Chief Executive Officer

Grant Date: _____

TERMS AND CONDITIONS

1. **Vesting of Option.** The Option shall vest (become exercisable) in accordance with the schedule shown on the cover page of this Certificate. Notwithstanding the foregoing vesting schedule, the Option shall become fully vested and exercisable upon: (i) Optionee's death or Disability during his or her Continuous Status as a Participant, (ii) a Change in Control, unless the Option is assumed by the surviving entity or otherwise equitably converted or substituted in connection with the Change in Control, or (iii) if the Option is assumed by the surviving entity or otherwise equitably converted or substituted in connection with a Change in Control, the termination of Optionee's employment by the Company without Cause (or Optionee's resignation for Good Reason as provided in any employment, severance or similar agreement between Optionee and the Company or an Affiliate) within two years after the effective date of the Change in Control.

2. **Term of Option and Limitations on Right to Exercise.** The term of the Option will be for a period of ten years, expiring at 5:00 p.m., Eastern Time, on the tenth anniversary of the Grant Date (the "Expiration Date"). To the extent not previously exercised, the Option will lapse prior to the Expiration Date upon the earliest to occur of the following circumstances:

(a) Three months after the date of the termination of Optionee's Continuous Status as a Participant for any reason other than (i) for Cause or (ii) by reason of Optionee's death, Disability or Retirement.

(b) Thirty-six (36) months after the date of the termination of Optionee's Continuous Status as a Participant by reason of Retirement.

(c) Twelve months after the date of the termination of Optionee's Continuous Status as a Participant by reason of Disability.

(d) Twelve months after the date of Optionee's death, if Optionee dies while employed, or during the three-month period described in subsection (a) above, during the thirty-six month period described in subsection (b) above or during the twelve-month period described in subsection (c) above and before the Option otherwise lapse. Upon Optionee's death, the Option may be exercised by Optionee's beneficiary designated pursuant to the Plan.

(e) 5:00 p.m., Eastern Time, on the 10th business day after the date of the termination of Optionee's Continuous Status as a Participant for Cause.

If Optionee returns to employment with the Company during the designated post-termination exercise period, then Optionee shall be restored to the status Optionee held prior to such termination but no vesting credit will be earned for any period Optionee was not in Continuous Status as a Participant. If Optionee or his or her beneficiary exercises an Option after termination of service, the Option may be exercised only with respect to the Shares that were otherwise vested on Optionee's termination of service, including Option Shares vested by acceleration under section 1.

3. **Exercise of Option.** The Option shall be exercised by (a) notice directed to the Secretary of the Company or his or her designee at the address and in the form specified by the Secretary from time to time and (b) payment to the Company in full for the Shares subject to such exercise (unless the exercise is a broker-assisted cashless exercise, as described below). If the person exercising an Option is not Optionee, such person shall also deliver with the notice of exercise appropriate proof of his or her right to exercise the Option. Payment for such Shares shall be in (a) cash, (b) Shares previously acquired by the purchaser, or (c) any combination thereof, for the number of Shares specified in such written notice. The value of surrendered Shares for this purpose shall be the Fair Market Value as of the last trading day immediately prior to the exercise date. Alternatively, the Company may permit Optionee to exercise the Option through a "net" exercise, whereby the Company shall retain from the Option that number of Option shares having a Fair Market Value on the date of exercise equal to some or all of the exercise price. To the extent permitted under Regulation T of the Federal Reserve Board, and subject to applicable securities laws and any limitations as may be applied from time to time by the Committee (which need not be uniform), the Option may be exercised through a broker in a so-called "cashless exercise" whereby the broker sells the Option Shares on behalf of Optionee and delivers cash sales proceeds to the Company in payment of the exercise price. In such case, the date of exercise shall be deemed to be the date on which notice of exercise is received by the Company and the exercise price shall be delivered to the Company by the settlement date.

4. **Withholding.** The Company or any employer Affiliate has the authority and the right to deduct or withhold, or require Optionee to remit to the employer, an amount sufficient to satisfy federal, state, and local taxes (including Optionee's FICA obligation) required by law to be withheld with respect to any taxable event arising as a result of the exercise of the Option. The withholding requirement may be satisfied, in whole or in part, at the election of the Secretary, by withholding from the Option Shares having a Fair Market Value on the date of withholding equal to the minimum amount (and not any greater amount) required to be withheld for tax purposes, all in accordance with such procedures as the Secretary establishes.

5. **Limitation of Rights.** The Option does not confer to Optionee or Optionee's beneficiary any rights of a shareholder of the Company unless and until Shares are in fact issued to such person in connection with the exercise of the Option. Nothing in this Certificate shall interfere with or limit in any way the right of the Company or any Affiliate to terminate Optionee's service at any time, nor confer upon Optionee any right to continue in the service of the Company or any Affiliate.

6. **Restrictions on Transfer and Pledge.** No right or interest of Optionee in the Option may be pledged, encumbered, or hypothecated to or in favor of any party other than the Company or an Affiliate, or shall be subject to any lien, obligation, or liability of Optionee to any other party other than the Company or an Affiliate. The Option is not assignable or transferable by Optionee other than by will or the laws of descent and distribution, but the Committee may (but need not) permit other transfers. The Option may be exercised during the lifetime of Optionee only by Optionee or any permitted transferee.

7. **Restrictions on Issuance of Shares.** If at any time the Committee shall determine in its discretion, that registration, listing or qualification of the Shares covered by the Option upon any Exchange or under any foreign, federal, or local law or practice, or the consent or approval of any governmental regulatory body, is necessary or desirable as a condition to the exercise of the Option, the Option may not be exercised in whole or in part unless and until such registration, listing, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee.

8. **Plan Controls.** The terms contained in the Plan are incorporated into and made a part of this Certificate and this Certificate shall be governed by and construed in accordance with the Plan. In the event of any actual or alleged conflict between the provisions of the Plan and the provisions of this Certificate, the provisions of the Plan shall be controlling and determinative.

9. **Successors.** This Certificate shall be binding upon any successor of the Company, in accordance with the terms of this Certificate and the Plan.

10. **Notice.** Notices and communications under this Certificate must be in writing and either personally delivered or sent by registered or certified United States mail, return receipt requested, postage prepaid. Notices to the Company must be addressed to Roper Technologies, Inc., 6901 Professional Parkway East, Suite 200, Sarasota, Florida 34240, Attn: Secretary, or any other address designated by the Company in a written notice to Optionee. Notices to Optionee will be directed to the address of Optionee then currently on file with the Company, or at any other address given by Optionee in a written notice to the Company.

RESTRICTED STOCK AWARD CERTIFICATE

Non-transferable
GRANT TO

("Grantee")

_____ by Roper Technologies, Inc. (the "Company") of
_____ shares of its common stock, \$0.01 par value (the "Shares")

pursuant to and subject to the provisions of the Roper Technologies, Inc. 2016 Incentive Plan (the "Plan") and to the terms and conditions set forth on the following page (the "Terms and Conditions"). By accepting the Shares, Grantee shall be deemed to have agreed to the terms and conditions set forth in this Certificate and the Plan. Capitalized terms used herein and not otherwise defined shall have the meanings assigned to such terms in the Plan.

Unless vesting is accelerated in accordance with the Plan or in the discretion of the Committee, the Shares will vest (become non-forfeitable) in accordance with the following schedule:

Continuous Status as a Participant after Grant Date	Percent of Shares Vested

IN WITNESS WHEREOF, Roper Technologies, Inc., acting by and through its duly authorized officers, has caused this Certificate to be duly executed.

ROPER TECHNOLOGIES, INC.

By: _____ Grant Date: _____

Its: President and Chief Executive Officer

TERMS AND CONDITIONS

1. Restrictions. The Shares are subject to each of the following restrictions. "Restricted Shares" mean those Shares that are subject to the restrictions imposed hereunder which restrictions have not then expired or terminated. Restricted Shares may not be sold, transferred, exchanged, assigned, pledged, hypothecated or otherwise encumbered. If Grantee's employment with the Company or any Subsidiary terminates for any reason other than as set forth in paragraph (b) or (d) of Section 2 hereof, then Grantee shall forfeit all of Grantee's right, title and interest in and to the Restricted Shares as of the date of employment termination, and such Restricted Shares shall revert to the Company immediately following the event of forfeiture. The restrictions imposed under this Section shall apply to all shares of the Company's Stock or other securities issued with respect to Restricted Shares hereunder in connection with any merger, reorganization, consolidation, recapitalization, stock dividend or other change in corporate structure affecting the Stock of the Company.

2. Expiration and Termination of Restrictions. The restrictions imposed under Section 1 will expire on the earliest to occur of the following (the period prior to such expiration being referred to herein as the "Restricted Period"):

(a) as to the percentages of the Shares specified on the cover page hereof, on the respective dates specified on the cover page hereof; provided Grantee is then employed by the Company or an Affiliate; or

(b) as to all of the Shares, the termination of Grantee's employment due to death or Disability; or

(c) the occurrence of a Change in Control, except with respect to any Restricted Shares assumed by the surviving entity or otherwise equitably converted or substituted in connection with the Change in Control; or

(d) with respect to any Restricted Shares assumed by the surviving entity or otherwise equitably converted or substituted in connection with a Change in Control, upon the termination of Grantee's employment without Cause (or Grantee's resignation for Good Reason as provided in any employment, severance or similar agreement between Grantee and the Company or an Affiliate) within two years after the effective date of the Change in Control.

3. Delivery of Shares. The Shares will be registered in the name of Grantee as of the Grant Date and may be held by the Company during the Restricted Period in certificated or uncertificated form. If a certificate for Restricted Shares is issued during the Restricted Period with respect to such Shares, such certificate shall be registered in the name of Grantee and shall bear a legend in substantially the following form (in addition to any legend required under applicable state securities laws): "This certificate and the shares of stock represented hereby are subject to the terms and conditions (including forfeiture and restrictions against transfer) contained in a Restricted Stock Certificate between the registered owner of the shares represented hereby and Roper Technologies, Inc. Release from such terms and conditions shall be made only in accordance with the provisions of such Certificate, copies of which are on file in the offices of Roper Technologies, Inc." Stock certificates for the Shares, without the first above legend, shall be delivered to Grantee or Grantee's designee upon request of Grantee after the expiration of the Restricted Period, but delivery may be postponed for such period as may be required for the Company with reasonable diligence to comply, if deemed advisable by the Company, with registration requirements under the Securities Act of 1933, listing requirements under the rules of any stock exchange, and requirements under any other law or regulation applicable to the issuance or transfer of the Shares.

4. Voting and Dividend Rights. Grantee, as beneficial owner of the Shares, shall have full voting and dividend rights with respect to the Shares during and after the Restricted Period. Each dividend payment, if any, shall be made no later than the end of the calendar year in which the dividend is paid to the shareholders or, if later, the 15th day of the third month following the date the dividend is paid to shareholders. Any non-cash dividends shall be subject to the restrictions imposed under Section 1. If Grantee forfeits any rights he may have under this Certificate, Grantee shall no longer have any rights as a stockholder with respect to the Restricted Shares or any interest therein and Grantee shall no longer be entitled to receive dividends on such stock. In the event that for any reason Grantee shall have received dividends upon such stock after such forfeiture, Grantee shall repay to the Company any amount equal to such dividends.

5. No Right of Continued Employment. Nothing in this Certificate shall interfere with or limit in any way the right of the Company or any Affiliate to terminate Grantee's employment at any time, nor confer upon Grantee any right to continue in the employ of the Company or any Affiliate.

6. Payment of Taxes. Grantee will, no later than the date as of which any amount related to the Shares first becomes includable in Grantee's gross income for federal income tax purposes, pay to the Company, or make other arrangements satisfactory to the Committee regarding payment of, any federal, state and local taxes of any kind required by law to be withheld with respect to such amount, including without limitation the surrender of shares of Stock to the Company. The obligations of the Company under this Certificate will be conditional on such payment or arrangements, and the Company, and, where applicable, its Affiliates will, to the extent permitted by law, have the right to deduct any such taxes from the award or any payment of any kind otherwise due to Grantee.

7. Plan Controls. The terms contained in the Plan are incorporated into and made a part of this Certificate and this Certificate shall be governed by and construed in accordance with the Plan. In the event of any actual or alleged conflict between the provisions of the Plan and the provisions of this Certificate, the provisions of the Plan shall be controlling and determinative.

8. Successors. This Certificate shall be binding upon any successor of the Company, in accordance with the terms of this Certificate and the Plan.

9. Severability. If any one or more of the provisions contained in this Certificate is invalid, illegal or unenforceable, the other provisions of this Certificate will be construed and enforced as if the invalid, illegal or unenforceable provision had never been included.

10. Notice. Notices and communications under this Certificate must be in writing and either personally delivered or sent by registered or certified United States mail, return receipt requested, postage prepaid. Notices to the Company must be addressed to Roper Technologies, Inc., 6901 Professional Parkway East, Suite 200, Sarasota, Florida 34240: Attn: Secretary, or any other address designated by the Company in a written notice to Grantee. Notices to Grantee will be directed to the address of Grantee then currently on file with the Company, or at any other address given by Grantee in a written notice to the Company.

I, Brian D. Jellison, certify that:

1. I have reviewed this Annual Report on Form 10-K of Roper Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2017

/s/ Brian D. Jellison

Brian D. Jellison
Chairman of the Board, President and
Chief Executive Officer
(Principal Executive Officer)

I, John Humphrey, certify that:

1. I have reviewed this Annual Report on Form 10-K of Roper Technologies, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2017

/s/ John Humphrey

John Humphrey
Executive Vice President and
Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Roper Technologies, Inc. (the "Company") on Form 10-K for the year ending December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Brian D. Jellison, Chief Executive Officer of the Company, and John Humphrey, Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of his knowledge that:

1. The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 27, 2017

/s/ Brian D. Jellison

Brian D. Jellison
Chairman of the Board, President and Chief Executive Officer
(Principal Executive Officer)

/s/ John Humphrey

John Humphrey
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

This certificate is being made for the exclusive purpose of compliance of the Company with the requirements of Section 906 of the Sarbanes-Oxley Act of 2002, and may not be disclosed, distributed or used by any person or for any reason other than specifically required by law.