

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 10-K

- Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the fiscal year ended March 31, 2019 or**
- Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from to**

Commission file number: 001-32253

ENERSYS

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

23-3058564
(I.R.S. Employer
Identification No.)

2366 Bernville Road
Reading, Pennsylvania 19605
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: 610-208-1991

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.01 par value per share	ENS	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: None

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES NO

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

Indicate by check mark whether the registrant has submitted electronically, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit 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. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). YES NO

State the aggregate market value of the voting and non-voting common equity held by non-affiliates at **September 30, 2018**: \$3,657,002,760 (1) (based upon its closing transaction price on the New York Stock Exchange on September 28, 2018).

(1) For this purpose only, "non-affiliates" excludes directors and executive officers.

Common stock outstanding at May 24, 2019:

42,856,811 Shares of Common Stock

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for its Annual Meeting of Stockholders to be held on or about August 1, 2019 are incorporated by reference in Part III of this Annual Report.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

The Private Securities Litigation Reform Act of 1995 (the “Reform Act”) provides a safe harbor for forward-looking statements made by or on behalf of EnerSys. EnerSys and its representatives may, from time to time, make written or verbal forward-looking statements, including statements contained in EnerSys' filings with the Securities and Exchange Commission (“SEC”) and its reports to stockholders. Generally, the inclusion of the words “anticipate,” “believe,” “expect,” “future,” “intend,” “estimate,” “will,” “plans,” or the negative of such terms and similar expressions identify statements that constitute “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 and that are intended to come within the safe harbor protection provided by those sections. All statements addressing operating performance, events, or developments that EnerSys expects or anticipates will occur in the future, including statements relating to sales growth, earnings or earnings per share growth, and market share, as well as statements expressing optimism or pessimism about future operating results, are forward-looking statements within the meaning of the Reform Act. The forward-looking statements are and will be based on management’s then-current beliefs and assumptions regarding future events and operating performance and on information currently available to management, and are applicable only as of the dates of such statements.

Forward-looking statements involve risks, uncertainties and assumptions. Although we do not make forward-looking statements unless we believe we have a reasonable basis for doing so, we cannot guarantee their accuracy. Actual results may differ materially from those expressed in these forward-looking statements due to a number of uncertainties and risks, including the risks described in this Annual Report on Form 10-K and other unforeseen risks. You should not put undue reliance on any forward-looking statements. These statements speak only as of the date of this Annual Report on Form 10-K, even if subsequently made available by us on our website or otherwise, and we undertake no obligation to update or revise these statements to reflect events or circumstances occurring after the date of this Annual Report on Form 10-K.

Our actual results may differ materially from those contemplated by the forward-looking statements for a number of reasons, including the following factors:

- general cyclical patterns of the industries in which our customers operate;
- the extent to which we cannot control our fixed and variable costs;
- the raw materials in our products may experience significant fluctuations in market price and availability;
- certain raw materials constitute hazardous materials that may give rise to costly environmental and safety claims;
- legislation regarding the restriction of the use of certain hazardous substances in our products;
- risks involved in our operations such as disruption of markets, changes in import and export laws, environmental regulations, currency restrictions and local currency exchange rate fluctuations;
- our ability to raise our selling prices to our customers when our product costs increase;
- the extent to which we are able to efficiently utilize our global manufacturing facilities and optimize our capacity;
- general economic conditions in the markets in which we operate;
- competitiveness of the battery markets and other energy solutions for industrial applications throughout the world;
- our timely development of competitive new products and product enhancements in a changing environment and the acceptance of such products and product enhancements by customers;
- our ability to adequately protect our proprietary intellectual property, technology and brand names;
- litigation and regulatory proceedings to which we might be subject;
- our expectations concerning indemnification obligations;
- changes in our market share in the geographic business segments where we operate;
- our ability to implement our cost reduction initiatives successfully and improve our profitability;
- quality problems associated with our products;
- our ability to implement business strategies, including our acquisition strategy, manufacturing expansion and restructuring plans;
- our acquisition strategy may not be successful in locating advantageous targets;
- our ability to successfully integrate any assets, liabilities, customers, systems and management personnel we acquire into our operations and our ability to realize related revenue synergies, strategic gains and cost savings may be significantly hard to achieve, if at all, or may take longer to achieve;
- potential goodwill impairment charges, future impairment charges and fluctuations in the fair values of reporting units or of assets in the event projected financial results are not achieved within expected time frames;
- our debt and debt service requirements which may restrict our operational and financial flexibility, as well as imposing unfavorable interest and financing costs;
- our ability to maintain our existing credit facilities or obtain satisfactory new credit facilities;
- adverse changes in our short and long-term debt levels under our credit facilities;

- our exposure to fluctuations in interest rates on our variable-rate debt;
- our ability to attract and retain qualified management and personnel;
- our ability to maintain good relations with labor unions;
- credit risk associated with our customers, including risk of insolvency and bankruptcy;
- our ability to successfully recover in the event of a disaster affecting our infrastructure;
- terrorist acts or acts of war, could cause damage or disruption to our operations, our suppliers, channels to market or customers, or could cause costs to increase, or create political or economic instability; and
- the operation, implementation, capacity and security of our information systems and infrastructure.

This list of factors that may affect future performance is illustrative, but by no means exhaustive. Accordingly, all forward-looking statements should be evaluated with the understanding of their inherent uncertainty.

EnerSys
Annual Report on Form 10-K
For the Fiscal Year Ended March 31, 2019
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PART I

ITEM 1. BUSINESS

Overview

EnerSys (the “Company,” “we,” or “us”) is the world’s largest manufacturer, marketer and distributor of industrial batteries. We also manufacture, market and distribute products such as battery chargers, power equipment, battery accessories, and outdoor cabinet enclosures. Additionally, we provide related aftermarket and customer-support services for our products. We market our products globally to over 10,000 customers in more than 100 countries through a network of distributors, independent representatives and our internal sales force.

We operate and manage our business in three geographic regions of the world—Americas, EMEA and Asia, as described below. Our business is highly decentralized with manufacturing locations throughout the world. More than half of our manufacturing capacity is located outside of the United States, and approximately 50% of our net sales were generated outside of the United States. The Company has three reportable business segments based on geographic regions, defined as follows:

- **Americas**, which includes North and South America, with our segment headquarters in Reading, Pennsylvania, U.S.A.;
- **EMEA**, which includes Europe, the Middle East and Africa, with our segment headquarters in Zug, Switzerland; and
- **Asia**, which includes Asia, Australia and Oceania, with our segment headquarters in Singapore.

We have two primary product lines: reserve power and motive power products. Net sales classifications by product line are as follows:

- **Reserve power products** are used for backup power for the continuous operation of critical applications in telecommunications systems, uninterruptible power systems, or “UPS” applications for computer and computer-controlled systems, and other specialty power applications, including medical and security systems, premium starting, lighting and ignition applications, in switchgear, electrical control systems used in electric utilities, large-scale energy storage, energy pipelines, in commercial aircraft, satellites, military aircraft, submarines, ships and tactical vehicles. Reserve power products also include thermally managed cabinets and enclosures for electronic equipment and batteries. With the recent Alpha acquisition, we are a provider of highly integrated power solutions and services to broadband, telecom, renewable and industrial customers.
- **Motive power products** are used to provide power for electric industrial forklifts used in manufacturing, warehousing and other material handling applications as well as mining equipment, diesel locomotive starting and other rail equipment.

Effective April 1, 2019, we plan to change our reportable business segments from being based on geographic regions to line of business, which are motive power and energy systems (which includes energy solutions related to telecommunications systems, uninterruptible power systems, and other specialty power applications).

Additionally, see Note 22 to the Consolidated Financial Statements for information on segment reporting.

Fiscal Year Reporting

In this Annual Report on Form 10-K, when we refer to our fiscal years, we state “fiscal” and the year, as in “fiscal 2019”, which refers to our fiscal year ended March 31, 2019. The Company reports interim financial information for 13-week periods, except for the first quarter, which always begins on April 1, and the fourth quarter, which always ends on March 31. The four quarters in fiscal 2019 ended on July 1, 2018, September 30, 2018, December 30, 2018, and March 31, 2019, respectively. The four quarters in fiscal 2018 ended on July 2, 2017, October 1, 2017, December 31, 2017, and March 31, 2018, respectively.

History

EnerSys and its predecessor companies have been manufacturers of industrial batteries for over 125 years. Morgan Stanley Capital Partners teamed with the management of Yuasa, Inc. in late 2000 to acquire from Yuasa Corporation (Japan) its reserve power and motive power battery businesses in North and South America. We were incorporated in October 2000 for the

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purpose of completing the Yuasa, Inc. acquisition. On January 1, 2001, we changed our name from Yuasa, Inc. to EnerSys to reflect our focus on the energy systems nature of our businesses.

In 2004, EnerSys completed its initial public offering (the “IPO”) and the Company’s common stock commenced trading on the New York Stock Exchange, under the trading symbol “ENS”.

Key Developments

There have been several key stages in the development of our business, which explain to a significant degree our results of operations over the past several years.

In March 2002, we acquired the reserve power and motive power business of the Energy Storage Group of Invensys plc. (“ESG”). Our successful integration of ESG provided global scale in both the reserve and motive power markets. The ESG acquisition also provided us with a further opportunity to reduce costs and improve operating efficiency.

During fiscal years 2003 through 2019, we made thirty-three acquisitions around the globe. In fiscal 2019, we completed the acquisition of Alpha (defined below), as further described below. Based in Bellingham, Washington, Alpha is a global industry leader in the comprehensive commercial-grade energy solutions for broadband, telecom, renewable, industrial and traffic customers around the world.

Alpha Acquisition

On December 7, 2018, the Company completed the acquisition of all of the issued and outstanding common stock of Alpha Technologies Services, Inc. (“ATS”) and Alpha Technologies Ltd. (“ATL”), resulting in ATS and ATL becoming wholly-owned subsidiaries of the Company (the “share purchase”). Additionally, the Company acquired substantially all of the assets of Alpha Technologies Inc. and certain assets of Altair Advanced Industries, Inc. and other affiliates of ATS and ATL (all such sellers, together with ATS and ATL, “Alpha”), in each case in accordance with the terms and conditions of certain restructuring agreements (collectively, the “asset acquisition” and together with the share purchase, the “acquisition”). Based in Bellingham, Washington, Alpha is a global industry leader in the comprehensive commercial-grade energy solutions for broadband, telecom, renewable, industrial and traffic customers around the world. The initial purchase consideration for the acquisition was \$750.0 million of which \$650.0 million was paid in cash and the balance was settled by issuing 1,177,630 shares of EnerSys common stock. These shares were issued out of the Company’s treasury stock and were valued at \$84.92 per share, which was based on the thirty-day volume weighted average stock price of the Company’s common stock at closing, in accordance with the purchase agreement. The 1,177,630 shares had a closing date fair value of \$93.3 million, based upon the December 7, 2018, closing date spot rate of \$79.20. The total purchase consideration, consisting of cash paid of \$650.0 million, shares valued at \$93.3 million and adjustment for working capital (due from seller of \$0.8 million) was \$742.5 million.

The Company funded the cash portion of the acquisition with borrowings from the Amended Credit Facility (as defined in the Liquidity and Capital Resources section).

The results of operations of Alpha have been included in the Company’s Americas segment beginning December 8, 2018.

Our Customers

We serve over 10,000 customers in over 100 countries, on a direct basis or through our distributors. We are not overly dependent on any particular end market. Our customer base is highly diverse, and no single customer accounts for more than 10% of our revenues.

Our reserve power customers consist of both global and regional customers. These customers are in diverse markets including telecom, UPS, electric utilities, security systems, emergency lighting, premium starting, lighting and ignition applications and space satellites. In addition, we sell our aerospace and defense products in numerous countries, including the governments of the U.S., Germany and the U.K. and to major defense and aviation original equipment manufacturers (“OEMs”).

Our motive power products are sold to a large, diversified customer base. These customers include material handling equipment dealers, OEMs and end users of such equipment. End users include manufacturers, distributors, warehouse operators, retailers, airports, mine operators and railroads.

Distribution and Services

We distribute, sell and service reserve and motive power products throughout the world, principally through company-owned sales and service facilities, as well as through independent manufacturers' representatives. Our company-owned network allows us to offer high-quality service, including preventative maintenance programs and customer support. Our warehouses and service locations enable us to respond quickly to customers in the markets we serve. We believe that the extensive industry experience of our sales organization results in strong long-term customer relationships.

Manufacturing and Raw Materials

We manufacture and assemble our products at manufacturing facilities located in the Americas, EMEA and Asia. With a view toward projected demand, we strive to optimize and balance capacity at our battery manufacturing facilities globally, while simultaneously minimizing our product cost. By taking a global view of our manufacturing requirements and capacity, we believe we are better able to anticipate potential capacity bottlenecks and equipment and capital funding needs.

The primary raw materials used to manufacture our products include lead, plastics, steel and copper. We purchase lead from a number of leading suppliers throughout the world. Because lead is traded on the world's commodity markets and its price fluctuates daily, we periodically enter into hedging arrangements for a portion of our projected requirements to reduce the volatility of our costs.

Competition

The industrial battery market is highly competitive both among competitors who manufacture and sell industrial batteries and among customers who purchase industrial batteries. Our competitors range from development stage companies to large domestic and international corporations. Certain of our competitors produce energy storage products utilizing technologies or chemistries different from our own. We compete primarily on the basis of reputation, product quality, reliability of service, delivery and price. We believe that our products and services are competitively priced.

Americas

We believe that we have the largest market share in the Americas industrial battery market. We compete principally with East Penn Manufacturing, Exide Technologies and New Power in both the reserve and motive products markets; and also C&D Technologies Inc., EaglePicher (GTCR Group), NorthStar Battery, SAFT, as well as Chinese producers in the reserve products market.

EMEA

We believe that we have the largest market share in the European industrial battery market. Our primary competitors are Exide Technologies, FIAMM, Hoppecke, SAFT, as well as Chinese producers in the reserve products market; and Exide Technologies, Eternity, Hoppecke, Midac, Sunlight and TAB in the motive products market.

Asia

We have a small share of the fragmented Asian industrial battery market. We compete principally with GS-Yuasa, Shin-Kobe, Hoppecke and Zibo Torch in the motive products market; and Amara Raja, China Shoto, Coslight, Exide Industries, Leoch and Narada, in the reserve products market.

Warranties

Warranties for our products vary geographically and by product type and are competitive with other suppliers of these types of products. Generally, our reserve power product warranties range from one to twenty years and our motive power product warranties range from one to seven years. The length of our warranties is varied to reflect regional characteristics and competitive influences. In some cases, our warranty period may include a pro rata period, which is typically based around the design life of the product and the application served. Our warranties generally cover defects in workmanship and materials and are limited to specific usage parameters.

Intellectual Property

We have numerous patents and patent licenses in the United States and other jurisdictions but do not consider any one patent to be material to our business. From time to time, we apply for patents on new inventions and designs, but we believe that the growth of our business will depend primarily upon the quality of our products and our relationships with our customers, rather than the extent of our patent protection.

We believe we are leaders in thin plate pure lead technology (“TPPL”). We believe that a significant capital investment would be required by any party desiring to produce products using TPPL technology for our markets.

We own or possess exclusive and non-exclusive licenses and other rights to use a number of trademarks in various jurisdictions. We have obtained registrations for many of these trademarks in the United States and other jurisdictions. Our various trademark registrations currently have durations of approximately 10 to 20 years, varying by mark and jurisdiction of registration and may be renewable. We endeavor to keep all of our material registrations current. We believe that many such rights and licenses are important to our business by helping to develop strong brand-name recognition in the marketplace.

Seasonality

Our business generally does not experience significant quarterly fluctuations in net sales as a result of weather or other trends that can be directly linked to seasonality patterns, but historically our fourth quarter is our best quarter with higher revenues and generally more working days and our second quarter is the weakest due to the summer holiday season in Western Europe and North America.

Product and Process Development

Our product and process development efforts are focused on the creation of new stored energy products, and integrated power systems and controls. We allocate our resources to the following key areas:

- the design and development of new products;
- optimizing and expanding our existing product offering;
- waste and scrap reduction;
- production efficiency and utilization;
- capacity expansion without additional facilities; and
- quality attribute maximization.

Employees

At March 31, 2019, we had approximately 11,000 employees. Of these employees, approximately 27% were covered by collective bargaining agreements. Employees covered by collective bargaining agreements that expire in the next twelve months were approximately 10% of the total workforce. The average term of these agreements is two years, with the longest term being three years. We consider our employee relations to be good. We did not experience any significant labor unrest or disruption of production during fiscal 2019.

Information about Our Executive Officers

As of May 29, 2019, our executive officers are:

David M. Shaffer, age 54, President and Chief Executive Officer. Mr. Shaffer has been a director of EnerSys and has served as our President and Chief Executive Officer since April 2016. Prior thereto, he served as President and Chief Operating Officer since November 2014. From January 2013 through October 2014, he served as our President-EMEA. From 2008 to 2013, Mr. Shaffer was our President-Asia. Prior thereto he was responsible for our telecommunications sales in the Americas. Mr. Shaffer joined EnerSys in 2005 and has worked in various roles of increasing responsibility in the industry since 1989.

Holger P. Aschke, age 49, President-Europe, Middle East and Africa (EMEA). Mr. Aschke has served as President-EMEA since January 2016. From April 2010 to January 2016, he was the Vice President Sales and Marketing Reserve Power-Europe. Mr. Aschke joined a predecessor company in 1996 and has held a wide range of operational and sales roles of increased responsibility in the Company’s EMEA business. Mr. Aschke completed a commercial IT education and apprenticeship

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sponsored by the University of Dortmund (Germany) and completed the Advanced Management Program from INSEAD (France).

Michael J. Schmidtlein, age 58, Executive Vice President and Chief Financial Officer. Mr. Schmidtlein has served as Executive Vice President and Chief Financial Officer since January 2016. Prior thereto, since February 2010, he was our Senior Vice President-Finance and Chief Financial Officer. From November 2005 until February 2010, Mr. Schmidtlein was Vice President-Corporate Controller and Chief Accounting Officer. Prior thereto, Mr. Schmidtlein was the Plant Manager of our manufacturing facility in Warrensburg, Missouri. In 1995, he joined the Energy Storage Group of Invensys plc, which EnerSys acquired in 2002. Mr. Schmidtlein is a certified public accountant and received his Bachelor of Science degree in Accounting from the University of Missouri.

Shawn M. O'Connell, age 46, President, Motive Power - Americas. Mr. O'Connell has served as our President, Motive Power - Americas since April 2019. Prior thereto served as our Vice President - Reserve Power Sales and Service for the Americas from February 2017, and Vice President of EnerSys Advanced Systems from December 2015 to January 2017. Mr. O'Connell joined EnerSys in 2011, serving in various sales and marketing capacities in several areas of our business. Mr. O'Connell received his Master of Business Administration degree in International Business from the University of Redlands, CA and his Bachelor of Arts degree in English Literature from the California State University, San Bernardino. Mr. O'Connell is a veteran of the U.S. Army's 82nd Airborne Division (Paratroopers) where he served as a Signals Intelligence Analyst, Spanish Linguist, and held a Top Secret security clearance.

Andrew M. Zogby, age 59, President, Energy Systems - Americas. Mr. Zogby has served as President, Energy Systems - Americas since April, 2019. He joined EnerSys upon completion of the acquisition of Alpha Technologies in December 2018. Mr. Zogby served as Alpha Technology's President since 2008, and brings over 30 years of experience in global broadband, telecommunications and renewal energy industries. He has held corporate leadership positions with several leading technology firms. Mr. Zogby received his Bachelor of Science degree in Industrial and Labor Relations from LeMoyne College, Syracuse, NY, and his Master in Business Administration degree from Duke University's Fuqua School of Business. He is active in the US Chamber of Commerce, and serves on the Chamber's Energy, Clean Air & Natural Resources Committee and the C_TEC, Chamber Technology Engagement Center Committee.

Environmental Matters

In the manufacture of our products throughout the world, we process, store, dispose of and otherwise use large amounts of hazardous materials, especially lead and acid. As a result, we are subject to extensive and evolving environmental, health and safety laws and regulations governing, among other things: the generation, handling, storage, use, transportation and disposal of hazardous materials; emissions or discharges of hazardous materials into the ground, air or water; and the health and safety of our employees. In addition, we are required to comply with the regulation issued from the European Union called Registration, Evaluation, Authorization and Restriction of Chemicals or "REACH". Under the regulation, companies which manufacture or import more than one ton of a covered chemical substance per year are required to register it in a central database administered by the European Chemicals Agency. The registration process requires the submission of information to demonstrate the safety of chemicals as used and could result in significant costs or delay the manufacture or sale of our products in the European Union. Additionally, industry associations and their member companies, including EnerSys, have scheduled meetings with the European Union member countries to advocate for their support of an exemption for lead compounds. Compliance with these laws and regulations results in ongoing costs. Failure to comply with these laws and regulations, or to obtain or comply with required environmental permits, could result in fines, criminal charges or other sanctions by regulators. From time to time, we have had instances of alleged or actual noncompliance that have resulted in the imposition of fines, penalties and required corrective actions. Our ongoing compliance with environmental, health and safety laws, regulations and permits could require us to incur significant expenses, limit our ability to modify or expand our facilities or continue production and require us to install additional pollution control equipment and make other capital improvements. In addition, private parties, including current or former employees, can bring personal injury or other claims against us due to the presence of, or their exposure to, hazardous substances used, stored, transported or disposed of by us or contained in our products.

Sumter, South Carolina

We currently are responsible for certain environmental obligations at our former battery facility in Sumter, South Carolina, that predate our ownership of this facility. This battery facility was closed in 2001 and is separate from our current metal fabrication facility in Sumter. We have a reserve of \$1.1 million for this facility as of March 31, 2019. Based on current information, we believe this reserve is adequate to satisfy our environmental liabilities at this facility.

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Environmental and safety certifications

Seventeen of our facilities in the Americas, EMEA and Asia are certified to ISO 14001 standards. ISO 14001 is a globally recognized, voluntary program that focuses on the implementation, maintenance and continual improvement of an environmental management system and the improvement of environmental performance. Six facilities in EMEA and Asia are certified to OHSAS 18001 standards. OHSAS 18001 is a globally recognized occupational health and safety management systems standard.

Quality Systems

We utilize a global strategy for quality management systems, policies and procedures, the basis of which is the ISO 9001:2015 standard, which is a worldwide recognized quality standard. We believe in the principles of this standard and reinforce this by requiring mandatory compliance for all manufacturing, sales and service locations globally that are registered to the ISO 9001 standard. This strategy enables us to provide consistent quality products and services to meet our customers' needs.

Available Information

We file annual, quarterly and current reports, proxy statements and other information with the SEC. These filings are available to the public on the Internet at the SEC's website at <http://www.sec.gov>.

Our Internet address is <http://www.enersys.com>. We make available free of charge on <http://www.enersys.com> our annual, quarterly and current reports, and amendments to those reports, as soon as reasonably practical after we electronically file such material with, or furnish it to, the SEC.

ITEM 1A. RISK FACTORS

The following risks and uncertainties, as well as others described in this Annual Report on Form 10-K, could materially and adversely affect our business, our results of operations and financial condition and could cause actual results to differ materially from our expectations and projections. Stockholders are cautioned that these and other factors, including those beyond our control, may affect future performance and cause actual results to differ from those which may, from time to time, be anticipated. There may be additional risks that are not presently material or known. See "Cautionary Note Regarding Forward-Looking Statements." All forward-looking statements made by us or on our behalf are qualified by the risks described below.

We operate in an extremely competitive industry and are subject to pricing pressures.

We compete with a number of major international manufacturers and distributors, as well as a large number of smaller, regional competitors. Due to excess capacity in some sectors of our industry and consolidation among industrial battery purchasers, we have been subjected to significant pricing pressures. We anticipate continued competitive pricing pressure as foreign producers are able to employ labor at significantly lower costs than producers in the U.S. and Western Europe, expand their export capacity and increase their marketing presence in our major Americas and European markets. Several of our competitors have strong technical, marketing, sales, manufacturing, distribution and other resources, as well as significant name recognition, established positions in the market and long-standing relationships with OEMs and other customers. In addition, certain of our competitors own lead smelting facilities which, during periods of lead cost increases or price volatility, may provide a competitive pricing advantage and reduce their exposure to volatile raw material costs. Our ability to maintain and improve our operating margins has depended, and continues to depend, on our ability to control and reduce our costs. We cannot assure you that we will be able to continue to control our operating expenses, to raise or maintain our prices or increase our unit volume, in order to maintain or improve our operating results.

The uncertainty in global economic conditions could negatively affect the Company's operating results.

Our operating results are directly affected by the general global economic conditions of the industries in which our major customer groups operate. Our business segments are highly dependent on the economic and market conditions in each of the geographic areas in which we operate. Our products are heavily dependent on the end markets that we serve and our operating results will vary by geographic segment, depending on the economic environment in these markets. Sales of our motive power products, for example, depend significantly on demand for new electric industrial forklift trucks, which in turn depends on end-user demand for additional motive capacity in their distribution and manufacturing facilities. The uncertainty in global

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economic conditions varies by geographic segment, and can result in substantial volatility in global credit markets, particularly in the United States, where we service the vast majority of our debt. These conditions affect our business by reducing prices that our customers may be able or willing to pay for our products or by reducing the demand for our products, which could in turn negatively impact our sales and earnings generation and result in a material adverse effect on our business, cash flow, results of operations and financial position.

Government reviews, inquiries, investigations, and actions could harm our business or reputation.

As we operate in various locations around the world, our operations in certain countries are subject to significant governmental scrutiny and may be adversely impacted by the results of such scrutiny. The regulatory environment with regard to our business is evolving, and officials often exercise broad discretion in deciding how to interpret and apply applicable regulations. From time to time, we receive formal and informal inquiries from various government regulatory authorities, as well as self-regulatory organizations, about our business and compliance with local laws, regulations or standards. For example, certain of the Company's European subsidiaries have received subpoenas and requests for documents and, in some cases, interviews from, and have had on-site inspections conducted by the competition authorities of Belgium, Germany and the Netherlands relating to conduct and anticompetitive practices of certain industrial battery participants. The Company settled the Belgian regulatory proceeding in February 2016 by acknowledging certain anticompetitive practices and conduct and agreeing to pay a fine of \$2.0 million, which was paid in March 2016. In June 2017, the Company settled a portion of its previously disclosed proceeding involving the German competition authority relating to conduct involving the Company's motive power battery business and agreed to pay a fine of \$14.8 million, which was paid in July 2017. Also in June 2017, the German competition authority issued a fining decision related to the Company's reserve power battery business. The Company settled this matter by agreeing to pay \$7.3 million, which was paid in April 2019. In July 2017, the Company settled the Dutch regulatory proceeding and agreed to pay a fine of \$11.2 million, which was paid in August 2017. As of March 31, 2019, the Company had a total reserve balance of \$7.3 million in connection with these investigations and related legal matters. However, the precise scope, timing and time period at issue, as well as the final outcome of the investigations or customer claims, remain uncertain and could be materially adverse to our business. (See Note 18 to the Consolidated Financial Statement).

Any determination that our operations or activities, or the activities of our employees, are not in compliance with existing laws, regulations or standards could result in the imposition of substantial fines, interruptions of business, loss of supplier, vendor, customer or other third-party relationships, termination of necessary licenses and permits, or similar results, all of which could potentially harm our business and/or reputation. Even if an inquiry does not result in these types of determinations, regulatory authorities could cause us to incur substantial costs or require us to change our business practices in a manner materially adverse to our business, and it potentially could create negative publicity which could harm our business and/or reputation.

Reliance on third party relationships and derivative agreements could adversely affect the Company's business.

We depend on third parties, including suppliers, distributors, lead toll operators, freight forwarders, insurance brokers, commodity brokers, major financial institutions and other third party service providers, for key aspects of our business, including the provision of derivative contracts to manage risks of (a) commodity cost volatility, (b) foreign currency exposures and (c) interest rate volatility. Failure of these third parties to meet their contractual, regulatory and other obligations to the Company, or the development of factors that materially disrupt our relationships with these third parties, could expose us to the risks of business disruption, higher commodity and interest costs, unfavorable foreign currency rates and higher expenses, which could have a material adverse effect on our business.

Our operating results could be adversely affected by changes in the cost and availability of raw materials.

Lead is our most significant raw material and is used along with significant amounts of plastics, steel, copper and other materials in our manufacturing processes. We estimate that raw material costs account for over half of our cost of goods sold. The costs of these raw materials, particularly lead, are volatile and beyond our control. Additionally, availability of the raw materials used to manufacture our products may be limited at times resulting in higher prices and/or the need to find alternative suppliers. Furthermore, the cost of raw materials may also be influenced by transportation costs. Volatile raw material costs can significantly affect our operating results and make period-to-period comparisons extremely difficult. We cannot assure you that we will be able to either hedge the costs or secure the availability of our raw material requirements at a reasonable level or, even with respect to our agreements that adjust pricing to a market-based index for lead, pass on to our customers the increased costs of our raw materials without affecting demand or that limited availability of materials will not impact our production capabilities. Our inability to raise the price of our products in response to increases in prices of raw materials or to maintain a proper supply of raw materials could have an adverse effect on our revenue, operating profit and net income.

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Our operations expose us to litigation, tax, environmental and other legal compliance risks.

We are subject to a variety of litigation, tax, environmental, health and safety and other legal compliance risks. These risks include, among other things, possible liability relating to product liability matters, personal injuries, intellectual property rights, contract-related claims, government contracts, taxes, health and safety liabilities, environmental matters and compliance with U.S. and foreign laws, competition laws and laws governing improper business practices. We or one of our business units could be charged with wrongdoing as a result of such matters. If convicted or found liable, we could be subject to significant fines, penalties, repayments or other damages (in certain cases, treble damages). As a global business, we are subject to complex laws and regulations in the U.S. and other countries in which we operate. Those laws and regulations may be interpreted in different ways. They may also change from time to time, as may related interpretations and other guidance. Changes in laws or regulations could result in higher expenses and payments, and uncertainty relating to laws or regulations may also affect how we conduct our operations and structure our investments and could limit our ability to enforce our rights.

In the area of taxes, changes in tax laws and regulations, as well as changes in related interpretations and other tax guidance could materially impact our tax receivables and liabilities and our deferred tax assets and tax liabilities. Additionally, in the ordinary course of business, we are subject to examinations by various authorities, including tax authorities. In addition to ongoing examinations, there could be additional investigations launched in the future by governmental authorities in various jurisdictions and existing investigations could be expanded. The global and diverse nature of our operations means that these risks will continue to exist and additional legal proceedings and contingencies will arise from time to time. Our results may be affected by the outcome of legal proceedings and other contingencies that cannot be predicted with certainty.

In the manufacture of our products throughout the world, we process, store, dispose of and otherwise use large amounts of hazardous materials, especially lead and acid. As a result, we are subject to extensive and changing environmental, health and safety laws and regulations governing, among other things: the generation, handling, storage, use, transportation and disposal of hazardous materials; remediation of polluted ground or water; emissions or discharges of hazardous materials into the ground, air or water; and the health and safety of our employees. Compliance with these laws and regulations results in ongoing costs. Failure to comply with these laws or regulations, or to obtain or comply with required environmental permits, could result in fines, criminal charges or other sanctions by regulators. From time to time we have had instances of alleged or actual noncompliance that have resulted in the imposition of fines, penalties and required corrective actions. Our ongoing compliance with environmental, health and safety laws, regulations and permits could require us to incur significant expenses, limit our ability to modify or expand our facilities or continue production and require us to install additional pollution control equipment and make other capital improvements. In addition, private parties, including current or former employees, could bring personal injury or other claims against us due to the presence of, or exposure to, hazardous substances used, stored or disposed of by us or contained in our products.

Certain environmental laws assess liability on owners or operators of real property for the cost of investigation, removal or remediation of hazardous substances at their current or former properties or at properties at which they have disposed of hazardous substances. These laws may also assess costs to repair damage to natural resources. We may be responsible for remediating damage to our properties caused by former owners. Soil and groundwater contamination has occurred at some of our current and former properties and may occur or be discovered at other properties in the future. We are currently investigating and monitoring soil and groundwater contamination at several of our properties, in most cases as required by regulatory permitting processes. We may be required to conduct these operations at other properties in the future. In addition, we have been and in the future may be liable to contribute to the cleanup of locations owned or operated by other persons to which we or our predecessor companies have sent wastes for disposal, pursuant to federal and other environmental laws. Under these laws, the owner or operator of contaminated properties and companies that generated, disposed of or arranged for the disposal of wastes sent to a contaminated disposal facility can be held jointly and severally liable for the investigation and cleanup of such properties, regardless of fault. Additionally, our products may become subject to fees and taxes in order to fund cleanup of such properties, including those operated or used by other lead-battery industry participants.

Changes in environmental and climate laws or regulations could lead to new or additional investment in production designs and could increase environmental compliance expenditures. Changes in climate change concerns, or in the regulation of such concerns, including greenhouse gas emissions, could subject us to additional costs and restrictions, including increased energy and raw materials costs. Additionally, we cannot assure you that we have been or at all times will be in compliance with environmental laws and regulations or that we will not be required to expend significant funds to comply with, or discharge liabilities arising under, environmental laws, regulations and permits, or that we will not be exposed to material environmental, health or safety litigation.

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Also, the U.S. Foreign Corrupt Practices Act (“FCPA”) and similar worldwide anti-bribery laws in non-U.S. jurisdictions generally prohibit companies and their intermediaries from making improper payments to non-U.S. officials for the purpose of obtaining or retaining business. The FCPA applies to companies, individual directors, officers, employees and agents. Under the FCPA, U.S. companies may be held liable for actions taken by strategic or local partners or representatives. The FCPA also imposes accounting standards and requirements on publicly traded U.S. corporations and their foreign affiliates, which are intended to prevent the diversion of corporate funds to the payment of bribes and other improper payments. Certain of our customer relationships outside of the U.S. are with governmental entities and are therefore subject to such anti-bribery laws. Our policies mandate compliance with these anti-bribery laws. Despite meaningful measures that we undertake to facilitate lawful conduct, which include training and internal control policies, these measures may not always prevent reckless or criminal acts by our employees or agents. As a result, we could be subject to criminal and civil penalties, disgorgement, further changes or enhancements to our procedures, policies and controls, personnel changes or other remedial actions. Violations of these laws, or allegations of such violations, could disrupt our operations, involve significant management distraction and result in a material adverse effect on our competitive position, results of operations, cash flows or financial condition.

There is also a regulation to improve the transparency and accountability concerning the supply of minerals coming from the conflict zones in and around the Democratic Republic of Congo. U.S. legislation included disclosure requirements regarding the use of conflict minerals mined from the Democratic Republic of Congo and adjoining countries and procedures regarding a manufacturer’s efforts to prevent the sourcing of such conflict minerals. In addition, the European Union adopted a EU-wide conflict minerals rule under which most EU importers of tin, tungsten, tantalum, gold and their ores will have to conduct due diligence to ensure the minerals do not originate from conflict zones and do not fund armed conflicts. Large manufacturers also will have to disclose how they plan to monitor their sources to comply with the rules. Compliance with the regulation is required by January 1, 2021. The implementation of these requirements could affect the sourcing and availability of minerals used in the manufacture of our products. As a result, there may only be a limited pool of suppliers who provide conflict-free metals, and we cannot assure you that we will be able to obtain products in sufficient quantities or at competitive prices. Future regulations may become more stringent or costly and our compliance costs and potential liabilities could increase, which may harm our business.

We are exposed to exchange rate risks, and our net earnings and financial condition may suffer due to currency translations.

We invoice our foreign sales and service transactions in local and foreign currencies and translate net sales using actual exchange rates during the period. We translate our non-U.S. assets and liabilities into U.S. dollars using current exchange rates as of the balance sheet dates. Because a significant portion of our revenues and expenses are denominated in foreign currencies, changes in exchange rates between the U.S. dollar and foreign currencies, primarily the euro, British pound, Polish zloty, Chinese renminbi, Mexican peso and Swiss franc may adversely affect our revenue, cost of goods sold and operating margins. For example, foreign currency depreciation against the U.S. dollar will reduce the value of our foreign revenues and operating earnings as well as reduce our net investment in foreign subsidiaries. Approximately 50% of net sales were generated outside of the United States for the last three fiscal years.

Most of the risk of fluctuating foreign currencies is in our EMEA segment, which comprised approximately one-third of our net sales during the last three fiscal years. The euro is the dominant currency in our EMEA operations. In the event that one or more European countries were to replace the euro with another currency, our sales into such countries, or into Europe generally, would likely be adversely affected until stable exchange rates are established.

The translation impact from currency fluctuations on net sales and operating earnings in our Americas and Asia segments are not as significant as our EMEA segment, as a substantial majority of these net sales and operating earnings are in U.S. dollars or foreign currencies that have been closely correlated to the U.S. dollar.

If foreign currencies depreciate against the U.S. dollar, it would make it more expensive for our non-U.S. subsidiaries to purchase certain of our raw material commodities that are priced globally in U.S. dollars, while the related revenue will decrease when translated to U.S. dollars. Significant movements in foreign exchange rates can have a material impact on our results of operations and financial condition. We periodically engage in hedging of our foreign currency exposures, but cannot assure you that we can successfully hedge all of our foreign currency exposures or do so at a reasonable cost.

We quantify and monitor our global foreign currency exposures. Our largest foreign currency exposure is from the purchase and conversion of U.S. dollar based lead costs into local currencies in Europe. Additionally, we have currency exposures from intercompany financing and intercompany and third party trade transactions. On a selective basis, we enter into foreign currency forward contracts and purchase option contracts to reduce the impact from the volatility of currency movements; however, we cannot be certain that foreign currency fluctuations will not impact our operations in the future.

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If we are unable to effectively hedge against currency fluctuations, our operating costs and revenues in our non-U.S. operations may be adversely affected, which would have an adverse effect on our operating profit and net income.

We have experienced and may continue to experience, difficulties implementing our new global enterprise resource planning system.

We are engaged in a multi-year implementation of a new global enterprise resource planning system (“ERP”). The ERP is designed to efficiently maintain our financial records and provide information important to the operation of our business to our management team. The ERP will continue to require significant investment of human and financial resources. In implementing the ERP, we have experienced significant production and shipping delays, increased costs and other difficulties. Any significant disruption or deficiency in the design and implementation of the ERP will adversely affect our ability to process orders, ship product, send invoices and track payments, fulfill contractual obligations or otherwise operate our business. While we have invested significant resources in planning, project management and training, additional and significant implementation issues may arise. In addition, our efforts to centralize various business processes and functions within our organization in connection with our ERP implementation may disrupt our operations and negatively impact our business, results of operations and financial condition.

The failure to successfully implement efficiency and cost reduction initiatives, including restructuring activities, could materially adversely affect our business and results of operations, and we may not realize some or all of the anticipated benefits of those initiatives.

From time to time we have implemented efficiency and cost reduction initiatives intended to improve our profitability and to respond to changes impacting our business and industry. These initiatives include relocating manufacturing to lower cost regions, working with our material suppliers to lower costs, product design and manufacturing improvements, personnel reductions and voluntary retirement programs, and strategically planning capital expenditures and development activities. In the past we have recorded net restructuring charges to cover costs associated with our cost reduction initiatives involving restructuring. These costs have been primarily composed of employee separation costs, including severance payments, and asset impairments or losses from disposal. We also undertake restructuring activities and programs to improve our cost structure in connection with our business acquisitions, which can result in significant charges, including charges for severance payments to terminated employees and asset impairment charges.

We cannot assure you that our efficiency and cost reduction initiatives will be successfully or timely implemented, or that they will materially and positively impact our profitability. Because our initiatives involve changes to many aspects of our business, the associated cost reductions could adversely impact productivity and sales to an extent we have not anticipated. In addition, our ability to complete our efficiency and cost-savings initiatives and achieve the anticipated benefits within the expected time frame is subject to estimates and assumptions and may vary materially from our expectations, including as a result of factors that are beyond our control. Furthermore, our efforts to improve the efficiencies of our business operations and improve growth may not be successful. Even if we fully execute and implement these activities and they generate the anticipated cost savings, there may be other unforeseeable and unintended consequences that could materially adversely impact our profitability and business, including unintended employee attrition or harm to our competitive position. To the extent that we do not achieve the profitability enhancement or other benefits of our efficiency and cost reduction initiatives that we anticipate, our results of operations may be materially adversely effected.

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Our international operations may be adversely affected by actions taken by foreign governments or other forces or events over which we may have no control.

We currently have significant manufacturing and/or distribution facilities outside of the United States, in Argentina, Australia, Belgium, Brazil, Canada, the Czech Republic, France, Germany, India, Italy, Malaysia, Mexico, the People's Republic of China ("PRC"), Poland, Spain, Switzerland and the United Kingdom. Our global operations are dependent upon products manufactured, purchased and sold in the U.S. and internationally, including in countries with political and economic instability or uncertainty. This includes, for example, the uncertainty related to the United Kingdom's withdrawal from the European Union (commonly known as "Brexit") and the adoption and expansion of trade restrictions, including the occurrence or escalation of a "trade war," or other governmental action related to tariffs or trade agreements or policies among the governments of the United States, PRC and other countries. Some countries have greater political and economic volatility and greater vulnerability to infrastructure and labor disruptions than others. Our business could be negatively impacted by adverse fluctuations in freight costs, limitations on shipping and receiving capacity, and other disruptions in the transportation and shipping infrastructure at important geographic points of exit and entry for our products. Operating in different regions and countries exposes us to a number of risks, including:

- multiple and potentially conflicting laws, regulations and policies that are subject to change;
- imposition of currency restrictions, restrictions on repatriation of earnings or other restraints imposition of burdensome import duties, tariffs or quotas;
- changes in trade agreements;
- imposition of new or additional trade and economic sanctions laws imposed by the U.S. or foreign governments;
- war or terrorist acts; and
- political and economic instability or civil unrest that may severely disrupt economic activity in affected countries.

The occurrence of one or more of these events may negatively impact our business, results of operations and financial condition.

Our failure to introduce new products and product enhancements and broad market acceptance of new technologies introduced by our competitors could adversely affect our business.

Many new energy storage technologies have been introduced over the past several years. For certain important and growing markets, such as aerospace and defense, lithium-based battery technologies have a large and growing market share. Our ability to achieve significant and sustained penetration of key developing markets, including aerospace and defense, will depend upon our success in developing or acquiring these and other technologies, either independently, through joint ventures or through acquisitions. If we fail to develop or acquire, and manufacture and sell, products that satisfy our customers' demands, or we fail to respond effectively to new product announcements by our competitors by quickly introducing competitive products, then market acceptance of our products could be reduced and our business could be adversely affected. We cannot assure you that our portfolio of primarily lead-acid products will remain competitive with products based on new technologies.

We may not be able to adequately protect our proprietary intellectual property and technology.

We rely on a combination of copyright, trademark, patent and trade secret laws, non-disclosure agreements and other confidentiality procedures and contractual provisions to establish, protect and maintain our proprietary intellectual property and technology and other confidential information. Certain of these technologies, especially TPPL technology, are important to our business and are not protected by patents. Despite our efforts to protect our proprietary intellectual property and technology and other confidential information, unauthorized parties may attempt to copy or otherwise obtain and use our intellectual property and proprietary technologies. If we are unable to protect our intellectual property and technology, we may lose any technological advantage we currently enjoy and may be required to take an impairment charge with respect to the carrying value of such intellectual property or goodwill established in connection with the acquisition thereof. In either case, our operating results and net income may be adversely affected.

Relocation of our customers' operations could adversely affect our business.

The trend by a number of our North American and Western European customers to move manufacturing operations and expand their businesses in faster growing and low labor-cost markets may have an adverse impact on our business. As our customers in traditional manufacturing-based industries seek to move their manufacturing operations to these locations, there is a risk that these customers will source their energy storage products from competitors located in those territories and will cease or reduce the purchase of products from our manufacturing plants. We cannot assure you that we will be able to compete effectively with

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manufacturing operations of energy storage products in those territories, whether by establishing or expanding our manufacturing operations in those lower-cost territories or acquiring existing manufacturers.

Quality problems with our products could harm our reputation and erode our competitive position.

The success of our business will depend upon the quality of our products and our relationships with customers. In the event that our products fail to meet our customers' standards, our reputation could be harmed, which would adversely affect our marketing and sales efforts. We cannot assure you that our customers will not experience quality problems with our products.

We offer our products under a variety of brand names, the protection of which is important to our reputation for quality in the consumer marketplace.

We rely upon a combination of trademark, licensing and contractual covenants to establish and protect the brand names of our products. We have registered many of our trademarks in the U.S. Patent and Trademark Office and in other countries. In many market segments, our reputation is closely related to our brand names. Monitoring unauthorized use of our brand names is difficult, and we cannot be certain that the steps we have taken will prevent their unauthorized use, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the U.S. We cannot assure you that our brand names will not be misappropriated or utilized without our consent or that such actions will not have a material adverse effect on our reputation and on our results of operations.

We may fail to implement our plans to make acquisitions or successfully integrate them into our operations.

As part of our business strategy, we have grown, and plan to continue growing, by acquiring other product lines, technologies or facilities that complement or expand our existing business, such as the acquisition of Alpha during fiscal 2019. There is significant competition for acquisition targets in the stored energy industry. We may not be able to identify suitable acquisition candidates or negotiate attractive terms. In addition, we may have difficulty obtaining the financing necessary to complete transactions we pursue. In that regard, our credit facilities restrict the amount of additional indebtedness that we may incur to finance acquisitions and place other restrictions on our ability to make acquisitions. Exceeding any of these restrictions would require the consent of our lenders. Even if acquisition candidates are identified, we cannot be sure that our diligence will surface all material issues that may be present, including as they relate to inside Alpha or its business, or that it would be possible to uncover all material issues through a customary amount of due diligence, or that factors outside of such acquisition candidate or Alpha and their business and outside of their respective control will not arise later. If any such material issues arise, they may materially and adversely impact the on-going business of EnerSys and our stockholders' investment. We may be unable to successfully integrate any assets, liabilities, customers, systems and management personnel we acquire into our operations and we may not be able to realize related revenue synergies and cost savings within expected time frames. For example, the ability of Alpha and EnerSys to realize the anticipated benefits of the Alpha acquisition will depend, to a large extent, on our ability to combine Alpha's and our businesses in a manner that facilitates growth opportunities and realizes anticipated synergies, and achieves the projected stand-alone cost savings and revenue growth trends identified by each company. It is expected that we will benefit from operational and general and administrative cost synergies resulting from the warehouse and transportation integration, direct procurement savings on overlapping materials, purchasing scale on indirect spend categories and optimization of duplicate positions and processes. We may also enjoy revenue synergies, driven by a strong portfolio of brands with exposure to higher growth segments and the ability to leverage our collective distribution strength. In order to achieve these expected benefits, we must successfully combine the businesses of Alpha and EnerSys in a manner that permits these cost savings and synergies to be realized and must achieve the anticipated savings and synergies without adversely affecting current revenues and investments in future growth. If we experience difficulties with the integration process or are not able to successfully achieve these objectives, the anticipated benefits of the Alpha acquisition may not be realized fully or at all or may take longer to realize than expected. Our failure to execute our acquisition strategy could have a material adverse effect on our business. We cannot assure you that our acquisition strategy will be successful or that we will be able to successfully integrate acquisitions we do make.

Any acquisitions that we complete may dilute stockholder ownership interests in EnerSys, may have adverse effects on our financial condition and results of operations and may cause unanticipated liabilities.

Future acquisitions may involve the issuance of our equity securities as payment, in part or in full, for the businesses or assets acquired. Any future issuances of equity securities would dilute stockholder ownership interests. In addition, future acquisitions might not increase, and may even decrease, our earnings or earnings per share and the benefits derived by us from an acquisition might not outweigh or might not exceed the dilutive effect of the acquisition. We also may incur additional debt or suffer adverse tax and accounting consequences in connection with any future acquisitions.

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The failure or cyber security breach of critical computer systems could seriously affect our sales and operations.

We operate a number of critical computer systems throughout our business that can fail for a variety of reasons. If such a failure were to occur, we may not be able to sufficiently recover from the failure in time to avoid the loss of data or any adverse impact on certain of our operations that are dependent on such systems. This could result in lost sales and the inefficient operation of our facilities for the duration of such a failure.

In addition, our computer systems are essential for the exchange of information both within the company and in communicating with third parties. Despite our efforts to protect the integrity of our systems and network as well as sensitive, confidential or personal data or information, our facilities and systems and those of our third-party service providers may be vulnerable to security breaches, theft, misplaced or lost data, programming and/or human errors that could potentially lead to the compromising of sensitive, confidential or personal data or information, improper use of our systems, software solutions or networks, unauthorized access, use, disclosure, modification or destruction of information, defective products, production downtimes and operational disruptions, which in turn could adversely affect our reputation, competitiveness, and results of operations.

We may not be able to maintain adequate credit facilities.

Our ability to continue our ongoing business operations and fund future growth depends on our ability to maintain adequate credit facilities and to comply with the financial and other covenants in such credit facilities or to secure alternative sources of financing. However, such credit facilities or alternate financing may not be available or, if available, may not be on terms favorable to us. If we do not have adequate access to credit, we may be unable to refinance our existing borrowings and credit facilities when they mature and to fund future acquisitions, and this may reduce our flexibility in responding to changing industry conditions.

Our indebtedness could adversely affect our financial condition and results of operations.

As of March 31, 2019, we had \$1,036.5 million of total consolidated debt (including capital lease obligations). This level of debt could:

- increase our vulnerability to adverse general economic and industry conditions, including interest rate fluctuations, because a portion of our borrowings bear, and will continue to bear, interest at floating rates;
- require us to dedicate a substantial portion of our cash flow from operations to debt service payments, which would reduce the availability of our cash to fund working capital, capital expenditures or other general corporate purposes, including acquisitions;
- limit our flexibility in planning for, or reacting to, changes in our business and industry;
- restrict our ability to introduce new products or new technologies or exploit business opportunities;
- place us at a disadvantage compared with competitors that have proportionately less debt;
- limit our ability to borrow additional funds in the future, if we need them, due to financial and restrictive covenants in our debt agreements; and
- have a material adverse effect on us if we fail to comply with the financial and restrictive covenants in our debt agreements.

There can be no assurance that we will continue to declare cash dividends at all or in any particular amounts.

During fiscal 2019, we announced the declaration of a quarterly cash dividend of \$0.175 per share of common stock for quarters ended July 1, 2018, September 30, 2018, December 30, 2018 and March 31, 2019. On May 16, 2019, we announced a fiscal 2020 first quarter cash dividend of \$0.175 per share of common stock. Future payment of a regular quarterly cash dividend on our common shares will be subject to, among other things, our results of operations, cash balances and future cash requirements, financial condition, statutory requirements of Delaware law, compliance with the terms of existing and future indebtedness and credit facilities, and other factors that the Board of Directors may deem relevant. Our dividend payments may change from time to time, and we cannot provide assurance that we will continue to declare dividends at all or in any particular amounts. A reduction in or elimination of our dividend payments could have a negative effect on our share price.

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We cannot guarantee that our share repurchase programs will be fully consummated or that they will enhance long-term stockholder value. Share repurchases could also increase the volatility of the trading price of our stock and could diminish our cash reserves.

Our board of directors has authorized two share repurchase programs, one authorizing the repurchase of up to \$100 million of our common stock, of which authority, as of March 31, 2019, approximately \$69 million remains available and another authorizing the repurchase of up to such number of shares as shall equal the dilutive effects of any equity based award granted during such fiscal year and the number of shares exercised through stock option awards during such fiscal year. Although our board of directors has authorized these share repurchase programs, the programs do not obligate us to repurchase any specific dollar amount or to acquire any specific number of shares. We cannot guarantee that the programs will be fully consummated or that they will enhance long-term stockholder value. The programs could affect the trading price of our stock and increase volatility, and any announcement of a termination of these programs may result in a decrease in the trading price of our stock. In addition, these programs could diminish our cash reserves.

We depend on our senior management team and other key employees, and significant attrition within our management team or unsuccessful succession planning could adversely affect our business.

Our success depends in part on our ability to attract, retain and motivate senior management and other key employees. Achieving this objective may be difficult due to many factors, including fluctuations in global economic and industry conditions, competitors' hiring practices, cost reduction activities, and the effectiveness of our compensation programs. Competition for qualified personnel can be very intense. We must continue to recruit, retain and motivate senior management and other key employees sufficient to maintain our current business and support our future projects. We are vulnerable to attrition among our current senior management team and other key employees. A loss of any such personnel, or the inability to recruit and retain qualified personnel in the future, could have an adverse effect on our business, financial condition and results of operations. In addition, if we are unsuccessful in our succession planning efforts, the continuity of our business and results of operations could be adversely affected.

We may have exposure to greater than anticipated tax liabilities.

Our income tax obligations are based in part on our corporate operating structure and intercompany arrangements, including the manner in which we operate our business, develop, value, manage, protect, and use our intellectual property and the valuations of our intercompany transactions. We may also be subject to additional indirect or non-income taxes. The tax laws applicable to our business, including the laws of the United States and other jurisdictions, are subject to interpretation and certain jurisdictions are aggressively interpreting their laws in new ways in an effort to raise additional tax revenue from multi-national companies, like us. The taxing authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed technology or intercompany arrangements, which could increase our worldwide effective tax rate and harm our financial position, results of operations, and cash flows. Although we believe that our provision for income taxes is reasonable, the ultimate tax outcome may differ from the amounts recorded in our financial statements and may materially affect our financial results in the period or periods for which such determination is made. In addition, our future income tax rates could be adversely affected by earnings being lower than anticipated in jurisdictions that have lower statutory tax rates and higher than anticipated in jurisdictions that have higher statutory tax rates, by changes in the valuation of our deferred tax assets and liabilities, or by changes in tax laws, regulations, or accounting principles.

Changes in tax laws or tax rulings could materially affect our financial position, results of operations, and cash flows.

The income and non-income tax regimes we are subject to or operate under are unsettled and may be subject to significant change. Changes in tax laws or tax rulings, or changes in interpretations of existing laws, could materially affect our financial position, results of operations, and cash flows. For example, changes to U.S. tax laws enacted in December 2017 had a significant impact on our tax obligations and effective tax rate for fiscal 2019 and 2018. In addition, many countries in Europe, as well as a number of other countries and organizations, have recently proposed or recommended changes to existing tax laws or have enacted new laws that could significantly increase our tax obligations in many countries where we do business or require us to change the manner in which we operate our business. The Organization for Economic Cooperation and Development has been working on a Base Erosion and Profit Shifting Project, and issued in 2015, and is expected to continue to issue, guidelines and proposals that may change various aspects of the existing framework under which our tax obligations are determined in many of the countries in which we do business. The European Commission has conducted investigations in

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multiple countries focusing on whether local country tax rulings or tax legislation provides preferential tax treatment that violates European Union state aid rules and concluded that certain countries, including Ireland, have provided illegal state aid in certain cases. These investigations may result in changes to the tax treatment of our foreign operations. Due to the large and expanding scale of our international business activities, many of these types of changes to the taxation of our activities could increase our worldwide effective tax rate and harm our financial position, results of operations, and cash flows.

The United Kingdom's withdrawal from the European Union could harm our business and financial results.

In June 2016, voters in the United Kingdom approved the withdrawal of the United Kingdom from the European Union (commonly referred to as "Brexit"). In March 2017, the UK government initiated the exit process under Article 50 of the Treaty of the European Union, commencing a period of up to two years for the United Kingdom and the other EU member states to negotiate the terms of the withdrawal, which has been extended for an additional six months. The British government and the European Union have now negotiated a withdrawal agreement, and the European Union has approved that agreement, but the British Parliament has not yet approved it. As a result, there remains considerable uncertainty around the withdrawal. Failure to obtain parliamentary approval of the negotiated withdrawal agreement would mean that the United Kingdom would leave the European Union on October 31, 2019, probably with no agreement (a so-called "hard Brexit"). The consequences for the economies of the European Union members and of the United Kingdom exiting the European Union are unknown and unpredictable, especially in the case of a hard Brexit. Depending on the final terms of Brexit, we could face new regulatory costs and challenges and greater volatility in the Pound Sterling and the euro. Any adjustments we make to our business and operations as of Brexit could result in significant time and expense to complete. Any of the foregoing factors could have a material adverse effect on our business, results of operations or financial condition.

Our software and related services are highly technical and may contain undetected software bugs or vulnerabilities, which could manifest in ways that could seriously harm our reputation and our business.

The software and related services that we offer, including those as a result of the Alpha acquisition, are highly technical and complex. Our services or any other products that we may introduce in the future may contain undetected software bugs, hardware errors, and other vulnerabilities. These bugs and errors can manifest in any number of ways in our products, including through diminished performance, security vulnerabilities, malfunctions, or even permanently disabled products. We have a practice of regularly updating our products and some errors in our products may be discovered only after a product has been used by users, and may in some cases be detected only under certain circumstances or after extended use. Any errors, bugs or other vulnerabilities discovered in our code or backend after release could damage our reputation, drive away users, allow third parties to manipulate or exploit our software, lower revenue and expose us to claims for damages, any of which could seriously harm our business. Additionally, errors, bugs, or other vulnerabilities may, either directly or if exploited by third parties, affect our ability to make accurate royalty payments.

We also could face claims for product liability, tort or breach of warranty. Defending a lawsuit, regardless of its merit, is costly and may divert management's attention and seriously harm our reputation and our business. In addition, if our liability insurance coverage proves inadequate or future coverage is unavailable on acceptable terms or at all, our business could be seriously harmed.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. *PROPERTIES*

The Company's worldwide headquarters is located in Reading, Pennsylvania, U.S.A. Geographic headquarters for our Americas, EMEA and Asia segments are located in Reading, Pennsylvania, U.S.A., Zug, Switzerland and Singapore, respectively. The Company owns approximately 80% of its manufacturing facilities and distribution centers worldwide. The following sets forth the Company's principal owned or leased facilities by business segment:

Americas: Sylmar, California; Longmont, Colorado; Tampa, Florida; Suwanee, Georgia, Hays, Kansas; Richmond, Kentucky; Warrensburg, Missouri; Horsham, Pennsylvania; Sumter, South Carolina; Ooltewah, Tennessee, Spokane, Washington and Bellingham, Washington in the United States; Burnaby, in Canada; Monterrey and Tijuana in Mexico; Buenos Aires, Argentina and São Paulo, in Brazil.

EMEA: Hostomice, Czech Republic; Arras, France; Hagen and Zwickau in Germany; Bielsko-Biala, Poland; Newport and Culham in the United Kingdom.

Asia: Chongqing and Yangzhou in the PRC and Andhra Pradesh in India.

We consider our plants and facilities, whether owned or leased, to be in satisfactory condition and adequate to meet the needs of our current businesses and projected growth. Information as to material lease commitments is included in Note 9 - Leases to the Consolidated Financial Statements.

ITEM 3. *LEGAL PROCEEDINGS*

From time to time, we are involved in litigation incidental to the conduct of our business. See Litigation and Other Legal Matters in Note 18 - Commitments, Contingencies and Litigation to the Consolidated Financial Statements, which is incorporated herein by reference.

ITEM 4. *MINE SAFETY DISCLOSURES*

Not applicable.

PART II

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

Market Information

The Company's common stock has been listed on the New York Stock Exchange under the symbol "ENS" since it began trading on July 30, 2004. Prior to that time, there had been no public market for our common stock.

Holders of Record

As of May 24, 2019, there were approximately 348 record holders of common stock of the Company. Because many of these shares are held by brokers and other institutions on behalf of stockholders, the Company is unable to estimate the total number of stockholders represented by these record holders.

Recent Sales of Unregistered Securities

During the fourth quarter of fiscal 2019, we did not issue any unregistered securities.

Dividends

During fiscal 2019, the Company's quarterly dividend was \$0.175 per share. The Company declared aggregate regular cash dividends of \$0.70 per share in each of the years ended March 31, 2019 and 2018.

The Company anticipates that it will continue to pay quarterly cash dividends in the future. However, the payment and amount of future dividends remain within the discretion of the Board and will depend upon the Company's future earnings, financial condition, capital requirements, restrictions under existing or future credit facilities or debt and other factors. See "There can be no assurance that we will continue to declare cash dividends at all or in any particular amounts." Under Item 1A. Risk Factors for additional information.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The following table summarizes the number of shares of common stock we purchased from participants in our equity incentive plans as well as repurchases of common stock authorized by the Board of Directors. As provided by the Company's equity incentive plans, (a) vested options outstanding may be exercised through surrender to the Company of option shares or vested options outstanding under the Company's equity incentive plans to satisfy the applicable aggregate exercise price (and any withholding tax) required to be paid upon such exercise and (b) the withholding tax requirements related to the vesting and settlement of equity awards may be satisfied by the surrender of shares of the Company's common stock.

Purchases of Equity Securities

Period	(a) Total number of shares (or units) purchased	(b) Average price paid per share (or unit)	(c) Total number of shares (or units) purchased as part of publicly announced plans or programs	(d) Maximum number (or approximate dollar value) of shares (or units) that may be purchased under the plans or programs ⁽¹⁾⁽²⁾
December 31, 2018 - January 27, 2019	—	\$ —	—	\$ 75,000,083
January 28, 2019 - February 24, 2019	403,773	73.29	403,601	45,419,363
February 25, 2019 - March 31, 2019	24,743	75.00	24,743	43,563,613
Total	<u>428,516</u>	<u>\$ 73.39</u>	<u>428,344</u>	

(1) The Company's Board of Directors has authorized the Company to repurchase up to such number of shares as shall equal the dilutive effects of any equity based award granted during such fiscal year under the 2017 Equity Incentive Plan and the number of shares exercised through stock option awards during such fiscal year. These amounted to 172 shares, repurchased at an average price of \$72.55.

(2) On November 8, 2017, the Company announced the establishment of a \$100 million stock repurchase authorization, with no expiration date and a remaining authorization of \$68.6 million. The authorization is in addition to the existing stock repurchase programs.

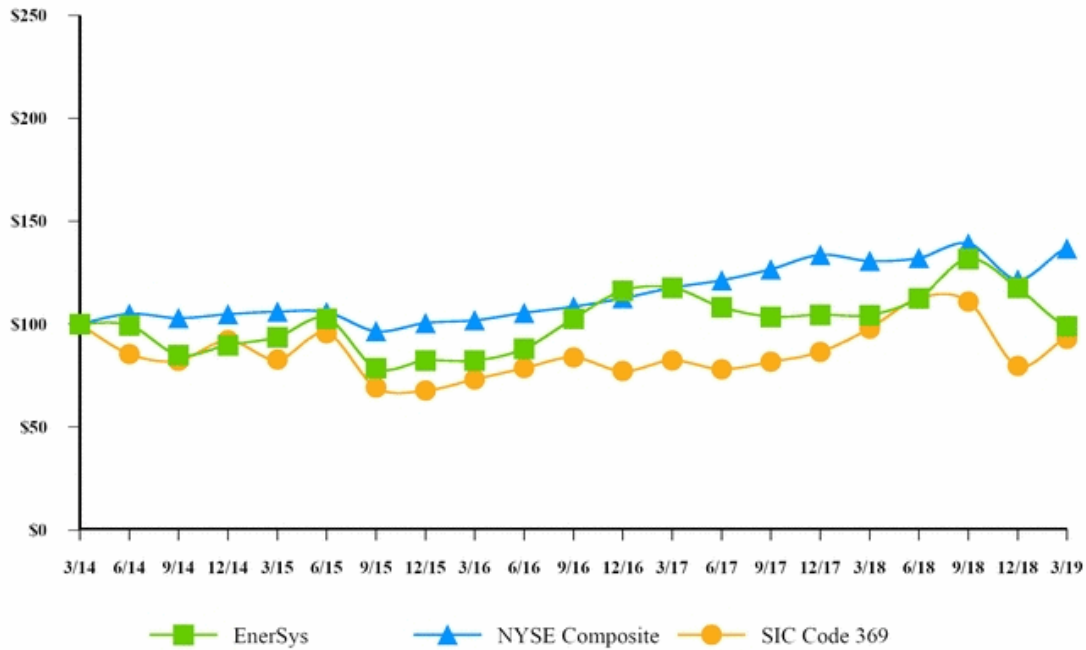
STOCK PERFORMANCE GRAPH

The following graph compares the changes in cumulative total returns on EnerSys' common stock with the changes in cumulative total returns of the New York Stock Exchange Composite Index, a broad equity market index, and the total return on a selected peer group index. The peer group selected is based on the standard industrial classification codes ("SIC Codes") established by the U.S. government. The index chosen was "Miscellaneous Electrical Equipment and Suppliers" and comprises all publicly traded companies having the same three-digit SIC Code (369) as EnerSys.

The graph was prepared assuming that \$100 was invested in EnerSys' common stock, the New York Stock Exchange Composite Index and the peer group (duly updated for changes) on March 31, 2014.

**Comparison Of Five Year Cumulative Total Return*
For Year Ended March 31, 2019**

Among EnerSys, the NYSE Composite Index, and SIC Code 369



*\$100 invested on March 31, 2014 in stock or index, including reinvestment of dividends.

ITEM 6. SELECTED FINANCIAL DATA

	Fiscal Year Ended March 31,				
	2019	2018	2017	2016	2015
(In thousands, except share and per share data)					
Consolidated Statements of Income:					
Net sales	\$ 2,808,017	\$ 2,581,891	\$ 2,367,149	\$ 2,316,249	\$ 2,505,512
Cost of goods sold	2,104,612	1,920,030	1,713,115	1,704,472	1,864,601
Inventory step up to fair value relating to Alpha acquisition and exit activities	10,379	3,457	2,157	—	—
Gross profit	693,026	658,404	651,877	611,777	640,911
Operating expenses	441,415	382,077	369,863	352,767	358,381
Restructuring and other exit charges	34,709	5,481	7,160	12,978	11,436
Impairment of goodwill	—	—	12,216	31,411	20,371
Impairment of indefinite-lived intangibles and fixed assets	—	—	1,800	4,841	3,575
Legal proceedings charge, net of settlement income / (reversal of legal accrual, net of fees)	4,437	—	23,725	3,201	(16,233)
Gain on sale of facility	—	—	—	(3,420)	—
Operating earnings	212,465	270,846	237,113	209,999	263,381
Interest expense	30,868	25,001	22,197	22,343	19,644
Other (income) expense, net	(614)	7,519	2,221	5,719	(5,602)
Earnings before income taxes	182,211	238,326	212,695	181,937	249,339
Income tax expense	21,584	118,493	54,472	50,113	67,814
Net earnings	160,627	119,833	158,223	131,824	181,525
Net earnings (losses) attributable to noncontrolling interests	388	239	(1,991)	(4,326)	337
Net earnings attributable to EnerSys stockholders	\$ 160,239	\$ 119,594	\$ 160,214	\$ 136,150	\$ 181,188
Net earnings per common share attributable to EnerSys stockholders:					
Basic	\$ 3.79	\$ 2.81	\$ 3.69	\$ 3.08	\$ 3.97
Diluted	\$ 3.73	\$ 2.77	\$ 3.64	\$ 2.99	\$ 3.77
Weighted-average number of common shares outstanding:					
Basic	42,335,023	42,612,036	43,389,333	44,276,713	45,606,317
Diluted	43,008,952	43,119,856	44,012,543	45,474,130	48,052,729

As a result of the adoption of ASU 2017-07, "Compensation—Retirement Benefits (Topic 715)" during the first quarter of 2019, the Company has recast the prior years of fiscal 2018 and 2017, those being the years presented in the primary financial statements.

	Fiscal Year Ended March 31,				
	2019	2018	2017	2016	2015
(In thousands)					
Consolidated cash flow data:					
Net cash provided by operating activities	\$ 197,855	\$ 211,048	\$ 246,030	\$ 307,571	\$ 194,471
Net cash used in investing activities	(723,883)	(72,357)	(61,833)	(80,923)	(59,616)
Net cash provided by (used in) financing activities	346,577	(166,888)	(62,542)	(105,729)	(59,313)
Other operating data:					
Capital expenditures	70,372	69,832	50,072	55,880	63,625
As of March 31,					
	2019	2018	2017	2016	2015
(In thousands)					
Consolidated balance sheet data:					
Cash and cash equivalents	\$ 299,212	\$ 522,118	\$ 500,329	\$ 397,307	\$ 268,921
Working capital	923,715	1,048,057	951,484	845,068	769,881
Total assets	3,118,193	2,486,925	2,293,029	2,214,488	2,136,555
Total debt, including capital leases	1,036,534	598,020	606,133	628,631	513,213
Total EnerSys stockholders' equity	1,282,287	1,195,675	1,103,456	1,013,131	1,038,900

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

The following discussion and analysis of our results of operations and financial condition for the fiscal years ended March 31, 2019, 2018 and 2017, should be read in conjunction with our audited consolidated financial statements and the notes to those statements included in Item 8. Financial Statements and Supplementary Data, of this Annual Report on Form 10-K. Our discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties, such as our plans, objectives, opinions, expectations, anticipations and intentions and beliefs. Actual results and the timing of events could differ materially from those anticipated in those forward-looking statements as a result of a number of factors. See "Cautionary Note Regarding Forward-Looking Statements," "Business" and "Risk Factors," sections elsewhere in this Annual Report on Form 10-K. In the following discussion and analysis of results of operations and financial condition, certain financial measures may be considered "non-GAAP financial measures" under the SEC rules. These rules require supplemental explanation and reconciliation, which is provided in this Annual Report on Form 10-K.

EnerSys' management uses the non-GAAP measures, EBITDA and adjusted EBITDA, in its computation of compliance with loan covenants. These measures, as used by EnerSys, adjust net earnings determined in accordance with GAAP for interest, taxes, depreciation and amortization, and certain charges or credits as permitted by our credit agreements, that were recorded during the periods presented.

EnerSys' management uses the non-GAAP measures, "primary working capital" and "primary working capital percentage" (see definition in "Liquidity and Capital Resources" below) along with capital expenditures, in its evaluation of business segment cash flow and financial position performance.

These non-GAAP disclosures have limitations as analytical tools, should not be viewed as a substitute for cash flow or operating earnings determined in accordance with GAAP, and should not be considered in isolation or as a substitute for analysis of the Company's results as reported under GAAP, nor are they necessarily comparable to non-GAAP performance measures that may be presented by other companies. This supplemental presentation should not be construed as an inference that the Company's future results will be unaffected by similar adjustments to operating earnings determined in accordance with GAAP.

Overview

EnerSys (the "Company," "we," or "us") is the world's largest manufacturer, marketer and distributor of industrial batteries. We also manufacture, market and distribute products such as battery chargers, power equipment, battery accessories, and outdoor cabinet enclosures. Additionally, we provide related aftermarket and customer-support services for our products. We market our products globally to over 10,000 customers in more than 100 countries through a network of distributors, independent representatives and our internal sales force.

We operate and manage our business in three geographic regions of the world—Americas, EMEA and Asia, as described below. Our business is highly decentralized with manufacturing locations throughout the world. More than half of our manufacturing capacity is located outside the United States, and approximately 50% of our net sales were generated outside the United States. The Company currently has three reportable business segments based on geographic regions, defined as follows:

- **Americas**, which includes North and South America, with our segment headquarters in Reading, Pennsylvania, U.S.A.;
- **EMEA**, which includes Europe, the Middle East and Africa, with our segment headquarters in Zug, Switzerland; and
- **Asia**, which includes Asia, Australia and Oceania, with our segment headquarters in Singapore.

We evaluate business segment performance based primarily upon operating earnings exclusive of highlighted items. Highlighted items are those that the Company deems are not indicative of ongoing operating results, including those charges that the Company incurs as a result of restructuring activities, impairment of goodwill and indefinite-lived intangibles and other assets, acquisition activities and those charges and credits that are not directly related to operating unit performance, such as significant legal proceedings, ERP system implementation, amortization of recently acquired intangible assets and tax valuation allowance changes, including those related to the adoption of the Tax Cuts and Jobs Act. Because these charges are not incurred as a result of ongoing operations, or are incurred as a result of a potential or previous acquisition, they are not as helpful a measure of the performance of our underlying business, particularly in light of their unpredictable nature and are difficult to forecast. All corporate and centrally incurred costs are allocated to the business segments based principally on net sales. We evaluate business segment cash flow and financial position performance based primarily upon capital expenditures and primary working capital levels (see definition of primary working capital in "Liquidity and Capital Resources" below). Although we

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monitor the three elements of primary working capital (receivables, inventory and payables), our primary focus is on the total amount due to the significant impact it has on our cash flow.

Our management structure, financial reporting systems, and associated internal controls and procedures, are all consistent with our three geographic business segments. We report on a March 31 fiscal year-end. Our financial results are largely driven by the following factors:

- global economic conditions and general cyclical patterns of the industries in which our customers operate;
- changes in our selling prices and, in periods when our product costs increase, our ability to raise our selling prices to pass such cost increases through to our customers;
- the extent to which we are able to efficiently utilize our global manufacturing facilities and optimize our capacity;
- the extent to which we can control our fixed and variable costs, including those for our raw materials, manufacturing, distribution and operating activities;
- changes in our level of debt and changes in the variable interest rates under our credit facilities; and
- the size and number of acquisitions and our ability to achieve their intended benefits.

We have two primary product lines: reserve power and motive power products. Net sales classifications by product line are as follows:

- **Reserve power products** are used for backup power for the continuous operation of critical applications in telecommunications systems, uninterruptible power systems, or “UPS” applications for computer and computer-controlled systems, and other specialty power applications, including medical and security systems, premium starting, lighting and ignition applications, in switchgear, electrical control systems used in electric utilities, large-scale energy storage, energy pipelines, in commercial aircraft, satellites, military aircraft, submarines, ships and tactical vehicles. Reserve power products also include thermally managed cabinets and enclosures for electronic equipment and batteries. With the recent Alpha acquisition, we are a provider of highly integrated power solutions and services to broadband, telecom, renewable and industrial customers.
- **Motive power products** are used to provide power for electric industrial forklifts used in manufacturing, warehousing and other material handling applications as well as mining equipment, diesel locomotive starting and other rail equipment.

Effective April 1, 2019, we plan to change our reportable business segments from being based on geographic regions to line of business, which are motive power and energy systems (which includes energy solutions related to telecommunications systems, uninterruptible power systems, and other specialty power applications).

Current Market Conditions

Economic Climate

Recent indicators continue to suggest a mixed trend in economic activity among the different geographical regions. North America's experiencing moderate economic growth while EMEA's economic growth is slow. Our Asia region continues to grow faster than any other region in which we do business.

Volatility of Commodities and Foreign Currencies

Our most significant commodity and foreign currency exposures are related to lead and the Euro, respectively. Historically, volatility of commodity costs and foreign currency exchange rates have caused large swings in our production costs. As the global economic climate changes, we anticipate that our commodity costs and foreign currency exposures may continue to fluctuate as they have in the past several years. Over the past year, on a consolidated basis, we have experienced rising commodity costs.

Customer Pricing

Our selling prices fluctuated during the last several years to offset the volatile cost of commodities. Approximately 30% of our revenue is currently subject to agreements that adjust pricing to a market-based index for lead. During fiscal 2019, our selling prices rose in response to increased lead and other commodity costs. Lead prices rose for the most part of fiscal 2018, peaked in the first quarter of fiscal 2019 and then declined sequentially in every quarter in fiscal 2019. Based on current commodity

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markets, we will likely see year over year benefits from declining commodity prices, with some related reduction in our selling prices in the upcoming year.

Liquidity and Capital Resources

We believe that our financial position is strong, and we have substantial liquidity with \$299 million of available cash and cash equivalents and available and undrawn credit lines of approximately \$547 million at March 31, 2019 to cover short-term liquidity requirements and anticipated growth in the foreseeable future.

In fiscal 2018, we entered into a credit facility (“2017 Credit Facility”) that consisted of a \$600.0 million senior secured revolving credit facility (“2017 Revolver”) and a \$150.0 million senior secured term loan (“2017 Term Loan”) with a maturity date of September 30, 2022. On December 7, 2018, we amended the 2017 Credit Facility (as amended, the “Amended Credit Facility”). The Amended Credit Facility consists of \$449.1 million senior secured term loans (the “Amended 2017 Term Loan”), including a CAD 133.1 million (\$99.1 million) term loan and a \$700.0 million senior secured revolving credit facility (the “Amended 2017 Revolver”). The amendment resulted in an increase of the 2017 Term Loan and the 2017 Revolver by \$299.1 million and \$100.0 million, respectively.

In fiscal 2019 we repurchased \$56.0 million of our common stock under existing authorizations and reissued 1,177,630 shares from our treasury stock to satisfy \$100.0 million of the initial purchase consideration of \$750.0 million, in connection with the Alpha acquisition. In fiscal 2018, we repurchased \$121.0 million of our common stock through an accelerated share repurchase program (“ASR”) with a major financial institution and through open market purchases.

A substantial majority of the Company’s cash and investments are held by foreign subsidiaries. The majority of that cash and investments is expected to be utilized to fund local operating activities, capital expenditure requirements and acquisitions. The Company believes that it has sufficient sources of domestic and foreign liquidity.

We believe that our strong capital structure and liquidity affords us access to capital for future capital expenditures, acquisition and stock repurchase opportunities and continued dividend payments.

Cost Savings Initiatives

Cost savings programs remain a continuous element of our business strategy and are directed primarily at further reductions in plant manufacturing (labor and overhead), raw material costs and our operating expenses (primarily selling, general and administrative). In order to realize cost savings benefits for a majority of these initiatives, costs are incurred either in the form of capital expenditures, funding the cash obligations of previously recorded restructuring expenses or current period expenses.

In January 2017, we started our Operational Excellence program, referred to as the EnerSys Operating System, or EOS, which serves as our continuous improvement engine. During fiscal 2018 and 2019, we were able to fund our investment in new product development and digital core with savings of approximately \$25 million in each year, primarily from restructuring programs. Our global deployment of EOS has slowed in fiscal 2019 and we have struggled to maintain pace with surging customer demand for TPPL amidst disruptions from our ERP implementation. We constantly evaluate the return on investment to ensure we achieve our targeted improvement by the end of fiscal 2021, but accomplishing this will require strong results in fiscal 2020 and 2021.

Critical Accounting Policies and Estimates

Our significant accounting policies are described in Note 1 - Summary of Significant Accounting Policies to the Consolidated Financial Statements in Item 8. In preparing our financial statements, management is required to make estimates and assumptions that, among other things, affect the reported amounts in the Consolidated Financial Statements and accompanying notes. These estimates and assumptions are most significant where they involve levels of subjectivity and judgment necessary to account for highly uncertain matters or matters susceptible to change, and where they can have a material impact on our financial condition and operating performance. We discuss below the more significant estimates and related assumptions used in the preparation of our consolidated financial statements. If actual results were to differ materially from the estimates made, the reported results could be materially affected.

Revenue Recognition

We adopted the new accounting standard for the recognition of revenue under ASC 606 for the fiscal year beginning on April 1, 2019. Under this standard, we recognize revenue only when we have satisfied a performance obligation through transferring

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control of the promised good or service to a customer. The standard indicates that an entity must determine at contract inception whether it will transfer control of a promised good or service over time or satisfy the performance obligation at a point in time through analysis of the following criteria: (i) the entity has a present right to payment, (ii) the customer has legal title, (iii) the customer has physical possession, (iv) the customer has the significant risks and rewards of ownership and (v) the customer has accepted the asset. Our primary performance obligation to our customers is the delivery of finished goods and products, pursuant to purchase orders. Control of the products sold typically transfers to our customers at the point in time when the goods are shipped as this is also when title generally passes to our customers under the terms and conditions of our customer arrangements.

We assess collectibility based primarily on the customer's payment history and on the creditworthiness of the customer.

Management believes that the accounting estimates related to revenue recognition are critical accounting estimates because they require reasonable assurance of collection of revenue proceeds and completion of all performance obligations. Also, revenues are recorded net of provisions for sales discounts and returns, which are established at the time of sale. These estimates are based on our past experience. For additional information on the new accounting standard for the recognition of revenue see Note 1 of Notes to the Consolidated Financial Statements.

Asset Impairment Determinations

We test for the impairment of our goodwill and indefinite-lived trademarks at least annually and whenever events or circumstances occur indicating that a possible impairment has been incurred.

We perform our annual goodwill impairment test on the first day of our fourth quarter for each of our reporting units based on the income approach, also known as the discounted cash flow ("DCF") method, which utilizes the present value of future cash flows to estimate fair value. We also use the market approach, which utilizes market price data of companies engaged in the same or a similar line of business as that of our company, to estimate fair value. A reconciliation of the two methods is performed to assess the reasonableness of fair value of each of the reporting units.

The future cash flows used under the DCF method are derived from estimates of future revenues, operating income, working capital requirements and capital expenditures, which in turn reflect specific global, industry and market conditions. The discount rate developed for each of the reporting units is based on data and factors relevant to the economies in which the business operates and other risks associated with those cash flows, including the potential variability in the amount and timing of the cash flows. A terminal growth rate is applied to the final year of the projected period and reflects our estimate of stable growth to perpetuity. We then calculate the present value of the respective cash flows for each reporting unit to arrive at the fair value using the income approach and then determine the appropriate weighting between the fair value estimated using the income approach and the fair value estimated using the market approach. Finally, we compare the estimated fair value of each reporting unit to its respective carrying value in order to determine if the goodwill assigned to each reporting unit is potentially impaired. In January 2017, the Financial Accounting Standards Board ("FASB") issued ASU 2017-04, "Intangibles-Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment", which eliminated Step 2 from the goodwill impairment test. If the fair value of the reporting unit exceeds its carrying value, goodwill is not impaired and no further testing is required. If the fair value of the reporting unit is less than the carrying value, an impairment charge is recognized 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. This update is effective for annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019 with early adoption permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company was able to early adopt ASU 2017-04 in fiscal 2017 and eliminated Step 2 from the goodwill impairment test conducted in fiscal 2017.

Significant assumptions used include management's estimates of future growth rates, the amount and timing of future operating cash flows, capital expenditures, discount rates, as well as market and industry conditions and relevant comparable company multiples for the market approach. Assumptions utilized are highly judgmental, especially given the role technology plays in driving the demand for products in the telecommunications and aerospace markets.

Our annual goodwill impairment test, which we performed during the fourth quarter of fiscal 2019, did not result in any impairment. The excess of fair value over carrying value for each of our reporting units for which we performed a quantitative goodwill impairment test, as of December 31, 2018, the annual testing date, ranged from approximately 17% to approximately 102% of carrying value, except in the case of our Asia region, where it was at 9%.

In order to evaluate the sensitivity of the fair value calculations on the goodwill impairment test, we applied a hypothetical 10% decrease to the fair values of each reporting unit. This hypothetical 10% decrease would result in excess fair values over

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carrying values range from approximately 11% to approximately 88% of the carrying values, except Asia where the excess of fair value over the carrying value would be reduced to 4%. Asia's goodwill was \$42.9 million and \$45.7 million as of March 31, 2019 and 2018, respectively.

We will continue to evaluate goodwill on an annual basis as of the beginning of our fourth fiscal quarter and whenever events or changes in circumstances, such as significant adverse changes in business climate or operating results, changes in management's business strategy or loss of a major customer, indicate that there may be a potential indicator of impairment.

The indefinite-lived trademarks are tested for impairment by comparing the carrying value to the fair value based on current revenue projections of the related operations, under the relief from royalty method. Any excess carrying value over the amount of fair value is recognized as impairment. Any impairment would be recognized in full in the reporting period in which it has been identified.

With respect to our other long-lived assets other than goodwill and indefinite-lived trademarks, we test for impairment when indicators of impairment are present. An asset is considered impaired when the undiscounted estimated net cash flows expected to be generated by the asset are less than its carrying amount. The impairment recognized is the amount by which the carrying amount exceeds the fair value of the impaired asset.

Litigation and Claims

From time to time, the Company has been or may be a party to various legal actions and investigations including, among others, employment matters, compliance with government regulations, federal and state employment laws, including wage and hour laws, contractual disputes and other matters, including matters arising in the ordinary course of business. These claims may be brought by, among others, governments, customers, suppliers and employees. Management considers the measurement of litigation reserves as a critical accounting estimate because of the significant uncertainty in some cases relating to the outcome of potential claims or litigation and the difficulty of predicting the likelihood and range of potential liability involved, coupled with the material impact on our results of operations that could result from litigation or other claims.

In determining legal reserves, management considers, among other inputs:

- interpretation of contractual rights and obligations;
- the status of government regulatory initiatives, interpretations and investigations;
- the status of settlement negotiations;
- prior experience with similar types of claims;
- whether there is available insurance coverage; and
- advice of outside counsel.

For certain matters, management is able to estimate a range of losses. When a loss is probable, but no amount of loss within a range of outcomes is more likely than other any other outcome, management will record a liability based on the low end of the estimated range. Additionally, management will evaluate whether losses in excess of amounts accrued are reasonably possible, and will make disclosure of those matters based on an assessment of the materiality of those addition possible losses.

Environmental Loss Contingencies

Accruals for environmental loss contingencies (i.e., environmental reserves) are recorded when it is probable that a liability has been incurred and the amount can reasonably be estimated. Management views the measurement of environmental reserves as a critical accounting estimate because of the considerable uncertainty surrounding estimation, including the need to forecast well into the future. From time to time, we may be involved in legal proceedings under federal, state and local, as well as international environmental laws in connection with our operations and companies that we have acquired. The estimation of environmental reserves is based on the evaluation of currently available information, prior experience in the remediation of contaminated sites and assumptions with respect to government regulations and enforcement activity, changes in remediation technology and practices, and financial obligations and creditworthiness of other responsible parties and insurers.

Warranty

We record a warranty reserve for possible claims against our product warranties, which generally run for a period ranging from one to twenty years for our reserve power batteries and for a period ranging from one to seven years for our motive power batteries. The assessment of the adequacy of the reserve includes a review of open claims and historical experience.

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Management believes that the accounting estimate related to the warranty reserve is a critical accounting estimate because the underlying assumptions used for the reserve can change from time to time and warranty claims could potentially have a material impact on our results of operations.

Allowance for Doubtful Accounts

We encounter risks associated with sales and the collection of the associated accounts receivable. We record a provision for accounts receivable that are considered to be uncollectible. In order to calculate the appropriate provision, management analyzes the creditworthiness of specific customers and the aging of customer balances. Management also considers general and specific industry economic conditions, industry concentration and contractual rights and obligations.

Management believes that the accounting estimate related to the allowance for doubtful accounts is a critical accounting estimate because the underlying assumptions used for the allowance can change from time to time and uncollectible accounts could potentially have a material impact on our results of operations.

Retirement Plans

We use certain economic and demographic assumptions in the calculation of the actuarial valuation of liabilities associated with our defined benefit plans. These assumptions include the discount rate, expected long-term rates of return on assets and rates of increase in compensation levels. Changes in these assumptions can result in changes to the pension expense and recorded liabilities. Management reviews these assumptions at least annually. We use independent actuaries to assist us in formulating assumptions and making estimates. These assumptions are updated periodically to reflect the actual experience and expectations on a plan-specific basis, as appropriate.

For benefit plans which are funded, we establish strategic asset allocation percentage targets and appropriate benchmarks for significant asset classes with the aim of achieving a prudent balance between return and risk. We set the expected long-term rate of return based on the expected long-term average rates of return to be achieved by the underlying investment portfolios. In establishing this rate, we consider historical and expected returns for the asset classes in which the plans are invested, advice from pension consultants and investment advisors, and current economic and capital market conditions. The expected return on plan assets is incorporated into the computation of pension expense. The difference between this expected return and the actual return on plan assets is deferred and will affect future net periodic pension costs through subsequent amortization.

We believe that the current assumptions used to estimate plan obligations and annual expense are appropriate in the current economic environment. However, if economic conditions change materially, we may change our assumptions, and the resulting change could have a material impact on the Consolidated Statements of Income and on the Consolidated Balance Sheets.

Equity-Based Compensation

We recognize compensation cost relating to equity-based payment transactions by using a fair-value measurement method whereby all equity-based payments to employees, including grants of restricted stock units, stock options, market and performance condition-based awards are recognized as compensation expense based on fair value at grant date over the requisite service period of the awards. We determine the fair value of restricted stock units based on the quoted market price of our common stock on the date of grant. The fair value of stock options is determined using the Black-Scholes option-pricing model, which uses both historical and current market data to estimate the fair value. The fair value of market condition-based awards is estimated at the date of grant using a Monte Carlo Simulation. The fair value of performance condition-based awards is based on the closing stock price on the date of grant, adjusted for a discount to reflect the illiquidity inherent in these awards.

All models incorporate various assumptions such as the risk-free interest rate, expected volatility, expected dividend yield and expected life of the awards. When estimating the requisite service period of the awards, we consider many related factors including types of awards, employee class, and historical experience. Actual results, and future changes in estimates of the requisite service period may differ substantially from our current estimates.

Income Taxes

Our effective tax rate is based on pretax income and statutory tax rates available in the various jurisdictions in which we operate. We account for income taxes in accordance with applicable guidance on accounting for income taxes, which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between

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book and tax bases on recorded assets and liabilities. Accounting guidance also requires that deferred tax assets be reduced by a valuation allowance, when it is more likely than not that a tax benefit will not be realized.

The recognition and measurement of a tax position is based on management's best judgment given the facts, circumstances and information available at the reporting date. We evaluate tax positions to determine whether the benefits of tax positions are more likely than not of being sustained upon audit based on the technical merits of the tax position. For tax positions that are more likely than not of being sustained upon audit, we recognize the largest amount of the benefit that is greater than 50% likely of being realized upon ultimate settlement in the financial statements. For tax positions that are not more likely than not of being sustained upon audit, we do not recognize any portion of the benefit in the financial statements. If the more likely than not threshold is not met in the period for which a tax position is taken, we may subsequently recognize the benefit of that tax position if the tax matter is effectively settled, the statute of limitations expires, or if the more likely than not threshold is met in a subsequent period.

We evaluate, on a quarterly basis, our ability to realize deferred tax assets by assessing our valuation allowance and by adjusting the amount of such allowance, if necessary. The factors used to assess the likelihood of realization are our forecast of future taxable income and available tax planning strategies that could be implemented to realize the net deferred tax assets.

To the extent we prevail in matters for which reserves have been established, or are required to pay amounts in excess of our reserves, our effective tax rate in a given financial statement period could be materially affected.

Results of Operations—Fiscal 2019 Compared to Fiscal 2018

The following table presents summary Consolidated Statement of Income data for fiscal year ended March 31, 2019, compared to fiscal year ended March 31, 2018:

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Net sales	\$ 2,808.0	100.0%	\$ 2,581.8	100.0%	\$ 226.2	8.8 %
Cost of goods sold	2,104.6	74.9	1,920.0	74.4	184.6	9.6
Inventory step up to fair value relating to Alpha acquisition and exit activities	10.3	0.4	3.4	0.1	6.9	NM
Gross profit	693.1	24.7	658.4	25.5	34.7	5.3
Operating expenses	441.4	15.7	382.1	14.8	59.3	15.5
Restructuring and other exit charges	34.8	1.2	5.5	0.2	29.3	NM
Legal proceedings charge, net	4.4	0.2	—	—	4.4	NM
Operating earnings	212.5	7.6	270.8	10.5	(58.3)	(21.6)
Interest expense	30.9	1.1	25.0	1.0	5.9	23.5
Other (income) expense, net	(0.5)	—	7.5	0.3	(8.0)	NM
Earnings before income taxes	182.1	6.5	238.3	9.2	(56.2)	(23.5)
Income tax expense	21.6	0.8	118.5	4.6	(96.9)	(81.8)
Net earnings	160.5	5.7	119.8	4.6	40.7	34.0
Net earnings attributable to noncontrolling interests	0.3	—	0.2	—	0.1	62.3
Net earnings attributable to EnerSys stockholders	\$ 160.2	5.7%	\$ 119.6	4.6%	\$ 40.6	34.0 %

NM = not meaningful

Overview

Our sales in fiscal 2019 were \$2.8 billion, an 8.8% increase from prior year's sales. This increase was the result of a 6% increase due to the Alpha acquisition (as discussed in Part I, Item 1 of this Annual Report), a 3% increase in organic volume and a 2% increase in pricing, partially offset by a 2% decrease in foreign currency translation impact.

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A discussion of specific fiscal 2019 versus fiscal 2018 operating results follows, including an analysis and discussion of the results of our reportable segments.

Net Sales

Segment sales

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	% Net Sales	In Millions	% Net Sales	In Millions	%
Americas	\$ 1,690.9	60.2%	\$ 1,429.8	55.4%	\$ 261.1	18.3 %
EMEA	860.6	30.7	849.5	32.9	11.1	1.3
Asia	256.5	9.1	302.5	11.7	(46.0)	(15.2)
Total net sales	\$ 2,808.0	100.0%	\$ 2,581.8	100.0%	\$ 226.2	8.8 %

The Americas segment's net sales increased by \$261.1 million or 18.3% in fiscal 2019, as compared to fiscal 2018, primarily due to an 11% increase due to the Alpha acquisition, a 6% increase in organic volume and a 3% increase in pricing, partially offset by a 2% decrease in currency translation impact.

The EMEA segment's net sales increased by \$11.1 million or 1.3% in fiscal 2019, as compared to fiscal 2018, primarily due to a 5% increase in organic volume, partially offset by a 4% decrease in currency translation impact.

The Asia segment's net sales decreased by \$46.0 million or 15.2% in fiscal 2019, as compared to fiscal 2018, primarily due to a 14% decrease in organic volume reflecting dramatic declines in China telecom demands and a general softening of demand in Australia, and a 3% decrease in currency translation impact, partially offset by a 2% increase in pricing.

Product line sales

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Reserve power	\$ 1,416.2	50.4%	\$ 1,247.9	48.3%	\$ 168.3	13.5%
Motive power	1,391.8	49.6	1,333.9	51.7	57.9	4.3
Total net sales	\$ 2,808.0	100.0%	\$ 2,581.8	100.0%	\$ 226.2	8.8%

Sales in our reserve power products increased in fiscal 2019 by \$168.3 million or 13.5% compared to the prior year, primarily due to a 13% increase due to the Alpha acquisition, a 2% increase in pricing, and a 1% increase in organic volume, partially offset by a 2% decrease in currency translation impact.

Sales in our motive power products increased in fiscal 2019 by \$57.9 million or 4.3% compared to the prior year, primarily due to a 5% increase in organic volume and a 1% increase in pricing, partially offset by a 2% decrease in currency translation impact.

Gross Profit

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Gross profit	\$ 693.1	24.7%	\$ 658.4	25.5%	\$ 34.7	5.3%

Gross profit increased \$34.7 million or 5.3% in fiscal 2019 compared to fiscal 2018. Gross profit, as a percentage of net sales, decreased 80 basis points in fiscal 2019 compared to fiscal 2018. The decrease in the gross profit margin was primarily due to an increase in commodity costs, freight and tariffs of approximately \$60 million, which were offset by comparable increase in organic volume and pricing, but still resulted in gross margin dilution. However, this dilutive effect had reversed by our fourth quarter of fiscal 2019, due to a decline in commodity costs. Gross profit, as a percentage of net sales, was also negatively impacted by the opening balance sheet adjustment to Alpha inventories of \$7.2 million.

Operating Items

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Operating expenses	\$ 441.4	15.7%	\$ 382.1	14.8%	\$ 59.3	15.5%
Restructuring and other exit charges	34.8	1.2	5.5	0.2	29.3	NM
Legal proceedings charge, net	4.4	0.2	—	—	4.4	NM

NM = not meaningful

Operating Expenses

Operating expenses increased \$59.3 million or 15.5% in fiscal 2019 from fiscal 2018 and increased as a percentage of net sales by 90 basis points. The impact of foreign currency translation resulted in a decrease of \$8.5 million. Excluding the impact of the foreign currency translation, the increase in dollars was primarily due to Alpha acquisition related costs and payroll related expenses.

Selling expenses, our main component of operating expenses, were 46.4% in fiscal 2019, compared to 51.5% in fiscal 2018.

Restructuring and other exit charges

With the recent Alpha acquisition, the Company has commenced restructuring in the Americas, as part of its targeted synergy plans. The Company has also continued meaningful restructuring actions in EMEA with the intent to improve profitability and streamline management's focus.

Included in our fiscal 2019 operating results are restructuring charges of \$4.0 million in Americas, \$27.0 million in EMEA and \$3.8 million in Asia. Of the \$27.0 million charges in EMEA, \$17.7 million relates to the closure of our facility in Targovishte, Bulgaria, \$4.9 million relates to the disposition of GAZ Geräte - und Akkumulatorenwerk Zwickau GmbH, a wholly-owned German subsidiary, \$3.4 million relates to improving efficiencies of our general operations and \$1.0 million relates to dissolving a joint venture in Tunisia. The facility in Bulgaria produced diesel-electric submarine batteries. Management determined that the future demand for batteries of diesel-electric submarines was not sufficient given the number of competitors in the market. The \$17.7 million charges were primarily non-cash charges of \$15.0 million related to the write-off of fixed assets and \$2.7 million of severance payments. In addition, cost of goods sold also include a \$2.5 million of inventory write-off relating to the closure of the Bulgaria facility. These exit activities are a consequence of the Company's strategic decision to streamline its product portfolio and focus its efforts on new technologies. The charges in Asia primarily relate to improving efficiencies in the PRC in light of recent decline in demand.

Included in our fiscal 2018 operating results is a \$5.5 million charge of restructuring and other exit charges, comprising \$1.3 million in Americas, \$4.0 million in EMEA and \$0.2 million in Asia. The charges in the Americas primarily relate to improving efficiencies of our general operations, while charges in EMEA relate to restructuring programs to improve efficiencies in our manufacturing, supply chain and general operations. In addition, cost of goods sold also include a \$3.4 million of inventory write-off relating to the closing of our Cleveland, Ohio charger manufacturing facility.

Legal proceedings charge (settlement income)**European Competition Investigations**

Certain of our European subsidiaries had received subpoenas and requests for documents and, in some cases, interviews from, and have had on-site inspections conducted by the competition authorities of Belgium, Germany and the Netherlands relating to conduct and anticompetitive practices of certain industrial battery participants. We settled the Belgian regulatory proceeding in February 2016 by acknowledging certain anticompetitive practices and conduct and agreeing to pay a fine of \$2.0 million, which was paid in March 2016. During fiscal 2019, the Company paid \$2.4 million towards certain aspects of this matter, which are under appeal. As of March 31, 2019 and March 31, 2018, the Company had a reserve balance of \$0 million and \$2.3 million, respectively.

In June 2017, the Company settled a portion of its previously disclosed proceeding involving the German competition authority relating to conduct involving the Company's motive power battery business and agreed to pay a fine of \$14.8 million, which

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was paid in July 2017. Also in June 2017, the German competition authority issued a fining decision related to the Company's reserve power battery business, which constitutes the remaining portion of the previously disclosed German proceeding. The Company appealed this decision. In March 2019, the Company settled this matter by agreeing to pay \$7.3 million, which was paid in April 2019. As of March 31, 2019 and March 31, 2018, the Company had a reserve balance of \$7.3 million and \$0, respectively.

For the Dutch regulatory proceeding, we reserved \$10.2 million as of March 31, 2017. In July 2017, the Company settled the Dutch regulatory proceeding and agreed to pay a fine of \$11.2 million, which was paid in August 2017. As of March 31, 2019 and March 31, 2018, the Company had a reserve balance of \$0 and \$10.2 million, respectively, relating to the Dutch regulatory proceeding.

As of March 31, 2019 and March 31, 2018, we had a total reserve balance of \$7.3 million and \$2.3 million, respectively, in connection with these remaining investigations and other related legal matters, included in Accrued Expenses on the Consolidated Balance Sheets. The foregoing estimate of losses is based upon currently available information for these proceedings. However, the precise scope, timing and time period at issue, as well as the final outcome of the investigations or customer claims, remain uncertain. Accordingly, the Company's estimate may change from time to time, and actual losses could vary.

EnerSys Sarl Litigation

One of the parties to a litigation related to a 1999 fire in a French hotel under construction involving the Company's French subsidiary, EnerSys Sarl, which was acquired by the Company in 2002, that was adverse to the Company, appealed the ruling by the Court of Appeal of Lyon on June 11, 2013, which ruled in the Company's favor, entitling the Company to a refund of the monies paid of €2.0 million, or \$2.8 million to the French Supreme Court, which appeal was denied in January 2015. During the third quarter of fiscal 2019, the Company and the adverse party settled this final item with the Company receiving a refund, including interest, from the adverse party of €2.5 million, or \$2.8 million, for monies paid. The Company believes that it has no further liability with respect to this matter.

Operating Earnings

Operating earnings by segment were as follows:

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales ⁽¹⁾	In Millions ⁽²⁾	As % Net Sales ⁽¹⁾	In Millions	%
Americas	\$ 186.9	11.0 %	\$ 189.4	13.3 %	\$ (2.5)	(1.4)%
EMEA	71.9	8.4	77.7	9.1	(5.8)	(7.3)
Asia	3.2	1.3	12.6	4.2	(9.4)	(74.6)
Subtotal	262.0	9.3	279.7	10.8	(17.7)	(6.4)
Inventory step up to fair value relating to Alpha acquisition and exit activities						
- Americas	(7.2)	(0.4)	(3.4)	(0.2)	(3.8)	NM
Restructuring charges - Americas	(4.0)	(0.2)	(1.3)	(0.1)	(2.7)	NM
Inventory adjustment relating to exit activities - EMEA	(2.6)	(0.3)	—	—	(2.6)	NM
Restructuring and other exit charges - EMEA	(27.0)	(3.1)	(4.0)	(0.5)	(23.0)	NM
Inventory adjustment relating to exit activities - Asia	(0.5)	(0.2)	—	—	(0.5)	NM
Restructuring charges - Asia	(3.8)	(1.4)	(0.2)	(0.1)	(3.6)	NM
Legal proceedings charge, net - EMEA	(4.4)	(0.5)	—	—	(4.4)	NM
Total operating earnings	\$ 212.5	7.6 %	\$ 270.8	10.5 %	\$ (58.3)	(21.5)%

NM = not meaningful

(1) The percentages shown for the segments are computed as a percentage of the applicable segment's net sales.

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(2) Restated for ASU No. 2017-07, “Compensation—Retirement Benefits (Topic 715)”. See Note 1 to the Consolidated Financial Statement for more details.

Operating earnings decreased \$58.3 million or 21.5% in fiscal 2019, compared to fiscal 2018. Operating earnings, as a percentage of net sales, decreased 290 basis points in fiscal 2019, compared to fiscal 2018. Excluding the impact of highlighted items, operating earnings in fiscal 2019 decreased 150 basis points primarily due to an increase in commodity costs, freight and tariffs, although offset by organic volume improvement and price recoveries, caused a dilutive effect along with higher operating expense.

The Americas segment’s operating earnings, excluding the highlighted items discussed above, decreased \$2.5 million or 1.4% in fiscal 2019 compared to fiscal 2018, with the operating margin decreasing 230 basis points to 11.0%. This decrease was primarily due to higher commodity costs, transaction costs related to the Alpha acquisition and product delays caused by ERP execution challenges, partially offset by organic volume improvement, price recoveries and cost saving initiatives.

The EMEA segment’s operating earnings, excluding the highlighted items discussed above, decreased \$5.8 million or 7.3% in fiscal 2019 compared to fiscal 2018, with the operating margin decreasing 70 basis points to 8.4%. This decrease was primarily due to higher commodity costs and freight, partially offset by organic volume improvement and cost saving initiatives.

Operating earnings in Asia, excluding the highlighted items discussed above, decreased \$9.4 million or 74.6% in fiscal 2019 compared to fiscal 2018, with the operating margin decreasing by 290 basis points to 1.3%. This was primarily due to a decrease in organic volume from a slow down in telecom spending in the PRC and a general softening of demand in Australia as well as higher commodity costs, in the first half of fiscal 2019 in the PRC.

Interest Expense

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Interest expense	\$ 30.9	1.1%	\$ 25.0	1.0%	\$ 5.9	23.5%

Interest expense of \$30.9 million in fiscal 2019 (net of interest income of \$2.1 million) was \$5.9 million higher than the \$25.0 million in fiscal 2018 (net of interest income of \$3.0 million).

Our average debt outstanding was \$742.0 million in fiscal 2019, compared to our average debt outstanding of \$672.8 million in fiscal 2018. Our average cash interest rate incurred in fiscal 2019 was 4.1% compared to 3.7% in fiscal 2018. The increase in interest expense was primarily due to higher interest rates and higher average debt. The increased borrowings was primarily to fund the Alpha acquisition.

Included in interest expense were non-cash charges related to amortization of deferred financing fees of \$1.3 million in fiscal 2019 and \$1.6 million in fiscal 2018.

Other (Income) Expense, Net

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Other (income) expense, net	\$ (0.5)	—%	\$ 7.5	0.3%	\$ (8.0)	NM

NM = not meaningful

Other (income) expense, net was income of \$0.5 million in fiscal 2019 compared to expense of \$7.5 million in fiscal 2018 primarily due to foreign currency gains of \$3.1 million in fiscal 2019 compared to foreign currency losses of \$5.5 million in fiscal 2018.

Earnings Before Income Taxes

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Earnings before income taxes	\$ 182.1	6.5%	\$ 238.3	9.2%	\$ (56.2)	(23.5)%

As a result of the factors discussed above, fiscal 2019 earnings before income taxes were \$182.1 million, a decrease of \$56.2 million or 23.5% compared to fiscal 2018.

Income Tax Expense

	Fiscal 2019		Fiscal 2018		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Income tax expense	\$ 21.6	0.8%	\$ 118.5	4.6%	\$ (96.9)	(81.8)%
Effective tax rate	11.9%		49.7%		(37.8)%	

Our effective income tax rate with respect to any period may be volatile based on the mix of income in the tax jurisdictions in which we operate and the amount of our consolidated income before taxes.

On December 22, 2017, the Tax Cuts and Jobs Act ("Tax Act") was enacted into law. Among the significant changes resulting from the law, the Tax Act reduced the U.S. federal income tax rate from 35% to 21% effective January 1, 2018, and required companies to pay a one-time transition tax on unrepatriated cumulative non-U.S. earnings of foreign subsidiaries and created new taxes on certain foreign sourced earnings. The U.S. federal statutory tax rate for fiscal 2019 is 21.0%.

On December 22, 2017, the SEC issued Staff Accounting Bulletin No.118 ("SAB 118") that provided guidance on the financial statement implications of the Tax Act. In fiscal 2018, we recorded a provisional amount for the Transition Tax liability, resulting in an increase in income tax expense of \$97.5 million. In fiscal 2019, we completed our accounting for the tax effects of enactment of the Tax Act and recognized an income tax benefit of \$13.5 million, net of uncertain tax positions, resulting from a decrease in the mandatory one-time transition tax on unremitted earnings of our foreign business. We made the election on the 2017 Federal Income Tax Return to pay the one-time Tax Act liability over an eight-year period without interest, as allowed under the tax enactment.

The Company's income tax provision consists of federal, state and foreign income taxes. The effective income tax rate was 11.9% in fiscal 2019 compared to the fiscal 2018 effective income tax rate of 49.7%. The rate decrease in fiscal 2019 compared to fiscal 2018 is primarily due to the impact of the Tax Act, partially offset by increases for additional tax valuation allowances related to certain of our foreign subsidiaries, increases due to non-deductible legal proceedings charge related to the European competition investigation and changes in the mix of earnings among tax jurisdictions in fiscal 2019.

The fiscal 2019 foreign effective income tax rate was 12.3% on foreign pre-tax income of \$128.9 million compared to effective income tax rate of 5.2% on foreign pre-tax income of \$163.9 million in fiscal 2018. For both fiscal 2019 and 2018, the difference in the foreign effective tax rate versus the U.S. statutory rate of 21% and 31.55%, respectively, is primarily attributable to lower tax rates in the foreign countries in which we operate. The rate increase in fiscal 2019 compared to fiscal 2018 is primarily due to additional tax valuation allowances related to certain of our foreign subsidiaries, increases due to non-deductible legal proceedings charge related to the European competition investigation and changes in the mix of earnings among tax jurisdictions in fiscal 2019.

Income from our Swiss subsidiary comprised a substantial portion of our overall foreign mix of income for both fiscal 2019 and fiscal 2018 and is taxed at an effective income tax rate of approximately 4% and 8%, respectively.

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Results of Operations—Fiscal 2018 Compared to Fiscal 2017

The following table presents summary Consolidated Statement of Income data for fiscal year ended March 31, 2018, compared to fiscal year ended March 31, 2017:

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Net sales	\$ 2,581.8	100.0%	\$ 2,367.1	100.0%	\$ 214.7	9.1%
Cost of goods sold	1,920.0	74.4	1,713.2	72.4	206.8	12.1
Inventory adjustment relating to exit activities - See Note 19	3.4	0.1	2.1	0.1	1.3	60.3
Gross profit	658.4	25.5	651.8	27.5	6.6	1.0
Operating expenses	382.1	14.8	369.9	15.6	12.2	3.3
Restructuring and other exit charges	5.5	0.2	7.1	0.3	(1.6)	(23.5)
Impairment of goodwill	—	—	12.2	0.5	(12.2)	NM
Impairment of indefinite-lived intangibles	—	—	1.8	0.1	(1.8)	NM
Legal proceedings charge	—	—	23.7	1.0	(23.7)	NM
Operating earnings	270.8	10.5	237.1	10.0	33.7	14.2
Interest expense	25.0	1.0	22.2	1.0	2.8	12.6
Other (income) expense, net	7.5	0.3	2.2	—	5.3	NM
Earnings before income taxes	238.3	9.2	212.7	9.0	25.6	12.1
Income tax expense	118.5	4.6	54.5	2.3	64.0	NM
Net earnings	119.8	4.6	158.2	6.7	(38.4)	(24.3)
Net earnings (losses) attributable to noncontrolling interests	0.2	—	(2.0)	(0.1)	2.2	NM
Net earnings attributable to EnerSys stockholders	\$ 119.6	4.6%	\$ 160.2	6.8%	\$ (40.6)	(25.4)%

NM = not meaningful

Overview

Our sales in fiscal 2018 were \$2.6 billion, a 9.1% increase from prior year's sales. This increase was the result of a 4% increase in pricing, a 3% increase in organic volume and a 2% increase in foreign currency translation impact.

A discussion of specific fiscal 2018 versus fiscal 2017 operating results follows, including an analysis and discussion of the results of our reportable segments.

Net Sales

Segment sales

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	% Net Sales	In Millions	% Net Sales	In Millions	%
Americas	\$ 1,429.8	55.4%	\$ 1,332.3	56.3%	\$ 97.5	7.3%
EMEA	849.5	32.9	763.1	32.2	86.4	11.3
Asia	302.5	11.7	271.7	11.5	30.8	11.3
Total net sales	\$ 2,581.8	100.0%	\$ 2,367.1	100.0%	\$ 214.7	9.1%

The Americas segment's net sales increased by \$97.5 million or 7.3% in fiscal 2018, as compared to fiscal 2017, primarily due to a 4% increase in organic volume and a 3% increase in pricing.

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The EMEA segment's net sales increased by \$86.4 million or 11.3% in fiscal 2018, as compared to fiscal 2017, primarily due to a 7% increase in currency translation impact and a 5% increase in pricing, partially offset by a 1% decrease in organic volume.

The Asia segment's net sales increased by \$30.8 million or 11.3% in fiscal 2018, as compared to fiscal 2017, primarily due to a 5% increase in organic volume, a 4% increase in pricing and a 2% increase in currency translation impact.

Product line sales

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Reserve power	\$ 1,247.9	48.3%	\$ 1,142.2	48.3%	\$ 105.7	9.2%
Motive power	1,333.9	51.7	1,224.9	51.7	109.0	8.9
Total net sales	\$ 2,581.8	100.0%	\$ 2,367.1	100.0%	\$ 214.7	9.1%

Sales in our reserve power products increased in fiscal 2018 by \$105.7 million or 9.2% compared to the prior year, primarily due to a 4% increase in pricing, a 3% increase in organic volume and a 2% increase in currency translation impact.

Sales in our motive power products increased in fiscal 2018 by \$109.0 million or 8.9% compared to the prior year, primarily due to a 4% increase in pricing, a 3% increase in currency translation impact and a 2% increase in organic volume.

Gross Profit

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Gross profit	\$ 658.4	25.5%	\$ 651.8	27.5%	\$ 6.6	1.0%

Gross profit increased \$6.6 million or 1.0% in fiscal 2018 compared to fiscal 2017. Gross profit, as a percentage of net sales, decreased 200 basis points in fiscal 2018 compared to fiscal 2017. The decrease in the gross profit margin is primarily due to an increase in commodity costs of approximately \$125 million, partially offset by increases in organic volume, cost savings and pricing.

Operating Items

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Operating expenses	\$ 382.1	14.8%	\$ 369.9	15.6%	\$ 12.2	3.3 %
Restructuring and other exit charges	5.5	0.2	7.1	0.3	(1.6)	(23.5)
Impairment of goodwill	—	—	12.2	0.5	(12.2)	NM
Impairment of indefinite-lived intangibles	—	—	1.8	0.1	(1.8)	NM
Legal proceedings charge	—	—	23.7	1.0	(23.7)	NM

NM = not meaningful

Operating Expenses

Operating expenses increased \$12.2 million or 3.3% in fiscal 2018 from fiscal 2017 but decreased as a percentage of net sales by 80 basis points. The impact of foreign currency translation resulted in an increase of \$6.1 million. Excluding this impact of the foreign currency translation, the increase in dollars was primarily due to our investment relating to the development of our digital core and new products, which were partially offset by our cost saving initiatives.

The operating expenses in fiscal 2017 included a receipt of \$1.9 million of deferred purchase consideration relating to an acquisition made in fiscal 2014. In fiscal 2017, we also recorded a charge of \$9.4 million in operating expenses, related to the

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ERP system implementation in our Americas region, including a \$6.3 million write-off of previously capitalized costs during the first quarter of fiscal 2017.

Selling expenses, our main component of operating expenses, were 51.5% in fiscal 2018, compared to 53.9% in fiscal 2017.

Restructuring and other exit charges

Included in our fiscal 2018 operating results is a \$5.5 million charge of restructuring and other exit charges, comprising \$1.3 million in Americas, \$4.0 million in EMEA and \$0.2 million in Asia. The charges in the Americas primarily relate to improving efficiencies of our general operations, while charges in EMEA relate to restructuring programs to improve efficiencies in our manufacturing, supply chain and general operations. In addition, cost of goods sold also include a \$3.4 million of inventory write-off relating to the closing of our Cleveland, Ohio charger manufacturing facility.

Included in our fiscal 2017 operating results is a \$7.1 million charge consisting of restructuring and other exit charges, comprising primarily of \$5.5 million in EMEA, \$0.9 million in Americas and \$0.7 million in Asia. Of the restructuring and other exit charges in EMEA of \$5.5 million, \$4.3 million of restructuring charges related primarily to European manufacturing operations and \$1.2 million of other exit charges related to our joint venture in South Africa. In addition, cost of goods sold also includes a \$2.1 million inventory adjustment charge relating to the South Africa joint venture, discussed below.

Fiscal 2017 - South Africa exit activities

During fiscal 2017, the Company recorded exit charges of \$3.3 million related to the South Africa joint venture, consisting of cash charges of \$2.6 million primarily relating to severance and non-cash charges of \$0.7 million. Included in the non-cash charges is a \$2.1 million charge relating to the inventory adjustment which was reported in cost of goods sold, partially offset by a credit of \$1.1 million relating to a change in estimate of contract losses and a \$0.3 million gain on deconsolidation of the joint venture. Weakening of the general economic environment in South Africa, reflecting the limited growth in the mining industry, affected the joint venture's ability to compete effectively in the marketplace and consequently, the Company initiated an exit plan in consultation with its joint venture partner in the second quarter of fiscal 2017. The joint venture was under liquidation resulting in a loss of control and deconsolidation of the joint venture. The impact of the deconsolidation has been reflected in the Consolidated Statements of Income.

Fiscal 2017 - Impairment of goodwill and indefinite-lived intangibles

In the fourth quarter of fiscal 2017, we conducted step one of the annual goodwill impairment test which indicated that the fair values of two of our reporting units - Purcell US in the Americas and Purcell EMEA in EMEA operating segment, were less than their respective carrying values. Based on the guidance in ASU 2017-04, which we early adopted, we recognized an impairment charge for the amount by which the carrying amount exceeded the reporting unit's fair value.

We recorded a non-cash charge of \$8.6 million and \$3.6 million, related to goodwill impairment in the Americas and EMEA operating segments, respectively, and \$0.7 million and \$1.1 million, related to impairment of indefinite-lived trademarks in the Americas and EMEA operating segments, respectively, in the Consolidated Statements of Income.

Purcell was acquired in fiscal 2014 during the height of the 4G telecom build-out. After performing to expectations for the first few quarters, its revenue declined as telecom spending in the U.S. curtailed sharply. In fiscal 2016, lower estimated projected revenue and profitability in the near term caused by reduced levels of capital spending by major customers in the telecommunications industry was a key factor contributing to the impairment charges recorded in that year. In fiscal 2017, we transferred the European operations of Purcell to our EMEA operating segment, consistent with our geographical management approach. In the U.S., Purcell received significant orders, but at lower margins, resulting in an impairment in 2017. In Europe, Purcell's sales forecasts were reduced as a result of low telecom spending and accordingly recorded an impairment charge as well.

Fiscal 2017 - Legal proceedings charge

Certain of our European subsidiaries had received subpoenas and requests for documents and, in some cases, interviews from, and have had on-site inspections conducted by the competition authorities of Belgium, Germany and the Netherlands relating to conduct and anticompetitive practices of certain industrial battery participants. We settled the Belgian regulatory proceeding in February 2016 by acknowledging certain anticompetitive practices and conduct and agreeing to pay a fine of \$2.0 million, which was paid in March 2016.

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As of March 31, 2018 and March 31, 2017, the Company had a reserve balance of \$2.3 million and \$1.8 million, respectively, relating to certain ancillary matters associated with the Belgian regulatory proceeding. The change in the reserve balance between March 31, 2018 and March 31, 2017 was due to foreign currency translation impact.

As of January 1, 2017, we had estimated an aggregate range of possible loss associated with the German regulatory proceeding of \$17.0 million to \$26.0 million and reserved \$17.0 million. Based on the continued evolution of facts and our interactions with the German competition authority in regard to this matter, we further refined our estimate for a portion of this proceeding to be \$13.5 million as of March 31, 2017. The Company settled a portion of the proceeding relating to conduct involving the Company's motive power battery business and agreed to pay a fine of \$14.8 million, which was paid in July 2017. Also in June 2017, the German competition authority issued a fining decision related to the Company's reserve power battery business, which constitutes the remaining portion of the previously disclosed German proceeding. The Company appealed this decision, including payment of the proposed fine of \$12.3 million, and believes that the reserve power matter does not, based on current facts and circumstances known to management, require an accrual. The Company is not required to escrow any portion of this fine during the appeal process. As of March 31, 2018 and March 31, 2017, the Company had a reserve balance of \$0 and \$13.5 million, respectively, relating to this matter.

For the Dutch regulatory proceeding, we reserved \$10.2 million as of March 31, 2017. In July 2017, the Company settled the Dutch regulatory proceeding and agreed to pay a fine of \$11.2 million, which was paid in August 2017. As of March 31, 2018 and March 31, 2017, the Company had a reserve balance of \$0 and \$10.2 million, respectively, relating to the Dutch regulatory proceeding.

As of March 31, 2018 and March 31, 2017, we had a total reserve balance of \$2.3 million and \$25.6 million, respectively, in connection with these remaining investigations and other related legal matters, included in Accrued Expenses on the Consolidated Balance Sheets. The foregoing estimate of losses was based upon then available information for these proceedings. However, the precise scope, timing and time period at issue, as well as the final outcome of the investigations or customer claims, remain uncertain. Accordingly, the Company's estimate may change from time to time, and actual losses could vary.

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Operating Earnings

Operating earnings by segment were as follows:

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales(1)	In Millions	As % Net Sales(1)	In Millions	%
Americas	\$ 189.4	13.3 %	\$ 191.8	14.4 %	\$ (2.4)	(1.2)%
EMEA	77.7	9.1	77.3	10.1	0.4	0.4
Asia	12.6	4.2	14.9	5.5	(2.3)	(15.7)
Subtotal	279.7	10.8	284.0	12.0	(4.3)	(1.5)
Inventory adjustment relating to exit activities - Americas	(3.4)	(0.2)	—	—	(3.4)	NM
Restructuring charges - Americas	(1.3)	(0.1)	(0.9)	(0.1)	(0.4)	39.7
Inventory adjustment relating to exit activities - EMEA	—	—	(2.1)	(0.3)	2.1	NM
Restructuring and other exit charges - EMEA	(4.0)	(0.5)	(5.5)	(0.7)	1.5	(26.7)
Restructuring charges - Asia	(0.2)	(0.1)	(0.7)	(0.3)	0.5	(72.9)
Impairment of goodwill and indefinite-lived intangibles - Americas	—	—	(9.3)	(0.7)	9.3	NM
Impairment of goodwill and indefinite-lived intangibles - EMEA	—	—	(4.7)	(0.6)	4.7	NM
Legal proceedings charge - EMEA	—	—	(23.7)	(3.1)	23.7	NM
Total operating earnings	\$ 270.8	10.5 %	\$ 237.1	10.0 %	\$ 33.7	14.2 %

NM = not meaningful

(1) The percentages shown for the segments are computed as a percentage of the applicable segment's net sales.

Operating earnings increased \$33.7 million or 14.2% in fiscal 2018, compared to fiscal 2017. Operating earnings, as a percentage of net sales, increased 50 basis points in fiscal 2018, compared to fiscal 2017. Excluding the impact of highlighted items, operating earnings in fiscal 2018 decreased 120 basis points primarily due to an increase in lead cost partially offset by price recoveries and cost saving initiatives.

The Americas segment's operating earnings, excluding the highlighted items discussed above, decreased \$2.4 million or 1.2% in fiscal 2018 compared to fiscal 2017, with the operating margin decreasing 110 basis points to 13.3%. This decrease was primarily due to higher commodity costs partially offset by price recoveries and cost saving initiatives. Excluding the impact of the \$6.3 million write-off of previously capitalized costs relating to the ERP system implementation during fiscal 2017, operating earnings of fiscal 2018 decreased by 170 basis points compared to the prior year period.

The EMEA segment's operating earnings, excluding the highlighted items discussed above, increased \$0.4 million or 0.4% in fiscal 2018 compared to fiscal 2017, with the operating margin decreasing 100 basis points to 9.1%. This decrease was primarily due to an increase in lead cost, partially offset by price recoveries and cost saving initiatives.

Operating earnings in Asia, excluding the highlighted items discussed above, decreased \$2.3 million or 15.7% in fiscal 2018 compared to fiscal 2017, with the operating margin decreasing by 130 basis points to 4.2%. This decrease was primarily due to higher commodity costs, partially offset by price recoveries, currency headwinds and a slowdown in telecom spending during the first half of fiscal 2018 in the PRC.

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Interest Expense

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Interest expense	\$ 25.0	1.0%	\$ 22.2	1.0%	\$ 2.8	12.6%

Interest expense of \$25.0 million in fiscal 2018 (net of interest income of \$3.0 million) was \$2.8 million higher than the \$22.2 million in fiscal 2017 (net of interest income of \$2.1 million).

Our average debt outstanding was \$672.8 million in fiscal 2018, compared to our average debt outstanding of \$625.4 million in fiscal 2017. Our average cash interest rate incurred in fiscal 2018 was 3.7% compared to 3.3% in fiscal 2017. The increase in our average debt was primarily to fund treasury share repurchase activity.

Included in interest expense were non-cash charges related to amortization of deferred financing fees of \$1.6 million in fiscal 2018 and \$1.4 million in fiscal 2017.

Other (Income) Expense, Net

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Other (income) expense, net	\$ 7.5	0.3%	\$ 2.2	—%	\$ 5.3	NM

NM = not meaningful

Other (income) expense, net was expense of \$7.5 million in fiscal 2018 compared to expense of \$2.2 million in fiscal 2017 primarily due to foreign currency losses of \$5.5 million in fiscal 2018 compared to foreign currency gains of \$0.6 million in fiscal 2017.

Earnings Before Income Taxes

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Earnings before income taxes	\$ 238.3	9.2%	\$ 212.7	9.0%	\$ 25.6	12.1%

As a result of the factors discussed above, fiscal 2018 earnings before income taxes were \$238.3 million, an increase of \$25.6 million or 12.1% compared to fiscal 2017.

Income Tax Expense

	Fiscal 2018		Fiscal 2017		Increase (Decrease)	
	In Millions	As % Net Sales	In Millions	As % Net Sales	In Millions	%
Income tax expense	\$ 118.5	4.6%	\$ 54.5	2.3%	\$ 64.0	NM
Effective tax rate	49.7%		25.6%		24.1%	

NM = not meaningful

Our effective income tax rate with respect to any period may be volatile based on the mix of income in the tax jurisdictions in which we operate and the amount of our consolidated income before taxes.

On December 22, 2017, the Tax Act was enacted into law. Among the significant changes resulting from the law, the Tax Act reduced the U.S. federal income tax rate from 35% to 21% effective January 1, 2018, required companies to pay a one-time

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transition tax on unrepatriated cumulative non-U.S. earnings of foreign subsidiaries (“Transition Tax”), and created new taxes on certain foreign sourced earnings. In accordance with ASC 740, “Income Taxes”, we are required to record the effects of tax law changes in the period enacted. As a result of the rate change in the Tax Act, our blended U.S. statutory tax rate for fiscal 2018 was 31.55%.

As of March 31, 2018, we had not completed our accounting for the tax effects of enactment of the Tax Act; however, in certain cases, as described below, we had made a reasonable estimate of the effects on our existing deferred tax balances and the Transition Tax. Our results for fiscal 2018 contained estimates of the impact of the Tax Act as permitted by Staff Accounting Bulletin 118 “SAB 118” issued by the Securities and Exchange Commission on December 22, 2017. These amounts are considered provisional and may be affected by future guidance if and when issued.

As a result of the Tax Act, fiscal 2018 financial statements included a provisional net tax expense of \$83.4 million which comprised the following:

Foreign tax effects: The Transition Tax was based on our total post-1986 earnings and profits (“E&P”) that we previously deferred from U.S. income taxes. We recorded a provisional amount for our Transition Tax liability, resulting in an increase in income tax expense of \$97.5 million; an increase of \$3.5 million from the amount reported in the third quarter of fiscal 2018. The estimated Transition Tax of \$97.5 million was recorded under current income tax payable and non-current income tax payable, at \$7.8 million and \$89.7 million, respectively, and is payable over eight years. Further, the Transition Tax was based in part on the amount of those earnings held in cash and other specified assets. This amount may change when we finalize both the calculation of post-1986 foreign E&P previously deferred from U.S. federal taxation and the amounts held in cash or other specified assets. No additional income taxes have been provided for any remaining undistributed foreign earnings not subject to the Transition Tax, or any additional outside basis difference inherent in these entities, as these amounts continue to be indefinitely reinvested in foreign operations.

Deferred tax assets and liabilities: We remeasured our deferred tax assets and liabilities based on the reduced U.S. federal income tax rate of 21%. However, we are still analyzing certain aspects of the Tax Act and refining our calculations, which could potentially affect the measurement of these balances or give rise to new deferred tax amounts. The provisional amount recorded related to the remeasurement of our deferred tax balance was a tax benefit of \$14.1 million; a decrease of \$0.6 million from the amount reported in the third quarter of fiscal 2018.

In all cases, we may adjust these provisional amounts which could potentially affect the measurement and impact on tax expense as we refine our calculations within a reasonable period not to exceed one year from the enactment date.

The Company’s income tax provision consists of federal, state and foreign income taxes. The effective income tax rate was 49.7% in fiscal 2018 compared to the fiscal 2017 effective income tax rate of 25.6%. The rate increase in fiscal 2018 as compared to fiscal 2017 is primarily due to the impact of the Tax Act in fiscal 2018, partially offset by a decrease due to the reversal of previously recognized deferred tax valuation allowances related to certain of the Company’s foreign subsidiaries in fiscal 2018, decreases due to non-deductible goodwill impairment charges and non-deductible legal proceedings charge relating to the European competition investigation in fiscal 2017, and a decrease due to changes in the mix of earnings among tax jurisdictions. The valuation allowances released are primarily the result of an operational restructuring approved during the fourth quarter of fiscal 2018.

The fiscal 2018 foreign effective income tax rate on foreign pre-tax income of \$163.9 million was 5.2% compared to foreign pre-tax income of \$132.3 million and effective income tax rate of 13.5% in fiscal 2017. For both fiscal 2018 and fiscal 2017, the difference in the foreign effective tax rate versus the U.S. statutory rate of 31.55% and 35%, respectively, is primarily attributable to lower tax rates in the foreign countries in which we operate. The rate decrease in fiscal 2018 compared to fiscal 2017 was primarily due to the reversal of previously recognized deferred tax valuation allowances related to certain of the Company’s foreign subsidiaries in fiscal 2018, decreases due to non-deductible goodwill impairment charges and non-deductible legal proceedings charge related to the European competition investigation in fiscal 2017, and changes in the mix of earnings among tax jurisdictions.

Income from our Swiss subsidiary comprised a substantial portion of our overall foreign mix of income for both fiscal 2018 and fiscal 2017 and is taxed at an effective income tax rate of approximately 8% and 5%, respectively.

Liquidity and Capital Resources

Cash Flow and Financing Activities

Cash and cash equivalents at March 31, 2019, 2018 and 2017, were \$299.2 million, \$522.1 million and \$500.3 million, respectively.

Cash provided by operating activities for fiscal 2019, 2018 and 2017, was \$197.9 million, \$211.0 million and \$246.0 million, respectively.

During fiscal 2019, cash provided by operating activities was primarily from net earnings of \$160.5 million, depreciation and amortization of \$63.3 million, non-cash charges relating to write-off of assets of \$26.3 million, stock-based compensation of \$22.6 million, non-cash interest of \$1.3 million and provision for doubtful accounts of \$1.4 million, partially offset by deferred tax benefit of \$6.5 million. Cash provided by earnings as adjusted for non-cash items was partially offset by the increase in primary working capital of \$30.7 million, net of currency translation changes, and a decrease in other long-term liabilities of \$14.9 million, primarily related to income taxes. Prepaid and other current assets, primarily comprising of contract assets, also resulted in a decrease of \$20.2 million to operating cash.

During fiscal 2018, cash provided by operating activities was primarily from net earnings of \$119.8 million, depreciation and amortization of \$54.3 million, stock-based compensation of \$19.5 million, non-cash charges relating to write-off of assets of \$3.7 million, non-cash interest of \$1.6 million and provision for doubtful accounts of \$0.8 million, partially offset by deferred tax benefit of \$20.3 million. Cash provided by earnings as adjusted for non-cash items was improved by an increase of \$94.0 million in long term liabilities primarily due to the Transition Tax liability and was partially offset by the increase in primary working capital of \$49.0 million, net of currency translation changes, and a decrease in accrued expenses of \$26.6 million, comprising primarily of legal proceedings related payments, payroll related expenses and income taxes. Prepaid and other current assets, comprising of prepaid taxes, also provided an increase of \$14.5 million to operating cash.

During fiscal 2017, cash provided by operating activities was primarily from net earnings of \$158.2 million, depreciation and amortization of \$53.9 million, non-cash charges relating to write-off of goodwill and other assets of \$20.3 million, stock-based compensation of \$19.2 million, provision of doubtful accounts of \$1.8 million, restructuring and other exit charges of \$1.4 million, and non-cash interest of \$1.4 million. Cash provided by operating activities were partially offset by the increase in primary working capital of \$55.5 million, net of currency translation changes. Cash provided by operating activities were positively impacted by legal proceedings accrual of \$23.7 million and accrued expenses of \$9.3 million, comprising primarily of income and other taxes.

As explained in the discussion of our use of “non-GAAP financial measures,” we monitor the level and percentage of primary working capital to sales. Primary working capital for this purpose is trade accounts receivable, plus inventories, minus trade accounts payable and the resulting net amount is divided by the trailing three-month net sales (annualized) to derive a primary working capital percentage. Primary working capital was \$835.6 million (yielding a primary working capital percentage of 26.2%) at March 31, 2019 and \$701.6 million (yielding a primary working capital percentage of 25.7%) at March 31, 2018. The primary working capital percentage of 26.2% at March 31, 2019 is 50 basis points higher than that for March 31, 2018, and 130 basis points higher than that for March 31, 2017. Excluding the impact of certain reclasses relating to the adoption of ASC 606, primary working capital percentage was 27.0%, which is 130 basis points higher than that for March 31, 2018 and 210 basis points higher than that for March 31, 2017. Primary working capital percentage increased during fiscal 2019 largely due to the inclusion of the Alpha primary working capital components and higher inventory levels. The reason for the increase in inventory is partially due to higher inventory levels at our Richmond, Kentucky, facility due to the implementation of our ERP system and rising lead costs and a longer supply chain on selective products.

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Primary Working Capital and Primary Working Capital percentages at March 31, 2019, 2018 and 2017 are computed as follows:

At March 31,	Trade Receivables	Inventory	Accounts Payable	Primary Working Capital	Quarter Revenue Annualized	Primary Working Capital (%)
	(in millions)					
2019	\$ 624.1	\$ 503.9	\$ (292.4)	\$ 835.6	\$ 3,186.4	26.2%
2018	546.3	414.2	(258.9)	701.6	2,732.2	25.7
2017	486.6	360.7	(222.5)	624.8	2,507.2	24.9

Cash used in investing activities for fiscal 2019, 2018 and 2017 was \$723.9 million, \$72.4 million and \$61.8 million, respectively.

During fiscal 2019, we acquired Alpha for a total purchase consideration of \$742.5 million, of which \$650.0 was paid in cash and the balance, after adjusting for working capital of \$0.8 million due from seller, was settled by issuing 1,177,630 shares of EnerSys common stock at a closing date fair value of \$93.3 million. See Note 2 to the Consolidated Financial Statements for more details.

Capital expenditures were \$70.4 million, \$69.8 million and \$50.1 million in fiscal 2019, 2018 and 2017, respectively.

During fiscal 2019, 2018 and 2017, we also had minor acquisitions resulting in a cash outflow of \$5.4 million, \$3.0 million and \$12.4 million, respectively.

During fiscal 2019, financing activities provided cash of \$346.6 million. We borrowed \$531.1 million under the Amended 2017 Revolver and \$299.1 million under the Amended 2017 Term Loan, primarily to fund the Alpha acquisition and repaid \$427.6 million of the Amended 2017 Revolver and \$11.7 million on the Amended 2017 Term Loan. Treasury stock open market purchases were \$56.4 million, payment of cash dividends to our stockholders were \$29.7 million and payment of taxes related to net share settlement of equity awards were \$3.6 million. Proceeds from stock options were \$9.0 million and net borrowings on short-term debt were \$37.4 million.

During fiscal 2018, financing activities used cash of \$166.9 million. In fiscal 2018, we entered into a 2017 Credit Facility and borrowed \$379.8 million under the 2017 Revolver and \$150.0 million under the 2017 Term loan. Repayments on the 2017 Revolver during fiscal 2018 were \$244.3 million. Borrowings and repayments on the 2011 Revolver during fiscal 2018 were \$147.1 million and \$312.1 million, respectively, and repayment of the 2011 Term loan was \$127.5 million. On August 4, 2017, the outstanding balance on the 2011 Revolver and the 2011 Term Loan of \$240.0 million and \$123.0 million, respectively, was repaid utilizing the proceeds from the 2017 Credit Facility. We also paid \$100.0 million under the ASR agreement, which was settled on January 9, 2018. Treasury stock open market purchases were \$21.2 million, payment of cash dividends to our stockholders were \$29.7 million, payment of taxes related to net share settlement of equity awards were \$7.5 million and debt issuance costs were \$2.7 million. Net borrowings on short-term debt were \$0.2 million and proceeds from stock options were \$1.0 million.

During fiscal 2017, financing activities used cash of \$62.5 million primarily due to 2011 Revolver borrowings of \$262.0 million and repayments of \$267.0 million, repayment of our 2011 Term Loan of \$15.0 million, payment of cash dividends to our stockholders of \$30.4 million, and payment of taxes related to net share settlement of equity awards of \$7.4 million. Net payments on short-term debt were \$4.6 million.

As a result of the above, total cash and cash equivalents decreased \$222.9 million from \$522.1 million at March 31, 2018 to \$299.2 million at March 31, 2019.

We currently are in compliance with all covenants and conditions under our credit agreements.

In addition to cash flows from operating activities, we had available committed and uncommitted credit lines of approximately \$547 million at March 31, 2019 to cover short-term liquidity requirements. Our Amended Credit Facility is committed through September 30, 2022, as long as we continue to comply with the covenants and conditions of the credit facility agreement. We have \$459 million in available credit lines under our Amended Credit Facility at March 31, 2019.

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All obligations under our Amended Credit Facility are secured by, among other things, substantially all of our U.S. assets. The Amended Credit Facility contains various covenants which, absent prepayment in full of the indebtedness and other obligations, or the receipt of waivers, limit our ability to conduct certain specified business transactions, buy or sell assets out of the ordinary course of business, engage in sale and leaseback transactions, pay dividends and take certain other actions. There are no prepayment penalties on loans under this credit facility.

We believe that our cash flow from operations, available cash and cash equivalents and available borrowing capacity under our credit facilities will be sufficient to meet our liquidity needs, including normal levels of capital expenditures, for the foreseeable future; however, there can be no assurance that this will be the case.

Off-Balance Sheet Arrangements

The Company did not have any off-balance sheet arrangements during any of the periods covered by this report.

Contractual Obligations and Commercial Commitments

At March 31, 2019, we had certain cash obligations, which are due as follows:

	Total	Less than 1 year	2 to 3 years	4 to 5 years	After 5 years
	(in millions)				
Debt obligations	\$ 977.3	\$ 28.1	\$ 84.3	\$ 864.9	\$ —
Short-term debt	54.5	54.5	—	—	—
Interest on debt	148.4	41.3	74.3	32.8	—
Operating leases	116.3	31.5	40.8	20.2	23.8
Tax Act - Transition Tax	60.8	5.3	10.6	15.2	29.7
Pension benefit payments and profit sharing	36.6	2.7	5.9	6.9	21.1
Restructuring	2.9	2.9	—	—	—
Purchase commitments	7.1	7.1	—	—	—
Lead and foreign currency forward contracts	1.2	1.2	—	—	—
Capital lease obligations, including interest	10.3	10.1	0.2	—	—
Total	<u>\$ 1,415.4</u>	<u>\$ 184.7</u>	<u>\$ 216.1</u>	<u>\$ 940.0</u>	<u>\$ 74.6</u>

Due to the uncertainty of future cash outflows, uncertain tax positions have been excluded from the above table.

Under our Amended Credit Facility and other credit arrangements, we had outstanding standby letters of credit of \$4.0 million as of March 31, 2019.

Credit Facilities and Leverage

Our focus on working capital management and cash flow from operations is measured by our ability to reduce debt and reduce our leverage ratios. In the second quarter of fiscal 2018, we entered into the 2017 Credit Facility that comprised a \$600.0 million senior secured revolving credit facility (“2017 Revolver”) and a \$150.0 million senior secured term loan (“2017 Term Loan”) with a maturity date of September 30, 2022. We repaid our then existing facility (“2011 Credit Facility”), which comprised a \$500 million senior secured revolving credit facility (“2011 Revolver”) and a \$150.0 million senior secured incremental term loan (the “2011 Term Loan”) with the proceeds from the 2017 Credit facility. On December 7, 2018, we amended the 2017 Credit Facility (as amended, the “Amended Credit Facility”). The Amended Credit Facility consists of \$449.1 million senior secured term loans (the “Amended 2017 Term Loan”), including a CAD 133.1 million (\$99.1 million) term loan and a \$700.0 million senior secured revolving credit facility (the “Amended 2017 Revolver”). The amendment resulted in an increase of the 2017 Term Loan and the 2017 Revolver by \$299.1 million and \$100.0 million, respectively.

Shown below are the leverage ratios at March 31, 2019 and 2018, in connection with the Amended Credit Facility and the 2017 Credit Facility, respectively.

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The total net debt, as defined under the Amended Credit Facility is \$835.8 million for fiscal 2019 and is 2.0 times adjusted EBITDA (non-GAAP), compared to total net debt of \$234.7 million under the 2017 Credit Facility and 0.7 times adjusted EBITDA (non-GAAP) for fiscal 2018.

The following table provides a reconciliation of net earnings to EBITDA (non-GAAP) and adjusted EBITDA (non-GAAP) for March 31, 2019 and 2018, in connection with the Amended Credit Facility and the 2017 Credit Facility, respectively:

	Fiscal 2019	Fiscal 2018
	(in millions, except ratios)	
Net earnings as reported	\$ 160.5	\$ 119.8
Add back:		
Depreciation and amortization	63.3	54.3
Interest expense	30.9	25.0
Income tax expense	21.6	118.5
EBITDA (non GAAP) ⁽¹⁾	\$ 276.3	\$ 317.6
Adjustments per credit agreement definitions ⁽²⁾	139.0	23.2
Adjusted EBITDA (non-GAAP) per credit agreement ⁽¹⁾	\$ 415.3	\$ 340.8
Total net debt ⁽³⁾	\$ 835.8	\$ 234.7
Leverage ratios ⁽⁴⁾ :		
Total net debt/adjusted EBITDA ratio ⁽⁴⁾	2.0 X	0.7 X
Maximum ratio permitted	4.00 X	3.50 X
Consolidated interest coverage ratio ⁽⁵⁾	9.9 X	14.5 X
Minimum ratio required	3.0 X	3.0 X

- (1) We have included EBITDA (non-GAAP) and adjusted EBITDA (non-GAAP) because our lenders use them as key measures of our performance. EBITDA is defined as earnings before interest expense, income tax expense, depreciation and amortization. EBITDA is not a measure of financial performance under GAAP and should not be considered an alternative to net earnings or any other measure of performance under GAAP or to cash flows from operating, investing or financing activities as an indicator of cash flows or as a measure of liquidity. Our calculation of EBITDA may be different from the calculations used by other companies, and therefore comparability may be limited. Certain financial covenants in both our Amended Credit Facility in fiscal 2019 and our 2017 Credit Facility in fiscal 2018 are based on EBITDA, subject to adjustments, which are shown above. Continued availability of credit under our Amended Credit Facility is critical to our ability to meet our business plans. We believe that an understanding of the key terms of our credit agreement is important to an investor's understanding of our financial condition and liquidity risks. Failure to comply with our financial covenants, unless waived by our lenders, would mean we could not borrow any further amounts under our revolving credit facility and would give our lenders the right to demand immediate repayment of all outstanding revolving credit and term loans. We would be unable to continue our operations at current levels if we lost the liquidity provided under our credit agreements. Depreciation and amortization in this table excludes the amortization of deferred financing fees, which is included in interest expense.
- (2) The \$139.0 million adjustment to EBITDA in fiscal 2019 primarily related to the inclusion of \$69.3 million of nine months of pro forma earnings of Alpha, \$13.6 million for fees and expenses related to the Alpha transaction, \$22.6 million of non-cash stock compensation, \$23.2 million of non-cash restructuring and other exit charges and \$10.3 million of inventory adjustments (including a fair value step up relating to the Alpha transaction of \$7.2 million). The \$23.2 million adjustment to EBITDA in fiscal 2018 primarily related to \$19.5 million of non-cash stock compensation and \$3.7 million of non-cash restructuring and other exit charges.
- (3) Debt includes capital lease obligations and letters of credit and is net of U.S. cash and cash equivalents and a portion of foreign cash and investments, as defined in both the Amended Credit Facility and the 2017 Credit Facility. In fiscal 2019, the amounts deducted in the calculation of net debt were U.S. cash and cash equivalents and foreign cash investments of \$200 million, and in fiscal 2018, were \$372 million.
- (4) These ratios are included to show compliance with the leverage ratios set forth in our credit facilities. We show both our current ratios and the maximum ratio permitted or minimum ratio required under our Amended Credit Facility and the 2017 Credit Facility, for fiscal 2019 and fiscal 2018, respectively.
- (5) As defined in the Amended Credit Facility and the 2017 Credit Facility, interest expense used in the consolidated interest coverage ratio excludes non-cash interest of \$1.3 million and \$1.6 million for fiscal 2019 and fiscal 2018, respectively.

RECENTLY ADOPTED ACCOUNTING PRONOUNCEMENTS

See Note 1 to the Consolidated Financial Statements - Summary of Significant Accounting Policies for a description of certain recently issued accounting standards that were adopted or are pending adoption that could have a significant impact on our Consolidated Financial Statements or the Notes to the Consolidated Financial Statements.

Related Party Transactions

None.

Sequential Quarterly Information

Fiscal 2019 and 2018 quarterly operating results, and the associated quarterly trends within each of those two fiscal years, are affected by the same economic and business conditions except for income tax expense in the third quarters of fiscal 2019 and 2018, which included a benefit of \$13.5 million and an expense of \$77.3 million, respectively, as a result of the Tax Act. We have also included the operating results of Alpha, in our third and fourth quarter results, for the period commencing on December 7, 2018 (the date of acquisition) and ending on March 31, 2019. The sales for the third and fourth quarters of fiscal 2019 were \$26.8 million and \$135.7 million, respectively. Alpha's net loss and net earnings, for the same periods were \$4.4 million and \$3.2 million, respectively.

	Fiscal 2019				Fiscal 2018			
	July 1, 2018 1st Qtr.	Sept. 30, 2018 2nd Qtr.	Dec. 30, 2018 3rd Qtr.	March 31, 2019 4th Qtr.	July 2, 2017 1st Qtr.	Oct. 1, 2017 2nd Qtr.	Dec. 31, 2017 3rd Qtr.	March 31, 2018 4th Qtr.
(in millions, except share and per share amounts)								
Net sales	\$ 670.9	\$ 660.5	\$ 680.0	\$ 796.6	\$ 622.6	\$ 617.3	\$ 658.9	\$ 683.0
Cost of goods sold	505.1	499.6	511.7	588.2	459.1	457.0	491.7	512.2
Inventory step up to fair value relating to Alpha acquisition and exit activities	0.5	—	3.7	6.1	—	—	—	3.4
Gross profit	165.3	160.9	164.6	202.3	163.5	160.3	167.2	167.4
Operating expenses	99.3	96.5	112.0	133.6	92.7	94.1	96.7	98.6
Restructuring and other exit charges	1.8	1.1	5.4	26.5	0.8	1.8	1.8	1.1
Legal proceedings charge (settlement income)	—	—	(2.8)	7.2	—	—	—	—
Operating earnings	64.2	63.3	50.0	35.0	70.0	64.4	68.7	67.7
Interest expense	6.5	6.4	7.1	10.9	5.7	6.5	6.5	6.3
Other (income) expense, net	0.4	(1.3)	—	0.4	3.3	2.8	(0.3)	1.7
Earnings before income taxes	57.3	58.2	42.9	23.7	61.0	55.1	62.5	59.7
Income tax expense (benefit)	11.3	10.8	(5.7)	5.2	12.7	11.9	88.3	5.6
Net earnings (loss)	46.0	47.4	48.6	18.5	48.3	43.2	(25.8)	54.1
Net earnings attributable to noncontrolling interests	0.1	—	0.2	—	0.1	—	—	0.1
Net earnings (loss) attributable to EnerSys stockholders	\$ 45.9	\$ 47.4	\$ 48.4	\$ 18.5	\$ 48.2	\$ 43.2	\$ (25.8)	\$ 54.0
Net earnings (loss) per common share attributable to EnerSys stockholders:								
Basic	\$ 1.09	\$ 1.13	\$ 1.14	\$ 0.43	\$ 1.11	\$ 1.01	\$ (0.61)	\$ 1.29
Diluted	\$ 1.08	\$ 1.11	\$ 1.12	\$ 0.42	\$ 1.09	\$ 1.00	\$ (0.61)	\$ 1.27
Weighted-average number of common shares outstanding:								
Basic	42,012,546	42,133,484	42,337,459	42,856,604	43,450,082	42,938,131	42,125,745	41,934,187
Diluted	42,573,981	42,773,706	43,102,598	43,585,523	44,163,074	43,327,361	42,125,745	42,441,647

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Net Sales

Quarterly net sales by segment were as follows:

	Fiscal 2019				Fiscal 2018			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
(in millions)								
Net sales by segment:								
Americas	\$ 392.5	\$ 388.6	\$ 402.0	\$ 507.8	\$ 354.6	\$ 341.5	\$ 353.2	\$ 380.5
EMEA	210.5	204.0	217.8	228.3	199.1	197.9	224.9	227.6
Asia	67.9	67.9	60.2	60.5	68.9	77.9	80.8	74.9
Total	<u>\$ 670.9</u>	<u>\$ 660.5</u>	<u>\$ 680.0</u>	<u>\$ 796.6</u>	<u>\$ 622.6</u>	<u>\$ 617.3</u>	<u>\$ 658.9</u>	<u>\$ 683.0</u>
Segment net sales as % of total:								
Americas	58.5%	58.8%	59.1%	63.7%	56.9%	55.3%	53.6%	55.7%
EMEA	31.4	30.9	32.0	28.7	32.0	32.1	34.1	33.3
Asia	10.1	10.3	8.9	7.6	11.1	12.6	12.3	11.0
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Quarterly net sales by product line were as follows:

	Fiscal 2019				Fiscal 2018			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
(in millions)								
Net sales by product line:								
Reserve power	\$ 324.0	\$ 313.4	\$ 329.5	\$ 449.3	\$ 305.2	\$ 292.2	\$ 327.0	\$ 323.5
Motive power	346.9	347.1	350.5	347.3	317.4	325.1	331.9	359.5
Total	<u>\$ 670.9</u>	<u>\$ 660.5</u>	<u>\$ 680.0</u>	<u>\$ 796.6</u>	<u>\$ 622.6</u>	<u>\$ 617.3</u>	<u>\$ 658.9</u>	<u>\$ 683.0</u>
Product line net sales as % of total:								
Reserve power	48.3%	47.4%	48.5%	56.4%	49.0%	47.3%	49.6%	47.4%
Motive power	51.7	52.6	51.5	43.6	51.0	52.7	50.4	52.6
Total	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risks

Our cash flows and earnings are subject to fluctuations resulting from changes in raw material costs, foreign currency exchange rates and interest rates. We manage our exposure to these market risks through internally established policies and procedures and, when deemed appropriate, through the use of derivative financial instruments. Our policy does not allow speculation in derivative instruments for profit or execution of derivative instrument contracts for which there are no underlying exposures. We do not use financial instruments for trading purposes and are not a party to any leveraged derivatives. We monitor our underlying market risk exposures on an ongoing basis and believe that we can modify or adapt our hedging strategies as needed.

Counterparty Risks

We have entered into lead forward purchase contracts and foreign exchange forward and purchased option contracts to manage the risk associated with our exposures to fluctuations resulting from changes in raw material costs and foreign currency

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exchange rates. The Company's agreements are with creditworthy financial institutions. Those contracts that result in a liability position at March 31, 2019 are \$1.6 million (pre-tax). Those contracts that result in an asset position at March 31, 2019 are \$0.4 million (pre-tax) and the vast majority of these will settle within one year. The impact on the Company due to nonperformance by the counterparties has been evaluated and not deemed material.

Interest Rate Risks

We are exposed to changes in variable U.S. interest rates on borrowings under our credit agreements, as well as short term borrowings in our foreign subsidiaries.

A 100 basis point increase in interest rates would have increased annual interest expense by approximately \$7.3 million on the variable rate portions of our debt.

Commodity Cost Risks—Lead Contracts

We have a significant risk in our exposure to certain raw materials. Our largest single raw material cost is for lead, for which the cost remains volatile. In order to hedge against increases in our lead cost, we have entered into forward contracts with financial institutions to fix the price of lead. A vast majority of such contracts are for a period not extending beyond one year. We had the following contracts outstanding at the dates shown below:

<u>Date</u>	<u>\$'s Under Contract</u>	<u># Pounds Purchased</u>	<u>Average Cost/Pound</u>	<u>Approximate % of Lead Requirements ⁽¹⁾</u>
	<u>(in millions)</u>	<u>(in millions)</u>		
March 31, 2019	\$39.2	42.0	\$0.93	7%
March 31, 2018	72.2	62.9	1.15	14
March 31, 2017	46.6	45.0	1.03	8

(1) Based on the fiscal year lead requirements for the periods then ended.

We estimate that a 10% increase in our cost of lead would have increased our annual cost of goods sold by approximately \$70 million for the fiscal year ended March 31, 2019.

Foreign Currency Exchange Rate Risks

We manufacture and assemble our products globally in the Americas, EMEA and Asia. Approximately 50% of our sales and expenses are transacted in foreign currencies. Our sales revenue, production costs, profit margins and competitive position are affected by the strength of the currencies in countries where we manufacture or purchase goods relative to the strength of the currencies in countries where our products are sold. Additionally, as we report our financial statements in U.S. dollars, our financial results are affected by the strength of the currencies in countries where we have operations relative to the strength of the U.S. dollar. The principal foreign currencies in which we conduct business are the Euro, Swiss franc, British pound, Polish zloty, Chinese renminbi and Mexican peso.

We quantify and monitor our global foreign currency exposures. Our largest foreign currency exposure is from the purchase and conversion of U.S. dollar based lead costs into local currencies in Europe. Additionally, we have currency exposures from intercompany financing and intercompany and third party trade transactions. On a selective basis, we enter into foreign currency forward contracts and purchase option contracts to reduce the impact from the volatility of currency movements; however, we cannot be certain that foreign currency fluctuations will not impact our operations in the future.

We hedge at any time, approximately 10% - 15% of the nominal amount of our known annual foreign exchange transactional exposures. We primarily enter into foreign currency exchange contracts to reduce the earnings and cash flow impact of the variation of non-functional currency denominated receivables and payables. The vast majority of such contracts are for a period not extending beyond one year.

Gains and losses resulting from hedging instruments offset the foreign exchange gains or losses on the underlying assets and liabilities being hedged. The maturities of the forward exchange contracts generally coincide with the settlement dates of the related transactions. Realized and unrealized gains and losses on these contracts are recognized in the same period as gains and losses on the hedged items. We also selectively hedge anticipated transactions that are subject to foreign exchange exposure,

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primarily with foreign currency exchange contracts, which are designated as cash flow hedges in accordance with Topic 815 - Derivatives and Hedging.

At March 31, 2019 and 2018, we estimate that an unfavorable 10% movement in the exchange rates would have adversely changed our hedge valuations net unrealized gains by approximately \$1.9 million and \$2.1 million, respectively.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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EnerSys

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of EnerSys

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of EnerSys (the Company) as of March 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended March 31, 2019, and the related notes and financial statement schedule listed in the Index at Item 15(a) (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at March 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended March 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of March 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated May 29, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1998.

Philadelphia, Pennsylvania
May 29, 2019

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of EnerSys

Opinion on Internal Control over Financial Reporting

We have audited EnerSys' internal control over financial reporting as of March 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, EnerSys (the Company) maintained, in all material respects, effective internal control over financial reporting as of March 31, 2019, based on the COSO criteria.

As indicated in the accompanying *Management Report on Internal Control over Financial Reporting*, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Alpha, which is included in the 2019 consolidated financial statements of the Company and constituted 28.3% of total assets as of March 31, 2019 and 5.8% and (0.8%) of net sales and net earnings, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Alpha.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2019 consolidated financial statements of the Company and our report dated May 29, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying *Management Report on Internal Control over Financial Reporting*. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania
May 29, 2019

EnerSys
Consolidated Balance Sheets
(In Thousands, Except Share and Per Share Data)

	March 31,	
	2019	2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 299,212	\$ 522,118
Accounts receivable, net of allowance for doubtful accounts (2019—\$10,813; 2018—\$12,643)	624,136	546,325
Inventories	503,869	414,234
Prepaid and other current assets	109,431	56,910
Total current assets	1,536,648	1,539,587
Property, plant, and equipment, net	409,439	390,260
Goodwill	656,399	352,805
Other intangible assets, net	462,316	147,141
Deferred taxes	40,466	44,402
Other assets	12,925	12,730
Total assets	\$ 3,118,193	\$ 2,486,925
Liabilities and Equity		
Current liabilities:		
Short-term debt	\$ 54,490	\$ 18,341
Current portion of capital lease obligations	10,113	89
Accounts payable	292,449	258,982
Accrued expenses	255,881	214,118
Total current liabilities	612,933	491,530
Long-term debt, net of unamortized debt issuance costs	971,756	579,535
Capital lease obligations	175	55
Deferred taxes	82,112	33,607
Other liabilities	165,200	181,087
Total liabilities	1,832,176	1,285,814
Commitments and contingencies		
Equity:		
Preferred Stock, \$0.01 par value, 1,000,000 shares authorized, no shares issued or outstanding at March 31, 2019 and at March 31, 2018	—	—
Common Stock, \$0.01 par value per share, 135,000,000 shares authorized, 54,848,523 shares issued and 42,620,750 shares outstanding at March 31, 2019; 54,595,105 shares issued and 41,915,000 shares outstanding at March 31, 2018	548	546
Additional paid-in capital	512,696	477,288
Treasury stock at cost, 12,227,773 shares held as of March 31, 2019 and 12,680,105 shares held as of March 31, 2018	(530,760)	(560,991)
Retained earnings	1,450,325	1,320,549
Accumulated other comprehensive loss	(142,682)	(41,717)
Contra equity - indemnification receivable	(7,840)	—
Total EnerSys stockholders' equity	1,282,287	1,195,675
Nonredeemable noncontrolling interests	3,730	5,436
Total equity	1,286,017	1,201,111
Total liabilities and equity	\$ 3,118,193	\$ 2,486,925

See accompanying notes.

EnerSys
Consolidated Statements of Income
(In Thousands, Except Share and Per Share Data)

	Fiscal year ended March 31,		
	2019	2018	2017
Net sales	\$ 2,808,017	\$ 2,581,891	\$ 2,367,149
Cost of goods sold	2,104,612	1,920,030	1,713,115
Inventory step up to fair value relating to Alpha acquisition and exit activities	10,379	3,457	2,157
Gross profit	693,026	658,404	651,877
Operating expenses	441,415	382,077	369,863
Restructuring and other exit charges	34,709	5,481	7,160
Impairment of goodwill	—	—	12,216
Impairment of indefinite-lived intangibles and fixed assets	—	—	1,800
Legal proceedings charge, net	4,437	—	23,725
Operating earnings	212,465	270,846	237,113
Interest expense	30,868	25,001	22,197
Other (income) expense, net	(614)	7,519	2,221
Earnings before income taxes	182,211	238,326	212,695
Income tax expense	21,584	118,493	54,472
Net earnings	160,627	119,833	158,223
Net earnings (losses) attributable to noncontrolling interests	388	239	(1,991)
Net earnings attributable to EnerSys stockholders	\$ 160,239	\$ 119,594	\$ 160,214
Net earnings per common share attributable to EnerSys stockholders:			
Basic	\$ 3.79	\$ 2.81	\$ 3.69
Diluted	\$ 3.73	\$ 2.77	\$ 3.64
Dividends per common share	\$ 0.70	\$ 0.70	\$ 0.70
Weighted-average number of common shares outstanding:			
Basic	42,335,023	42,612,036	43,389,333
Diluted	43,008,952	43,119,856	44,012,543

See accompanying notes.

EnerSys
Consolidated Statements of Comprehensive Income
(In Thousands)

	Fiscal year ended March 31,		
	2019	2018	2017
Net earnings	\$ 160,627	\$ 119,833	\$ 158,223
Other comprehensive income (loss):			
Net unrealized gain (loss) on derivative instruments, net of tax	3,295	(5,400)	1,587
Pension funded status adjustment, net of tax	1,712	3,052	(3,694)
Foreign currency translation adjustment	(106,555)	113,739	(53,730)
Total other comprehensive (loss) income, net of tax	(101,548)	111,391	(55,837)
Total comprehensive income	59,079	231,224	102,386
Comprehensive (income) loss attributable to noncontrolling interests	(195)	523	(2,353)
Comprehensive income attributable to EnerSys stockholders	<u>\$ 59,274</u>	<u>\$ 230,701</u>	<u>\$ 104,739</u>

See accompanying notes.

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EnerSys
Consolidated Statements of Changes in Equity

<i>(In Thousands, Except Per Share Data)</i>	Preferred Stock	Common Stock	Additional Paid-in Capital	Treasury Stock	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Contra- Equity	Total EnerSys Stockholders' Equity	Non- redeemable Non- Controlling Interests	Total Equity
Balance at March 31, 2016	\$ —	\$ 541	\$ 452,097	\$ (439,800)	\$ 1,097,642	\$ (97,349)	\$ —	\$ 1,013,131	\$ 5,304	\$ 1,018,435
Stock-based compensation	—	—	19,185	—	—	—	—	19,185	—	19,185
Shares issued under equity awards (taxes paid related to net share settlement of equity awards), net	—	3	(7,447)	—	—	—	—	(7,444)	—	(7,444)
Other	—	—	(480)	—	—	—	—	(480)	—	(480)
Net earnings (excludes \$2,021 of losses attributable to redeemable noncontrolling interests)	—	—	—	—	160,214	—	—	160,214	30	160,244
Dividends (\$0.70 per common share)	—	—	737	—	(31,137)	—	—	(30,400)	—	(30,400)
Redemption value adjustment attributable to redeemable noncontrolling interests	—	—	—	—	4,725	—	—	4,725	—	4,725
Other comprehensive income:										
Pension funded status adjustment (net of tax expense of \$142)	—	—	—	—	—	(3,694)	—	(3,694)	—	(3,694)
Net unrealized gain (loss) on derivative instruments (net of tax expense of \$929)	—	—	—	—	—	1,587	—	1,587	—	1,587
Foreign currency translation adjustment (excludes \$59 related to redeemable noncontrolling interests)	—	—	—	—	—	(53,368)	—	(53,368)	(421)	(53,789)
Balance at March 31, 2017	\$ —	\$ 544	\$ 464,092	\$ (439,800)	\$ 1,231,444	\$ (152,824)	\$ —	\$ 1,103,456	\$ 4,913	\$ 1,108,369
Stock-based compensation	—	—	19,453	—	—	—	—	19,453	—	19,453
Shares issued under equity awards (taxes paid related to net share settlement of equity awards), net	—	2	(6,533)	—	—	—	—	(6,531)	—	(6,531)
Purchase of common stock	—	—	—	(121,191)	—	—	—	(121,191)	—	(121,191)
Other	—	—	(402)	—	(137)	—	—	(539)	—	(539)
Net earnings	—	—	—	—	119,594	—	—	119,594	239	119,833
Dividends (\$0.70 per common share)	—	—	678	—	(30,352)	—	—	(29,674)	—	(29,674)
Other comprehensive income:										
Pension funded status adjustment (net of tax benefit of \$808)	—	—	—	—	—	3,052	—	3,052	—	3,052
Net unrealized gain (loss) on derivative instruments (net of tax benefit of \$2,071)	—	—	—	—	—	(5,400)	—	(5,400)	—	(5,400)
Foreign currency translation adjustment	—	—	—	—	—	113,455	—	113,455	284	113,739
Balance at March 31, 2018	\$ —	\$ 546	\$ 477,288	\$ (560,991)	\$ 1,320,549	\$ (41,717)	\$ —	\$ 1,195,675	\$ 5,436	\$ 1,201,111
Stock-based compensation	—	—	22,608	—	—	—	—	22,608	—	22,608
Exercise of stock options	—	2	9,046	—	—	—	—	9,048	—	9,048
Shares issued under equity awards (taxes paid related to net share settlement of equity awards), net	—	—	(3,630)	—	—	—	—	(3,630)	—	(3,630)
Purchase of common stock	—	—	—	(56,436)	—	—	—	(56,436)	—	(56,436)
Reissuance of treasury stock, on LIFO basis, towards Alpha purchase consideration	—	—	6,805	86,463	—	—	—	93,268	—	93,268
Reissuance of treasury stock towards employee stock purchase plan	—	—	—	204	—	—	—	204	—	204
Contra equity - indemnification receivable for acquisition related tax liability	—	—	—	—	—	—	(7,840)	(7,840)	—	(7,840)
Other	—	—	(141)	—	—	—	—	(141)	—	(141)
Net earnings	—	—	—	—	160,239	—	—	160,239	388	160,627
Dividends (\$0.70 per common share)	—	—	720	—	(30,463)	—	—	(29,743)	—	(29,743)
Dissolution of joint venture	—	—	—	—	—	—	—	—	(1,511)	(1,511)
Other comprehensive income:										
Pension funded status adjustment (net of tax benefit of \$120)	—	—	—	—	—	1,712	—	1,712	—	1,712
Net unrealized gain (loss) on derivative instruments (net of tax expense of \$1,006)	—	—	—	—	—	3,295	—	3,295	—	3,295
Foreign currency translation adjustment	—	—	—	—	—	(105,972)	—	(105,972)	(583)	(106,555)
Balance at March 31, 2019	\$ —	\$ 548	\$ 512,696	\$ (530,760)	\$ 1,450,325	\$ (142,682)	\$ (7,840)	\$ 1,282,287	\$ 3,730	\$ 1,286,017

See accompanying notes.

EnerSys
Consolidated Statements of Cash Flows
(In Thousands)

	Fiscal year ended March 31,		
	2019	2018	2017
Cash flows from operating activities			
Net earnings	\$ 160,627	\$ 119,833	\$ 158,223
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization	63,348	54,317	53,945
Write-off of assets relating to restructuring and other exit charges	26,308	3,736	1,435
Non-cash write-off of property, plant and equipment	—	—	6,300
Impairment of goodwill	—	—	12,216
Impairment of indefinite-lived intangibles and fixed assets	—	—	1,800
Derivatives not designated in hedging relationships:			
Net losses (gains)	1,856	(180)	471
Cash (settlements) proceeds	(1,802)	43	(1,225)
Provision for doubtful accounts	1,385	822	1,794
Deferred income taxes	(6,456)	(20,313)	1,455
Non-cash interest expense	1,316	1,603	1,388
Stock-based compensation	22,608	19,453	19,185
(Gain) loss on disposal of property, plant, and equipment	(258)	116	(7)
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable	5,974	(32,242)	(13,535)
Inventories	(46,614)	(38,075)	(42,792)
Prepaid and other current assets	(20,195)	14,470	3,721
Other assets	(7,611)	(1,150)	2,034
Accounts payable	9,944	21,266	845
Legal proceedings accrual	7,258	—	23,725
Accrued expenses	(4,937)	(26,614)	9,333
Other liabilities	(14,896)	93,963	5,719
Net cash provided by operating activities	197,855	211,048	246,030
Cash flows from investing activities			
Capital expenditures	(70,372)	(69,832)	(50,072)
Purchase of businesses	(654,614)	(2,988)	(12,392)
Proceeds from disposal of property, plant, and equipment	1,103	463	631
Net cash used in investing activities	(723,883)	(72,357)	(61,833)
Cash flows from financing activities			
Net borrowings (repayments) on short-term debt	37,424	214	(4,600)
Proceeds from Amended 2017 Revolver borrowings	531,100	379,750	—
Proceeds from 2011 Revolver borrowings	—	147,050	262,000
Repayments of Amended 2017 Revolver borrowings	(427,600)	(244,250)	—
Repayments of 2011 Revolver borrowings	—	(312,050)	(267,000)
Proceeds from Amended 2017 Term Loan	299,105	150,000	—
Repayments of 2017 Amended Term Loan	(11,666)	—	—
Repayments of 2011 Term Loan	—	(127,500)	(15,000)
Debt issuance costs	(1,393)	(2,677)	—
Capital lease obligations and other	368	(29)	(98)
Option proceeds	9,048	958	3
Payment of taxes related to net share settlement of equity awards	(3,630)	(7,489)	(7,447)
Purchase of treasury stock	(56,436)	(121,191)	—
Dividends paid to stockholders	(29,743)	(29,674)	(30,400)
Net cash provided by (used in) financing activities	346,577	(166,888)	(62,542)
Effect of exchange rate changes on cash and cash equivalents	(43,455)	49,986	(18,633)
Net (decrease) increase in cash and cash equivalents	(222,906)	21,789	103,022

Cash and cash equivalents at beginning of year	522,118	500,329	397,307
Cash and cash equivalents at end of year	<u>\$ 299,212</u>	<u>\$ 522,118</u>	<u>\$ 500,329</u>

Supplemental disclosures:

Non-cash investing and financing activities:

Common stock issued as partial consideration for Alpha acquisition	\$ 93,268	\$ —	\$ —
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See accompanying notes.

Notes to Consolidated Financial Statements
March 31, 2019
(In Thousands, Except Share and Per Share Data)

1. Summary of Significant Accounting Policies

Description of Business

EnerSys (the “Company”) and its predecessor companies have been manufacturers of industrial batteries for over 125 years. EnerSys is a global leader in stored energy solutions for industrial applications. The Company manufactures, markets and distributes industrial batteries and related products such as chargers, outdoor cabinet enclosures, power equipment and battery accessories, and provides related after-market and customer-support services for its products. With the recent Alpha acquisition, the Company is also a provider of highly integrated power solutions and services to broadband, telecom, renewable and industrial customers.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries and any partially owned subsidiaries that the Company has the ability to control. Control generally equates to ownership percentage, whereby investments that are more than 50% owned are generally consolidated, investments in affiliates of 50% or less but greater than 20% are generally accounted for using the equity method, and investments in affiliates of 20% or less are accounted for using the cost method. All intercompany transactions and balances have been eliminated in consolidation.

Foreign Currency Translation

Results of foreign operations of subsidiaries, whose functional currency is the local currency, are translated into U.S. dollars using average exchange rates during the periods. The assets and liabilities are translated into U.S. dollars using exchange rates as of the balance sheet dates. Gains or losses resulting from translating the foreign currency financial statements are accumulated as a separate component of accumulated other comprehensive income (“AOCI”) in EnerSys’ stockholders’ equity and noncontrolling interests.

Transaction gains and losses resulting from exchange rate changes on transactions denominated in currencies other than the functional currency of the applicable subsidiary are included in the Consolidated Statements of Income, within “Other (income) expense, net”, in the year in which the change occurs.

Revenue Recognition

Revenue for the years ended March 31, 2018 and 2017 were recognized under ASC 605, Revenue Recognition, when (i) persuasive evidence of an arrangement existed, (ii) delivery occurred or services were rendered, (iii) the price was fixed or determinable and (iv) collectibility was reasonably assured.

ASC 606, Revenue from Contracts with Customers, was adopted for the fiscal year beginning April 1, 2018.

Concurrent with the adoption of the new standard, the Company has updated its revenue recognition policy as follows:

The Company determines revenue recognition by applying the following steps:

1. identify the contract with a customer;
2. identify the performance obligations in the contract;
3. determine the transaction price;
4. allocate the transaction price to the performance obligations; and
5. recognize revenue as the performance obligations are satisfied.

The Company recognizes revenue when (or as) performance obligations are satisfied by transferring control of the performance obligation to a customer. Control of a performance obligation may transfer to the customer either at a point in time or over time depending on an evaluation of the specific facts and circumstances for each contract, including the terms and conditions of the contract as agreed with the customer, as well as the nature of the products or services to be provided.

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The Company's primary performance obligation to its customers is the delivery of finished goods and products, pursuant to purchase orders. Control of the products sold typically transfers to its customers at the point in time when the goods are shipped as this is also when title generally passes to its customers under the terms and conditions of our customer arrangements.

Each customer purchase order sets forth the transaction price for the products and services purchased under that arrangement. Some customer arrangements include variable consideration, such as volume rebates, some of which depend upon the customers meeting specified performance criteria, such as a purchasing level over a period of time. The Company uses judgment to estimate the most likely amount of variable consideration at each reporting date. When estimating variable consideration the Company also applies judgment when considering the probability of whether a reversal of revenue could occur and only recognize revenue subject to this constraint.

Service revenues related to the work performed for the Company's customers by its maintenance technicians generally represent a separate and distinct performance obligation. Control for these services passes to the customer as the services are performed. Service revenues for the twelve months of fiscal 2019 amounted to \$157,236.

A small portion of the Company's customer arrangements oblige the Company to create customized products for its customers that require the bundling of both products and services into a single performance obligation because the individual products and services that are required to fulfill the customer requirements do not meet the definitions for a distinct performance obligation. These customized products generally have no alternative use to the Company and the terms and conditions of these arrangements give the Company the enforceable right to payment for performance completed to date, including a reasonable profit margin. For these arrangements, control transfers over time and the Company measures progress towards completion by selecting the input or output method that best depicts the transfer of control of the underlying goods and services to the customer for each respective arrangement. Methods used by the Company to measure progress toward completion include labor hours, costs incurred and units of production. Revenues recognized over time for the twelve months of fiscal 2019 amounted to \$100,809.

On March 31, 2019, the aggregate transaction price allocated to unsatisfied (or partially unsatisfied) performance obligations was approximately \$66,088, of which, the Company estimates that approximately \$60,443 will be recognized as revenue in fiscal 2020 and \$5,645 in fiscal 2021.

The Company's typical payment terms are 30 days and sales arrangements do not contain any significant financing component for its customers.

Any payments that are received from a customer in advance, prior to the satisfaction of a related performance obligation and billings in excess of revenue recognized, are deferred and treated as a contract liability. Advance payments and billings in excess of revenue recognized are classified as current or non-current based on the timing of when recognition of revenue is expected. As of March 31, 2019, the current and non-current portion of contract liabilities were \$15,162 and \$6,360, respectively. Revenues recognized during the twelve months of fiscal 2019, that were included in the contract liability at the beginning of the fiscal year, amounted to \$6,132.

Amounts representing work completed and not billed to customers represent contract assets and are reported as a component of Prepaid and Other Current Assets in the Consolidated Balance Sheets. Contract assets as of March 31, 2019 were \$38,778. In conjunction with the April 1, 2018 adoption of ASC 606, \$24,810 was reclassified to contract assets, which was previously recorded in inventories and accounts receivables. Also as of April 1, 2018, \$9,387 and \$7,094, were identified as contract liabilities, current and non-current, that were recorded in Accrued Expenses and Other Liabilities, respectively.

The Company uses historic customer product return data as a basis of estimation for customer returns and records the reduction of sales at the time revenue is recognized. At March 31, 2019, the right of return asset related to the value of inventory anticipated to be returned from customers was \$2,667 and refund liability representing amounts estimated to be refunded to customers was \$5,153. These are shown under Prepaid and Other Current Assets and Accrued Expenses, respectively.

Freight charges billed to customers are included in sales and the related shipping costs are included in cost of sales in the Consolidated Statements of Income. If shipping activities are performed after a customer obtains control of a product, the Company applies a policy election to account for shipping as an activity to fulfill the promise to transfer the product to the customer.

The Company applies a policy election to exclude transaction taxes collected from customers from sales when the tax is both imposed on and concurrent with a specific revenue-producing transaction.

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The Company generally provides customers with a product warranty that provides assurance that the products meet standard specifications and are free of defects. The Company maintains a reserve for claims incurred under standard product warranty programs. Performance obligations related to service warranties are not material to the Consolidated Financial Statements.

The Company pays sales commissions to its sales representatives, which may be considered as incremental costs to obtain a contract. However, since the recoverability period is less than one year, the Company has utilized the practical expedient to record these costs of obtaining a contract as an expense as they are incurred.

Warranties

The Company's products are warranted for a period ranging from one to twenty years for reserve power batteries and for a period ranging from one to seven years for motive power batteries. The Company provides for estimated product warranty expenses when the related products are sold. The assessment of the adequacy of the reserve includes a review of open claims and historical experience.

Cash and Cash Equivalents

Cash and cash equivalents include all highly liquid investments with an original maturity of three months or less when purchased.

Concentration of Credit Risk

Financial instruments that subject the Company to potential concentration of credit risk consist principally of short-term cash investments and trade accounts receivable. The Company invests its cash with various financial institutions and in various investment instruments limiting the amount of credit exposure to any one financial institution or entity. The Company has bank deposits that exceed federally insured limits. In addition, certain cash investments may be made in U.S. and foreign government bonds, or other highly rated investments guaranteed by the U.S. or foreign governments. Concentration of credit risk with respect to trade receivables is limited by a large, diversified customer base and its geographic dispersion. The Company performs ongoing credit evaluations of its customers' financial condition and requires collateral, such as letters of credit, in certain circumstances.

Accounts Receivable

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of customers to make required payments. The allowance is based on management's estimate of uncollectible accounts, analysis of historical data and trends, as well as reviews of all relevant factors concerning the financial capability of its customers. Accounts receivable are considered to be past due based on when payments are received compared to the customer's credit terms. Accounts are written off when management determines the account is uncollectible.

Inventories

Inventories are stated at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method. The cost of inventory consists of material, labor, and associated overhead.

Property, Plant, and Equipment

Property, plant, and equipment are recorded at cost and include expenditures that substantially increase the useful lives of the assets. Depreciation is provided using the straight-line method over the estimated useful lives of the assets as follows: 10 to 33 years for buildings and improvements and 3 to 15 years for machinery and equipment.

Maintenance and repairs are expensed as incurred. Interest on capital projects is capitalized during the construction period.

Business Combinations

The Company records an acquisition using the acquisition method of accounting and recognizes the assets acquired and liabilities assumed at their fair values as of the date of the acquisition. The excess of the purchase price over the net tangible and

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intangible assets is recorded to goodwill. The results of operations of the acquired business are included in the Company's operating results from the date of acquisition.

Goodwill and Other Intangible Assets

Goodwill and indefinite-lived trademarks are tested for impairment at least annually and whenever events or circumstances occur indicating that a possible impairment may have been incurred. Goodwill is tested for impairment by determining the fair value of the Company's reporting units. These estimated fair values are based on financial projections, certain cash flow measures, and market capitalization.

The Company estimates the fair value of its reporting units using a weighting of fair values derived from both the income approach and the market approach. Under the income approach, the Company calculates the fair value of a reporting unit based on the present value of estimated future cash flows. Cash flow projections are based on management's estimates of revenue growth rates and operating margins, taking into consideration industry and market conditions. The discount rate used is based on the weighted-average cost of capital adjusted for the relevant risk associated with business-specific characteristics and the uncertainty related to the business's ability to execute on the projected cash flows. The market approach estimates fair value based on market multiples of revenue and earnings derived from comparable publicly-traded companies with similar operating and investment characteristics as the reporting unit. The weighting of the fair value derived from the market approach ranges from 0% to 50% depending on the level of comparability of these publicly-traded companies to the reporting unit.

In order to assess the reasonableness of the calculated fair values of its reporting units, the Company also compares the sum of the reporting units' fair values to its market capitalization and calculates an implied control premium (the excess of the sum of the reporting units' fair values over the market capitalization). The Company evaluates the control premium by comparing it to control premiums of recent comparable market transactions.

The Company assesses whether indefinite-lived intangible assets impairment exists using both the qualitative and quantitative assessments. The qualitative assessment involves determining whether events or circumstances exist that indicate it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount. If based on this qualitative assessment, the Company determines it is more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount or if the Company elects not to perform a qualitative assessment, a quantitative assessment is performed to determine whether an indefinite-lived intangible asset impairment exists. The Company tests the indefinite-lived intangible assets for impairment by comparing the carrying value to the fair value based on current revenue projections of the related operations, under the relief from royalty method. Any excess of the carrying value over the amount of fair value is recognized as an impairment. Any such impairment is recognized in the reporting period in which it has been identified.

Finite-lived assets such as customer relationships, technology, trademarks, licenses, and non-compete agreements are amortized on a straight-line basis over their estimated useful lives, generally over periods ranging from 3 to 20 years. The Company reviews the carrying values of these assets for possible impairment whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable based on undiscounted estimated cash flows expected to result from its use and eventual disposition. The Company continually evaluates the reasonableness of the useful lives of these assets.

Impairment of Long-Lived Assets

The Company reviews the carrying values of its long-lived assets to be held and used for possible impairment whenever events or changes in circumstances indicate that the carrying value may not be recoverable, based on undiscounted estimated cash flows expected to result from its use and eventual disposition. The factors considered by the Company in performing this assessment include current operating results, trends and other economic factors. In assessing the recoverability of the carrying value of a long-lived asset, the Company must make assumptions regarding future cash flows and other factors. If these estimates or the related assumptions change in the future, the Company may be required to record an impairment loss for these assets.

Environmental Expenditures

The Company records a loss and establishes a reserve for environmental remediation liabilities when it is probable that an asset has been impaired or a liability exists and the amount of the liability can be reasonably estimated. Reasonable estimates involve judgments made by management after considering a broad range of information including notifications, demands or settlements that have been received from a regulatory authority or private party, estimates performed by independent engineering companies and outside counsel, available facts, existing and proposed technology, the identification of other potentially

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responsible parties, their ability to contribute and prior experience. These judgments are reviewed quarterly as more information is received and the amounts reserved are updated as necessary. However, the reserves may materially differ from ultimate actual liabilities if the loss contingency is difficult to estimate or if management's judgments turn out to be inaccurate. If management believes no best estimate exists, the minimum probable loss is accrued.

Derivative Financial Instruments

The Company utilizes derivative instruments to mitigate volatility related to interest rates, lead prices and foreign currency exposures. The Company does not hold or issue derivative financial instruments for trading or speculative purposes. The Company recognizes derivatives as either assets or liabilities in the accompanying Consolidated Balance Sheets and measures those instruments at fair value. Changes in the fair value of those instruments are reported in AOCI if they qualify for hedge accounting or in earnings if they do not qualify for hedge accounting. Derivatives qualify for hedge accounting if they are designated as hedge instruments and if the hedge is highly effective in achieving offsetting changes in the fair value or cash flows of the asset or liability hedged. Effectiveness is measured on a regular basis using statistical analysis and by comparing the overall changes in the expected cash flows on the lead and foreign currency forward contracts with the changes in the expected all-in cash outflow required for the lead and foreign currency purchases. This analysis is performed on the initial purchases quarterly that cover the quantities hedged. Accordingly, gains and losses from changes in derivative fair value of effective hedges are deferred and reported in AOCI until the underlying transaction affects earnings.

The Company has commodity, foreign exchange and interest rate hedging authorization from the Board of Directors and has established a hedging and risk management program that includes the management of market and counterparty risk. Key risk control activities designed to ensure compliance with the risk management program include, but are not limited to, credit review and approval, validation of transactions and market prices, verification of risk and transaction limits, portfolio stress tests, sensitivity analyses and frequent portfolio reporting, including open positions, determinations of fair value and other risk management metrics.

Market risk is the potential loss the Company and its subsidiaries may incur as a result of price changes associated with a particular financial or commodity instrument. The Company utilizes forward contracts, options, and swaps as part of its risk management strategies, to minimize unanticipated fluctuations in earnings caused by changes in commodity prices, interest rates and / or foreign currency exchange rates. All derivatives are recognized on the balance sheet at their fair value, unless they qualify for the Normal Purchase Normal Sale exemption.

Credit risk is the potential loss the Company may incur due to the counterparty's non-performance. The Company is exposed to credit risk from interest rate, foreign currency and commodity derivatives with financial institutions. The Company has credit policies to manage their credit risk, including the use of an established credit approval process, monitoring of the counterparty positions and the use of master netting agreements.

The Company has elected to offset net derivative positions under master netting arrangements. The Company does not have any positions involving cash collateral (payables or receivables) under a master netting arrangement as of March 31, 2019 and 2018.

The Company does not have any credit-related contingent features associated with its derivative instruments.

Fair Value of Financial Instruments

The Company groups its recurring, non-recurring and disclosure-only fair value measurements into the following levels when making fair value measurement disclosures:

- | | |
|---------|---|
| Level 1 | Inputs are unadjusted quoted prices in active markets for identical assets or liabilities. |
| Level 2 | Inputs are quoted prices for similar assets or liabilities in an active market, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable and market-corroborated inputs which are derived principally from or corroborated by observable market data. |
| Level 3 | Inputs are derived from valuation techniques in which one or more significant inputs or value drivers are unobservable. |

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Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date (an exit price). The Company and its subsidiaries use, as appropriate, a market approach (generally, data from market transactions), an income approach (generally, present value techniques and option-pricing models), and / or a cost approach (generally, replacement cost) to measure the fair value of an asset or liability. These valuation approaches incorporate inputs such as observable, independent market data and / or unobservable data that management believes are predicated on the assumptions market participants would use to price an asset or liability. These inputs may incorporate, as applicable, certain risks such as nonperformance risk, which includes credit risk.

Lead contracts, foreign currency contracts and interest rate contracts generally use an income approach to measure the fair value of these contracts, utilizing readily observable inputs, such as forward interest rates (e.g., London Interbank Offered Rate—"LIBOR"), forward foreign currency exchange rates (e.g., GBP and euro) and commodity prices (e.g., London Metals Exchange), as well as inputs that may not be observable, such as credit valuation adjustments. When observable inputs are used to measure all or most of the value of a contract, the contract is classified as Level 2. Over-the-counter (OTC) contracts are valued using quotes obtained from an exchange, binding and non-binding broker quotes. Furthermore, the Company obtains independent quotes from the market to validate the forward price curves. OTC contracts include forwards, swaps and options. To the extent possible, fair value measurements utilize various inputs that include quoted prices for similar contracts or market-corroborated inputs.

When unobservable inputs are significant to the fair value measurement, the asset or liability is classified as Level 3. Additionally, Level 2 fair value measurements include adjustments for credit risk based on the Company's own creditworthiness (for net liabilities) and its counterparties' creditworthiness (for net assets). The Company assumes that observable market prices include sufficient adjustments for liquidity and modeling risks. The Company did not have any fair value measurements that transferred between Level 2 and Level 3 as well as Level 1 and Level 2.

Income Taxes

The Company accounts for income taxes using the asset and liability approach, which requires deferred tax assets and liabilities be recognized using enacted tax rates to measure the effect of temporary differences between book and tax bases on recorded assets and liabilities. Valuation allowances are recorded to reduce deferred tax assets, if it is more likely than not some portion or all of the deferred tax assets will not be realized. The need to establish valuation allowances against deferred tax assets is assessed quarterly. The primary factors used to assess the likelihood of realization are expected reversals of taxable temporary timing differences, forecasts of future taxable income and available tax planning strategies that could be implemented to realize the net deferred tax assets.

The Company recognizes tax related interest and penalties in income tax expense in its Consolidated Statement of Income.

With respect to accounting for uncertainty in income taxes, the Company evaluates tax positions to determine whether the benefits of tax positions are more likely than not of being sustained upon audit based on the technical merits of the tax position. For tax positions that are more likely than not of being sustained upon audit, the Company recognizes the largest amount of the benefit that is greater than 50% likely of being realized upon ultimate settlement. For tax positions that are not more likely than not of being sustained upon audit, the Company does not recognize any portion of the benefit. If the more likely than not threshold is not met in the period for which a tax position is taken, the Company may subsequently recognize the benefit of that tax position if the tax matter is effectively settled, the statute of limitations expires, or if the more likely than not threshold is met in a subsequent period.

No additional income taxes have been provided for any undistributed foreign earnings or any additional outside basis difference inherent in these entities, as these amounts continue to be indefinitely reinvested in foreign operations.

Deferred Financing Fees

Debt issuance costs that are incurred by the Company in connection with the issuance of debt are deferred and amortized to interest expense over the life of the underlying indebtedness, adjusted to reflect any early repayments and are shown as a deduction from long-term debt.

Stock-Based Compensation Plans

The Company measures the cost of employee services received in exchange for the award of an equity instrument based on the grant-date fair value of the award, with such cost recognized over the applicable vesting period.

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Market and Performance condition-based awards

The Company grants market condition-based awards and performance condition-based awards.

Prior to fiscal 2016, the Company granted market condition-based awards (“MSU”). These units cliff vested on the third anniversary of the date of grant. These share units were converted into between zero and two shares of common stock for each unit granted at the end of a three-year performance cycle. The conversion ratio was calculated by dividing the average closing share price of the Company’s common stock during the ninety calendar days immediately preceding the vesting date by the average closing share price of the Company’s common stock during the ninety calendar days immediately preceding the grant date, with the resulting quotient capped at two. This quotient was then multiplied by the number of share units granted to yield the number of shares of common stock to be delivered on the vesting date. The fair value of the share units was estimated at the date of grant using a binomial lattice model with the following assumptions: a risk-free interest rate, dividend yield, time to maturity and expected volatility.

Beginning with fiscal 2017, the Company granted market condition-based awards (“TSR”). A participant may earn between 0% to 200% of the number of awards granted, based on the total shareholder return of the Company’s common stock over a three-year period. The awards cliff vest on the third anniversary of the date of grant and are settled in common stock on the first anniversary of the vesting date. The TSR is calculated by dividing the sixty or ninety calendar day average price at end of the period (as applicable) and the reinvested dividends thereon by such sixty or ninety calendar day average price at start of the period. The maximum number of awards earned is capped at 200% of the target award. Additionally, no payout will be awarded in the event that the TSR at the vesting date reflects less than a 25% return from the average price at the grant date. These share units are similar to the share units granted prior to fiscal 2016, except that under these awards, the targets are more difficult to achieve as they are tied to the TSR of a defined peer group. The fair value of these awards is estimated at the date of grant, using a Monte Carlo Simulation.

The Company recognizes compensation expense using the straight-line method over the life of the market condition-based awards except for those issued to certain retirement-eligible participants, which are expensed on an accelerated basis.

In fiscal 2019, the Company granted performance condition-based awards (“PSU”). A participant may earn between 0% to 200% of the number of awards granted, based on the Company’s cumulative adjusted earnings per share performance over a three-year period. The vesting of these awards are contingent upon meeting or exceeding performance conditions. The awards cliff vest on the third anniversary of the date of grant and are settled in common stock on the first anniversary of the vesting date. The maximum number of awards earned is capped at 200% of the target award. Expense for the performance condition based award is recorded when the achievement of the performance condition is considered probable of achievement and is recorded on a straight-line basis over the requisite service period. If such performance criteria are not met, no compensation cost is recognized and any recognized compensation cost is reversed. The closing stock price on the date of grant, adjusted for a discount to reflect the illiquidity inherent in the PSUs, represents the grant-date fair value for these awards.

Restricted Stock Units

The fair value of restricted stock units is based on the closing market price of the Company’s common stock on the date of grant. These awards generally vest, and are settled in common stock, at 25% per year, over a four year period from the date of grant. The Company recognizes compensation expense using the straight-line method over the life of the restricted stock units.

Stock Options

The fair value of the options granted is estimated at the date of grant using the Black-Scholes option-pricing model utilizing assumptions based on historical data and current market data. The assumptions include expected term of the options, risk-free interest rate, expected volatility, and dividend yield. The expected term represents the expected amount of time that options granted are expected to be outstanding, based on historical and forecasted exercise behavior. The risk-free rate is based on the rate at the grant date of zero-coupon U.S. Treasury Notes with a term equal to the expected term of the option. Expected volatility is estimated using historical volatility rates based on historical weekly price changes over a term equal to the expected term of the options. The Company’s dividend yield is based on historical data. The Company recognizes compensation expense using the straight-line method over the vesting period of the options except for those issued to certain retirement-eligible participants, which are expensed on an accelerated basis.

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Forfeitures

Forfeitures of share-based awards are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Earnings Per Share

Basic earnings per common share (“EPS”) are computed by dividing net earnings attributable to EnerSys stockholders by the weighted-average number of common shares outstanding for the period. Diluted EPS reflects the potential dilution that would occur if securities or other contracts to issue common stock were exercised or converted into common stock. At March 31, 2019, 2018 and 2017, the Company had outstanding stock options, restricted stock units, market and performance condition-based awards, which could potentially dilute basic earnings per share in the future.

Segment Reporting

A segment for reporting purposes is based on the financial performance measures that are regularly reviewed by the chief operating decision maker to assess segment performance and to make decisions about a public entity’s allocation of resources. Based on this guidance, the Company reports its segment results based upon the three geographical regions of operations.

- **Americas**, which includes North and South America, with segment headquarters in Reading, Pennsylvania, U.S.A.,
- **EMEA**, which includes Europe, the Middle East and Africa, with segment headquarters in Zug, Switzerland, and
- **Asia**, which includes Asia, Australia and Oceania, with segment headquarters in Singapore.

Recently Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board (“FASB”) issued ASU No. 2014-09, “Revenue from Contracts with Customers (Topic 606)” providing guidance on revenue from contracts with customers that supersedes most current revenue recognition guidance, including industry-specific guidance. The underlying principle is that an entity will recognize revenue to depict the transfer of goods or services to customers at an amount that the entity expects to be entitled to in exchange for those goods or services.

The Company adopted this standard on April 1, 2018 using the modified retrospective transition method. Under the modified retrospective transition method, the cumulative effect of applying Topic 606 to all contracts where all revenue has not been completely recognized under previously existing accounting principles that are not completed as of the date of adoption is recorded as an adjustment to the opening balance of retained earnings (if applicable) while the comparative periods are not restated and continue to be reported under the accounting standards in effect for those periods. There was no cumulative effect of adopting the standard at the date of initial application in retained earnings.

In March 2017, the FASB issued ASU No. 2017-07, “Compensation—Retirement Benefits (Topic 715)”, which requires an entity to report the service cost component of pension and other postretirement benefit costs in the same line item as other compensation costs. The other components of net (benefit) cost will be required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. This standard is effective for interim and annual reporting periods beginning after December 15, 2017, with early adoption permitted and requires the retrospective method to be applied to all periods presented. The Company adopted this guidance effective April 1, 2018. The service cost component of pension expense continues to be recognized in cost of goods sold whereas other components of pension expense have been reclassified to “Other (income) expense, net” in the Consolidated Statements of Income. The Company reclassified \$1,464 and \$1,252 from “Cost of goods sold” relating to fiscal 2018 and 2017, respectively, to “Other (income) expense, net” in the Consolidated Statements of Income.

Accounting Pronouncements Issued But Not Adopted as of March 31, 2019

In February 2016, the FASB issued ASU No. 2016-02, “Leases (Topic 842)”, which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e. lessees and lessors). This update requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase of the leased asset by the lessee. This classification will determine whether the lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their

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classification. The new standard requires lessors to account for leases using an approach that is substantially equivalent to existing guidance for sales-type leases, direct financing leases and operating leases. This update is effective for annual periods beginning after December 15, 2018, using a modified retrospective approach, with early adoption permitted.

ASC 842 will be effective for the Company on April 1, 2019. There are a number of optional practical expedients made available to simplify the transition of the new standard. The Company has made the following elections:

- to adopt the optional transition method defined within ASU 2018-11 and not restate comparative prior periods but instead recognize a cumulative effect adjustment to the opening balance of retained earnings in the period of adoption;
- to elect the package of three practical expedients addressing whether a contract contains a lease, lease classification and initial direct costs; to combine lease and non-lease components as a single component for all asset classes;
- to use a portfolio approach to determine the incremental borrowing rate; and
- to apply the short-term lease exception to leases that, at the commencement date, has a lease term of 12 months or less and does not include an option to purchase the underlying asset that the lessee is reasonably certain to exercise.

During fiscal 2019, the Company made progress on implementing the new standard which included surveying the Company's businesses, assessing the Company's portfolio of leases and compiling a central repository of active leases. The Company evaluated key policy elections and considerations under the standard which the Company will utilize to develop an internal policy to address the new standard requirements. Additionally, the Company selected a lease accounting software solution to support the new reporting requirements and started implementation of the software. While the Company continues to assess the impact on its accounting policies, internal control processes and related disclosures required under the new guidance, as well as its process to determine the actual amount of the required transition adjustment to reflect the balance of the right of use asset and lease liability, the Company's current estimate of the initial lease liability based on the status of its adoption processes is approximately \$100,000 and is subject to change as the Company continues to refine this amount. These conclusions may change as the Company continues to evaluate the new standard or if there are any changes in the Company's lease portfolio. The Company does not currently believe that the standard will have a material impact on its results of operations or cash flows.

In June 2016, the FASB, issued ASU No. 2016-13, "Financial Instruments - Credit Losses (Topic 326)": Measurement of Credit Losses on Financial Instruments, which changes the recognition model for the impairment of financial instruments, including accounts receivable, loans and held-to-maturity debt securities, among others. The guidance is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. In contrast to current guidance, which considers current information and events and utilizes a probable threshold, (an "incurred loss" model), ASU 2016-13 mandates an "expected loss" model. The expected loss model: (i) estimates the risk of loss even when risk is remote, (ii) estimates losses over the contractual life, (iii) considers past events, current conditions and reasonable supported forecasts and (iv) has no recognition threshold. The Company is currently assessing the potential impact that the adoption will have on its consolidated financial statements.

In August 2017, the FASB issued ASU No. 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities", which amends and simplifies existing guidance in order to allow companies to more accurately present the economic effects of risk management activities in the financial statements. The guidance eliminates the requirement to separately measure and report hedge ineffectiveness and generally requires the entire change in the fair value of a hedging instrument to be presented in the same income statement line as the hedged item. The guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those years. Early adoption is permitted in any interim period or fiscal year before the effective date. The Company is currently assessing the potential impact that the adoption will have on its consolidated financial statements and does not believe that it will have a material impact on its consolidated financial statements.

In February 2018, the FASB issued ASU No. 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income", which allows a reclassification from accumulated other comprehensive income (loss) to retained earnings for stranded tax effects resulting from the Tax Act. The amount of the reclassification is calculated based on the effect of the change in the U.S. federal corporate income tax rate on the gross deferred tax amounts at the date of the enactment of the Tax Act related to items that remained in accumulated other comprehensive income (loss) at that time. The guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those years and early adoption is permitted. The Company is currently assessing the potential impact that the adoption will have on its consolidated financial statements.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

2. Acquisitions

On December 7, 2018, the Company completed the acquisition of all of the issued and outstanding common stock of Alpha Technologies Services, Inc. (“ATS”) and Alpha Technologies Ltd. (“ATL”), resulting in ATS and ATL becoming wholly-owned subsidiaries of the Company (the “share purchase”). Additionally, the Company acquired substantially all of the assets of Alpha Technologies Inc. and certain assets of Altair Advanced Industries, Inc. and other affiliates of ATS and ATL (all such sellers, together with ATS and ATL, “Alpha”), in each case in accordance with the terms and conditions of certain restructuring agreements (collectively, the “asset acquisition” and together with the share purchase, the “acquisition”). Based in Bellingham, Washington, Alpha is a global industry leader in comprehensive commercial-grade energy solutions for broadband, telecom, renewable, industrial and traffic customers around the world. The initial purchase consideration for the acquisition was \$750,000, of which \$650,000 was paid in cash and the balance was settled by issuing 1,177,630 shares of EnerSys common stock. These shares were issued out of the Company's treasury stock and were valued at \$84.92 per share, which was based on the thirty-day volume weighted average stock price of the Company's common stock at closing, in accordance with the purchase agreement. The 1,177,630 shares had a closing date fair value of \$93,268, based upon the December 7, 2018, closing date spot rate of \$79.20. The total purchase consideration, consisting of cash paid of \$650,000, shares valued at \$93,268 and an adjustment for working capital (due from seller of \$766) was \$742,502. The Company funded the cash portion of the acquisition with borrowings from the Amended Credit Facility as defined in Note 8. See Note 8 for additional information.

The acquisition expands the Company's footprint in broadband and telecom markets. The goodwill recognized in connection with this transaction reflects the benefits the Company expects to realize from being able to provide a one-stop, fully integrated power solutions offering to its customers, as well as the benefit of cost synergies from alignment of the Alpha group within its own organizational structure.

The Company recorded the acquisition using the acquisition method of accounting and recognized the assets acquired and liabilities assumed at their estimated fair values as of the date of the acquisition. The results of operations of Alpha have been included in the Company's Americas segment beginning December 8, 2018. Included within operating expenses, in the Company's Consolidated Statement of Income for fiscal 2019 are acquisition costs of \$12,883.

For the period ended March 31, 2019, that EnerSys owned Alpha, the contribution of the acquisition to net sales was \$162,454 and net loss of \$1,252, excluding the effect of the transaction and integration costs, and interest expense on the debt to finance the acquisition.

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The following table represents the fair values assigned to the assets acquired and liabilities assumed and resulting goodwill. The amounts recognized will be finalized as the information necessary to complete the analysis is obtained, but no later than one year from the acquisition date (“the measurement period”).

The acquired assets and assumed liabilities include the following:

Accounts receivable	\$	115,467
Inventories		84,297
Other current assets		6,822
Other intangible assets		332,000
Property, plant and equipment		20,987
Other assets		9,005
Total assets acquired	\$	568,578
Accounts payable		35,803
Accrued liabilities		41,918
Deferred income taxes		56,331
Other liabilities		12,642
Total liabilities assumed	\$	146,694
Net assets acquired	\$	421,884

Purchase price:		
Cash paid for net assets acquired	\$	650,000
Fair value of shares issued for net assets acquired		93,268
Working capital adjustment		(766)
Total purchase consideration		742,502
Less: Fair value of acquired identifiable assets and liabilities		421,884
Goodwill	\$	320,618

The following table summarizes the estimated fair value of Alpha's identifiable intangible assets and the initial assessment of their respective estimated lives:

	Type	Life in Years	Fair Value
Trademarks	Indefinite-lived	Indefinite	\$ 56,000
Customer relationships	Finite-lived	14	221,000
Technology	Finite-lived	10	55,000
Total identifiable intangible assets			\$ 332,000

The Company recorded the acquisition using the acquisition method of accounting and recognized the assets acquired and liabilities assumed at their fair values as of the date of the acquisition. The excess of the purchase price over the net tangible and intangible assets is recorded to goodwill. Estimated goodwill deductible for tax purposes is \$42,262. The measurement of the fair value of assets acquired and liabilities assumed is substantially complete. The Company continues to gather necessary information to finalize the accounting for income taxes associated with the acquisition, and as such the Company could record additional adjustments to the provisional amount recognized as this additional information is obtained.

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The following unaudited summary information is presented on a consolidated pro forma basis as if the acquisition had occurred on April 1, 2017:

	Fiscal year ended	
	March 31, 2019	March 31, 2018
Net sales	\$ 3,278,646	\$ 3,124,527
Net earnings attributable to EnerSys stockholders	207,904	126,965
Net earnings per share attributable to EnerSys stockholders - basic	4.79	2.90
Net earnings per share attributable to EnerSys stockholders - assuming dilution	4.71	2.87

The pro forma amounts include additional interest expense on the debt issued to finance the purchases, amortization and depreciation expense based on the estimated fair value and useful lives of intangible assets and plant assets, and related tax effects. The pro forma results are not necessarily indicative of the combined results had the Alpha acquisition been completed on April 1, 2017, nor are they indicative of future combined results. The pro forma results for the twelve months of fiscal 2019 and 2018 exclude pre-tax transaction costs of \$12,883, as well as the pre-tax amortization of the acquisition date step up to fair value of inventories of \$7,263 as they are considered non-recurring in nature. The remeasurement of Alpha's deferred taxes due to the Tax Act are also being excluded in arriving at these pro forma results.

The Company made no significant acquisitions in fiscal 2018 and 2017.

3. Inventories

	March 31,	
	2019	2018
Raw materials	\$ 138,718	\$ 92,216
Work-in-process	129,736	136,068
Finished goods	235,415	185,950
Total	\$ 503,869	\$ 414,234

4. Property, Plant, and Equipment

Property, plant, and equipment consist of:

	March 31,	
	2019	2018
Land, buildings, and improvements	\$ 268,006	\$ 273,506
Machinery and equipment	683,955	657,262
Construction in progress	54,278	49,900
	1,006,239	980,668
Less accumulated depreciation	(596,800)	(590,408)
Total	\$ 409,439	\$ 390,260

Depreciation expense for the fiscal years ended March 31, 2019, 2018 and 2017 totaled \$48,618, \$45,874, and \$45,388, respectively. Interest capitalized in connection with major capital expenditures amounted to \$1,581, \$1,082, and \$817 for the fiscal years ended March 31, 2019, 2018 and 2017, respectively.

5. Goodwill and Other Intangible Assets

Other Intangible Assets

Information regarding the Company's other intangible assets are as follows:

	March 31,					
	2019			2018		
	Gross Amount	Accumulated Amortization	Net Amount	Gross Amount	Accumulated Amortization	Net Amount
Indefinite-lived intangible assets:						
Trademarks	\$ 152,484	\$ (953)	\$ 151,531	\$ 97,444	\$ (953)	\$ 96,491
Finite-lived intangible assets:						
Customer relationships	286,664	(42,704)	243,960	66,973	(31,500)	35,473
Non-compete	3,025	(2,807)	218	2,852	(2,759)	93
Technology	77,779	(12,229)	65,550	22,769	(8,872)	13,897
Trademarks	2,003	(1,236)	767	2,003	(1,151)	852
Licenses	1,477	(1,187)	290	1,491	(1,156)	335
Total	\$ 523,432	\$ (61,116)	\$ 462,316	\$ 193,532	\$ (46,391)	\$ 147,141

The Company's amortization expense related to finite-lived intangible assets was \$14,730, \$8,443, and \$8,557, for the years ended March 31, 2019, 2018 and 2017, respectively. The expected amortization expense based on the finite-lived intangible assets as of March 31, 2019, is \$29,491 in fiscal 2020, \$29,237 in fiscal 2021, \$28,993 in fiscal 2022, \$27,694 in fiscal 2023 and \$24,287 in fiscal 2024.

Goodwill

The changes in the carrying amount of goodwill by reportable segment are as follows:

	Fiscal year ended March 31, 2019			
	Americas	EMEA	Asia	Total
Balance at beginning of year	\$ 151,255	\$ 155,825	\$ 45,725	\$ 352,805
Acquisitions during the year	320,618	—	—	320,618
Foreign currency translation adjustment	(1,679)	(12,556)	(2,789)	(17,024)
Balance at end of year	<u>\$ 470,194</u>	<u>\$ 143,269</u>	<u>\$ 42,936</u>	<u>\$ 656,399</u>
	Fiscal year ended March 31, 2018			
	Americas	EMEA	Asia	Total
Balance at beginning of year	\$ 146,982	\$ 138,813	\$ 42,862	\$ 328,657
Acquisitions during the year	3,670	—	—	3,670
Foreign currency translation adjustment	603	17,012	2,863	20,478
Balance at end of year	<u>\$ 151,255</u>	<u>\$ 155,825</u>	<u>\$ 45,725</u>	<u>\$ 352,805</u>

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A reconciliation of goodwill and accumulated goodwill impairment losses, by reportable segment, is as follows:

	March 31, 2019			
	Americas	EMEA	Asia	Total
Gross carrying value	\$ 528,039	\$ 149,422	\$ 48,115	\$ 725,576
Accumulated goodwill impairment charges	(57,845)	(6,153)	(5,179)	(69,177)
Net book value	\$ 470,194	\$ 143,269	\$ 42,936	\$ 656,399

	March 31, 2018			
	Americas	EMEA	Asia	Total
Gross carrying value	\$ 209,100	\$ 161,978	\$ 50,904	\$ 421,982
Accumulated goodwill impairment charges	(57,845)	(6,153)	(5,179)	(69,177)
Net book value	\$ 151,255	\$ 155,825	\$ 45,725	\$ 352,805

Impairment of goodwill and indefinite-lived intangibles

The Company did not record any impairment relating to its goodwill and intangible assets during fiscal 2019 and 2018.

In fiscal 2017, the Company early adopted ASU 2017-04 - Intangibles—Goodwill and Other (Topic 350), which eliminated Step 2 from the goodwill impairment test. In the fourth quarter of fiscal 2017, the Company conducted step one of the annual goodwill impairment test which indicated that the fair values of two of its reporting units - Purcell US in the Americas operating segment and Purcell EMEA in the EMEA operating segment - were less than their respective carrying values. Based on the guidance in ASU 2017-04, the Company recognized an impairment charge for the amount by which the carrying amount exceeded the reporting unit's fair value and recorded a non-cash charge of \$8,646 and \$3,570, related to goodwill impairment in the Americas and EMEA operating segments, respectively, and \$700 and \$1,100 related to impairment of indefinite-lived trademarks in the Americas and EMEA operating segments, respectively.

Purcell was acquired in fiscal 2014 during the height of the 4G telecom build-out. After performing to expectations for the first few quarters, its revenue declined as telecom spending in the U.S. curtailed sharply. In fiscal 2016, lower estimated projected revenue and profitability caused by reduced levels of capital spending by major customers in the telecommunications industry was a key factor contributing to the impairment charges recorded in that year. In fiscal 2017, the Company transferred the European operations of Purcell to its EMEA operating segment, consistent with its geographical management approach. In the U.S., Purcell received significant orders, but at lower margins, resulting in an impairment in 2017. In Europe, Purcell's sales forecasts were reduced in fiscal 2017, as a result of low telecom spending and accordingly recorded an impairment charge as well.

The Company estimated tax-deductible goodwill to be approximately \$58,699 and \$18,147 as of March 31, 2019 and 2018, respectively.

6. Prepaid and Other Current Assets

Prepaid and other current assets consist of the following:

	March 31,	
	2019	2018
Contract assets	\$ 38,778	\$ —
Prepaid non-income taxes	22,490	22,583
Non-trade receivables	10,823	4,087
Prepaid income taxes	9,608	8,921
Other	27,732	21,319
Total	\$ 109,431	\$ 56,910

7. Accrued Expenses

Accrued expenses consist of the following:

	March 31,	
	2019	2018
Payroll and benefits	\$ 54,285	\$ 50,053
Accrued selling expenses	35,394	34,831
Warranty	21,646	22,637
VAT and other non-income taxes	17,125	13,155
Project related accruals	16,301	—
Contract liabilities	15,162	—
Freight	14,423	15,810
Income taxes payable	9,234	19,696
Legal proceedings	7,258	2,326
Interest	7,248	6,762
Tax Act - Transition Tax	5,290	7,800
Restructuring	2,952	2,909
Pension	1,207	1,657
Deferred income	—	9,387
Other	48,356	27,095
Total	\$ 255,881	\$ 214,118

8. Debt

The following summarizes the Company's long-term debt:

	As of March 31,			
	2019		2018	
	Principal	Unamortized Issuance Costs	Principal	Unamortized Issuance Costs
5.00% Senior Notes, due 2023	\$ 300,000	\$ 2,497	\$ 300,000	\$ 3,122
Amended Credit Facility, due 2022*	677,315	3,062	285,500	2,843
	\$ 977,315	\$ 5,559	\$ 585,500	\$ 5,965
Less: Unamortized issuance costs	5,559		5,965	
Less: Current portion	—		—	
Long-term debt, net of unamortized issuance costs	\$ 971,756		\$ 579,535	

* As of March 31, 2018, the 2017 Credit Facility, due 2022

5.00% Senior Notes

The Company's \$300,000 5.00% Senior Notes due 2023 (the "Notes") bear interest at a rate of 5.00% per annum. Interest is payable semiannually in arrears on April 30 and October 30 of each year, and commenced on October 30, 2015. The Notes will mature on April 30, 2023, unless earlier redeemed or repurchased in full. The Notes are unsecured and unsubordinated obligations of the Company. The Notes are fully and unconditionally guaranteed (the "Guarantees"), jointly and severally, by certain of its subsidiaries that are guarantors (the "Guarantors") under the Amended Credit Facility. The Guarantees are unsecured and unsubordinated obligations of the Guarantors.

2017 Credit Facility and Subsequent Amendment

On August 4, 2017, the Company entered into a credit facility (the "2017 Credit Facility"). The 2017 Credit Facility with a maturity date of September 30, 2022 consisted of a \$600,000 senior secured revolving credit facility ("2017 Revolver") and a \$150,000 senior secured term loan ("2017 Term Loan"). The Company's previous credit facility ("2011 Credit Facility")

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consisted of a \$500,000 senior secured revolving credit facility (“2011 Revolver”) and a \$150,000 senior secured incremental term loan (the “2011 Term Loan”) with a maturity date of September 30, 2018. On August 4, 2017, the outstanding balance on the 2011 Revolver and the 2011 Term Loan of \$240,000 and \$123,750, respectively, was repaid utilizing borrowings from the 2017 Credit Facility.

On December 7, 2018, the Company amended the 2017 Credit Facility (as amended, the “Amended Credit Facility”) to fund the Alpha acquisition. The Amended Credit Facility consists of \$449,105 senior secured term loans (the “Amended 2017 Term Loan”), including a CAD 133,050 (\$99,105) term loan and a \$700,000 senior secured revolving credit facility (the “Amended 2017 Revolver”). The amendment resulted in an increase of the 2017 Term Loan and the 2017 Revolver by \$299,105 and \$100,000, respectively.

As of March 31, 2019, the Company had \$239,000 outstanding on the Amended 2017 Revolver and \$438,315 under the Amended 2017 Term Loan.

Subsequent to the amendment, the quarterly installments payable on the Amended 2017 Term Loan are \$5,625 beginning December 31, 2018, \$8,438 beginning December 31, 2019 and \$11,250 beginning December 31, 2020 with a final payment of \$315,000 on September 30, 2022. The Amended Credit Facility may be increased by an aggregate amount of \$325,000 in revolving commitments and /or one or more new tranches of term loans, under certain conditions. Both the Amended 2017 Revolver and the Amended 2017 Term Loan bear interest, at the Company's option, at a rate per annum equal to either (i) the London Interbank Offered Rate (“LIBOR”) or Canadian Dollar Offered Rate (“CDOR”) plus between (i) LIBOR plus between 1.25% and 2.00% (currently 1.25% and based on the Company's consolidated net leverage ratio) or (ii) the U.S. Dollar Base Rate (which equals, for any day a fluctuating rate per annum equal to the highest of (a) the Federal Funds Effective Rate plus 0.50%, (b) Bank of America “Prime Rate” and (c) the Eurocurrency Base Rate plus 1%; provided that, if the Base Rate shall be less than zero, such rate shall be deemed zero) (iii) the CDOR Base Rate equal to the higher of (a) Bank of America “Prime Rate” and (b) average 30-day CDOR rate plus 0.50%. Obligations under the Amended Credit Facility are secured by substantially all of the Company's existing and future acquired assets, including substantially all of the capital stock of the Company's United States subsidiaries that are guarantors under the Amended Credit Facility and up to 65% of the capital stock of certain of the Company's foreign subsidiaries that are owned by the Company's United States subsidiaries.

The Amended Credit Facility allows for up to two temporary increases in the maximum leverage ratio from 3.50x to 4.00x for a four quarter period following an acquisition larger than \$250,000. Effective December 7, 2018 through December 30, 2019, the maximum leverage ratio has been increased to 4.00x. As of March 31, 2019, the leverage ratio was 2.00x.

The current portion of the Amended 2017 Term Loan of \$28,098 is classified as long-term debt as the Company expects to refinance the future quarterly payments with revolver borrowings under its Amended Credit Facility.

2011 Credit Facility

As discussed under the 2017 Credit Facility, the 2011 Credit Facility was repaid in full on August 4, 2017. There were no prepayment penalties on loans under the 2011 Credit Facility. Both the revolving loan and the Term Loan under the 2011 Credit Facility bore interest, at the Company's option, at a rate per annum equal to either (i) LIBOR plus between 1.25% and 1.75% (1.25% at March 31, 2017, and based on the Company's consolidated net leverage ratio) or (ii) the Base Rate (which is the highest of (a) the Bank of America prime rate, and (b) the Federal Funds Effective Rate) plus between 0.25% and 0.75% (based on the Company's consolidated net leverage ratio).

Interest Rates on Long Term Debt

The weighted average interest rate on the long term debt at March 31, 2019 and March 31, 2018, was 4.1% and 3.7%, respectively.

Interest Paid

The Company paid in cash, \$29,552, \$23,527 and \$20,781, net of interest received, for interest during the fiscal years ended March 31, 2019, 2018 and 2017, respectively.

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Covenants

The Company's financing agreements contain various covenants, which, absent prepayment in full of the indebtedness and other obligations, or the receipt of waivers, would limit the Company's ability to conduct certain specified business transactions including incurring debt, mergers, consolidations or similar transactions, buying or selling assets out of the ordinary course of business, engaging in sale and leaseback transactions, paying dividends and certain other actions. The Company is in compliance with all such covenants.

Short-Term Debt

As of March 31, 2019 and 2018, the Company had \$54,490 and \$18,341, respectively, of short-term borrowings from banks. The weighted-average interest rate on these borrowings was approximately 4% and 7%, respectively, for fiscal years ended March 31, 2019 and 2018.

Letters of Credit

As of March 31, 2019 and 2018, the Company had \$3,955 and \$3,074, respectively, of standby letters of credit.

Debt Issuance Costs

In fiscal 2019, the Company incurred \$1,393 in debt issuance costs and wrote off \$483 of unamortized debt issuance costs related to the Amended Credit Facility. In fiscal 2018, the Company incurred \$2,677 in debt issuance costs and wrote off \$301 of unamortized debt issuance costs related to the 2011 Credit Facility. Amortization expense, relating to debt issuance costs, included in interest expense was \$1,316, \$1,302, and \$1,388 for the fiscal years ended March 31, 2019, 2018 and 2017, respectively. Debt issuance costs, net of accumulated amortization, totaled \$5,559 and \$5,965 as of March 31, 2019 and 2018, respectively.

Available Lines of Credit

As of March 31, 2019 and 2018, the Company had available and undrawn, under all its lines of credit, \$546,960 and \$613,234, respectively, including \$87,685 and \$150,459, respectively, of uncommitted lines of credit as of March 31, 2019 and March 31, 2018.

9. Leases

The Company's future minimum lease payments under operating leases that have noncancelable terms in excess of one year as of March 31, 2019 are as follows:

2020	\$	31,483
2021		24,290
2022		16,514
2023		11,596
2024		8,683
Thereafter		23,757
Total minimum lease payments	\$	<u>116,323</u>

Rental expense was \$40,261, \$38,146, and \$35,991 for the fiscal years ended March 31, 2019, 2018 and 2017, respectively. Certain operating lease agreements contain renewal or purchase options and / or escalation clauses.

10. Other Liabilities

Other liabilities consist of the following:

	March 31,	
	2019	2018
Tax Act - Transition Tax	\$ 55,489	\$ 89,700
Pension	39,924	44,404
Warranty	32,922	27,965
Liability for uncertain tax positions	20,240	1,684
Deferred income	—	7,094
Contract liabilities	6,360	—
Other	10,265	10,240
Total	<u>\$ 165,200</u>	<u>\$ 181,087</u>

11. Fair Value of Financial Instruments

Recurring Fair Value Measurements

The following tables represent the financial assets and (liabilities) measured at fair value on a recurring basis as of March 31, 2019 and March 31, 2018 and the basis for that measurement:

	Total Fair Value Measurement March 31, 2019	Quoted Price in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Lead forward contracts	\$ (902)	\$ —	\$ (902)	\$ —
Foreign currency forward contracts	(249)	—	(249)	—
Total derivatives	<u>\$ (1,151)</u>	<u>\$ —</u>	<u>\$ (1,151)</u>	<u>\$ —</u>

	Total Fair Value Measurement March 31, 2018	Quoted Price in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Lead forward contracts	\$ (3,877)	\$ —	\$ (3,877)	\$ —
Foreign currency forward contracts	22	—	22	—
Total derivatives	<u>\$ (3,855)</u>	<u>\$ —</u>	<u>\$ (3,855)</u>	<u>\$ —</u>

The fair values of lead forward contracts are calculated using observable prices for lead as quoted on the London Metal Exchange (“LME”) and, therefore, were classified as Level 2 within the fair value hierarchy as described in Note 1, Summary of Significant Accounting Policies.

The fair values for foreign currency forward contracts are based upon current quoted market prices and are classified as Level 2 based on the nature of the underlying market in which these derivatives are traded.

Financial Instruments

The fair values of the Company’s cash and cash equivalents approximate carrying value due to their short maturities.

The fair value of the Company’s short-term debt and borrowings under the Amended Credit Facility (as defined in Note 8), approximate their respective carrying value, as they are variable rate debt and the terms are comparable to market terms as of the balance sheet dates and are classified as Level 2.

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The Company's Notes, with an original face value of \$300,000, were issued in April 2015. The fair value of the Notes represent the trading values based upon quoted market prices and are classified as Level 2. The Notes were trading at approximately 99% and 102% of face value on March 31, 2019 and March 31, 2018, respectively.

The carrying amounts and estimated fair values of the Company's derivatives and Notes at March 31, 2019 and 2018 were as follows:

	March 31, 2019		March 31, 2018	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Financial assets:				
Derivatives ⁽¹⁾	\$ —	\$ —	\$ 22	\$ 22
Financial liabilities:				
Notes ⁽²⁾	300,000	297,000	300,000	304,500
Derivatives ⁽¹⁾	\$ 1,151	\$ 1,151	\$ 3,877	\$ 3,877

(1) Represents lead and foreign currency forward contracts (see Note 12 for asset and liability positions of the lead and foreign currency forward contracts at March 31, 2019 and March 31, 2018).

(2) The fair value amount of the Notes at March 31, 2019 and March 31, 2018 represent the trading value of the instruments.

Non-recurring fair value measurements

On March 5, 2019, the Company committed to a plan to close its facility in Targovishte, Bulgaria, which produced diesel-electric submarine batteries. Management determined that the future demand for batteries of diesel-electric submarines was not sufficient given the number of competitors in the market. As a result, the Company concluded that the carrying value of the asset group is not recoverable and recorded a write-off of \$14,958 in the fixed assets to their estimated fair value of \$242, which was recognized in the fourth quarter of fiscal 2019. The valuation technique used to measure the fair value of fixed assets was a combination of the income and market approaches. The inputs used to measure the fair value of these fixed assets under the income approach were largely unobservable and accordingly were classified as Level 3.

12. Derivative Financial Instruments

The Company utilizes derivative instruments to reduce its exposure to fluctuations in commodity prices and foreign exchange rates, under established procedures and controls. The Company does not enter into derivative contracts for speculative purposes. The Company's agreements are with creditworthy financial institutions and the Company anticipates performance by counterparties to these contracts and therefore no material loss is expected.

Derivatives in Cash Flow Hedging Relationships

Lead Forward Contracts

The Company enters into lead forward contracts to fix the price for a portion of its lead purchases. Management considers the lead forward contracts to be effective against changes in the cash flows of the underlying lead purchases. The vast majority of such contracts are for a period not extending beyond one year. At March 31, 2019 and 2018, the Company has hedged the price to purchase approximately 42.0 million pounds and 62.9 million pounds of lead, respectively, for a total purchase price of \$39,218 and \$72,207, respectively.

Foreign Currency Forward Contracts

The Company uses foreign currency forward contracts and options to hedge a portion of the Company's foreign currency exposures for lead, as well as other foreign currency exposures so that gains and losses on these contracts offset changes in the underlying foreign currency denominated exposures. The vast majority of such contracts are for a period not extending beyond one year. As of March 31, 2019 and 2018, the notional amount of these contracts was \$42,318 and \$54,164, respectively.

In the coming twelve months, the Company anticipates that \$46 of pretax loss relating to lead and foreign currency forward contracts will be reclassified from AOCI as part of Cost of goods sold. This amount represents the current net unrealized impact of hedging lead and foreign exchange rates, which will change as market rates change in the future, and will ultimately be

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realized in the Consolidated Statements of Income as an offset to the corresponding actual changes in lead costs to be realized in connection with the variable lead cost and foreign exchange rates being hedged.

Derivatives not Designated in Hedging Relationships

Foreign Currency Forward Contracts

The Company also enters into foreign currency forward contracts to economically hedge foreign currency fluctuations on intercompany loans and foreign currency denominated receivables and payables. These are not designated as hedging instruments and changes in fair value of these instruments are recorded directly in the Consolidated Statements of Income. As of March 31, 2019 and 2018, the notional amount of these contracts was \$22,201 and \$28,486, respectively.

Presented below in tabular form is information on the location and amounts of derivative fair values in the Consolidated Balance Sheets and derivative gains and losses in the Consolidated Statements of Income:

**Fair Value of Derivative Instruments
March 31, 2019 and 2018**

	Derivatives and Hedging Activities Designated as Cash Flow Hedges		Derivatives and Hedging Activities Not Designated as Hedging Instruments	
	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
Prepaid and other current assets:				
Foreign currency forward contracts	—	209	—	—
Total assets	\$ —	\$ 209	\$ —	\$ —
Accrued expenses:				
Lead forward contracts	\$ 902	\$ 3,877	\$ —	\$ —
Foreign currency forward contracts	8	—	241	187
Total liabilities	\$ 910	\$ 3,877	\$ 241	\$ 187

**The Effect of Derivative Instruments on the Consolidated Statements of Income
For the fiscal year ended March 31, 2019**

	Pretax Gain (Loss) Recognized in AOCI on Derivative (Effective Portion)	Location of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Pretax Gain (Loss) Reclassified from AOCI into Income (Effective Portion)
Derivatives Designated as Cash Flow Hedges			
Lead forward contracts	\$ (12,531)	Cost of goods sold	\$ (15,666)
Foreign currency forward contracts	1,551	Cost of goods sold	385
Total	\$ (10,980)		\$ (15,281)
Derivatives Not Designated as Hedging Instruments		Location of Gain (Loss) Recognized in Income on Derivatives	Pretax Gain (Loss)
Foreign currency forward contracts		Other (income) expense, net	\$ (1,856)
Total			\$ (1,856)

**The Effect of Derivative Instruments on the Consolidated Statements of Income
For the fiscal year ended March 31, 2018**

Derivatives Designated as Cash Flow Hedges	Pretax Gain (Loss) Recognized in AOCI on Derivative (Effective Portion)	Location of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Pretax Gain (Loss) Reclassified from AOCI into Income (Effective Portion)
Lead forward contracts	\$ (805)	Cost of goods sold	\$ 5,860
Foreign currency forward contracts	(3,524)	Cost of goods sold	(2,718)
Total	\$ (4,329)		\$ 3,142

Derivatives Not Designated as Hedging Instruments	Location of Gain (Loss) Recognized in Income on Derivatives	Pretax Gain (Loss)
Foreign currency forward contracts	Other (income) expense, net	\$ 180
Total		\$ 180

**The Effect of Derivative Instruments on the Consolidated Statements of Income
For the fiscal year ended March 31, 2017**

Derivatives Designated as Cash Flow Hedges	Pretax Gain (Loss) Recognized in AOCI on Derivative (Effective Portion)	Location of Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Pretax Gain (Loss) Reclassified from AOCI into Income (Effective Portion)
Lead forward contracts	\$ 7,907	Cost of goods sold	\$ 5,803
Foreign currency forward contracts	845	Cost of goods sold	433
Total	\$ 8,752		\$ 6,236

Derivatives Not Designated as Hedging Instruments	Location of Gain (Loss) Recognized in Income on Derivatives	Pretax Gain (Loss)
Foreign currency forward contracts	Other (income) expense, net	\$ (471)
Total		\$ (471)

13. Income Taxes

	Fiscal year ended March 31,		
	2019	2018	2017
Current income tax expense			
Current:			
Federal	\$ 6,377	\$ 115,315	\$ 30,362
State	5,027	3,461	4,855
Foreign	16,636	20,030	17,800
Total current income tax expense	28,040	138,806	53,017
Deferred income tax (benefit) expense			
Federal	(5,031)	(9,551)	857
State	(669)	789	590
Foreign	(756)	(11,551)	8
Total deferred income tax (benefit) expense	(6,456)	(20,313)	1,455
Total income tax expense	\$ 21,584	\$ 118,493	\$ 54,472

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Earnings before income taxes consists of the following:

	Fiscal year ended March 31,		
	2019	2018	2017
United States	\$ 53,339	\$ 74,440	\$ 80,436
Foreign	128,872	163,886	132,259
Earnings before income taxes	\$ 182,211	\$ 238,326	\$ 212,695

Income taxes paid by the Company for the fiscal years ended March 31, 2019, 2018 and 2017 were \$53,866, \$28,044 and \$45,332, respectively.

U.S. Tax Cuts and Jobs Act of 2017

On December 22, 2017, the Tax Cuts and Jobs Act (“Tax Act”) was enacted into law. Among the significant changes resulting from the law, the Tax Act reduced the U.S. federal income tax rate from 35% to 21% effective January 1, 2018, and required companies to pay a one-time transition tax on unrepatriated cumulative non-U.S. earnings of foreign subsidiaries and created new taxes on certain foreign sourced earnings. The U.S. federal statutory tax rate for fiscal 2019 is 21.0%.

On December 22, 2017, the SEC issued Staff Accounting Bulletin No. 118 (“SAB 118”) that provided guidance on the financial statement implications of the Tax Act. In fiscal 2018, the Company recorded a provisional amount for the Transition Tax liability, resulting in an increase in income tax expense of \$97,500. In fiscal 2019, the Company completed its accounting for the tax effects of enactment of the Tax Act. The Company recognized an income tax benefit of \$13,483, net of uncertain tax positions, resulting from a decrease in the mandatory one-time transition tax on unrepatriated cumulative non-U.S. earnings of the Company's foreign businesses. The Company made the election on the 2017 Federal Income Tax Return to pay the one-time Tax Act liability over an eight-year period without interest, as allowed under the tax enactment.

In fiscal 2019, the global intangible low-taxed income (“GILTI”), foreign derived intangible income (“FDII”), and base-erosion and anti-abuse (“BEAT”) provisions became effective. The GILTI provisions require the Company to include in its US income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary’s tangible assets. Under US GAAP, the Company is allowed to make an accounting policy choice of either (1) treating the taxes due on future US inclusions in taxable income as a current-period expense when incurred (“period cost method”) or (2) factoring amounts into a Company’s measurement of its deferred taxes (“deferred method”). The Company has elected the period cost method. Based on existing legislative guidance and interpretation, the Company's effective tax rate has increased by approximately 2.2% compared to prior year.

FDII allows a new deduction for U.S. corporations up to 37.5% of foreign derived intangible income. This is an export incentive that reduces the tax on foreign derived sales and service income. Based upon the existing legislative guidance and interpretation, the Company's effective tax rate has decreased by 0.9% compared to prior year.

The BEAT provisions eliminate the deductions of certain base-erosion payments to related foreign corporations and impose a minimum tax if greater than regular tax. The Company does not expect to be subject to BEAT for fiscal 2019.

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The following table sets forth the tax effects of temporary differences that give rise to significant portions of the deferred tax assets and liabilities:

	March 31,	
	2019	2018
Deferred tax assets:		
Accounts receivable	\$ 1,297	\$ 1,790
Inventories	4,081	3,660
Net operating loss carryforwards	48,423	50,928
Accrued expenses	21,574	21,274
Capitalized research and development costs	7,061	—
Other assets	17,656	16,832
Gross deferred tax assets	100,092	94,484
Less valuation allowance	(17,519)	(15,255)
Total deferred tax assets	82,573	79,229
Deferred tax liabilities:		
Property, plant and equipment	25,656	21,045
Intangible assets	96,826	46,058
Other liabilities	1,737	1,331
Total deferred tax liabilities	124,219	68,434
Net deferred tax (liabilities) assets	\$ (41,646)	\$ 10,795

The Company has approximately \$1,438 in United States federal net operating loss carryforwards, all of which are limited by Section 382 of the Internal Revenue Code, with expirations between 2023 and 2027. The Company has approximately \$168,906 of foreign net operating loss carryforwards, of which \$102,792 may be carried forward indefinitely and \$66,114 expire between fiscal 2020 and fiscal 2034. In addition, the Company also has approximately \$33,900 of state net operating loss carryforwards with expirations between fiscal 2020 and fiscal 2039.

As of March 31, 2019 and 2018, the federal valuation allowance was \$1,027 and \$630, respectively. Of the net increase of \$397, \$1,027 is due to the current year acquisition of Alpha, offset by \$630 due to the expiration of capital losses for which a full valuation allowance was previously recorded. As of March 31, 2019 and 2018, the valuation allowance associated with the state tax jurisdictions was \$898 and \$895, respectively. As of March 31, 2019 and 2018, the valuation allowance associated with certain foreign tax jurisdictions was \$15,594 and \$13,730, respectively. Of the net increase of \$1,864, \$2,876 was recorded as an increase to tax expense primarily related to net operating loss carryforwards generated in the current year that the Company believes are not more likely than not to be realized. The remaining net decrease of \$1,012 is primarily related to foreign currency translation adjustments and an offset to adjustments to foreign net operating losses for which a full valuation allowance was recorded.

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A reconciliation of income taxes at the statutory rate (21.0% for fiscal 2019, 31.55% for fiscal 2018 and 35% for fiscal 2017) to the income tax provision is as follows:

	Fiscal year ended March 31,		
	2019	2018	2017
United States statutory income tax expense	\$ 38,264	\$ 75,196	\$ 74,444
Increase (decrease) resulting from:			
Impact of Tax Act	(13,483)	83,400	—
State income taxes, net of federal effect	3,285	3,146	3,677
Nondeductible expenses, domestic manufacturing deduction (fiscal 2018 and 2017) and other	2,677	1,078	1,993
Legal proceedings charge - European Competition Investigations - See Note 18	2,405	—	7,873
Net effect of GILTI, FDII, BEAT	2,320	—	—
Goodwill impairment - See Note 5	—	—	3,812
Effect of foreign operations	(16,763)	(35,048)	(39,377)
Valuation allowance	2,879	(9,279)	2,050
Income tax expense	<u>\$ 21,584</u>	<u>\$ 118,493</u>	<u>\$ 54,472</u>

The effective income tax rates for the fiscal years ended March 31, 2019, 2018 and 2017 were 11.9%, 49.7% and 25.6%, respectively. The effective income tax rate with respect to any period may be volatile based on the mix of income in the tax jurisdictions in which the Company operates and the amount of its consolidated income before taxes. The rate decrease in fiscal 2019 compared to fiscal 2018 is primarily due to the impact of the Tax Act, partially offset by increases for additional tax valuation allowances related to certain of our foreign subsidiaries, increases due to non-deductible legal proceedings charge related to the European competition investigation, and changes in the mix of earnings among tax jurisdictions in fiscal 2019. The rate increase in fiscal 2018 compared to fiscal 2017 is also primarily due to the Tax Act.

In fiscal 2019, the foreign effective income tax rate on foreign pre-tax income of \$128,872 was 12.3%. In fiscal 2018, the foreign effective income tax rate on foreign pre-tax income of \$163,886 was 5.2% and in fiscal 2017, the foreign effective income tax rate on foreign pre-tax income of \$132,259 was 13.5%. The rate increase in fiscal 2019 compared to fiscal 2018 is primarily due to additional tax valuation allowances related to certain of the Company's foreign subsidiaries, increases due to non-deductible legal proceedings charge related to the European competition investigation, and changes in the mix of earnings among tax jurisdictions in fiscal 2019. The rate decrease in fiscal 2018 compared to fiscal 2017 is primarily due to the reversal of previously recognized deferred tax valuation allowances related to certain of the Company's foreign subsidiaries in fiscal 2018, decreases due to non-deductible goodwill impairment charges and non-deductible legal proceedings charge related to the European competition investigation in fiscal 2017, and changes in the mix of earnings among tax jurisdictions.

Income from the Company's Swiss subsidiary comprised a substantial portion of its overall foreign mix of income for the fiscal years ended March 31, 2019, 2018 and 2017 and was taxed at approximately 4%, 8% and 5%, respectively.

The Company has approximately \$1,167,000 and \$1,260,000 of undistributed earnings of foreign subsidiaries for fiscal years 2019 and 2018, respectively. Since the Company's undistributed foreign earnings and outside basis differences inherent in foreign entities continue to be indefinitely reinvested in foreign operations, no additional income taxes have been provided.

Uncertain Tax Positions

The following table summarizes activity of the total amounts of unrecognized tax benefits:

	Fiscal year ended March 31,		
	2019	2018	2017
Balance at beginning of year	\$ 1,568	\$ 1,450	\$ 2,375
Increases related to current year tax positions	129	397	252
Increases related to the Alpha acquisition	7,840	—	—
Increases related to prior year tax positions	11,463	11	31
Decreases related to prior tax positions and foreign currency translation	(544)	—	(352)
Decreases related to prior year tax positions settled	(93)	(1)	(678)
Lapse of statute of limitations	(198)	(289)	(178)
Balance at end of year	\$ 20,165	\$ 1,568	\$ 1,450

The increase of prior year tax positions during fiscal 2019, are related to items included in the Tax Act. In connection with the Alpha acquisition, the Company recorded an unrecognized tax benefit of \$7,840, as well as an indemnification asset of \$7,840 representing the Seller's obligation to indemnify the Company for the outcome of potential contingent liabilities relating to uncertain tax positions. See Note 2 for more information relating to the acquisition.

All of the balance of unrecognized tax benefits at March 31, 2019, if recognized, would be included in the Company's Consolidated Statements of Income and have a favorable impact on both the Company's net earnings and effective tax rate.

The Company and its subsidiaries file income tax returns in the U.S. federal jurisdiction, and various states and foreign jurisdictions. With few exceptions, the Company is no longer subject to U.S. federal, state and local, or non-U.S. income tax examinations by tax authorities for years before 2008.

While the net effect on total unrecognized tax benefits cannot be reasonably estimated, approximately \$2,275 is expected to reverse in fiscal 2020 due to expiration of various statute of limitations.

The Company recognizes tax related interest and penalties in income tax expense in its Consolidated Statements of Income. As of March 31, 2019 and 2018, the Company had an accrual of \$75 and \$116, respectively, for interest and penalties.

14. Retirement Plans

Defined Benefit Plans

The Company sponsors several retirement and pension plans covering eligible salaried and hourly employees. The Company uses a measurement date of March 31 for its pension plans.

Net periodic pension cost for fiscal 2019, 2018 and 2017, includes the following components:

	United States Plans			International Plans		
	Fiscal year ended March 31,			Fiscal year ended March 31,		
	2019	2018	2017	2019	2018	2017
Service cost	\$ —	\$ —	\$ 371	\$ 997	\$ 1,025	\$ 871
Interest cost	631	658	664	1,831	1,795	1,848
Expected return on plan assets	(514)	(496)	(816)	(2,151)	(2,264)	(1,875)
Amortization and deferral	184	303	453	1,520	1,468	978
Net periodic benefit cost	\$ 301	\$ 465	\$ 672	\$ 2,197	\$ 2,024	\$ 1,822

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The following table sets forth a reconciliation of the related benefit obligation, plan assets, and accrued benefit costs related to the pension benefits provided by the Company for those employees covered by defined benefit plans:

	United States Plans		International Plans	
	March 31,		March 31,	
	2019	2018	2019	2018
Change in projected benefit obligation				
Benefit obligation at the beginning of the period	\$ 16,713	\$ 16,682	\$ 82,033	\$ 74,478
Service cost	—	—	997	1,025
Interest cost	631	658	1,831	1,795
Benefits paid, inclusive of plan expenses	(1,061)	(1,037)	(1,758)	(2,153)
Plan curtailments and settlements	—	—	(1,130)	(52)
Actuarial losses (gains)	364	410	(261)	(2,705)
Foreign currency translation adjustment	—	—	(6,674)	9,645
Benefit obligation at the end of the period	<u>\$ 16,647</u>	<u>\$ 16,713</u>	<u>\$ 75,038</u>	<u>\$ 82,033</u>

Change in plan assets				
Fair value of plan assets at the beginning of the period	\$ 13,928	\$ 12,731	\$ 38,757	\$ 34,323
Actual return on plan assets	758	1,731	2,109	688
Employer contributions	138	503	1,670	1,865
Benefits paid, inclusive of plan expenses	(1,061)	(1,037)	(1,758)	(2,153)
Plan curtailments and settlements	—	—	(1,130)	(52)
Foreign currency translation adjustment	—	—	(2,857)	4,086
Fair value of plan assets at the end of the period	<u>\$ 13,763</u>	<u>\$ 13,928</u>	<u>\$ 36,791</u>	<u>\$ 38,757</u>
Funded status deficit	<u>\$ (2,884)</u>	<u>\$ (2,785)</u>	<u>\$ (38,247)</u>	<u>\$ (43,276)</u>

	March 31,	
	2019	2018
Amounts recognized in the Consolidated Balance Sheets consist of:		
Accrued expenses	(1,207)	(1,657)
Other liabilities	(39,924)	(44,404)
Total liabilities	<u>\$ (41,131)</u>	<u>\$ (46,061)</u>

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The following table represents pension components (before tax) and related changes (before tax) recognized in AOCI for the Company's pension plans for the years ended March 31, 2019, 2018 and 2017:

	Fiscal year ended March 31,		
	2019	2018	2017
Amounts recorded in AOCI before taxes:			
Prior service cost	\$ (307)	\$ (385)	\$ (377)
Net loss	(24,051)	(27,762)	(28,475)
Net amount recognized	<u>\$ (24,358)</u>	<u>\$ (28,147)</u>	<u>\$ (28,852)</u>

	Fiscal year ended March 31,		
	2019	2018	2017
Changes in plan assets and benefit obligations:			
New prior service cost	\$ —	\$ —	\$ —
Net loss (gain) arising during the year	(99)	(1,953)	5,485
Effect of exchange rates on amounts included in AOCI	(1,984)	3,019	(2,275)
Amounts recognized as a component of net periodic benefit costs:			
Amortization of prior service cost	(45)	(46)	(42)
Amortization or settlement recognition of net loss	(1,659)	(1,725)	(1,389)
Total recognized in other comprehensive (income) loss	<u>\$ (3,787)</u>	<u>\$ (705)</u>	<u>\$ 1,779</u>

The amounts included in AOCI as of March 31, 2019 that are expected to be recognized as components of net periodic pension cost (before tax) during the next twelve months are as follows:

Prior service cost	\$ (44)
Net loss	(1,185)
Net amount expected to be recognized	<u>\$ (1,229)</u>

The accumulated benefit obligation related to all defined benefit pension plans and information related to unfunded and underfunded defined benefit pension plans at the end of each year are as follows:

	United States Plans		International Plans	
	March 31,		March 31,	
	2019	2018	2019	2018
All defined benefit plans:				
Accumulated benefit obligation	\$ 16,647	\$ 16,713	\$ 71,350	\$ 77,724
Unfunded defined benefit plans:				
Projected benefit obligation	\$ —	\$ —	\$ 32,320	\$ 33,124
Accumulated benefit obligation	—	—	30,328	31,270
Defined benefit plans with a projected benefit obligation in excess of the fair value of plan assets:				
Projected benefit obligation	\$ 16,647	\$ 16,713	\$ 75,038	\$ 82,033
Fair value of plan assets	13,763	13,928	36,791	38,757
Defined benefit plans with an accumulated benefit obligation in excess of the fair value of plan assets:				
Projected benefit obligation	\$ 16,647	\$ 16,713	\$ 74,235	\$ 81,253
Accumulated benefit obligation	16,647	16,713	70,654	77,021
Fair value of plan assets	13,763	13,928	36,077	37,986

Assumptions

Significant assumptions used to determine the net periodic benefit cost for the U.S. and International plans were as follows:

	United States Plans			International Plans		
	Fiscal year ended March 31,			Fiscal year ended March 31,		
	2019	2018	2017	2019	2018	2017
Discount rate	3.9%	4.1%	3.9%	1.4-3.3%	1.5-3.5%	1.8-3.7%
Expected return on plan assets	6.3	6.8	7.0	4.1-6.0	3.6-6.3	3.3-6.5
Rate of compensation increase	N/A	N/A	N/A	1.8-4.0	1.5-4.0	1.5-4.0

N/A = not applicable

Significant assumptions used to determine the projected benefit obligations for the U.S. and International plans were as follows:

	United States Plans		International Plans	
	March 31,		March 31,	
	2019	2018	2019	2018
Discount rate	3.8%	3.9%	1.0-2.7%	1.4-3.3%
Rate of compensation increase	N/A	N/A	2.0-4.0	1.8-4.0

N/A = not applicable

The United States plans do not include compensation in the formula for determining the pension benefit as it is based solely on years of service.

The expected long-term rate of return for the Company's pension plan assets is based upon the target asset allocation and is determined using forward looking assumptions in the context of historical returns and volatilities for each asset class, as well as correlations among asset classes. The Company evaluates the rate of return assumptions for each of its plans on an annual basis.

Pension Plan Investment Strategy

The Company's investment policy emphasizes a balanced approach to investing in securities of high quality and ready marketability. Investment flexibility is encouraged so as not to exclude opportunities available through a diversified investment strategy.

Equity investments are maintained within a target range of 40% - 75% of the total portfolio market value for the U.S. plans and with a target of approximately 65% for international plans. Investments in debt securities include issues of various maturities, and the average quality rating of bonds should be investment grade with a minimum quality rating of "B" at the time of purchase.

The Company periodically reviews the asset allocation of its portfolio. The proportion committed to equities, debt securities and cash and cash equivalents is a function of the values available in each category and risk considerations. The plan's overall return will be compared to and is expected to meet or exceed established benchmark funds and returns over a three to five year period.

The objectives of the Company's investment strategies are: (a) the achievement of a reasonable long-term rate of total return consistent with an emphasis on preservation of capital and purchasing power, (b) stability of annual returns through a portfolio that reflects a conservative mix of risk versus return, and (c) reflective of the Company's willingness to forgo significantly above-average rewards in order to minimize above-average risks. These objectives may not be met each year but should be attained over a reasonable period of time.

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The following table represents the Company's pension plan investments measured at fair value as of March 31, 2019 and 2018 and the basis for that measurement:

March 31, 2019								
United States Plans					International Plans			
Total Fair Value Measurement	Quoted Price In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value Measurement	Quoted Price In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Asset category:								
Cash and cash equivalents	\$ 1,080	\$ 1,080	\$ —	\$ —	\$ 83	\$ 83	\$ —	\$ —
Equity securities								
US(a)	8,275	8,275	—	—	—	—	—	—
International(b)	—	—	—	—	23,875	—	23,875	—
Fixed income(c)	4,408	4,408	—	—	12,833	—	12,833	—
Total	<u>\$ 13,763</u>	<u>\$ 13,763</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 36,791</u>	<u>\$ 83</u>	<u>\$ 36,708</u>	<u>\$ —</u>

March 31, 2018								
United States Plans					International Plans			
Total Fair Value Measurement	Quoted Price In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total Fair Value Measurement	Quoted Price In Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Asset category:								
Cash and cash equivalents	\$ 891	\$ 891	\$ —	\$ —	\$ 49	\$ 49	\$ —	\$ —
Equity securities								
US(a)	9,864	9,864	—	—	—	—	—	—
International(b)	—	—	—	—	25,768	—	25,768	—
Fixed income(c)	3,173	3,173	—	—	12,940	—	12,940	—
Total	<u>\$ 13,928</u>	<u>\$ 13,928</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 38,757</u>	<u>\$ 49</u>	<u>\$ 38,708</u>	<u>\$ —</u>

The fair values presented above were determined based on valuation techniques to measure fair value as discussed in Note 1.

- (a) US equities include companies that are well diversified by industry sector and equity style (i.e., growth and value strategies). Active and passive management strategies are employed. Investments are primarily in large capitalization stocks and, to a lesser extent, mid- and small-cap stocks.
- (b) International equities are invested in companies that are traded on exchanges outside the U.S. and are well diversified by industry sector, country and equity style. Active and passive strategies are employed. The vast majority of the investments are made in companies in developed markets with a small percentage in emerging markets.
- (c) Fixed income consists primarily of investment grade bonds from diversified industries.

The Company expects to make cash contributions of approximately \$1,640 to its pension plans in fiscal 2020.

Estimated future benefit payments under the Company's pension plans are as follows:

2020	\$	2,713
2021		2,783
2022		3,072
2023		3,392
2024		3,536
Years 2025-2029		21,106

[Table of Contents](#)*Defined Contribution Plan*

The Company maintains defined contribution plans primarily in the U.S. and U.K. Eligible employees can contribute a portion of their pre-tax and / or after-tax income in accordance with plan guidelines and the Company will make contributions based on the employees' eligible pay and /or will match a percentage of the employee contributions up to certain limits. Matching contributions charged to expense for the fiscal years ended March 31, 2019, 2018 and 2017 were \$12,078, \$8,931 and \$7,447, respectively.

15. Stockholders' Equity and Noncontrolling Interests*Preferred Stock and Common Stock*

The Company's certificate of incorporation authorizes the issuance of up to 1,000,000 shares of preferred stock, par value \$0.01 per share ("Preferred Stock"). At March 31, 2019 and 2018, no shares of Preferred Stock were issued or outstanding. The Board of Directors of the Company has the authority to specify the terms of any Preferred Stock at the time of issuance.

The following summarizes the change in the number of shares of common stock outstanding during fiscal years ended March 31, 2017, 2018 and 2019, respectively:

Shares outstanding as of March 31, 2016	43,189,502
Shares issued under equity-based compensation plans, net of equity awards surrendered for option price and taxes	258,034
Shares outstanding as of March 31, 2017	43,447,536
Purchase of treasury stock	(1,756,831)
Shares issued under equity-based compensation plans, net of equity awards surrendered for option price and taxes	224,295
Shares outstanding as of March 31, 2018	41,915,000
Purchase of treasury stock	(726,347)
Shares issued towards purchase consideration of Alpha acquisition	1,177,630
Shares issued under equity-based compensation plans, net of equity awards surrendered for option price and taxes	254,467
Shares outstanding as of March 31, 2019	42,620,750

Treasury Stock

In fiscal 2019, the Company purchased 726,347 shares of its common stock for \$56,436 and in fiscal 2018, purchased 1,756,831 shares for \$121,191. Of the shares purchased in fiscal 2018, 1,495,714 were acquired through an accelerated share repurchase program ("ASR") for a total cash investment of \$100,000 at an average price of \$66.86. There were no repurchases of common stock during fiscal 2017. At March 31, 2019 and 2018, the Company held 12,227,773 and 12,680,105 shares as treasury stock, respectively.

Treasury Stock Reissuance

On December 7, 2018, the Company acquired Alpha. The initial purchase consideration for the acquisition was \$750,000, of which \$650,000 was paid in cash and the balance was settled by issuing 1,177,630 shares of EnerSys common stock. These shares were issued out of the Company's treasury stock and were valued at \$84.92 per share, which was based on the thirty-day volume weighted average stock price of the Company's common stock at closing. The 1,177,630 shares had a closing date fair value of \$93,268. During fiscal 2019, the Company also issued 3,256 shares out of its treasury stock, valued at \$62.55 per share, on LIFO basis, to participants under the Company's Employee Stock Purchase Plan.

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Accumulated Other Comprehensive Income ("AOCI")

The components of AOCI, net of tax, are as follows:

	Beginning Balance	Before Reclassifications	Amount Reclassified from AOCI	Ending Balance
March 31, 2019				
Pension funded status adjustment	\$ (22,503)	\$ 339	\$ 1,373	\$ (20,791)
Net unrealized gain (loss) on derivative instruments	(3,425)	(8,396)	11,691	(130)
Foreign currency translation adjustment	(15,789)	(105,972)	—	(121,761)
Accumulated other comprehensive loss	<u>\$ (41,717)</u>	<u>\$ (114,029)</u>	<u>\$ 13,064</u>	<u>\$ (142,682)</u>
March 31, 2018				
Pension funded status adjustment	\$ (25,555)	\$ 1,692	\$ 1,360	\$ (22,503)
Net unrealized gain (loss) on derivative instruments	1,975	(2,868)	(2,532)	(3,425)
Foreign currency translation adjustment	(129,244)	113,455	—	(15,789)
Accumulated other comprehensive loss	<u>\$ (152,824)</u>	<u>\$ 112,279</u>	<u>\$ (1,172)</u>	<u>\$ (41,717)</u>
March 31, 2017				
Pension funded status adjustment	\$ (21,861)	\$ (4,659)	\$ 965	\$ (25,555)
Net unrealized gain (loss) on derivative instruments	388	5,523	(3,936)	1,975
Foreign currency translation adjustment	(75,876)	(53,368)	—	(129,244)
Accumulated other comprehensive loss	<u>\$ (97,349)</u>	<u>\$ (52,504)</u>	<u>\$ (2,971)</u>	<u>\$ (152,824)</u>

The following table presents reclassifications from AOCI during the twelve months ended March 31, 2019:

Components of AOCI	Amounts Reclassified from AOCI	Location of (Gain) Loss Recognized on Income Statement
Derivatives in Cash Flow Hedging Relationships:		
Net unrealized loss on derivative instruments	\$ 15,281	Cost of goods sold
Tax benefit	(3,590)	
Net unrealized loss on derivative instruments, net of tax	<u>\$ 11,691</u>	
Defined benefit pension costs:		
Prior service costs and deferrals	\$ 1,704	Net periodic benefit cost, included in other (income) expense, net - See Note 1 and 14
Tax benefit	(331)	
Net periodic benefit cost, net of tax	<u>\$ 1,373</u>	

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The following table presents reclassifications from AOCI during the twelve months ended March 31, 2018:

Components of AOCI	Amounts Reclassified from AOCI	Location of (Gain) Loss Recognized on Income Statement
Derivatives in Cash Flow Hedging Relationships:		
Net unrealized gain on derivative instruments	\$ (3,142)	Cost of goods sold
Tax expense	610	
Net unrealized gain on derivative instruments, net of tax	<u>\$ (2,532)</u>	
Defined benefit pension costs:		
Prior service costs and deferrals	\$ 1,771	Net periodic benefit cost, included in other (income) expense, net - See Note 1 and 14
Tax benefit	(411)	
Net periodic benefit cost, net of tax	<u>\$ 1,360</u>	

The following table presents reclassifications from AOCI during the twelve months ended March 31, 2017:

Components of AOCI	Amounts Reclassified from AOCI	Location of (Gain) Loss Recognized on Income Statement
Derivatives in Cash Flow Hedging Relationships:		
Net unrealized gain on derivative instruments	\$ (6,236)	Cost of goods sold
Tax expense	2,300	
Net unrealized gain on derivative instruments, net of tax	<u>\$ (3,936)</u>	
Defined benefit pension costs:		
Prior service costs and deferrals	\$ 1,431	Net periodic benefit cost, included in other (income) expense, net - See Note 1 and 14
Tax benefit	(466)	
Net periodic benefit cost, net of tax	<u>\$ 965</u>	

Redeemable Noncontrolling Interests

In fiscal 2017, the Company deconsolidated its joint venture in South Africa and the impact of this deconsolidation was reflected in the Consolidated Statements of Income.

The following demonstrates the change in redeemable noncontrolling interests during the fiscal year ended March 31, 2017:

Balance as of March 31, 2016	\$	5,997
Net losses attributable to redeemable noncontrolling interests		(2,021)
Deconsolidation of joint venture		(4,035)
Foreign currency translation adjustment		59
Balance as of March 31, 2017	<u>\$</u>	<u>—</u>

16. Stock-Based Compensation

As of March 31, 2019, the Company maintains the 2017 Equity Incentive Plan ("2017 EIP"). The 2017 EIP reserved 4,173,554 shares of common stock for the grant of various classes of nonqualified stock options, restricted stock units, market and performance condition-based share units and other forms of equity-based compensation. Shares subject to any awards that expire without being exercised or that are forfeited or settled in cash shall again be available for future grants of awards under

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the 2017 EIP. Shares subject to stock option or stock appreciation right awards, that have been retained by the Company in payment or satisfaction of the exercise price and any applicable tax withholding obligation of such awards, shall not be available for future grant under the 2017 EIP.

As of March 31, 2019, 3,750,392 shares are available for future grants. The Company's management equity incentive plans are intended to provide an incentive to employees and non-employee directors of the Company to remain in the service of the Company and to increase their interest in the success of the Company in order to promote the long-term interests of the Company. The plans seek to promote the highest level of performance by providing an economic interest in the long-term performance of the Company. The Company settles employee share-based compensation awards with newly issued shares.

Stock Options

During fiscal 2019, the Company granted to management and other key employees 192,700 non-qualified options that vest ratably over 3 years from the date of grant. Options expire 10 years from the date of grant.

The Company recognized stock-based compensation expense relating to stock options of \$3,251, with a related tax benefit of \$634 for fiscal 2019, stock-based compensation expense of \$2,741 with a related tax benefit of \$700 for fiscal 2018 and stock-based compensation of \$1,705 with a related tax benefit of \$457 for fiscal 2017.

For purposes of determining the fair value of stock options granted, the Company used a Black-Scholes Model with the following assumptions:

	2019	2018	2017
Risk-free interest rate	2.77%	2.08%	1.41%
Dividend yield	0.93%	0.84%	1.22%
Expected life (years)	6	6	6
Volatility	26.8%	29.2%	30.4%

The following table summarizes the Company's stock option activity in the years indicated:

	Number of Options	Weighted-Average Remaining Contract Term (Years)	Weighted-Average Exercise Price	Aggregate Intrinsic Value
Options outstanding as of March 31, 2016	210,297	8.5	\$ 67.54	\$ 218
Granted	242,068		57.60	—
Exercised	(263)		18.25	12
Expired	(434)		18.25	15
Options outstanding as of March 31, 2017	451,668	8.4	\$ 62.29	\$ 7,520
Granted	169,703		83.14	—
Exercised	(62,197)		63.44	1,132
Forfeited	(11,495)		70.22	75
Expired	(2,089)		18.25	137
Options outstanding as of March 31, 2018	545,590	8.4	\$ 68.65	\$ 2,679
Granted	192,700		75.17	—
Exercised	(171,630)		63.66	2,707
Forfeited	(11,754)		75.17	—
Options outstanding as of March 31, 2019	554,906	8.0	\$ 72.31	\$ 1,040
Options exercisable as of March 31, 2019	186,823	6.9	\$ 69.34	\$ 452
Options vested and expected to vest, as of March 31, 2019	545,299	8.0	\$ 72.24	\$ 1,038

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The following table summarizes information regarding stock options outstanding as of March 31, 2019:

Range of Exercise Prices	Number of Options	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price
\$55.00-\$60.00	137,599	7.1	\$ 57.60
\$65.01-\$70.00	73,368	5.8	\$ 68.82
\$75.01-\$83.14	343,939	8.8	\$ 78.95
	<u>554,906</u>	8.0	\$ 72.31

Restricted Stock Units, Market and Performance-condition based Awards

Non-employee directors

In fiscal 2019, the Company granted to non-employee directors 35,065 deferred restricted stock units at the fair value of \$46.30 per restricted stock unit at the date of grant. In fiscal 2018, such grants amounted to 33,408 restricted stock units at the fair value of \$46.24 per restricted stock unit at the date of grant and in fiscal 2017, such grants amounted to 25,708 restricted stock units at the fair value of \$69.97 per restricted stock unit at the date of grant. The awards vest immediately upon the date of grant and are settled in shares of common stock six months after termination of service as a director.

In fiscal 2019, the Company also granted to non-employee directors, 1,441 restricted stock units and in fiscal 2018 and 2017, granted 1,345 and 1,239 restricted stock units, respectively, at fair values of \$75.32, \$73.39 and \$65.88, for fiscal 2018, 2017 and 2016, respectively, under the deferred compensation plan.

Employees

In fiscal 2019, the Company granted to management and other key employees 204,599 restricted stock units that vest ratably over four years from the date of grant, at the fair value of \$75.17 per restricted stock unit, 45,883 performance condition-based share units (“PSU”) at the fair value of \$68.48 and 36,646 market condition-based share units (“TSR”) at the fair value of \$86.23 per unit at the date of grant. The PSUs and TSRs cliff vest three years from the date of grant.

In fiscal 2018, the Company granted to management and other key employees 161,229 restricted stock units that vest ratably over four years from the date of grant at the fair value of \$83.14 per restricted stock unit and 60,187 TSRs at a weighted average fair value of \$105.74 per unit at the date of grant that cliff vest three years from the date of grant.

In fiscal 2017, the Company granted to management and other key employees 237,358 restricted stock units that vest ratably over four years from the date of grant at a fair value of \$57.60 per restricted stock unit and 83,720 TSRs at a weighted average fair value of \$70.79 per unit at the date of grant that cliff vest three years from the date of grant.

For purposes of determining the fair value of the PSUs granted in fiscal 2019, the Company used the market price at the date of grant to which a discount for illiquidity was applied to reflect post vesting restrictions.

For purposes of determining the fair value of TSRs granted in fiscal 2019, fiscal 2018, and fiscal 2017, the Company used a Monte Carlo Simulation with the following assumptions:

	2019	2018	2017
Risk-free interest rate	2.66%	1.57%	0.94%
Dividend yield	—%	—%	—%
Expected life (years)	3	3	3
Volatility	26.41%	27.49%	31.74%

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A summary of the changes in restricted stock units, TSRs and PSUs awarded to employees and directors that were outstanding under the Company's equity compensation plans during fiscal 2019 is presented below:

	Restricted Stock Units (RSU)		Market condition-based Share Units (TSR)		Performance condition-based Share Units (PSU)	
	Number of RSU	Weighted-Average Grant Date Fair Value	Number of TSR	Weighted-Average Grant Date Fair Value	Number of PSU	Weighted-Average Grant Date
Non-vested awards as of March 31, 2018	633,751	\$ 56.60	349,941	\$ 70.22	—	\$ —
Granted	241,105	69.43	36,646	85.84	45,883	68.48
Stock dividend	6,087	56.81	3,131	72.60	320	68.48
Performance factor	—	—	143	75.48	—	—
Vested	(148,487)	68.55	(3,482)	59.94	—	—
Canceled	(10,809)	72.56	(33,795)	62.21	(3,677)	68.48
Non-vested awards as of March 31, 2019	721,647	\$ 57.72	352,584	\$ 72.83	42,526	\$ 68.48

The Company recognized stock-based compensation expense relating to restricted stock units, TSRs and PSUs of \$19,357, with a related tax benefit of \$3,085 for fiscal 2019, \$16,712, with a related tax benefit of \$3,325 for fiscal 2018 and \$17,480, with a related tax benefit of \$4,210 for fiscal 2017.

All Award Plans

As of March 31, 2019, unrecognized compensation expense associated with the non-vested equity awards outstanding was \$37,187 and is expected to be recognized over a weighted-average period of 20 months.

17. Earnings Per Share

The following table sets forth the reconciliation from basic to diluted weighted-average number of common shares outstanding and the calculations of net earnings per common share attributable to EnerSys stockholders.

	Fiscal year ended March 31,		
	2019	2018	2017
Net earnings attributable to EnerSys stockholders	\$ 160,239	\$ 119,594	\$ 160,214
Weighted-average number of common shares outstanding:			
Basic	42,335,023	42,612,036	43,389,333
Dilutive effect of:			
Common shares from exercise and lapse of equity awards, net of shares assumed reacquired	673,929	507,820	623,210
Diluted weighted-average number of common shares outstanding	43,008,952	43,119,856	44,012,543
Basic earnings per common share attributable to EnerSys stockholders	\$ 3.79	\$ 2.81	\$ 3.69
Diluted earnings per common share attributable to EnerSys stockholders	\$ 3.73	\$ 2.77	\$ 3.64
Anti-dilutive equity awards not included in diluted weighted-average common shares	355,728	59,482	1,295

18. Commitments, Contingencies and Litigation

Litigation and Other Legal Matters

In the ordinary course of business, the Company and its subsidiaries are routinely defendants in or parties to pending and threatened legal actions and proceedings, including actions brought on behalf of various classes of claimants. These actions and proceedings are generally based on alleged violations of environmental, anticompetition, employment, contract and other laws. In some of these actions and proceedings, claims for substantial monetary damages are asserted against the Company and its subsidiaries. In the ordinary course of business, the Company and its subsidiaries are also subject to regulatory and governmental examinations, information gathering requests, inquiries, investigations, and threatened legal actions and proceedings. In connection with formal and informal inquiries by federal, state, local and foreign agencies, the Company and its subsidiaries receive numerous requests, subpoenas and orders for documents, testimony and information in connection with various aspects of their activities.

European Competition Investigations

Certain of the Company's European subsidiaries had received subpoenas and requests for documents and, in some cases, interviews from, and have had on-site inspections conducted by the competition authorities of Belgium, Germany and the Netherlands relating to conduct and anticompetitive practices of certain industrial battery participants.

The Company settled the Belgian regulatory proceeding in February 2016 by acknowledging certain anticompetitive practices and conduct and agreeing to pay a fine of \$1,962, which was paid in March 2016. During fiscal 2019, the Company paid \$2,402 towards certain aspects of this matter, which are under appeal. As of March 31, 2019 and March 31, 2018, the Company had a reserve balance of \$0 and \$2,326, respectively.

In June 2017, the Company settled a portion of its previously disclosed proceeding involving the German competition authority relating to conduct involving the Company's motive power battery business and agreed to pay a fine of \$14,811, which was paid in July 2017. Also in June 2017, the German competition authority issued a fining decision related to the Company's reserve power battery business, which constitutes the remaining portion of the previously disclosed German proceeding. The Company had appealed this decision. In March 2019, the Company settled this matter by agreeing to pay \$7,258, which was paid in April 2019. As of March 31, 2019 and March 31, 2018, the Company had a reserve balance of \$7,258 and \$0, respectively.

In July 2017, the Company settled the Dutch regulatory proceeding and agreed to pay a fine of \$11,229, which was paid in August 2017.

As of March 31, 2019 and March 31, 2018, the Company had a total reserve balance of \$7,258 and \$2,326, respectively, in connection with these investigations and other related legal matters, included in accrued expenses on the Consolidated Balance Sheets. The foregoing estimate of losses is based upon currently available information for these proceedings. However, the precise scope, timing and time period at issue, as well as the final outcome of the investigations or customer claims, remain uncertain. Accordingly, the Company's estimate may change from time to time, and actual losses could vary.

EnerSys Sarl Litigation

One of the parties to a litigation related to a 1999 fire in a French hotel under construction involving the Company's French subsidiary, EnerSys Sarl, which was acquired by the Company in 2002, that was adverse to the Company, appealed the ruling by the Court of Appeal of Lyon on June 11, 2013, which ruled in the Company's favor, entitling the Company to a refund of the monies paid of €2,000, or \$2,756 to the French Supreme Court, which appeal was denied in January 2015. During the third quarter of fiscal 2019, the Company and the adverse party settled this final item with the Company receiving a refund, including interest, from the adverse party of €2,500, or \$2,843, for monies paid. The Company believes that it has no further liability with respect to this matter.

Environmental Issues

As a result of its operations, the Company is subject to various federal, state and local, as well as international environmental laws and regulations and is exposed to the costs and risks of registering, handling, processing, storing, transporting, and disposing of hazardous substances, especially lead and acid. The Company's operations are also subject to federal, state, local and international occupational safety and health regulations, including laws and regulations relating to exposure to lead in the workplace.

The Company is responsible for certain cleanup obligations at the former Yuasa battery facility in Sumter, South Carolina that predates its ownership of this facility. This manufacturing facility was closed in 2001 and the Company established a reserve for this facility which was \$1,081 and \$1,109 as of March 31, 2019 and 2018, respectively. Based on current information, the Company's management believes this reserve is adequate to satisfy the Company's environmental liabilities at this facility. This facility is separate from the Company's current metal fabrication facility in Sumter.

Collective Bargaining

At March 31, 2019, the Company had approximately 11,000 employees. Of these employees, approximately 27% were covered by collective bargaining agreements. Employees covered by collective bargaining agreements that expire in the next twelve months were approximately 10% of the total workforce. The average term of these agreements is 2 years, with the longest term being 3 years. The Company considers its employee relations to be good and did not experience any significant labor unrest or disruption of production during fiscal 2019.

Lead and Foreign Currency Forward Contracts

To stabilize its lead costs and reduce volatility from currency movements, the Company enters into contracts with financial institutions. The vast majority of such contracts are for a period not extending beyond one year. Please refer to Note 12 - Derivative Financial Instruments for more details.

Other

The Company has various purchase and capital commitments incidental to the ordinary conduct of business. In the aggregate, such commitments are not at prices in excess of current market.

19. Restructuring and Other Exit Charges

Restructuring Plans

During fiscal 2016, the Company announced restructurings to improve efficiencies primarily related to its motive power assembly and distribution center in Italy and its sales and administration organizations in EMEA. In addition, the Company announced a further restructuring related to its manufacturing operations in Europe. The program was completed during the third quarter of fiscal 2018. Total charges for this program were \$6,568, primarily for cash expenses of \$6,161 for employee severance payments of 130 employees and other charges of \$407. In fiscal 2016, 2017 and 2018, the Company recorded restructuring charges of \$5,232, \$1,251 and \$85, respectively. In fiscal 2016, 2017 and 2018 the Company incurred costs against the accrual of \$2,993, \$3,037 and \$499, respectively.

During fiscal 2016, the Company announced a restructuring related to improving the efficiency of its manufacturing operations in the Americas. The program, which was completed during the first quarter of fiscal 2017, consisted of closing its Cleveland, Ohio charger manufacturing facility and the transfer of charger production to other Americas manufacturing facilities. The total charges for all actions associated with this program amounted to \$2,379, primarily from cash charges for employee severance-related payments and other charges of \$1,043, along with a pension curtailment charge of \$313 and non-cash charges related to the accelerated depreciation of fixed assets of \$1,023. The program resulted in the reduction of 100 employees at its Cleveland facility. In fiscal 2016, the Company recorded restructuring charges of \$1,488 including a pension curtailment charge of \$313 and non-cash charges of \$305 and recorded an additional \$174 in cash charges and \$718 in non-cash charges during the first quarter of fiscal 2017. The Company incurred \$119 in costs against the accrual in fiscal 2016 and incurred an additional \$924 against the accrual during the first quarter of fiscal 2017.

During fiscal 2017, the Company announced restructuring programs to improve efficiencies primarily related to its motive power production in EMEA. This program was completed during fiscal 2019. The total charges for these actions were \$4,714, primarily from cash charges for employee severance-related payments and other charges. These actions resulted in the reduction of 45 employees. During fiscal 2017, the Company recorded restructuring charges of \$3,104 and an additional \$1,610 during fiscal 2018. The Company incurred \$749 in costs against the accrual in fiscal 2017 and an additional \$2,403 during fiscal 2018. During fiscal 2019, the Company incurred \$1,682 against the accrual.

During fiscal 2017, the Company announced restructurings primarily to complete the transfer of equipment and clean-up of its manufacturing facility located in Jiangdu, the People's Republic of China, which stopped production during the first quarter of fiscal 2016. This program was completed during the fourth quarter of fiscal 2018. The total cash charges for these actions amounted to \$991. During fiscal 2017, the Company recorded restructuring charges of \$779 and an additional \$212 during fiscal 2018. The Company incurred \$648 in costs against the accrual in fiscal 2017 and an additional \$341 during fiscal 2018.

During fiscal 2018, the Company announced restructuring programs to improve efficiencies primarily related to supply chain, manufacturing and general operations in EMEA. The Company estimates that the total charges for these actions will amount to approximately \$7,700, primarily from cash charges for employee severance-related payments and other charges. The Company estimates that these actions will result in the reduction of approximately 85 employees upon completion. During fiscal 2018, the Company recorded non-cash restructuring charges of \$69 and cash charges of \$2,260 and incurred \$1,350 in costs against the accrual. During fiscal 2019, the Company recorded restructuring charges of \$3,104 and incurred \$2,844 in costs against the accrual. As of March 31, 2019, the reserve balance associated with these actions is \$1,061. The Company expects to be committed to an additional \$2,200 in restructuring charges related to this action, which it expects to complete in fiscal 2020.

During the second quarter of fiscal 2018, the Company completed the sale of its Cleveland, Ohio facility and recorded a non-cash loss on the sale of the building of \$210 and other cash charges of \$75. The Cleveland facility ceased charger production in fiscal 2017.

During fiscal 2018, the Company announced a restructuring program to improve efficiencies of its general operations in the Americas. This program was completed during fiscal 2019. The total charges for these actions were \$960, from cash charges for employee severance-related payments to approximately 60 salaried employees. During fiscal 2018, the Company recorded restructuring charges of \$960 and incurred \$755 in costs against the accrual. During fiscal 2019, the Company incurred \$207 in costs against the accrual.

During fiscal 2019, the Company announced restructuring programs to improve efficiencies of its operations in EMEA. The Company estimates that the total charges for these actions will amount to approximately \$2,500, from charges primarily for employee severance-related payments to approximately 35 employees. During fiscal 2019, the Company recorded restructuring

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charges of \$347 and incurred \$83 in costs against the accrual. As of March 31, 2019, the reserve balance associated with these actions is \$262. The Company expects to complete this action in fiscal 2020.

During fiscal 2019, the Company announced restructuring programs to improve efficiencies of its operations in the Americas. The Company estimates that the total charges for these actions will amount to approximately \$4,600, from cash charges primarily for employee severance-related payments to approximately 100 employees and non-cash stock compensation charges. During fiscal 2019, the Company recorded cash restructuring charges of \$1,970, non-cash charges of \$2,095 and incurred \$1,480 in costs against the accrual. As of March 31, 2019, the reserve balance associated with these actions is \$490. The Company expects to complete these action in fiscal 2020.

During fiscal 2019, the Company announced restructuring programs to improve efficiencies of its operations in Asia and to convert its India operations from mainly reserve power production to motive power production. The Company estimates that the total charges for these actions will amount to approximately \$4,500, from cash charges for employee severance-related payments to approximately 150 employees, other charges and non-cash charges related to stock compensation and the write-off of fixed assets. During fiscal 2019, the Company recorded cash restructuring charges of \$2,772 and non-cash charges of \$771 and incurred \$1,683 in costs against the accrual. As of March 31, 2019, the reserve balance associated with these actions is \$1,139. The Company expects to complete these actions in fiscal 2020.

A roll-forward of the restructuring reserve is as follows:

	Employee Severance	Other	Total
Balance at March 31, 2016	\$ 2,964	\$ 25	\$ 2,989
Accrued	4,566	742	5,308
Costs incurred	(4,754)	(604)	(5,358)
Foreign currency impact and other	(108)	(19)	(127)
Balance at March 31, 2017	\$ 2,668	\$ 144	\$ 2,812
Accrued	4,757	445	5,202
Costs incurred	(4,849)	(574)	(5,423)
Foreign currency impact and other	317	1	318
Balance at March 31, 2018	\$ 2,893	\$ 16	\$ 2,909
Accrued	6,554	1,639	8,193
Costs incurred	(6,893)	(1,086)	(7,979)
Foreign currency impact and other	(198)	27	(171)
Balance at March 31, 2019	\$ 2,356	\$ 596	\$ 2,952

Other Exit Charges

During fiscal 2019, the Company committed to a plan to close its facility in Targovishte, Bulgaria, which produced diesel-electric submarine batteries. Management determined that the future demand for batteries of diesel-electric submarines was not sufficient given the number of competitors in the market. The Company estimates that the total charges for these actions will amount to approximately \$30,000. The Company recorded charges of \$17,652 included under restructuring and exit charges, comprising of \$2,694 relating to severance and \$14,958 of fixed asset write-offs. The Company also wrote off inventories of \$2,590, which was reported in cost of goods sold. The Company expects to complete this action in fiscal 2020.

During fiscal 2019, the Company recorded exit charges of \$4,930 relating to the disposition of GAZ Geräte- und Akkumulatorenwerk Zwickau GmbH, a wholly-owned German subsidiary and \$957 relating to dissolving a joint venture in Tunisia. These exit activities are a consequence of the Company's strategic decision to streamline its product portfolio and focus its efforts on new technologies.

During fiscal 2019, in an effort to improve profitability in Asia, the Company converted its India operations from mainly reserve power production to motive power production. As a result of the Company's exit from reserve power, the Company recorded a non-cash write off of reserve power inventories of \$526, which was reported in cost of goods sold and a \$660 non-cash write-off related to reserve power fixed assets in restructuring charges.

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During fiscal 2018, the Company wrote off \$3,457 of inventories, relating to the closing of its Cleveland, Ohio charger manufacturing facility, which was reported in cost of goods sold.

During fiscal 2018, the Company recorded exit charges of \$3,292 related to the South Africa joint venture, consisting of cash charges of \$2,575 primarily relating to severance and non-cash charges of \$717. Included in the non-cash charges were \$2,157 relating to the inventory adjustment which was reported in cost of goods sold, partially offset by a credit of \$1,099 relating to a change in estimate of contract losses and a \$341 gain on deconsolidation of the joint venture. Weakening of the general economic environment in South Africa, reflecting the limited growth in the mining industry, affected the joint venture's ability to compete effectively in the marketplace and consequently, the Company initiated an exit plan in consultation with its joint venture partner in the second quarter of fiscal 2018. The joint venture was under liquidation, which resulted in a loss of control and deconsolidation of the joint venture. The impact of the deconsolidation has been reflected in the Consolidated Statement of Income in fiscal 2018 and was deemed not material.

20. Warranty

The Company provides for estimated product warranty expenses when the related products are sold, with related liabilities included within accrued expenses and other liabilities. As warranty estimates are forecasts that are based on the best available information, primarily historical claims experience, claims costs may ultimately differ from amounts provided. An analysis of changes in the liability for product warranties is as follows:

	Fiscal year ended March 31,		
	2019	2018	2017
Balance at beginning of year	\$ 50,602	\$ 46,116	\$ 48,422
Current year provisions	23,679	21,706	17,852
Costs incurred	(25,053)	(18,820)	(15,945)
Warranty reserves of acquired business - Alpha	7,535	—	—
Foreign currency translation adjustment	(2,195)	1,600	(4,213)
Balance at end of year	<u>\$ 54,568</u>	<u>\$ 50,602</u>	<u>\$ 46,116</u>

21. Other (Income) Expense, Net

Other (income) expensing, net consists of the following:

	Fiscal year ended March 31,		
	2019	2018	2017
Foreign exchange transaction (gains) losses	\$ (3,044)	\$ 5,499	\$ (662)
Non-service components of pension expense	1,502	1,464	1,252
Other	928	556	1,631
Total	<u>\$ (614)</u>	<u>\$ 7,519</u>	<u>\$ 2,221</u>

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22. Business Segments

Summarized financial information related to the Company's reportable segments at March 31, 2019, 2018 and 2017 and for each of the fiscal years then ended is shown below.

	Fiscal year ended March 31,		
	2019	2018	2017
Net sales by segment to unaffiliated customers			
Americas	\$ 1,690,912	\$ 1,429,888	\$ 1,332,353
EMEA	860,563	849,420	763,013
Asia	256,542	302,583	271,783
Total net sales	<u>\$ 2,808,017</u>	<u>\$ 2,581,891</u>	<u>\$ 2,367,149</u>
Net sales by product line			
Reserve power	\$ 1,416,173	\$ 1,247,900	\$ 1,142,327
Motive power	1,391,844	1,333,991	1,224,822
Total net sales	<u>\$ 2,808,017</u>	<u>\$ 2,581,891</u>	<u>\$ 2,367,149</u>
Intersegment sales			
Americas	\$ 28,753	\$ 29,513	\$ 26,039
EMEA	123,274	133,164	93,150
Asia	34,531	23,375	22,584
Total intersegment sales ⁽¹⁾	<u>\$ 186,558</u>	<u>\$ 186,052</u>	<u>\$ 141,773</u>
Operating earnings by segment			
Americas	\$ 186,814	\$ 189,466	\$ 191,801
EMEA	71,963	77,671	77,376
Asia	3,213	12,647	14,994
Inventory step up to fair value relating to acquisition - Americas	(7,263)	—	—
Inventory adjustment relating to exit activities - Americas	—	(3,457)	—
Inventory adjustment relating to exit activities - EMEA	(2,590)	—	(2,157)
Inventory adjustment relating to exit activities - Asia	(526)	—	—
Restructuring charges - Americas	(4,066)	(1,246)	(892)
Restructuring and other exit charges - EMEA	(26,989)	(4,023)	(5,487)
Restructuring charges - Asia	(3,654)	(212)	(781)
Impairment of goodwill and indefinite-lived intangibles - Americas	—	—	(9,346)
Impairment of goodwill and indefinite-lived intangibles - EMEA	—	—	(4,670)
Legal proceedings charge, net - EMEA	(4,437)	—	(23,725)
Total operating earnings ⁽²⁾	<u>\$ 212,465</u>	<u>\$ 270,846</u>	<u>\$ 237,113</u>
Property, plant and equipment, net			
Americas	\$ 257,559	\$ 210,998	\$ 190,169
EMEA	94,932	118,263	100,042
Asia	56,948	60,999	58,338
Total	<u>\$ 409,439</u>	<u>\$ 390,260</u>	<u>\$ 348,549</u>
Capital Expenditures			
Americas	\$ 45,029	\$ 46,905	\$ 34,809
EMEA	18,972	18,392	13,733
Asia	6,371	4,535	1,530
Total	<u>\$ 70,372</u>	<u>\$ 69,832</u>	<u>\$ 50,072</u>
Depreciation and Amortization			
Americas	\$ 40,675	\$ 30,421	\$ 30,204
EMEA	15,128	16,198	15,693
Asia	7,545	7,698	8,048
Total	<u>\$ 63,348</u>	<u>\$ 54,317</u>	<u>\$ 53,945</u>

(1) Intersegment sales are presented on a cost-plus basis which takes into consideration the effect of transfer prices between legal entities.

(2) The Company does not allocate interest expense or other (income) expense, net, to the reportable segments.

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The Company markets its products and services in over 100 countries. Sales are attributed to countries based on the location of sales order approval and acceptance. Sales to customers in the United States were 48.5%, 49.2% and 50.0% for fiscal years ended March 31, 2019, 2018 and 2017, respectively. Property, plant and equipment, net, attributable to the United States as of March 31, 2019 and 2018, were \$202,985 and \$176,144, respectively. No single country, outside the United States, accounted for more than 10% of the consolidated net sales or net property, plant and equipment and, therefore, was deemed not material for separate disclosure.

23. Quarterly Financial Data (Unaudited)

The Company reports interim financial information for 13-week periods, except for the first quarter, which always begins on April 1, and the fourth quarter, which always ends on March 31. The four quarters in fiscal 2019 ended on July 1, 2018, September 30, 2018, December 30, 2018, and March 31, 2019, respectively. The four quarters in fiscal 2018 ended on July 2, 2017, October 1, 2017, December 31, 2017, and March 31, 2018, respectively.

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Fiscal Year
Fiscal year ended March 31, 2019					
Net sales	\$ 670,930	\$ 660,462	\$ 680,022	\$ 796,603	\$ 2,808,017
Gross profit	165,334	160,880	164,546	202,266	693,026
Operating earnings ⁽¹⁾⁽³⁾⁽⁵⁾	64,179	63,357	49,951	34,978	212,465
Net earnings ⁽⁶⁾	46,020	47,447	48,614	18,546	160,627
Net earnings attributable to EnerSys stockholders	45,860	47,424	48,417	18,538	160,239
Net earnings per common share attributable to EnerSys stockholders—basic	\$ 1.09	\$ 1.13	\$ 1.14	\$ 0.43	\$ 3.79
Net earnings per common share attributable to EnerSys stockholders—diluted	\$ 1.08	\$ 1.11	\$ 1.12	\$ 0.42	\$ 3.73
Fiscal year ended March 31, 2018					
Net sales	\$ 622,625	\$ 617,289	\$ 658,935	\$ 683,042	\$ 2,581,891
Gross profit	163,458	160,248	167,310	167,388	658,404
Operating earnings ⁽²⁾⁽⁴⁾	69,972	64,364	68,785	67,725	270,846
Net earnings (loss) ⁽⁷⁾	48,322	43,151	(25,779)	54,139	119,833
Net earnings (loss) attributable to EnerSys stockholders	48,201	43,222	(25,847)	54,018	119,594
Net earnings (loss) per common share attributable to EnerSys stockholders—basic	\$ 1.11	\$ 1.01	\$ (0.61)	\$ 1.29	\$ 2.81
Net earnings (loss) per common share attributable to EnerSys stockholders—diluted	\$ 1.09	\$ 1.00	\$ (0.61)	\$ 1.27	\$ 2.77

- (1) Included in Operating earnings were inventory adjustment relating to exit activities of \$526 and \$2,590 in the first and fourth quarter of fiscal 2019, respectively. Also included were inventory adjustments relating to Alpha acquisition of \$3,747 and \$3,516 in the third and fourth quarter of fiscal 2019, respectively.
- (2) Included in Operating earnings were inventory adjustment relating to exit activities of \$3,457 in the fourth quarter of fiscal 2018, respectively.
- (3) Included in Operating earnings were restructuring and other exit charges of \$1,739, \$1,121, \$5,392 and \$26,457 for the first, second, third and fourth quarters of fiscal 2019, respectively.
- (4) Included in Operating earnings were restructuring and other exit charges of \$833, \$1,776, \$1,808 and \$1,064 for the first, second, third and fourth quarters of fiscal 2018, respectively.
- (5) Included in Operating earnings were legal proceedings settlement income of \$2,843 in the third quarter and expense of \$7,280 in the fourth quarter of fiscal 2019.
- (6) Included in net earnings was a tax benefit of \$13,483 for the third quarter of fiscal 2019, on account of the Tax Act.
- (7) Included in net earnings (loss) was tax expense of \$77,347 and \$4,106 for the third and fourth quarters of fiscal 2018, respectively, on account of the Tax Act.

24. Subsequent Events

On May 16, 2019, the Company announced the payment of a quarterly cash dividend of \$0.175 per share of common stock to be paid on June 28, 2019, to stockholders of record as of June 14, 2019.

**EnerSys
Valuation and Qualifying Accounts
(In Thousands)**

Allowance for Doubtful Accounts

	Balance at Beginning of Period	Additions Charged to Expense	Write-Offs Net of Recoveries	Other ⁽¹⁾	Balance at End of Period
Allowance for doubtful accounts:					
Fiscal year ended March 31, 2017	\$ 11,393	\$ 1,794	\$ (173)	\$ (352)	\$ 12,662
Fiscal year ended March 31, 2018	12,662	822	(1,400)	559	12,643
Fiscal year ended March 31, 2019	12,643	1,385	(2,459)	(756)	10,813

Tax Valuation Allowance

	Balance at Beginning of Period	Additions Charged to Expense	Valuation Allowance Reversal	Business Combination Adjustments	Other ⁽¹⁾⁽²⁾⁽³⁾	Balance at End of Period
Deferred tax asset—valuation allowance:						
Fiscal year ended March 31, 2017	\$ 25,416	\$ 4,305	\$ (2,255)	\$ —	\$ (413)	\$ 27,053
Fiscal year ended March 31, 2018	27,053	4,853	(14,132)	—	(2,519)	15,255
Fiscal year ended March 31, 2019	15,255	2,978	(99)	1,157	(1,772)	17,519

- (1) Primarily the impact of currency changes.
(2) In fiscal 2019, “Other” included expiration of net operating losses for which a full valuation allowance was recorded.
(3) In fiscal 2018, “Other” also included an offset to adjustments to foreign net operating losses for which a full valuation allowance was recorded.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Disclosure Controls and Procedures. The Company's management, with the participation of the Company's Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this report. Based on such evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures are effective. The Company completed the Alpha acquisition on December 7, 2018 and have not yet included Alpha in the assessment of the effectiveness of the Company's internal control over financial reporting. Accordingly, pursuant to the SEC's general guidance that an assessment of a recently acquired business may be omitted from the scope of an assessment in the year of acquisition, the scope of the Company's assessment of the effectiveness of its disclosure controls and procedures does not include Alpha. The business acquired from Alpha accounted for 28.3% of total assets as of March 31, 2019 and 5.8% and (0.8%) of net sales and net earnings, respectively, for the year ended March 31, 2019.

(b) Internal Control Over Financial Reporting. There have not been any changes in the Company's internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fourth quarter of the fiscal year to which this report relates that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

The report called for by Item 308(a) of Regulation S-K is included herein as "Management Report on Internal Control Over Financial Reporting."

Management Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. With the participation of the Chief Executive Officer and Chief Financial Officer, our management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework and criteria established in *Internal Control—Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework).

Management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Alpha, which was acquired on December 7, 2018, and is included in the 2019 consolidated financial statements of the Company and accounted for 28.3% of total assets as of March 31, 2019 and 5.8% and (0.8%) of net sales and net earnings, respectively, for the year ended March 31, 2019.

Based on this evaluation, our management has concluded that our internal control over financial reporting was effective as of March 31, 2019.

The attestation report called for by Item 308(b) of Registration S-K is included herein as "Report of Independent Registered Public Accounting Firm," which appears in Item 8 in this Annual Report on Form 10-K.

/s/ David M. Shaffer

David M. Shaffer
Chief Executive Officer

/s/ Michael J. Schmidlein

Michael J. Schmidlein
Chief Financial Officer

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item is incorporated by reference from the sections entitled “Board of Directors,” “Executive Officers,” “Section 16(a) Beneficial Ownership Reporting Compliance,” “Corporate Governance—Independence of Directors,” “Corporate Governance—Process for Selection of Director Nominee Candidates,” “Audit Committee Report,” and “Certain Relationships and Related Transactions—Employment of Related Parties” of the Company’s definitive proxy statement for its 2019 Annual Meeting of Stockholders (the “Proxy Statement”) to be filed no later than 120 days after the fiscal year end.

We have adopted a Code of Business Conduct and Ethics that applies to all of our officers, directors and employees (including our Chief Executive Officer, Chief Financial Officer, and Corporate Controller) and have posted the Code on our website at www.enersys.com, and a copy is available in print to any stockholder who requires a copy. If we waive any provision of the Code applicable to any director, our Chief Executive Officer, Chief Financial Officer, and Corporate Controller, such waiver will be promptly disclosed to the Company’s stockholders through the Company’s website.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item is incorporated by reference from the sections entitled “Corporate Governance—Compensation Committee” and “Executive Compensation” of the Proxy Statement”) to be filed no later than 120 days after the fiscal year end.

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

The information required by this item is incorporated by reference from the section entitled “Security Ownership of Certain Beneficial Owners and Management” of the Proxy Statement to be filed no later than 120 days after the fiscal year end.

Plan Category	Equity Compensation Plan Information		
	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	2,065,138 ⁽¹⁾	\$ 72.24 ⁽²⁾	3,750,392
Equity compensation plans not approved by security holders	—	—	—
Total	2,065,138	\$ 72.24	3,750,392

(1) Assumes a 200% payout on market and performance condition-based awards.

(2) Awards of restricted stock units, market and performance condition-based awards and deferred stock units and stock units held in both the EnerSys Voluntary Deferred Compensation Plan for Non-Employee Directors and the EnerSys Voluntary Deferred Compensation Plan for Executives were not included in calculating the weighted-average exercise price as they will be settled in shares of common stock for no consideration.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item is incorporated by reference from the sections entitled “Corporate Governance,” and “Certain Relationships and Related Transactions” of the Proxy Statement to be filed no later than 120 days after the fiscal year end.

ITEM 14. *PRINCIPAL ACCOUNTING FEES AND SERVICES*

The information required by this item is incorporated by reference from the section entitled “Audit Committee Report” of the Proxy Statement to be filed no later than 120 days after the fiscal year end.

PART IV

ITEM 15. *EXHIBITS, FINANCIAL STATEMENT SCHEDULES*

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

(1) Consolidated Financial Statements

See Index to Consolidated Financial Statements.

(2) Financial Statement Schedule

The following consolidated financial statement schedule should be read in conjunction with the consolidated financial statements (see Item 8. “Financial Statements and Supplementary Data.”): Schedule II—Valuation and Qualifying Accounts.

All other schedules are omitted because they are not applicable or the required information is contained in the consolidated financial statements or notes thereto.

(b) The following documents are filed herewith as exhibits:

Exhibit Number	Description of Exhibit
2.1	Share Purchase Agreement, dated October 29, 2018, by and among EnerSys, AlphaTec Ltd., Alpha Innovations Ltd., Radiant Energy Systems Ltd. and Fortis Advisors LLC, as seller representative (incorporated by reference to Exhibit 2.1 to EnerSys’ Current Report on Form 8-K (File No. 00-32253) filed on October 29, 2018).
3.1	Fifth Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.2 to Amendment No. 3 to EnerSys’ Registration Statement on Form S-1 (File No. 001-32253) filed on February 6, 2013).
3.2	Third Amended and Restated Bylaws (incorporated by reference to Exhibits 3.1 to EnerSys’ Current Report on Form 8-K (File No. 001-32253) filed on August 3, 2016).
4.1	Indenture, dated as of April 23, 2015, among EnerSys, the Guarantors party thereto and MUFG Union Bank, N.A., as Trustee (incorporated by reference to Exhibit 4.1 to EnerSys’ Current Report on Form 8-K (File No. 00-32253) filed on April 23, 2015).
4.2	First Supplemental Indenture, dated as of April 23, 2015, among EnerSys, the Guarantors party thereto and MUFG Union Bank, N.A., as Trustee (incorporated by reference to Exhibit 4.2 to EnerSys’ Current Report on Form 8-K (File No. 00-32253) filed on April 23, 2015).
4.3	Form of 5.00% Senior Note due 2023 (incorporated by reference to Exhibit 4.3 to EnerSys’ Current Report on Form 8-K (File No. 00-32253) filed on April 23, 2015).
4.4	Description of Capital Stock (filed herewith).
10.1	Credit Agreement, dated as of August 4, 2017, among EnerSys, certain other borrowers and guarantors identified therein, Bank of America, N.A., as administrative agent, swing line lender and Letters of Credit issuer, and other lenders party thereto (incorporated herein by reference to Exhibit 10.4 of EnerSys’ Quarterly Report on Form 10-Q for the quarter ended July 2, 2017 (File No. 001-32253) filed with the SEC on August 9, 2017).
10.2	Stock Subscription Agreement, dated March 22, 2002, among EnerSys Holdings Inc., Morgan Stanley Dean Witter Capital Partners IV, L.P., Morgan Stanley Dean Witter Capital Investors IV, L.P., MSDW IV 892 Investors, L.P., Morgan Stanley Global Emerging Markets Private Investment Fund, L.P. and Morgan Stanley Global Emerging Markets Private Investors, L.P. (incorporated by reference to Exhibit 10.27 to Amendment No. 3 to EnerSys’ Registration Statement on Form S-1 (File No. 333-115553) filed on July 13, 2004).

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Exhibit Number	Description of Exhibit
10.3	<u>Employment Offer Letter, dated October 20, 2014, of EnerSys Delaware Inc. to David M. Shaffer (incorporated by reference to Exhibit 10.5 to EnerSys' Quarterly Report on Form 10-Q for the period ended September 28, 2014 (File No. 001-32253) filed on November 5, 2014).</u>
10.4	<u>EnerSys 2013 Management Incentive Plan (incorporated by reference to Appendix A to EnerSys' Definitive Proxy Statement on Schedule 14A (File No. 001-32253) filed on June 27, 2013).</u>
10.5	<u>Second Amended and Restated EnerSys 2010 Equity Incentive Plan (incorporated by reference to Appendix A to EnerSys' Definitive Proxy Statement on Schedule 14A (File No. 001-32253) filed on June 23, 2016).</u>
10.6	<u>EnerSys Voluntary Deferred Compensation Plan for Executives as amended August 5, 2010, and May 26, 2011 (incorporated by reference to Exhibit 10.23 to EnerSys' Annual Report on Form 10-K (File No. 001-32253) filed on May 31, 2011).</u>
10.7	<u>Form of Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.26 to Amendment No. 3 to EnerSys' Registration Statement on Form S-1 (File No. 333-115553) filed on July 13, 2004).</u>
10.8	<u>Form of Market Share Restricted Stock Unit Agreement – Employees (incorporated by reference to Exhibit 10.31 to EnerSys' Annual Report on Form 10-K (File No. 001-32253) filed on June 1, 2010).</u>
10.90	<u>Form of Deferred Stock Unit Agreement – Non-Employee Directors – 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.35 to EnerSys' Annual Report on Form 10-K (File No. 001-32253) filed on May 31, 2011).</u>
10.10	<u>Form of Severance Agreement, (incorporated by reference to Exhibit 10.37 to EnerSys' Annual Report on Form 10-K (File No. 001-32253) filed on May 28, 2013).</u>
10.11	<u>Form of Stock Option Agreement - Employees - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.32 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2014 (File No. 001-32253) filed on May 28, 2014).</u>
10.12	<u>Form of Stock Option Agreement - Senior Executives - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.33 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2014 (File No. 001-32253) filed on May 28, 2014).</u>
10.13	<u>Form of Market Share Unit Agreement - Employees - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.35 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2014 (File No. 001-32253) filed on May 28, 2014).</u>
10.14	<u>Form of Market Share Unit Agreement - Senior Executives - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.36 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2014 (File No. 001-32253) filed on May 28, 2014).</u>
10.15	<u>Form of Indemnification Agreement - Directors and Officers (incorporated by reference to Exhibit 10.37 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2016 (File No. 001-32253) filed on May 28, 2014).</u>
10.16	<u>Form of Indemnification Agreement - Directors and Officers (incorporated by reference to Exhibit 10.26 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2017 (File No. 001-32253) filed on May 30, 2017).</u>
10.17	<u>Form of Stock Option Agreement - Employees - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.42 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2015 (File No. 001-32253) filed on May 27, 2015).</u>
10.18	<u>Form of Stock Option Agreement - Executives - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.43 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2015 (File No. 001-32253) filed on May 27, 2015).</u>

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Exhibit Number	Description of Exhibit
10.19	<u>Form of Stock Option Agreement - Senior Executives - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.44 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2015 (File No. 001-32253) filed on May 27, 2015).</u>
10.20	<u>Form of Restricted Stock Unit Agreement - Employees - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.45 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2015 (File No. 001-32253) filed on May 27, 2015).</u>
10.21	<u>Form of Market Share Unit Agreement - Employees - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.46 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2015 (File No. 001-32253) filed on May 27, 2015).</u>
10.22	<u>Form of Market Share Unit Agreement - Executives - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.47 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2015 (File No. 001-32253) filed on May 27, 2015).</u>
10.23	<u>Form of Market Share Unit Agreement - Senior Executives - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.48 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2015 (File No. 001-32253) filed on May 27, 2015).</u>
10.24	<u>Form of Market Share Unit Agreement - Senior Executives - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to EnerSys' Quarterly Report on Form 10-Q for the period ended September 27, 2015 (File No. 001-32253) filed on November 2, 2015).</u>
10.25	<u>Form of Stock Option Agreement - Senior Executives - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.2 to EnerSys' Quarterly Report on Form 10-Q for the period ended September 27, 2015 (File No. 001-32253) filed on November 2, 2015).</u>
10.26	<u>Form of Stock Option Agreement - Employees - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.46 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2016 (File No. 001-32253) filed on May 31, 2016).</u>
10.27	<u>Form of Restricted Stock Unit Agreement - Employees - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.47 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2016 (File No. 001-32253) filed on May 31, 2016).</u>
10.28	<u>Form of Performance Share Unit Agreement - Employees - 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.48 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2016 (File No. 001-32253) filed on May 31, 2016).</u>
10.29	<u>Employment Agreement, dated December 21, 2015, between EH Europe GmbH and Holger P. Aschke (incorporated by reference to Exhibit 10.49 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2016 (File No. 001-32253) filed on May 31, 2016).</u>
10.3	<u>Employment Agreement, dated April 1, 2016, between EnerSys Reserve Power Pte Ltd. and Myles Jones (incorporated by reference to Exhibit 10.41 to EnerSys' Annual Report on Form 10-K for the year ended March 31, 2017 (File No. 001-32253) filed on May 30, 2017).</u>
10.31	<u>Form of letter agreement, dated June 7, 2017, between EnerSys and David M. Shaffer (incorporated herein by reference to Exhibit 10.1 of EnerSys' Current Report on Form 8-K (File No. 001-32253) filed with the SEC on June 12, 2017).</u>
10.32	<u>Form of letter agreement, dated June 7, 2017, between EnerSys and an executive officer (incorporated herein by reference to Exhibit 10.1 of EnerSys' Current Report on Form 8-K (File No. 001-32253) filed with the SEC on June 12, 2017).</u>
10.33	<u>Form of Deferred Stock Unit Agreement - Non-Employee Directors - 2017 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.5 of EnerSys' Quarterly Report on Form 10-Q for the quarter ended July 2, 2017 (File No. 001-32253) filed with the SEC on August 9, 2017).</u>

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Exhibit Number	Description of Exhibit
10.34	EnerSys 2017 Equity Incentive Plan (incorporated by reference to Appendix A to EnerSys' Definitive Proxy Statement on Schedule 14A (File No. 001-32253) filed on June 19, 2017).
21.1	Subsidiaries of the Registrant (filed herewith).
23.1	Consent of Ernst & Young LLP (filed herewith).
31.1	Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)/15d-14(a) Under the Securities Exchange Act of 1934 (filed herewith).
31.2	Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)/15d-14(a) Under the Securities Exchange Act of 1934 (filed herewith).
32.1	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (furnished herewith).
101.INS	XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Document
101.LAB	XBRL Taxonomy Extension Label Document
101.PRE	XBRL Taxonomy Extension Presentation Document

DESCRIPTION OF CAPITAL STOCK

The following information describes our capital stock and provisions of our certificate of incorporation, as amended, and bylaws, as amended. This description is only a summary. You should refer to our certificate of incorporation and bylaws, which have been filed with the Securities and Exchange Commission.

General Matters

Our authorized capital stock consists of 135,000,000 shares of common stock, par value \$0.01 per share, of which 42,856,811 shares were issued and outstanding as of May 24, 2019 and 1,000,000 shares of undesignated preferred stock, par value \$0.01 per share, none of which was outstanding as of May 24, 2019.

The following summary describes the material provisions of our capital stock. This summary is not meant to be a complete description of our capital stock and we urge you to read our certificate of incorporation and our bylaws, which are incorporated by reference into this prospectus.

Certain provisions of our certificate of incorporation and bylaws summarized below may be deemed to have an anti-takeover effect and may delay or prevent a tender offer or takeover attempt that a stockholder might consider in its best interest, including those attempts that might result in a premium over the market price for shares of common stock.

Common Stock

We have one class of common stock. All holders of shares of common stock are entitled to the same rights and privileges. Holders of shares of common stock are entitled to one vote per share on the election or removal of our directors and on all other matters to be voted on by our stockholders.

Holders of shares of common stock are not entitled to any preemptive or preferential rights to subscribe for additional shares of any class of our capital stock. The holders of shares of common stock are entitled to receive dividends, when, as and if declared by our board of directors, out of funds legally available therefor. Holders of shares of common stock are entitled to share ratably, upon dissolution or liquidation, in the assets available for distribution to holders of shares of common stock after the payment of all prior claims.

Preferred Stock

Our authorized capital stock includes 1,000,000 shares of undesignated preferred stock, none of which is issued or outstanding. Our board of directors is authorized, without further action by our stockholders, to provide for the issuance of such preferred stock in one or more series and to fix the dividend rate, conversion privileges, voting rights, redemption rights, redemption price or prices, liquidation preferences and qualifications, limitations and restrictions thereof with respect to each series. Holders of shares of preferred stock may be entitled to receive a preference payment in the event of any liquidation, dissolution or winding-up of our company before any payment is made to the holders of shares of our common stock. In some circumstances, the issuance of shares of preferred stock may render more difficult or tend to discourage a merger, tender offer or proxy contest, the assumption of control by a holder of a large block of our securities or the removal of incumbent management. Upon the affirmative vote of our board of directors, without stockholder approval, we may issue shares of preferred stock with voting and conversion rights that could adversely affect the holders of shares of our common stock. We have no current intention to issue any shares of preferred stock.

Section 203 of the Delaware General Corporation Law

Section 203 of the Delaware General Corporation Law may have the effect of delaying, deferring or preventing a change of control. In general, Section 203 of the Delaware General Corporation Law prohibits a publicly held

Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the date such stockholder became an “interested stockholder,” unless:

- prior to such date the board of directors approved either the “business combination” or the transaction that resulted in the stockholder becoming an “interested stockholder”;
- upon consummation of the transaction that resulted in the stockholder becoming an “interested stockholder,” the “interested stockholder” owned at least 85% of the voting stock outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding those shares owned by persons who are directors and also officers and certain other stockholders; or
- on or subsequent to such date the “business combination” is approved by the board of directors and authorized at an annual or special meeting of stockholders by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the “interested stockholder.”

A “business combination” includes certain mergers, stock or asset sales and other transactions resulting in a financial benefit to the “interested stockholder.” An “interested stockholder” is a person who, together with affiliates and associates, owns (or in the preceding three years, did own) 15% or more of the outstanding voting stock. The statute could prohibit or delay mergers or other takeover or change in control attempts and, accordingly, may discourage attempts to acquire us.

Limitation of Liability and Indemnification of Directors and Officers

We have included in our certificate of incorporation and bylaws provisions to:

- eliminate the personal liability of our directors for monetary damages resulting from breaches of their fiduciary duty, but such provision does not eliminate liability for breaches of the duty of loyalty, acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, violations under Section 174 of the Delaware General Corporation Law or for any transaction from which the director derived an improper personal benefit; and
- indemnify our directors and officers to the fullest extent permitted by the Delaware General Corporation Law, including circumstances in which indemnification is otherwise discretionary.

Acting pursuant to the provisions of our certificate of incorporation and bylaws and the provisions of Section 145 of the Delaware General Corporation Law, we have entered into agreements with each of our officers and directors to indemnify them to the fullest extent permitted by such provisions and such law. We also are authorized to carry directors’ and officers’ insurance providing indemnification for our directors, officers and certain employees for some liabilities. We believe that these indemnification provisions and insurance are useful to attract and retain qualified directors and executive officers.

The limitation of liability and indemnification provisions in our certificate of incorporation and bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. In addition, investments in our common stock may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors or officers pursuant to the provisions described above, or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Other Provisions of our Certificate of Incorporation and Bylaws

Classified Board of Directors.

Our certificate of incorporation provides for our board of directors to be divided into three classes of directors serving staggered three-year terms. Each class shall consist, as nearly as may be practicable, of one-third of the total number of directors constituting our entire board of directors. As a result, approximately one-third of our board of directors will be elected each year. When coupled with the provisions of our certificate of incorporation and bylaws authorizing only our board of directors to fill vacant directorships, a stockholder may be precluded from removing incumbent directors without cause and simultaneously gaining control of our board of directors by filling the vacancies created by such removal with its own nominees. This provision of our certificate of incorporation may not be amended or repealed by our stockholders except with the consent of the holders of at least two-thirds of our outstanding common stock.

Special Meeting of Stockholders.

Our certificate of incorporation provides that special meetings of our stockholders may be called only by our board of directors or our Chairman of the Board. This provision makes it more difficult for stockholders to take action opposed by our board of directors. This provision of our certificate of incorporation may not be amended or repealed by our stockholders except with the consent of the holders of at least two-thirds of our outstanding common stock.

No Stockholder Action by Written Consent.

Our certificate of incorporation provides that no action required or permitted to be taken at any annual or special meeting of our stockholders may be taken without a meeting, and the power of our stockholders to consent in writing, without a meeting, to the taking of any action is specifically denied. Such provision limits the ability of any stockholder to take action immediately and without prior notice to our board of directors. Such a limitation on a majority stockholder's ability to act might affect such person's or entity's decision to purchase our voting securities. This provision of our certificate of incorporation may not be amended or repealed by the stockholders except with the consent of the holders of at least two-thirds of our outstanding common stock.

Advance Notice Requirements for Stockholder Proposals and Director Nominations.

Our bylaws provide that stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual or special meeting of stockholders, must provide timely notice thereof in writing. To be timely, a stockholder's notice must be delivered to, or mailed and received at, our principal executive offices: in the case of an annual meeting that is called for a date that is within 30 days before or after the anniversary date of the immediately preceding annual meeting of stockholders, not less than 90 days nor more than 120 days prior to such anniversary date or, in the case of a special meeting called for the purpose of electing directors, not less than 90 days nor more than 120 days prior to such special meeting or not later than the close of business on the tenth day following the date on which public disclosure of the date of the meeting is made; and in the case of an annual meeting that is called for a date that is not within 30 days before or after the anniversary date of the immediately preceding annual meeting, not later than the close of business on the tenth day following the date on which public disclosure of the date of the meeting was made. Our bylaws also specify certain requirements for a stockholder's notice to be in proper written form. These provisions may preclude some stockholders from bringing matters before the stockholders at an annual or special meeting or from making nominations for directors at an annual or special meeting. You should refer to our bylaws for a complete description of these requirements. As set forth below, our bylaws may not be amended or repealed by our stockholders, except with the consent of holders of at least two-thirds of our outstanding common stock.

Majority Vote Requirement for Uncontested Director Elections.

The Corporate Governance and Nominating Committee has established informal procedures under which a director nominee must tender his or her contingent resignation to the Nominating and Corporate Governance Committee in advance of an annual meeting of stockholders. If the Director Nominee fails to receive a majority number of votes for re-election in an uncontested election at an annual meeting, the Nominating and Corporate Governance Committee will make a recommendation to the board of directors whether to accept or reject the resignation or whether other action shall be taken. The board of directors will act on the Committee's recommendation and publicly disclose its decision and the rationale behind it within 90 days from the date of the certification of the election results. The resignation becomes effective only if the director fails to receive a majority number of votes for re-election in an uncontested election at an annual meeting and the board of directors accepts the resignation.

Adjournment of Meetings of Stockholders.

Our bylaws provide that when a meeting of our stockholders is convened, the presiding officer, if directed by our board of directors, may adjourn the meeting if no quorum is present for the transaction of business or if our board of directors determines that adjournment is necessary or appropriate to enable the stockholders to consider fully information that our board of directors determines has not been made sufficiently or timely available to stockholders or to otherwise effectively exercise their voting rights. This provision will, under certain circumstances, make more difficult or delay actions by the stockholders opposed by our board of directors. The effect of such provision could be to delay the timing of a stockholders' meeting, including in cases where stockholders have brought proposals before the stockholders that are in opposition to those brought by our board of directors and therefore may provide our board of directors with additional flexibility in responding to such stockholder proposals. As set forth below, our bylaws may not be amended or repealed by our stockholders, except with the consent of holders of at least two-thirds of our outstanding common stock.

No Cumulative Voting.

The Delaware General Corporation Law provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our certificate of incorporation provides otherwise. Our certificate of incorporation does not provide for cumulative voting.

Authorized but Unissued Capital Stock.

Our certificate of incorporation authorizes our board of directors to issue one or more classes or series of preferred stock, and to determine, with respect to any such class or series of preferred stock, the voting powers (if any), designations, powers, preferences, rights and qualifications, limitations or restrictions of such preferred stock. We have no current intention to issue any shares of preferred stock.

The Delaware General Corporation Law does not require stockholder approval for any issuance of previously authorized shares of our capital stock. However, the listing requirements of the New York Stock Exchange, which will apply so long as our common stock is listed on the New York Stock Exchange, require, among other things, stockholder approval of certain related party transactions involving issuances of common stock, or securities convertible into or exercisable for common stock, if the issuance exceeds 1% of the number of shares of common stock outstanding or 1% of the voting power outstanding before the issuance. In addition, shareholder approval is required for certain issuances of common stock, or securities convertible into or exercisable for common stock, equal to or in excess of 20% of the voting power outstanding before such issuance or the number of shares of our common stock outstanding before the issuance of common stock or securities convertible into or exercisable for common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest

or otherwise, and thereby protect the continuity of our management and possibly deprive the stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Amendment of the Bylaws.

Our certificate of incorporation provides that our bylaws may not be amended or repealed by our stockholders except with the consent of holders of at least two-thirds of our outstanding common stock and grants our board of directors the authority to amend and repeal our bylaws without a stockholder vote in any manner not inconsistent with the laws of Delaware or our certificate of incorporation. This provision makes it more difficult for our stockholders to make changes to our bylaws that are opposed by our board of directors. This provision of our certificate of incorporation may not be amended or repealed by our stockholders except with the consent of holders of at least two-thirds of our outstanding common stock.

Transfer Agent and Registrar

Computershare is the transfer agent and registrar for our common stock.

**ENERSYS
Subsidiaries**

EnerSystem de Argentina S.A.	Argentina
EnerSys Australia Pty Ltd.	Australia
ICS Industries Pty Ltd.	Australia
ICS Sheet Metal Pty Ltd.	Australia
International Communication Shelters Australasia Pty Ltd.	Australia
Lancord Pty Ltd.	Australia
Lenmic Pty Ltd.	Australia
National Infrastructure Pty Ltd.	Australia
National Infrastructure Services Pty Ltd.	Australia
Powercom (NSW) Pty Ltd.	Australia
Alpha Technologies Pty. Ltd.	Australia
EnerSys GmbH	Austria
EnerSys SPRL	Belgium
EnerSystem do Brazil Ltda.	Brazil
EnerSys Participacoes Ltda.	Brazil
Industrial Battery Holding Ltda.	Brazil
Alpha Innovations Industria e Comercio de Produtos Eletronicos Ltda.	Brazil
EnerSys AD (99.8%) *	Bulgaria
EnerSys Canada Inc.	Canada
Alpha Technologies Ltd.	Canada
Argus Research Ltd.	Canada
Alpha Technical Services Ltd.	Canada
EnerSys Cayman Euro L.P.	Cayman Islands
EnerSys Cayman Holdings L.P.	Cayman Islands
EnerSys Cayman Inc.	Cayman Islands
EnerSys Cayman L.P.	Cayman Islands
YCI, Inc.	Cayman Islands
EnerSystem Chile Ltda.	Chile
EnerSys (Chaozhou) Huada Batteries Company Limited	China
EnerSys (China) Huada Batteries Company Limited	China
EnerSys (Chongqing) Huada Batteries Company Limited	China
EnerSys (Jiangsu) Huada Batteries Company Limited (94.7%) *	China
EnerSys (Yangzhou) Huada Batteries Co. Ltd.	China
Shenzhen Huada Power Supply Mechanical & Electrical Co. Ltd.	China
EnerSys, s.r.o.	Czech Republic
EnerSys A/S	Denmark
EnerSys Europe Oy	Finland
EnerSys SARL	France
Hawker GmbH	Germany
EnerSys AE	Greece

EnerSys Asia Limited	Hong Kong
Alpha Technologies Asia Ltd.	Hong Kong
Telecomponents & Supply (Hong Kong) Ltd.	Hong Kong
EnerSys Hungária Kft.	Hungary
EnerSys Battery Private Limited	India
EnerSys India Batteries Private Ltd.	India
Alpha Tech Energy Solutions India Private Limited	India
EnerSys S.r.l.	Italy
EnerSys Holdings (Luxembourg) Sarl	Luxembourg
EnerSys Luxembourg Finance Sarl	Luxembourg
DCPM Engineering Sdn Bhd	Malaysia
EnerSys Malaysia Sdn Bhd	Malaysia
MIB Energy Sdn Bhd	Malaysia
UTS Holdings Sdn Bhd	Malaysia
UTS Technology (JB) Sdn Bhd	Malaysia
UTS Technology (PG) Sdn Bhd	Malaysia
EnerSys de Mexico, S de R.L. de CV	Mexico
EnerSys de Mexico II, S de R.L. de CV	Mexico
Powersonic, S de R.L. de CV	Mexico
Yecoltd, S. de R.L. de CV	Mexico
Alpha Mexico Network Power S.A. de C.V.	Mexico
Riverfront Holding S. de R.L. de C.V.	Mexico
Alpha Innovations Mexico S. de R.L. de C.V.	Mexico
ENAS Industrial Batteries Morocco Sarl	Morocco
EnerSys AS	Norway
EnerSys sp. z o.o.	Poland
Powersafe Acumuladores Industrialis Unipessoal, Lda.	Portugal
EnerSys CJSC	Russia
Battery Power International Pte Ltd.	Singapore
EnerSys Reserve Power Pte. Ltd.	Singapore
IE EnerSys South East Asia Technologies Pte. Ltd.	Singapore
NaviSemi Energy Pte Ltd.	Singapore
EnerSys, s.r.o.	Slovak Republic
Acumuladores Industriales EnerSys SA	Spain
EnerSys AB	Sweden
Purcell Systems Intemational AB	Sweden
EH Batterien AG	Switzerland
EH Europe GmbH	Switzerland
EH Global Holdings GmbH	Switzerland
EnerSys BV	The Netherlands
Energys Akü Sanaya Dis Ticaret Limited Sirketi	Turkey
EnerSys LLC	Ukraine
ABSL Power Solutions Ltd.	United Kingdom
EnerSys Holdings UK Ltd.	United Kingdom
EnerSys Ltd.	United Kingdom
NaviSemi Inc.	California

ABSL Power Solutions Inc.	Delaware
EnerSys Advanced Systems Inc.	Delaware
EnerSys Capital Inc.	Delaware
EnerSys Delaware Inc.	Delaware
EnerSys Delaware LLC I	Delaware
EnerSys Delaware LLC II	Delaware
EnerSys Delaware LLC III	Delaware
EnerSys Delaware LLC IV	Delaware
EnerSys Delaware LLC V	Delaware
EnerSys Energy Products Inc.	Delaware
EnerSys European Holding Co.	Delaware
EnerSys Mexico Holdings LLC	Delaware
EnerSys Mexico Management LLC	Delaware
Esfenco, Inc.	Delaware
Hawker Powersource, Inc.	Delaware
Hawker Power Systems, Inc.	Delaware
Purcell Systems, Inc.	Delaware
Quallion LLC	Delaware
New Pacifico Realty, Inc.	Nevada
Alpha Technologies Services, Inc.	Nevada
Alpha Broadband Services Inc.	Nevada
Alpha Alternative Energy Inc.	Nevada
Cooperative Enterprises Inc.	Washington
Outback Power Technologies, Inc.	Washington

* *These entities are majority-owned by EnerSys with the remaining interests held by third parties.*

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-8 No. 333-226712) pertaining to the EnerSys 2018 Employee Stock Purchase Plan,
- (2) Registration Statement (Form S-8 No. 333-219838) pertaining to the EnerSys 2017 Equity Incentive Plan, and
- (3) Registration Statement (Form S-8 No. 333-168717) pertaining to the EnerSys 2010 Equity Incentive Plan;

of our reports dated May 29, 2019, with respect to the consolidated financial statements and schedule of EnerSys and the effectiveness of internal control over financial reporting of EnerSys included in this Annual Report (Form 10-K) of EnerSys for the year ended March 31, 2019.

/s/ Ernst & Young LLP

Philadelphia, Pennsylvania
May 29, 2019

**CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER
PURSUANT TO RULE 13a-14(a)/15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934**

I, David M. Shaffer, certify that:

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

ENERSYS

By /s/ David M. Shaffer

David M. Shaffer
Chief Executive Officer

Date: May 29, 2019

**CERTIFICATION OF THE CHIEF FINANCIAL OFFICER
PURSUANT TO RULE 13a-14(a)/15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934**

I, Michael J. Schmidtlein, certify that:

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

ENERSYS

By /s/ Michael J. Schmidtlein

Michael J. Schmidtlein
Chief Financial Officer

Date: May 29, 2019

**CERTIFICATION OF THE CHIEF EXECUTIVE OFFICER
AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18. U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of EnerSys on Form 10-K for the fiscal year ended March 31, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents, in all material respects, the financial condition and results of operations of EnerSys.

ENERSYS

By /s/ David M. Shaffer

David M. Shaffer
Chief Executive Officer

By /s/ Michael J. Schmidtlein

Michael J. Schmidtlein
Chief Financial Officer

Date: May 29, 2019