ROPER TECHNOLOGIES INC Form 10-K	
February 27, 2017	
UNITED STATES	AMICCION
SECURITIES AND EXCHANGE COM Washington, D.C. 20549	AMISSION
FORM 10-K	
ANNUAL REPORT PURSUANT T	TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31,	2016
TRANSITION REPORT PURSUAL 1934	NT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF
For the transition period from to	_
Commission File Number 1-12273	
ROPER TECHNOLOGIES, INC. (Exact name of Registrant as specified i	n its charter)
•	51-0263969 tion or organization) (I.R.S. Employer Identification No.)
6901 Professional Parkway East, Suite 2 Sarasota, Florida 34240	
(Address of principal executive offices)	(Zip Code)
Registrant's telephone number, includin	g area code: (941) 556-2601
SECURITIES REGISTERED PURSUA	ANT 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 PURSUA	ANT TO SECTION 12(g) OF THE ACT: None
Indicate by check mark if the registrant Yes No	is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Indicate by check mark if the registrant Exchange Act of 1934. Yes No	is not required to file reports pursuant to Section 13 or 15(d) of the Securities

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.

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

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### 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.

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None

### **ITEM 2. PROPERTIES**

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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 Medical & Scientific Imaging	Region	Office Leased		& acturing Owned	
Medical & Scientific Imaging	U.S.	309	298	127	
	Canada	309	109	127	
		32	64	-	
	Europe	_	04	-	
	Asia-Pacific	:21	-	-	
DE	Mexico	-	44	-	
RF Technology	** ~		0.0	4.6	
	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 MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND 5. 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.

		Cas	sh Dividends
High	Low	Dec	clared
\$188.04	\$167.91	\$	0.35
182.84	163.33		0.30
184.66	164.77		0.30
187.56	158.89		0.30
\$194.83	\$157.75	\$	0.30
177.08	152.93		0.25
177.79	167.08		0.25
174.02	145.75		0.25
	\$188.04 182.84 184.66 187.56 \$194.83 177.08 177.79	\$188.04 \$167.91 182.84 163.33 184.66 164.77 187.56 158.89 \$194.83 \$157.75 177.08 152.93 177.79 167.08	High Low Dec \$188.04 \$167.91 \$ 182.84 163.33 184.66 164.77 187.56 158.89 \$ 194.83 \$157.75 \$ 177.08 152.93 177.79 167.08

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.

	12/31/11	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16
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.

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### 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	As of and for the Years ended December 31,					
	$2016^{(1)} \qquad 2015^{(2)}$		$2014^{(3)}$	$2013^{(4)}$	$2012^{(5)}$		
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 <sup>(7)</sup>	14,324,927	10,168,365	8,400,185	8,169,120	7,059,975		
Long-term debt, net of current portion <sup>(7)</sup>	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		

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

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,

- (2) 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.
- 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.

  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.

  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
- (6) 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.
- 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.

# ITEM MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF 7. OPERATIONS

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"), UNIConnect 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 <sup>(1)</sup>	\$1,362,8	13	\$1,215,3	18	\$1,080,3	09
RF Technology <sup>(2)</sup>	1,210,2	64	1,033,951		950,227	
Industrial Technology <sup>(3)</sup>	706,625	5	745,381		827,145	
Energy Systems & Controls	510,223	3	587,745		691,813	
Total	\$3,789,9	25	\$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	%

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 UNIConnect from November 10, 2016.

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 Diamond Advanced Technologies through March 20, 2015, ConstructConnect from October 31, 2016 and Deltek from December 28, 2016.

<sup>(3)</sup> 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, 2015 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 exhange 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).

	2016	2015	change	•
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	\$3,896,175	\$3,547,624	9.8	%

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%.

	2016	2015	change
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	\$1,572,396	\$1,070,457	46.9 %

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 exhange 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).

	2015	2014	change
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	\$3,547,624	\$3,538,078	0.3 %

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.

	2015	2014	change
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	\$1,070,457	\$1,041,170	2.8 %

Financial Condition, Liquidity and Capital Resources

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

	2016	2015	2014
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 acquistion (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).

Payments Due in Fiscal Year							
Contractual							
Cash Obligations <sup>1</sup>	Total	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

#### Amounts Expiring in Fiscal Year

	Total		r				
Other Commercial	Amount						
Commitments	Committed	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

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

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Report of Independent Registered Certified Public Accounting Firm

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 31

## ROPER TECHNOLOGIES, INC. AND SUBSIDIARIES

#### CONSOLIDATED BALANCE SHEETS

December 31, 2016 and 2015

(in thousands, except per share data)

Assets	2016	2015
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	1,776,501	1,618,047
Total Current assets	1,770,301	1,010,047
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	\$14,324,927	\$10,168,365
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	1,445,272	720,128
Long-term debt, net of current portion	5,808,561	3,264,417
Deferred taxes	1,178,205	810,856
Other liabilities	1,178,203	74,017
Total liabilities	8,536,062	4,869,418
Total habilities	6,550,002	4,009,410
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	
Treasury stock, 1,906 shares at December 31, 2016 and 1,925 shares at December 31,	(521,75)	, (===,,,,)
2015	(18,901	(19,094)
Total stockholders' equity	5,788,865	5,298,947
Total liabilities and stockholders' equity	\$14,324,927	\$10,168,365
Total Intelliges and stockholders equity	Ψ17,327,721	Ψ10,100,505

See accompanying notes to consolidated financial statements.

## ROPER TECHNOLOGIES, INC. AND SUBSIDIARIES

#### 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	\$658,645	\$696,067	\$646,033		
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)		
Comment and in the comment	Φ <i>E</i> 4.C. CΩ <i>E</i>	¢ 5 5 5 0 1 5	¢ 521 022		
Comprehensive income	\$340,083	\$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	Retained	Accumulated other comprehensive	e Treasury	Total stockholders'
D-1	Shares	Amount	capital	earnings	earnings	stock	equity
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 Stock option tax benefit, net	213	2	(22,064)	-	-	-	(22,062)
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	100,126	\$1,021	\$1,325,338	\$3,520,201	\$ (71,927	) \$(19,273)	\$4,755,360
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					(120.700	`	(120.700
tax	-	-	-	-	(139,789	) -	(139,789 )
Stock based compensation	-	-	61,766	-	-	-	61,766
Restricted stock activity Stock option tax benefit, net	324	3	(14,697 )	-	-	-	(14,694 )
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				(105.720.)			(105.720
per share)	-	-	-	(105,738)	-	-	(105,738)
Balances at December 31,	100.970	¢ 1 020	¢1 /10 262	¢	¢ (212 770	\ \$ (10 004\	¢ 5 200 047
2015	100,870	\$1,028	\$1,419,262	\$4,110,530	\$ (212,779	) \$(19,094)	\$5,298,947 658,645
Net earnings Stock option averages	372	- 1	- 27,970	658,645	-	-	658,645 27,974
Stock option exercises Treasury stock sold	372 19	4	3,147	-	-	- 193	3,340
Treasury stock solu	17	-	3,14/	-	-	193	J,J+U

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	101,672	\$1,036	\$1,489,067	7 :	\$4,642,402	\$ (324,739	) :	\$(18,901)	\$5,788,865	

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 I 2016	2014	
Cash flows from operating activities:	2010	2015	2011
Net earnings	\$658,645	\$696,067	\$646,033
Adjustments to reconcile net earnings to cash flows from operating	φ σε σ,σ .ε	φονο,σον	Ψ σ . σ,σεε
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)		
Inventories	6,353	(1,150)	
Accounts payable and accrued liabilities	20,176	(8,392)	•
Deferred revenue	25,190	8,239	(28,202)
Income taxes	(47,589)		(46,619)
Other, net	(1,946)		1,528
Cash provided by operating activities	963,785	928,825	840,441
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)		
Proceeds from disposal of a business	-	105,624	-
Proceeds from sale of assets	870	1,126	1,506
Other, net	8,138	(3,500)	
Cash used in investing activities	(3,752,856)		
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	2,805,263	996,242	(298,104)
Effect of exchange rate changes on cash	(37,503)		
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	\$757,200	\$778,511	\$610,430

Supplemental disclosures:

Cash paid for:

Interest \$104,928 \$79,225 \$74,446
Income taxes, net of refunds received \$329,596 \$280,801 \$300,969
Noncash investing activities:
Net assets of businesses acquired:
Fair value of assets, including goodwill Liabilities assumed \$4,433,085 \$1,876,984 \$324,717
Liabilities assumed \$(711,327) (114,101) (19,338)

\$3,721,758 \$1,762,883 \$305,379

See accompanying notes to consolidated financial statements.

Cash paid, net of cash acquired

ROPER TECHNOLOGIES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements Years ended December 31, 2016, 2015 and 2014 (1) Summary of Accounting Policies

<u>Basis of Presentation</u> - 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.

<u>Nature of the Business</u> - 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.

<u>Cash and Cash Equivalents</u> - 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.

<u>Contingencies</u> - 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	102,464	101,597	100,884		

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.

<u>Estimates</u> - 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.

<u>Foreign Currency Translation and Transactions</u> - 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.

<u>Interest Rate Risk</u> - 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.

<u>Inventories</u> - 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.

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

<u>Product Warranties</u> - 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.

<u>Property, Plant and Equipment and Depreciation and Amortization</u> - 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.

<u>Capitalized Software</u> - 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 Prononcements" 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 \$2,800,140

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 adminstrative 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 forms 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 I	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 proforma 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.

UNIConnect - On November 10, 2016, Roper acquired the assets of UNIConnect 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 adminstrative 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):

	2016	2015
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)
	\$181,952	\$189,868

# (4) Property, Plant and Equipment

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

	2016	2015
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)
-	\$141,318	\$105,510

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):

	Medical & Scientific Imaging	RF Technology	Industrial Technology	Energy Systems & Controls	Total
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	\$ 3,039,197	\$ 1,993,299	\$ 374,033	\$ 418,197	\$5,824,726
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	\$ 3,185,071	\$ 4,687,670	\$ 363,978	\$ 410,423	\$8,647,142

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):

	Cost	Accum. amort.	Net book value
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	\$3,312,795	\$ (783,799)	\$ 2,528,996
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	\$4,590,520	\$ (934,677	\$ 3,655,843

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):

	2016	2015
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
	\$219,339	\$168,513

## (7) Income Taxes

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

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

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

	2016	2015	2014
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)
	\$282,007	\$306,278	\$275,423

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:

	2016	2015	2014
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)
	30.0%	30.6%	29.9%

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):

	2016	2015
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	\$273,224	\$198,045
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	\$1,420,809	\$977,369

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 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):

	2016	2015	2014
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

\$38,678 \$26,140 \$28,567

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 acquistion (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	6,209,536	3,271,222
Less current portion, net of issuance costs	400,975	6,805
Long-term debt	\$5,808,561	\$3,264,417

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):

	2016	2015	2014
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:

	2016	2015	2014
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:

		W	eighted-average		
		ex	xercise price	Weighted-average	Aggregate intrinsic
	Number of shares	pe	er share	contractual term	value
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	3,117,616		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	3,419,597		121.31	6.15	\$ 211,369,740
Exercisable at December 31, 2016	1,954,306	\$	89.37	4.28	\$ 183,136,309

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

	Outstanding	goptions		Exercisable	options
		Average			Average
		exercise	Average remaining		exercise
Exercise price	Number	price	life (years)	Number	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
\$38.46 - 192.28	3,419,597	\$121.31	6.2	1,954,306	\$89.37

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:

		Weighted-average
	Number of	grant date
	shares	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	709,275	\$ 146.64
Granted	555,730	172.67
Vested	(287,233)	141.27
Forfeited	(25,100)	139.56
Nonvested at December 31, 2016	952,672	\$ 164.62

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	\$232.4

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

	2016	2015	2014
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	\$10,548	\$10,183	\$9,537

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) <u>Segment and Geographic Area</u> 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):

	Medical &			Energy		
	Scientific	RF	Industrial	Systems		
	Imaging	Technology	Technology	& Controls	Corporate	Total
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

<sup>\*</sup>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):

	United States	Non-U.S.	Eliminations	Total
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	\$3,115,772	\$920,799	\$ (246,646)	\$3,789,925
Long-lived assets	\$ 145,996	\$21,020	\$ -	\$167,016
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	\$ 2,965,115	\$871,649	\$ (254,369)	\$3,582,395
Long-lived assets	\$ 133,522	\$21,960	\$ -	\$155,482
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	\$ 2,820,519	\$1,007,199	\$ (278,224)	\$3,549,494
Long-lived assets	\$ 134,855	\$30,781	\$ -	\$165,636

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):

	M	ledical &			Industrial	E	nergy Systems	
	S	cientific Imaging	R	F Technology	Technology	&	Controls	Total
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	\$	393,550	\$	204,036	\$ 225,539	\$	351,854	\$1,174,979
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	\$	340,461	\$	178,032	\$ 253,272	\$	390,293	\$1,162,058
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 \$ 356,674 \$ 151,270 \$ 320,017 \$ 453,920 \$1,281,881

## (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)

	First Quarter	-	-	Fourth Quarter
	(in thousa	nds, except per sh	are 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. 60

# ROPER TECHNOLOGIES, INC. AND SUBSIDIARIES

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

	Balance	Additions				
	at	charged to				Balance at
	beginning	g costs and				end
	of year	expenses	Deduction	S	Other	of year
	(in thousa	ands)				
Allov	vance for	doubtful acco	ounts and sa	ile	s allowan	ces
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
Reser	ve for inv	entory obsol	escence			
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 CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND 9. 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 SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND 12. 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.

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

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

#### 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.

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

#### PART IV

#### ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

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

(p)10.03 2000 Stock Incentive Plan, as amended. † (p)10.04 Non-Qualified Retirement Plan, as amended. †

(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).
$^{(1)}4.12$	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. †

(q)10.05 Brian D. Jellison Employment Agreement, dated as of December 29, 2008. †

- 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
- dministrative 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.
  - Amendment No. 1 to Credit Agreement dated December 2, 2016, to Credit Agreement dated as of
- (s)10.07 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. †
- 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. †
- 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.
- 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).
- 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).
- 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).
- 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).

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).

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f)

- 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).
- Jincorporated 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- 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).
- Incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed November 23, 2016 (file no. 1-12273).
- 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).
- Incorporated herein by reference to Exhibit 10 to the Current Report on Form 8-K filed November 20, 2015 (file no. 1-12273).
- 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

February 27, 2017

Brian D. Jellison, President and Chief Executive Officer

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.

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