

# 2019 Annual Report



**Aehr Test Systems  
FOX-P Wafer Level Test & Burn-in Systems  
& WaferPak Full Wafer Contactor**



# FINANCIAL HIGHLIGHTS

(in thousands, except per share data)

For the years ended May 31,

	2019	2018	2017
Net sales	\$21,056	\$29,555	\$18,898
(Loss) income from operations	(5,000)	915	(4,929)
Net (loss) income attributable to common shareholders	(5,235)	528	(5,653)
Net (loss) income per share - diluted	(0.23)	0.02	(0.35)
Cash and cash equivalents	5,428	16,848	17,803
Working capital	14,522	18,308	21,494
Shareholders' equity	15,453	19,285	16,794

## PRODUCTS



The FOX-P platform can be used in a wide range of test and reliability screening (burn-in) applications for high reliability applications, such as automotive, mobile devices, networking, telecommunications, sensors, photonics and laser devices. The FOX™-XP Burn-in and Test System, introduced in July 2016, is designed for single-touchdown testing of up to 18 wafers at a time and for testing singulated die or small modules. The FOX-NP was introduced in January 2019 and is a low-cost entry-level system to provide a configuration and price point for companies to do initial production qualification and new product introduction, enabling an easier transition to the FOX-XP system for high volume production test. The FOX-CP was introduced in February 2019 and is a new low-cost single-wafer compact test and reliability verification solution for logic, memory and photonic devices where test times ranging from minutes to a few hours or where multiple touchdowns are required to test the entire wafer. It complements the capabilities of the FOX-XP and FOX-NP systems, which are optimal when the test time is measured in hours or days and the full wafer can be tested in a single touchdown.

The FOX-1P Full Wafer Parallel Test System, introduced in our fiscal year 2015, is designed for massively parallel testing in wafer sort. By utilizing Design for Testability (DFI) or Built-In Self-Test (BIST) all devices on a wafer are tested at one time, test costs can be decreased significantly due to the high throughput of the system, enabling the user to significantly reduce the capital investment required for high-volume production test.



Aehr Test's patented WaferPak Contactor and DiePak® Carriers connect electrical test resources from Aehr's FOX systems to the customer's wafer or singulated die/modules to be tested or burned-in. Both products contain micro-miniature probes to contact all the die/modules in a single insertion.

The ABTS™ Advanced Burn-In and Test System is Aehr Test's family of Test During Burn-In systems for packaged parts. It is being used for many applications in the mobility and automotive markets. It can be configured with up to 320 I/O channels and up to 72 Burn-in boards for testing and burning-in advanced logic devices. It offers an individual device temperature control option for higher-power applications such as applications processors.



This Annual Report contains certain "forward-looking" statements based on current expectations, forecasts and assumptions that involve risks and uncertainties. Forward-looking statements include statements relating to future market opportunities and conditions, industry growth and customer demand for Aehr Test's products. Actual results may differ materially from those stated or implied due to risks and uncertainties. See Aehr Test's recent 10-K report that is part of this Annual Report for a more detailed description of the risks facing our business. Aehr Test disclaims any obligation to update information contained in any forward-looking statement to reflect events or circumstances occurring after the date of this Annual Report.

Dear Shareholders, Customers, Partners, and Employees,

**Fiscal 2019 was a good year for our FOX-P™ family of products.** We successfully introduced two new test systems that expand our capabilities and addressable market and we already received orders from four customers for these new systems since their launch. We grew our customer base for our FOX-P solutions, and we expect to see significant growth in our consumables business as we increase our installed base of FOX-P systems. We finished the fiscal year with strong revenue and a return to profitability in the fourth quarter, and fully paid off our convertible note leaving us with a solid balance sheet with no long-term debt. We also made significant structural and staffing changes during the year to enhance our sales, R&D and manufacturing capabilities, and believe that we are well positioned to meet the expanding market opportunities for Aehr Test's products as we head into fiscal 2020.

**We introduced new test and reliability solutions.** During the fiscal year we expanded our test capabilities with the successful introduction the FOX-NP™ and FOX-CP™ solutions, the newest editions in our FOX-P family of semiconductor wafer and module test and burn-in systems. We believe these new test solutions will significantly expand the market and number of customers for our FOX-P products.

Our FOX-NP is a low-cost, small footprint, entry-level system providing a configuration and price point for initial product development, product qualification and production, enabling an easier transition to our FOX-XP™ system for high-volume production test. The FOX-NP system is affordable and low risk for smaller companies or new applications where the initial volumes are low. It also opens up new opportunities where customers use multiple FOX-NP systems to run multiple wafers, panels, modules or die in parallel at different temperature and burn-in conditions as part of their development and qualification process.

Our new FOX-CP is a low-cost single-wafer compact solution for wafer-level testing and reliability cycling for logic, memory and photonic devices. The FOX-CP is optimal for test times ranging from minutes to a few hours, or where multiple touchdowns are required to test the entire wafer. It complements the capabilities of our FOX-XP and FOX-NP systems, which are optimal when the test time is measured in hours or days and the full wafer can be tested in a single touchdown.

**We grew our customer base.** Following the introduction of the FOX-NP and FOX CP solutions, we received orders from four customers for these systems to perform 100% test and burn-in production on their devices. The first order for the FOX-NP was from a new customer that selected the FOX-NP and our proprietary DiePak™ Carriers as the first step in their commitment to utilize our FOX-P platform for qualification and production burn-in of their new family of integrated silicon photonics chips. This new customer will utilize the FOX-NP for initial product development, qualification and production, and then plans to transition to high volume production test and burn-in of 100% of their silicon photonics chips using our FOX-XP multi-wafer and singulated die/module test solution.

The second FOX-NP order was from an existing customer that ordered several systems to complement their existing fleet of FOX-XP systems to provide additional test and qualification capacity for a variety of silicon photonics devices. For this lead customer, having multiple FOX-NP systems enables them to run many wafers at many different process variations and burn-in conditions as part of their qualification process.

We received an initial order for our new FOX-CP from a major new customer who will utilize this system to perform 100% test and burn-in of devices in a very high-volume application for the enterprise and data center market, with a build out of this production ramp over the next several years. We began shipments of both the FOX-NP and FOX-CP to these three customers during the fourth quarter, and expect each of them to add additional FOX system capacity from Aehr during the coming fiscal year.

We also received another new customer order for our FOX-P platform from Skorprios Technologies, a vertically integrated silicon photonics company. Skorprios will use our high-power test and reliability verification solutions to perform 100% wafer level test and burn-in for infant mortality and aging of silicon photonics devices as part of a significant production ramp to meet demand for high speed optical transceivers.

**We see significant new market growth opportunities.** The rapid growth of integrated optical devices in mobile devices, telecommunications, high-performance servers and data centers, and automotive applications is driving substantially higher requirements for initial quality and long-term reliability, and they are increasing with every new product generation. We believe these new applications are driving an entirely new level of quality and reliability expectation for these systems and provide a significant long-term growth opportunity for Aehr. Our unique products enable our customers to test and burn-in their devices with 100% confidence in traceability, which is needed to address the reliability, safety, security and confidence for mission-critical applications. We believe that we are well positioned to capitalize on those long-term market trends.

We believe that the data storage market, as well as multiple devices related to the worldwide 5G build-out, are substantial new opportunities for our test and burn-in systems, where these end markets and customers require devices to have extremely high levels of quality and long-term reliability. We see significant new growth opportunities in test and reliability qualification for automotive modules, heterogeneous semiconductor packaged devices, and the emerging Silicon Carbide device markets. We also remain very optimistic about the silicon photonics and photonics sensors markets that generated significant revenue for Aehr in fiscal 2019, and we believe they will be significant growth drivers for Aehr for multiple years ahead.

**Our consumables business is expected to grow significantly.** We expect to increase our installed base of FOX systems substantially over the next few years. These new systems and their corresponding WaferPak™ contactors and DiePak carriers will not only add to our overall revenue, but will also further grow our consumables business as new customers continue to order contactors and carriers with each new device they design. The consumable business continues long after a system is installed, and our FOX-NP, FOX-CP and FOX-XP, along with our legacy FOX-1™ and FOX-15™ systems, all use our proprietary WaferPak contactors and/or DiePak carriers that provide this consumable revenue stream for the long-term. We expect our consumables business to grow with current and new customers both in absolute terms and as a percentage of revenue, and we believe we can reach a point in the next few years where our WaferPak contactors and DiePak carriers comprise over half of our annual revenue.

**We enhanced our sales, R&D and manufacturing capabilities to address new opportunities.** We have seen our business shift considerably toward wafer level, singulated die, and module test and burn-in, particularly in silicon photonics, 2D and 3D sensors, automotive applications and data centers that consider wafer level and singulated die reliability test to be critical to their production. With this shift in our business and customer opportunities for our FOX-P platform, we have focused more of our selling resources and processes and made substantial structural changes in key areas of our company this past year to address these opportunities and improve our efficiencies. These included substantial changes in our customer-facing sales and marketing teams and in our R&D and manufacturing infrastructure to better align these operations for future growth.

As we head into fiscal 2020, we remain very optimistic about the opportunity for significant growth in our systems and consumables business within our installed base of customers, as well as expanding into new customers with our full family of FOX-P solutions. We see large expanding market opportunities ahead and believe we are well positioned to capitalize on these opportunities and generate significant revenue growth in fiscal 2020 and for many years to come.

I continue to be grateful to our employees, customers, partners and shareholders for their support.



Gayn Erickson, President and CEO

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

**FORM 10-K**

*(Mark One)*

Annual report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the fiscal year ended May 31, 2019

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: 000-22893.

**AEHR TEST SYSTEMS**

(Exact name of registrant as specified in its charter)

**CALIFORNIA**

(State or other jurisdiction of  
incorporation or organization)

**94-2424084**

(IRS Employer Identification Number)

**400 KATO TERRACE, FREMONT, CA**

(Address of principal executive offices)

**94539**

(Zip Code)

Registrant's telephone number, including area code: **(510) 623-9400**

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	AEHR	The NASDAQ Capital Market

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the 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 Exchange Act).  
Yes  No

The aggregate market value of the registrant’s common stock, par value \$0.01 per share, held by non-affiliates of the registrant, based upon the closing price of \$1.88 on November 30, 2018, as reported on the NASDAQ Capital Market, was \$36,887,600. For purposes of this disclosure, shares of common stock held by persons who hold more than 5% of the outstanding shares of common stock (other than such persons of whom the Registrant became aware only through the filing of a Schedule 13G filed with the Securities and Exchange Commission) and shares held by officers and directors of the Registrant have been excluded because such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily conclusive for other purposes.

The number of shares of registrant’s common stock, par value \$0.01 per share, outstanding at July 31, 2019 was 22,720,686.

**AEHR TEST SYSTEMS**  
**FORM 10-K**  
**FISCAL YEAR ENDED MAY 31, 2019**

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This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Section 27A of the Securities Act of 1933, as amended (the Securities Act), and Section 21E of the Securities Exchange Act of 1934, as amended (the Exchange Act). All statements contained in this Annual Report on Form 10-K other than statements of historical fact, including statements regarding our future results of operations and financial position, our business strategy and plans, and our objectives for future operations, are forward-looking statements. The words “believe,” “may,” “will,” “estimate,” “continue,” “anticipate,” “plan,” “intend,” “expect,” “could,” “target,” “project,” “should,” “predict,” “potential,” “would,” “seek” and similar expressions and the negative of those expressions are intended to identify forward-looking statements. These forward-looking statements are subject to a number of risks, uncertainties and assumptions that are difficult to predict. Therefore, actual results may differ materially and adversely from those expressed in any forward-looking statements. These risks include but are not limited to those factors identified in “Risk Factors” beginning on page 10 of this Annual Report on Form 10-K, those factors that we may from time to time identify in our periodic filings with the Securities and Exchange Commission, as well as other factors beyond our control. We undertake no obligation to revise or update publicly any forward-looking statements for any reason. Unless the context requires otherwise, references in this Form 10-K to “Aehr Test,” the “Company,” “we,” “us” and “our” refer to Aehr Test Systems.

## PART I

### Item 1. Business

#### THE COMPANY

Aehr Test was incorporated in the state of California on May 25, 1977. We develop, manufacture and sell systems that are designed to reduce the cost of testing and to perform reliability screening and stress testing, burn-in or cycling, of homogeneous and heterogenous logic and memory integrated circuits (ICs), sensors and optical devices. These systems can be used to simultaneously perform parallel testing and burn-in of packaged ICs, singulated bare die or ICs still in wafer form. The expanding automotive, mobility, networking, and telecommunications markets require ICs that meet increased quality and reliability specifications. To meet these needs, IC manufacturers are increasing capacity and performing additional testing and burn-in of their products, creating opportunities for Aehr Test products in package and wafer-level testing. Leveraging its expertise as a long-time leading provider of burn-in equipment, and having installed over 2,500 systems worldwide, the Company has developed and introduced several innovative product families, including the ABTS™ and FOX™ systems, the WaferPak™ contactor and the DiePak® carrier. The latest ABTS family of packaged part burn-in and test systems can perform test during burn-in of complex devices, such as digital signal processors, microprocessors, microcontrollers, memory and systems-on-a-chip, and offers individual temperature control for high-power advanced logic devices. The FOX systems are full wafer contact parallel test and burn-in systems designed to make contact with all pads of a wafer simultaneously, thus enabling full wafer parallel test and burn-in. They are also used for parallel test and burn-in of singulated die or very small multi-IC modules. The WaferPak contactor includes a full-wafer probe card for use in testing wafers in FOX systems. The DiePak carrier is a reusable, temporary package that enables IC manufacturers to perform cost-effective test and burn-in of singulated bare die or very small multi-IC modules.

#### INDUSTRY BACKGROUND

Semiconductor manufacturing is a complex, multi-step process, and defects or weaknesses that may result in the failure of an IC may be introduced at any process step. Failures may occur immediately or at any time during the operating life of an IC, sometimes after several months of normal use. Semiconductor manufacturers rely on testing and reliability screening to identify and eliminate defects that occur during the manufacturing process.

Testing and reliability screening involve multiple steps. The first set of tests is typically performed by IC manufacturers before the processed semiconductor wafer is cut into individual die, in order to avoid the cost of packaging defective die into their packages. This “wafer probe” testing can be performed on one or many die at a time, including testing the entire wafer at once. Most leading-edge microprocessors, microcontrollers, digital signal processors, memory ICs, sensors and optical devices (such as vertical-cavity surface-emitting lasers, or VCSELs) then undergo an extensive reliability screening and stress testing procedure known as burn-in or cycling, depending on the application. This can either be done at the wafer level, before the die are packaged, or at the package level, after the die are packaged. The burn-in process screens for early failures by operating the IC at elevated voltages and temperatures, at up to 150 degrees Celsius (302 degrees Fahrenheit) or higher. Depending upon the application, the burn-in times can range anywhere from minutes and hours to days. A typical burn-in system can process thousands of ICs simultaneously. After burn-in, the ICs undergo a final test process using automatic test equipment, or testers. For example, this cycling process screens flash memory devices for failure to meet write/erase cycling endurance requirements.



## PRODUCTS

The Company manufactures and markets full wafer contact test systems, test during burn-in systems, test fixtures and related accessories.

All of the Company's systems are platform-based systems with a portfolio of current, voltage, digital and thermal capabilities, allowing them to be configured with optional features to meet customer requirements. Systems can be configured for use in production applications, where capacity, throughput and price are most important, or for reliability engineering and quality assurance applications, where performance and flexibility, such as extended temperature ranges, are essential.

### *FULL WAFER CONTACT SYSTEMS*

The FOX-XP test and burn-in system, introduced in July 2016, is designed for devices in wafer, singulated die, and module form that require test and burn-in times typically measured in hours to days. The FOX-XP system can test and burn-in up to 18 wafers at a time. For high reliability applications, such as automotive, mobile devices, networking, telecommunications, sensors, and solid-state devices, the FOX-XP system is a cost-effective solution for producing tested and burned-in die for use in multi-chip packages. Using Known-Good Die, or KGD, which are fully burned-in and tested die, in multi-chip packages helps assure the reliability of the final product and lowers costs by increasing the yield of high-cost multi-chip packages. Wafer-level burn-in and test enables lower cost production of KGD for multi-chip modules, 3-D stacked packages and systems-in-a-package. The FOX-P platform has been extended for burn-in and test of small multi-die modules by using DiePak carriers. The DiePak carrier with its multi-module sockets and high wattage dissipation capabilities has a capacity of hundreds of die or modules, much higher than the capacity of a traditional burn-in system with traditional single-device sockets and heat sinks. This capability was introduced in March 2017.

The FOX-NP was introduced in January 2019 and is a low-cost entry-level system to provide a configuration and price point for companies to do initial production qualification and new product introduction, enabling an easier transition to the FOX-XP system for high volume production test. The FOX-NP system is 100% compatible with the FOX-XP system and is configurable with up to two slot assemblies per system compared to up to 18 slot assemblies in the FOX-XP system.

The FOX-CP was introduced in February 2019 and is a new low-cost single-wafer compact test and reliability verification solution for logic, memory and photonic devices. The FOX-CP reduces test cost by functionally testing wafers during reliability screening to identify failing logic, memory or photonic die before the die are integrated into their final package, and is optimal for test times ranging from minutes to a few hours or where multiple touchdowns are required to test the entire wafer. The FOX-CP includes an integrated prober which is equipped with optics for automatic pattern recognition so that the wafer is aligned properly for the testing process. It complements the capabilities of the FOX-XP and FOX-NP systems, which are optimal when the test time is measured in hours or days and the full wafer can be tested in a single touchdown.

The FOX-1P full wafer parallel test system, introduced in October 2014, is designed for massively parallel test of devices at wafer level. The FOX-1P system is designed to make electrical contact to and test all of the die on a wafer in a single touchdown. The FOX-1P test head and WaferPak contactor are compatible with industry-standard 300 mm wafer probers, which provide the wafer handling and alignment automation for the FOX-1P system. The FOX-1P pattern generator is designed to functionally test industry-standard memory devices such as flash and DRAMs, plus it is optimized to test memory or logic ICs that incorporate design for testability, or DFT, and built-in self-test, or BIST. The FOX-1P universal per-pin architecture is designed to provide per-pin electronics and per-device power supplies and is tailored to full-wafer functional test. The Company believes that the FOX-1P system can significantly reduce the cost of testing IC wafers. The Company's FOX-1P system was partially funded through a development agreement with a leading semiconductor manufacturer. The Company received the first production order of this new system and shipped the first system in July 2016.

The FOX-15 full wafer parallel test system, the predecessor to the FOX-XP system, was introduced in October 2007 and was designed for full-wafer test and burn-in. The FOX-15 system is nearing the end of its lifecycle and limited shipments are expected in the future.

One of the key components of the FOX systems is the patented WaferPak contactor system. The WaferPak contactor contains a full-wafer single-touchdown probe card which is easily removable from the system. Traditional probe cards contact only a portion of the wafer, requiring multiple touchdowns to test the entire wafer. The unique design is intended to accommodate a wide range of contactor technologies so that the contactor technology can evolve along with the changing requirements of the customer's wafers. The WaferPak contactors are custom designed for each

device type, each of which has a typical lifetime of 2 to 7 years, depending on the device life cycle. Therefore, multiple sets of WaferPak contactors could be purchased over the life of a FOX system.

A key new component of the FOX-XP and FOX-NP systems is the patented DiePak carrier system. The DiePak carrier contains many multi-module or die sockets with very fine-pitch probes which are easily removable from the system. Traditional sockets contact only a single device, requiring multiple large numbers of sockets and burn-in boards to test a production lot of devices. The unique design accommodates a wide range of socket sizes and densities so that the DiePak carrier technology can evolve along with the changing requirements of the customer's devices. The DiePak carriers are custom designed for each device type, each of which has a typical lifetime of 2 to 7 years, depending on the device life cycle. Therefore, multiple sets of DiePak carriers could be purchased over the life of a FOX-XP or FOX-NP system.

Another key component of our FOX-XP, FOX-NP and FOX-15 test cell is the WaferPak Aligner. The WaferPak Aligner performs alignment of the customer's wafer to the WaferPak contactor so that the wafer can be tested and burned-in by the FOX-XP, FOX-NP and FOX-15 systems. The Company offers an automated aligner for high volume production applications, which can support several FOX-XP, FOX-NP or FOX-15 systems, and a manual aligner for low volume production or engineering applications.

Similar to the WaferPak Aligner for WaferPak contactors, the Company offers the DiePak Loader for DiePak carriers. The DiePak Loader performs automatic loading of the customer's modules to the DiePak carrier so that the modules can be tested and burned-in by the FOX-XP and FOX-NP system. Typically, one DiePak Loader can support several FOX-XP or FOX-NP systems.

Net sales of full wafer contact systems for fiscal 2019, 2018 and 2017 were \$14.6 million, \$13.1 million, and \$9.6 million, respectively, and accounted for approximately 69%, 44% and 51% of the Company's net sales in fiscal 2019, 2018 and 2017, respectively.

#### *SYSTEMS FOR PACKAGED PARTS*

Test during burn-in, or TDBI, systems consist of several subsystems: pattern generation and test electronics, control software, network interface and environmental chamber. The test pattern generator allows duplication of most of the functional tests performed by a traditional tester. Pin electronics at each burn-in board, or BIB, position are designed to provide accurate signals to the ICs being tested and detect whether a device is failing the test.

Devices being tested are placed on BIBs and loaded into environmental chambers which typically operate at temperatures from 25 degrees Celsius (77 degrees Fahrenheit) up to 150 degrees Celsius (302 degrees Fahrenheit). Using our optional chambers, our systems can produce temperatures as low as -55 degrees Celsius (-67 degrees Fahrenheit). A single BIB can hold up to several hundred ICs, and a production chamber holds up to 72 BIBs, resulting in thousands of memory or logic devices being tested in a single system.

The Advanced Burn-in and Test System, or ABTS, was introduced in fiscal 2008. Several updates to the ABTS system have been made since its introduction, including the ABTS-P system released in 2012. The ABTS family of products is based on a hardware and software architecture that is intended to address not only today's devices, but also future devices for many years to come. The ABTS system can test and burn-in both high-power logic and low-power ICs. It can be configured to provide individual device temperature control for devices up to 70W or more and with up to 320 I/O channels.

Net sales of packaged part systems for fiscal 2019, 2018 and 2017 were \$6.4 million, \$16.5 million, and \$9.2 million, respectively, and accounted for approximately 31%, 56% and 49% of the Company's net sales in fiscal 2019, 2018 and 2017, respectively.

#### *TEST FIXTURES*

The Company sells, and licenses others to manufacture and sell, custom-designed test fixtures for its systems. The test fixtures include BIBs for its packaged part burn-in systems. These test fixtures hold the devices undergoing test or burn-in and electrically connect the devices under test to the system electronics. The capacity of each test fixture depends on the type of device being tested or burned-in, ranging from several hundred in memory production to as few as eight for high pin-count complex Application Specific Integrated Circuits, or ASICs, or microprocessor devices. Test fixtures are sold both with new Aehr Test systems and for use with the Company's installed base of systems. Test fixtures are also available from third-party suppliers.

The Company has received patents or applied for patents on certain features of the FOX and ABTS test fixtures. The Company has licensed or authorized several other companies to provide BIBs from which the Company receives

royalties. Royalties and revenue for the test fixtures product category accounted for less than 1% of net sales in fiscal 2019, 2018 and 2017.

## CUSTOMERS

The Company markets and sells its products throughout the world to semiconductor manufacturers, semiconductor contract assemblers, electronics manufacturers and burn-in and test service companies.

Sales to the Company's five largest customers accounted for approximately 80%, 86%, and 93% of its net sales in fiscal 2019, 2018 and 2017, respectively. During fiscal 2019, Intel Corporation, or Intel, Texas Instruments Incorporated, or Texas Instruments, Cypress Semiconductor Corporation, or Cypress Semiconductor, and STMicroelectronics, Inc., or STMicroelectronics, accounted for approximately 36%, 14%, 12% and 10%, respectively, of the Company's net sales. During fiscal 2018, Texas Instruments, STMicroelectronics, and Astronics Test Systems, Inc., or Astronics Test Systems, accounted for approximately 34%, 26% and 13%, respectively, of the Company's net sales. During fiscal 2017, Texas Instruments, STMicroelectronics, Intel and Cypress Semiconductor accounted for approximately 45%, 19%, 17% and 10%, respectively, of the Company's net sales. No other customers accounted for more than 10% of the Company's net sales for any of these periods. The Company expects that sales of its products to a limited number of customers will continue to account for a high percentage of net sales for the foreseeable future. In addition, sales to particular customers may fluctuate significantly from quarter to quarter. Such fluctuations may result in changes in utilization of the Company's facilities and resources. The loss of or reduction or delay in orders from a significant customer or a delay in collecting or failure to collect accounts receivable from a significant customer could materially and adversely affect the Company's business, financial condition and operating results.

## MARKETING, SALES AND CUSTOMER SUPPORT

The Company has sales and service operations in the United States, Japan, Germany and Taiwan, dedicated service resources in China, South Korea, and the Philippines, and has established a network of distributors and sales representatives in certain key parts of the world. See "REVENUE RECOGNITION" in Item 7 under "Management's Discussion and Analysis of Financial Condition and Results of Operations" for a further discussion of the Company's relationship with distributors, and its effects on revenue recognition.

The Company's customer service and support program includes system installation, system repair, applications engineering support, spare parts inventories, customer training and documentation. The Company has applications engineering and field service personnel located near and sometimes co-located at our customers and includes resources at the corporate headquarters in Fremont, California, at customer locations in Texas, at the Company's subsidiaries in Japan and Germany, at its branch office in Taiwan, and also through 3<sup>rd</sup> party agreements in China, South Korea, and the Philippines. The Company's distributors provide applications and field service support in other parts of the world. The Company customarily provides a warranty on its products. The Company offers service contracts on its systems directly and through its subsidiaries, distributors and representatives. The Company believes that maintaining a close relationship with customers and providing them with ongoing engineering support improves customer satisfaction and will provide the Company with a competitive advantage in selling its products to the Company's customers.

## BACKLOG

At May 31, 2019, the Company's backlog was \$7.5 million compared with \$8.4 million at May 31, 2018. The Company's backlog consists of product orders for which confirmed purchase orders have been received and which are scheduled for shipment within 12 months. Due to the possibility of customer changes in delivery schedules or cancellations and potential delays in product shipments or development projects, the Company's backlog as of a particular date may not be indicative of net sales for any succeeding period.

## RESEARCH AND PRODUCT DEVELOPMENT

The Company historically has devoted a significant portion of its financial resources to research and development programs and expects to continue to allocate significant resources to these efforts. Certain research and development expenditures related to non-recurring engineering milestones have been transferred to cost of goods sold, reducing research and development expenses. The Company's research and development expenses during fiscal 2019, 2018 and 2017 were \$4.2 million, \$4.2 million and \$4.7 million, respectively.

The Company conducts ongoing research and development to design new products and to support and enhance existing product lines. Building upon the expertise gained in the development of its existing products, the Company has developed the FOX family of systems for performing test and burn-in of entire processed wafers, and burn-in of devices in singulated die and module form, including the FOX-NP and FOX-CP systems released during fiscal 2019. The Company is developing enhancements to the ABTS and FOX families of products, intended to improve the capability

and performance for testing and burn-in of future generation devices and provide the flexibility in a wide variety of applications.

## MANUFACTURING

The Company assembles its products from components and parts manufactured by others, including environmental chambers, power supplies, metal fabrications, printed circuit assemblies, ICs, burn-in sockets, high-density interconnects, wafer contactors and interconnect substrates. Final assembly and testing are performed within the Company's facilities. The Company's strategy is to use in-house manufacturing only when necessary to protect a proprietary process or when a significant improvement in quality, cost or lead time can be achieved and relies on subcontractors to manufacture many of the components and subassemblies used in its products. The Company's principal manufacturing facility is located in Fremont, California. The Company's facility in Utting, Germany provides limited manufacturing and product customization.

## COMPETITION

The semiconductor equipment industry is intensely competitive. Significant competitive factors in the semiconductor equipment market include price, technical capabilities, quality, flexibility, automation, cost of ownership, reliability, throughput, product availability and customer service. In each of the markets it serves, the Company faces competition from established competitors and potential new entrants, many of which have greater financial, engineering, manufacturing and marketing resources than the Company.

The Company's FOX full wafer contact systems face competition from larger systems manufacturers that have significant technological know-how and manufacturing capability. Competing suppliers of full wafer contact systems include Advantest Corporation, Chroma ATE Inc., Teradyne Inc., Micronics Japan Co., Ltd., and Tokyo Electron Limited.

The Company's ABTS TDBI systems face increasingly severe competition, especially from several regional, low-cost manufacturers and from systems manufacturers that offer higher power dissipation per device under test. Some users of such systems, such as independent test labs, build their own burn-in systems, while others, particularly large IC manufacturers in Asia, acquire burn-in systems from captive or affiliated suppliers. The market for burn-in systems is highly fragmented, with many domestic and international suppliers. Competing suppliers of burn-in and functional test systems that compete with ABTS systems include Dong-Il Corporation, Micro Control Company, Incal Technology and Advantest Corporation.

The Company's WaferPak products are facing and are expected to face increasing competition. Several companies have developed or are developing full-wafer and single-touchdown probe cards. As the full-wafer test market develops, the Company expects that other competitors will emerge. The primary competitive factors in this market are cost, performance, reliability and assured supply. Competing suppliers of full-wafer probe cards include FormFactor, Inc., Japan Electronic Materials Corporation and Micronics Japan Co., Ltd.

The Company's test fixture products face numerous regional competitors. There are limited barriers to entry into the BIB market, and as a result, many companies design and manufacture BIBs, including BIBs for use with the Company's packaged part systems. The Company has granted royalty-bearing licenses to several companies to make BIBs for use with the Company's packaged part systems and the Company may grant additional licenses as well. Sales of BIBs by licensees result in royalties to the Company.

The Company expects that its DiePak products for burning-in and testing multiple singulated die and small modules face significant competition. The Company believes that several companies have developed or are developing products which are intended to enable test and burn-in of multiple bare die, and small modules. The Company expects that other competitors will emerge. The Company expects that the primary competitive factors in this market will be cost, performance, reliability and assured supply. Suppliers with products that compete with our single die DiePak products include Chroma ATE Inc.

The Company expects its competitors to continue to improve the performance of their current products and to introduce new products with improved price and performance characteristics. New product introductions by the Company's competitors or by new market entrants could cause a decline in sales or loss of market acceptance of the Company's products. The Company has observed price competition in the systems market, particularly with respect to its less advanced products. Increased competitive pressure could also lead to intensified price-based competition, resulting in lower prices which could adversely affect the Company's operating margins and results. The Company believes that to remain competitive it must invest significant financial resources in new product development and expand its customer service and support worldwide. There can be no assurance that the Company will be able to compete successfully in the future.

## PROPRIETARY RIGHTS

The Company relies primarily on the technical and creative ability of its personnel, its proprietary software, and trade secrets and copyright protection, rather than on patents, to maintain its competitive position. The Company's proprietary software is copyrighted and licensed to the Company's customers. At May 31, 2019, the Company held 53 issued United States patents with expiration date ranges from 2019 to 2038 and had several additional United States patent applications and foreign patent applications pending.

The Company's ability to compete successfully is dependent in part upon its ability to protect its proprietary technology and information. Although the Company attempts to protect its proprietary technology through patents, copyrights, trade secrets and other measures, there can be no assurance that these measures will be adequate or that competitors will not be able to develop similar technology independently. Further, there can be no assurance that claims allowed on any patent issued to the Company will be sufficiently broad to protect the Company's technology, that any patent will be issued to the Company from any pending application or that foreign intellectual property laws will protect the Company's intellectual property. Litigation may be necessary to enforce or determine the validity and scope of the Company's proprietary rights, and there can be no assurance that the Company's intellectual property rights, if challenged, will be upheld as valid. Any such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on the Company's business, financial condition and operating results, regardless of the outcome of the litigation. In addition, there can be no assurance that any of the patents issued to the Company will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide competitive advantages to the Company. Also, there can be no assurance that the Company will have the financial resources to defend its patents from infringement or claims of invalidity.

There are currently no pending claims against the Company regarding infringement of any patents or other intellectual property rights of others. However, the Company may, from time to time, receive communications from third parties asserting intellectual property claims against the Company. Such claims could include assertions that the Company's products infringe, or may infringe, the proprietary rights of third parties, requests for indemnification against such infringement or suggest the Company may be interested in acquiring a license from such third parties. There can be no assurance that any such claim made in the future will not result in litigation, which could involve significant expense to the Company, and, if the Company is required or deems it appropriate to obtain a license relating to one or more products or technologies, there can be no assurance that the Company would be able to do so on commercially reasonable terms, or at all.

## EMPLOYEES

As of May 31, 2019, the Company, including its two foreign subsidiaries and one branch office, employed 79 persons collectively, on a full-time basis, of whom 17 were engaged in research, development and related engineering, 26 were engaged in manufacturing, 23 were engaged in marketing, sales and customer support and 13 were engaged in general administration and finance functions. In addition, the Company from time to time employs a number of contractors and part-time employees, particularly to perform customer support and manufacturing. The Company's success is in part dependent on its ability to attract and retain highly skilled workers, who are in high demand. None of the Company's employees are represented by a union and the Company has never experienced a work stoppage. The Company's management considers its relations with its employees to be good.

## BUSINESS SEGMENT DATA AND GEOGRAPHIC AREAS

The Company operates in a single business segment, the designing, manufacturing and marketing of advanced test and burn-in products to the semiconductor manufacturing industry in several geographic areas. Selected financial information, including net sales and property and equipment, net for each of the last three fiscal years, by geographic area is included in Part II, Item 8, Note 2 "REVENUE" and Note 14 "SEGMENT INFORMATION" and certain risks related to such operations are discussed in Part I, Item 1A, under the heading "We sell our products and services worldwide, and our business is subject to risks inherent in conducting business activities in geographic regions outside of the United States."

## AVAILABLE INFORMATION

The Company's common stock trades on the NASDAQ Capital Market under the symbol "AEHR." The Company's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to these reports that are filed with the United States Securities and Exchange Commission, or SEC, pursuant to Section 13(a) or 15(d) of the Exchange Act, are available free of charge through the Company's website at [www.aehr.com](http://www.aehr.com) as soon as reasonably practicable after we electronically file them with, or furnish them to the SEC.

The public may read and copy any materials filed by the Company with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operations of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site, [www.sec.gov](http://www.sec.gov), that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC.

In addition, information regarding the Company's code of conduct and ethics and the charters of its Audit, Compensation and Nominating and Governance Committees, are available free of charge on the Company's website listed above.

#### **Item 1A. Risk Factors**

You should carefully consider the risks described below. These risks are not the only risks that we may face. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect us. If any of the following risks occur, our business, financial condition or results of operations could be materially and adversely affected which could cause our actual operating results to differ materially from those indicated or suggested by forward-looking statements made in this Annual Report on Form 10-K or presented elsewhere by management from time to time.

#### **We generate a large portion of our sales from a small number of customers. If we were to lose one or more of our large customers, operating results could suffer dramatically.**

The semiconductor manufacturing industry is highly concentrated, with a relatively small number of large semiconductor manufacturers and contract assemblers accounting for a substantial portion of the purchases of semiconductor equipment. Sales to our five largest customers accounted for approximately 80%, 86%, and 93% of our net sales in fiscal 2019, 2018 and 2017, respectively. During fiscal 2019, Intel, Texas Instruments, Cypress Semiconductor and STMicroelectronics, accounted for approximately 36%, 14%, 12% and 10%, respectively, of the Company's net sales. During fiscal 2018, Texas Instruments, STMicroelectronics, and Astronics Test Systems, accounted for approximately 34%, 26% and 13%, respectively, of the Company's net sales. During fiscal 2017, Texas Instruments, STMicroelectronics, Intel, and Cypress Semiconductor, accounted for approximately 45%, 19%, 17% and 10%, respectively, of the Company's net sales. No other customers accounted for more than 10% of our net sales for any of these periods.

We expect that sales of our products to a limited number of customers will continue to account for a high percentage of our net sales for the foreseeable future. In addition, sales to particular customers may fluctuate significantly from quarter to quarter. The loss of, or reduction or delay of, an order or orders from a significant customer or customers, or a delay in collecting or failure to collect accounts receivable from a significant customer or customers, could adversely affect our business, financial condition and operating results.

#### **The semiconductor equipment industry is intensely competitive. In each of the markets we serve, we face competition from established competitors and potential new entrants, many of which have greater financial, engineering, manufacturing and marketing resources than us.**

Our FOX wafer-level and singulated die/module test and burn in systems face competition from larger systems manufacturers that have significant technological know-how and manufacturing capability. Our ABTS TDBI systems have faced and are expected to continue to face increasingly severe competition, especially from several regional, low-cost manufacturers and from systems manufacturers that offer higher power dissipation per device under test. Some users of such systems, such as independent test labs, build their own burn-in systems, while others, particularly large IC manufacturers in Asia, acquire burn-in systems from captive or affiliated suppliers. Our WaferPak products are facing and are expected to face increasing competition. Several companies have developed or are developing full-wafer and single-touchdown probe cards.

We expect our competitors to continue to improve the performance of their current products and to introduce new products with improved price and performance characteristics. New product introductions by our competitors or by new market entrants could cause a decline in sales or loss of market acceptance of our products. We have observed price competition in the systems market, particularly with respect to its less advanced products. Increased competitive pressure could also lead to intensified price-based competition, resulting in lower prices which could adversely affect our operating margins and results. We believe that to remain competitive we must invest significant financial resources in new product development and expand our customer service and support worldwide. There can be no assurance that we will be able to compete successfully in the future.

**We rely on increasing market acceptance for our FOX system, and we may not be successful in attracting new customers or maintaining our existing customers.**

A principal element of our business strategy is to increase our presence in the test equipment market through system sales in our FOX wafer-level and singulated die/module test and burn-in product family. The market for the FOX systems is in the early stages of development. Market acceptance of the FOX system is subject to a number of risks. Before a customer will incorporate the FOX system into a production line, lengthy qualification and correlation tests must be performed. We anticipate that potential customers may be reluctant to change their procedures in order to transfer burn-in and test functions to the FOX system. Initial purchases are expected to be limited to systems used for these qualifications and for engineering studies. Market acceptance of the FOX system also may be affected by a reluctance of IC manufacturers to rely on relatively small suppliers such as us. As is common with new complex products incorporating leading-edge technologies, we may encounter reliability, design and manufacturing issues as we begin volume production and initial installations of FOX systems at customer sites. The failure of the FOX system to achieve increased market acceptance would have a material adverse effect on our future operating results, long-term prospects and our stock price.

**We rely on continued market acceptance of our ABTS system and our ability to complete certain enhancements.**

Continued market acceptance of the ABTS family is subject to a number of risks. It is important that we achieve customer acceptance, customer satisfaction and increased market acceptance as we add new features and enhancements to the ABTS product. To date, we have shipped ABTS systems to customers worldwide for use in both reliability and production applications. We have had a strengthening of ABTS product sales in fiscal 2018 and 2017. In fiscal 2019, our ABTS product sales decreased significantly from fiscal 2018, which adversely affected our operating results. The failure to grow revenues of the ABTS family above current levels could have a material adverse effect on our future operating results.

**A substantial portion of our net sales is generated by relatively small volume, high value transactions.**

We derive a substantial portion of our net sales from the sale of a relatively small number of systems which typically range in purchase price from approximately \$300,000 to well over \$1 million per system. As a result, the loss or deferral of a limited number of system sales could have a material adverse effect on our net sales and operating results in a particular period. Most customer purchase orders are subject to cancellation or rescheduling by the customer with limited penalties, and, therefore, backlog at any particular date is not necessarily indicative of actual sales for any succeeding period. From time to time, cancellations and rescheduling of customer orders have occurred, and delays by our suppliers in providing components or subassemblies to us have caused delays in our shipments of our own products. There can be no assurance that we will not be materially adversely affected by future cancellations or rescheduling by our customers or other delays in our shipments. For non-standard products where we have not effectively demonstrated the ability to meet specifications in the customer environment, we defer revenue until we have met such customer specifications. Any delay in meeting customer specifications could have a material adverse effect on our operating results. A substantial portion of net sales typically are realized near the end of each quarter. A delay or reduction in shipments near the end of a particular quarter, due, for example, to unanticipated shipment rescheduling, cancellations or deferrals by customers, customer credit issues, unexpected manufacturing difficulties experienced by us or delays in deliveries by suppliers, could cause net sales in a particular quarter to fall significantly.

**We may experience increased costs associated with new product introductions.**

As is common with new complex products incorporating leading-edge technologies, we have encountered reliability, design and manufacturing issues as we began volume production and initial installations of certain products at customer sites. Some of these issues in the past have been related to components and subsystems supplied to us by third parties who have in some cases limited the ability of us to address such issues promptly. This process in the past required and in the future is likely to require us to incur un-reimbursed engineering expenses and to experience larger than anticipated warranty claims which could result in product returns. In the early stages of product development there can be no assurance that we will discover any reliability, design and manufacturing issues or, that if such issues arise, that they can be resolved to the customers' satisfaction or that the resolution of such problems will not cause us to incur significant development costs or warranty expenses or to lose significant sales opportunities.

**We sell our products and services worldwide, and our business is subject to risks inherent in conducting business activities in geographic regions outside of the United States.**

Approximately 36%, 71%, and 59% of our net sales for fiscal 2019, 2018 and 2017, respectively, were attributable to sales to customers for delivery outside of the United States. We operate a direct sales, service and limited manufacturing organization in Germany and sales and service organizations in Japan and Taiwan as well as direct support through 3<sup>rd</sup>

party agreements in China, South Korea, and the Philippines. We expect that sales of products for delivery outside of the United States will continue to represent a substantial portion of our future net sales. Our future performance will depend, in significant part, upon our ability to continue to compete in foreign markets which in turn will depend, in part, upon a continuation of current trade relations between the United States and foreign countries in which semiconductor manufacturers or assemblers have operations. A change toward more protectionist trade legislation in either the United States or such foreign countries, such as a change in the current tariff structures, export compliance or other trade policies, could adversely affect our ability to sell our products in foreign markets. In addition, we are subject to other risks associated with doing business internationally, including longer receivable collection periods and greater difficulty in accounts receivable collection, the burden of complying with a variety of foreign laws, difficulty in staffing and managing global operations, risks of civil disturbance or other events which may limit or disrupt markets, international exchange restrictions, changing political conditions and monetary policies of foreign governments.

Approximately 100%, 0% and 0% of our net sales for fiscal 2019 were denominated in U.S. Dollars, Euros and Japanese Yen, respectively. Although the percentages of net sales denominated in Euros and Japanese Yen were immaterial in fiscal 2019, they have been larger in the past and could become significant again in the future. A large percentage of net sales to European customers are denominated in U.S. Dollars, but sales to many Japanese customers are denominated in Japanese Yen. Because a substantial portion of our net sales is from sales of products for delivery outside the United States, an increase in the value of the U.S. Dollar relative to foreign currencies would increase the cost of our products compared to products sold by local companies in such markets. In addition, since the price is determined at the time a purchase order is accepted, we are exposed to the risks of fluctuations in the U.S. Dollar exchange rate during the lengthy period from the date a purchase order is received until payment is made. This exchange rate risk is partially offset to the extent our foreign operations incur expenses in the local currency. To date, we have not invested in any instruments designed to hedge currency risks. Our operating results could be adversely affected by fluctuations in the value of the U.S. Dollar relative to other currencies.

**We purchase materials from suppliers worldwide, which subjects the Company to increased risk.**

We purchase components, sub-assemblies, and chambers from suppliers outside the United States. Increases in tariffs, additional taxes, or trade barriers may result in an increase in our manufacturing costs. A decrease in the value of the U.S. Dollar relative to foreign currencies would increase the cost of our materials. Should the Company increase its sales prices to recover the increase in costs, this could result in a decrease in the competitiveness of our products. In addition, we are subject to other risks associated with purchasing materials from suppliers worldwide. Government authorities may also implement protectionist policies or impose limitations on the transfer of intellectual property. This may limit our ability to obtain products from certain geographic regions and require us to identify and qualify new suppliers. The process of qualifying suppliers could be lengthy, and no assurance can be given that any additional sources would be available to us on a timely basis. Changes in trade relations, currency fluctuations, or protectionist policies could have a material adverse effect on our business, financial condition or results of operations.

**The Company is exposed to cybersecurity threats or incidents.**

We collect, maintain, and transmit data on information systems. These systems include those owned and maintained by the Company or by third parties. In addition, we use cloud-based enterprise resource planning, ERP, software to manage the business integrating all facets of operations, including manufacturing, finance, and sales and marketing. The data maintained on these systems includes confidential and proprietary information belonging to us, our customers, suppliers, and others. While the Company devotes significant resources to protect its systems and data from unauthorized access or misuse, we are exposed to cybersecurity risks. Our systems are subject to computer viruses, data breach, phishing schemes, and other malicious software programs or attacks. We have experienced cyber threats and incidents in the past. Although past threats and incidents have not resulted in a material adverse effect, cybersecurity incidents may result in business disruption, loss of data, or unauthorized access to intellectual property which could adversely affect our business.

**Our industry is subject to rapid technological change and our ability to remain competitive depends on our ability to introduce new products in a timely manner.**

The semiconductor equipment industry is subject to rapid technological change and new product introductions and enhancements. Our ability to remain competitive depends in part upon our ability to develop new products and to introduce them at competitive prices and on a timely and cost-effective basis. Our success in developing new and enhanced products depends upon a variety of factors, including product selection, timely and efficient completion of product design, timely and efficient implementation of manufacturing and assembly processes, product performance in the field and effective sales and marketing. Because new product development commitments must be made well in advance of sales, new product decisions must anticipate both future demand and the technology that will be available to supply that demand. Furthermore, introductions of new and complex products typically involve a period in which design, engineering and reliability issues are identified and addressed by our suppliers and by us. There can be no



assurance that we will be successful in selecting, developing, manufacturing and marketing new products that satisfy market demand. Any such failure would materially and adversely affect our business, financial condition and results of operations.

Because of the complexity of our products, significant delays can occur between a product's introduction and the commencement of the volume production of such product. We have experienced, from time to time, significant delays in the introduction of, and technical and manufacturing difficulties with, certain of our products and may experience delays and technical and manufacturing difficulties in future introductions or volume production of our new products. Our inability to complete new product development, or to manufacture and ship products in time to meet customer requirements would materially adversely affect our business, financial condition and results of operations.

**Our dependence on subcontractors and sole source suppliers may prevent us from delivering our products on a timely basis and expose us to intellectual property infringement.**

We rely on subcontractors to manufacture many of the components or subassemblies used in our products. Our FOX and ABTS systems, WaferPak contactors and DiePak carriers contain several components, including environmental chambers, power supplies, high-density interconnects, wafer contactors, module contactors, signal distribution substrates, WaferPak Aligners, DiePak Loaders and certain ICs that are currently supplied by only one or a limited number of suppliers. Our reliance on subcontractors and single source suppliers involves a number of significant risks, including the loss of control over the manufacturing process, the potential absence of adequate capacity and reduced control over delivery schedules, manufacturing yields, quality and costs. In the event that any significant subcontractor or single source supplier is unable or unwilling to continue to manufacture subassemblies, components or parts in required volumes, we would have to identify and qualify acceptable replacements. The process of qualifying subcontractors and suppliers could be lengthy, and no assurance can be given that any additional sources would be available to us on a timely basis. Any delay, interruption or termination of a supplier relationship could adversely affect our ability to deliver products, which would harm our operating results.

Our suppliers manufacture components, tooling, and provide engineering services. During this process, our suppliers are allowed access to our intellectual property. While we maintain patents to protect from intellectual property infringement, there can be no assurance that technological information gained in the manufacture of our products will not be used to develop a new product, improve processes or techniques which compete against our products. Litigation may be necessary to enforce or determine the validity and scope of our proprietary rights, and there can be no assurance that our intellectual property rights, if challenged, will be upheld as valid.

**Periodic economic and semiconductor industry downturns could negatively affect our business, results of operations and financial condition.**

Periodic global economic and semiconductor industry downturns have negatively affected and could continue to negatively affect our business, results of operations, and financial condition. Financial turmoil in the banking system and financial markets has resulted, and may result in the future, in a tightening of the credit markets, disruption in the financial markets and global economy downturn. These events may contribute to significant slowdowns in the industry in which we operate. Difficulties in obtaining capital and deteriorating market conditions can pose the risk that some of our customers may not be able to obtain necessary financing on reasonable terms, which could result in lower sales. Customers with liquidity issues may lead to additional bad debt expense.

Turmoil in the international financial markets has resulted, and may result in the future, in dramatic currency devaluations, stock market declines, restriction of available credit and general financial weakness. In addition, flash memory and other similar device prices have historically declined and will likely do so again in the future. These developments may affect us in several ways. The market for semiconductors and semiconductor capital equipment has historically been cyclical, and we expect this to continue in the future. The uncertainty of the semiconductor market may cause some manufacturers in the future to further delay capital spending plans. Economic conditions may also affect the ability of our customers to meet their payment obligations, resulting in cancellations or deferrals of existing orders and limiting additional orders. In addition, some governments have subsidized portions of fabrication facility construction, and financial turmoil may reduce these governments' willingness to continue such subsidies. Such developments could have a material adverse effect on our business, financial condition and results of operations.

The current economic conditions and uncertainty about future economic conditions make it challenging for us to forecast our operating results, make business decisions, and identify the risks that may affect our business, financial condition and results of operations. If such conditions recur, and we are not able to timely and appropriately adapt to changes resulting from the difficult macroeconomic environment, our business, financial condition or results of operations may be materially and adversely affected.

### **Future changes in semiconductor technologies may make our products obsolete.**

Future improvements in semiconductor design and manufacturing technology may reduce or eliminate the need for our products. For example, improvements in semiconductor process technology and improvements in conventional test systems, such as reduced cost or increased throughput, may significantly reduce or eliminate the market for one or more of our products. If we are not able to improve our products or develop new products or technologies quickly enough to maintain a competitive position in our markets, our business may decline.

### **If we are not able to reduce our operating expenses sufficiently during periods of weak revenue, or if we utilize significant amounts of cash to support operating losses, we may erode our cash resources and may not have sufficient cash to operate our business.**

In recent years, in the face of a downturn in our business and a decline in our net sales, we implemented a variety of cost controls and restructured our operations with the goal of reducing our operating costs to position ourselves to more effectively meet the needs of the then weak market for test and burn-in equipment. In February 2019, we adopted a restructuring plan in order to streamline our operations and better align our structure with our objectives going forward. While we took significant steps to minimize our expense levels and to increase the likelihood that we would have sufficient cash to support operations during the downturn, from fiscal 2009 through fiscal 2019, with the exception of fiscal 2014 and 2018, we experienced operating losses. We anticipate that our existing cash balance together with income from operations, collections of existing accounts receivable, revenue from our existing backlog of products, the sale of inventory on hand, and deposits and down payments against significant orders will be adequate to meet our working capital and capital equipment requirements. Depending on our rate of growth and profitability, and our ability to obtain significant orders with down payments, we may require additional equity or debt financing to meet our working capital requirements or capital equipment needs. There can be no assurance that additional financing will be available when required, or if available, that such financing can be obtained on terms satisfactory to us.

### **Our stock price may fluctuate.**

The price of our common stock has fluctuated in the past and may fluctuate significantly in the future. We believe that factors such as announcements of developments related to our business, fluctuations in our operating results, general conditions in the semiconductor and semiconductor equipment industries as well as the worldwide economy, announcement of technological innovations, new systems or product enhancements by us or our competitors, fluctuations in the level of cooperative development funding, acquisitions, changes in governmental regulations, developments in patents or other intellectual property rights and changes in our relationships with customers and suppliers could cause the price of our common stock to fluctuate substantially. In addition, in recent years the stock market in general, and the market for small capitalization and high technology stocks in particular, have experienced extreme price fluctuations which have often been unrelated to the operating performance of the affected companies. Such fluctuations could adversely affect the market price of our common stock.

### **We depend on our key personnel and our success depends on our ability to attract and retain talented employees.**

Our success depends to a significant extent upon the continued service of Gayn Erickson, our President and Chief Executive Officer, as well as other executive officers and key employees. We do not maintain key person life insurance for our benefit on any of our personnel, and none of our employees are subject to a non-competition agreement with us. The loss of the services of any of our executive officers or a group of key employees could have a material adverse effect on our business, financial condition and operating results. Our future success will depend in significant part upon our ability to attract and retain highly skilled technical, management, sales and marketing personnel. There are a limited number of personnel with the requisite skills to serve in these positions, and it has become increasingly difficult for us to hire such personnel. Competition for such personnel in the semiconductor equipment industry is intense, and there can be no assurance that we will be successful in attracting or retaining such personnel. Changes in management could disrupt our operations and adversely affect our operating results.

### **We may be subject to litigation relating to intellectual property infringement which would be time-consuming, expensive and a distraction from our business.**

If we do not adequately protect our intellectual property, competitors may be able to use our proprietary information to erode our competitive advantage, which could harm our business and operating results. Litigation may be necessary to enforce or determine the validity and scope of our proprietary rights, and there can be no assurance that our intellectual property rights, if challenged, will be upheld as valid. Such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on our operating results, regardless of the outcome of the litigation. In addition, there can be no assurance that any of the patents issued to us will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide competitive advantages to us.

There are no pending claims against us regarding infringement of any patents or other intellectual property rights of others. However, in the future we may receive communications from third parties asserting intellectual property claims against us. Such claims could include assertions that our products infringe, or may infringe, the proprietary rights of third parties, requests for indemnification against such infringement or suggestions that we may be interested in acquiring a license from such third parties. There can be no assurance that any such claim will not result in litigation, which could involve significant expense to us, and, if we are required or deem it appropriate to obtain a license relating to one or more products or technologies, there can be no assurance that we would be able to do so on commercially reasonable terms, or at all.

**While we believe we have complied with all applicable environmental laws, our failure to do so could adversely affect our business as a result of having to pay substantial amounts in damages or fees.**

Federal, state and local regulations impose various controls on the use, storage, discharge, handling, emission, generation, manufacture and disposal of toxic and other hazardous substances used in our operations. We believe that our activities conform in all material respects to current environmental and land use regulations applicable to our operations and our current facilities, and that we have obtained environmental permits necessary to conduct our business. Nevertheless, failure to comply with current or future regulations could result in substantial fines, suspension of production, alteration of our manufacturing processes or cessation of operations. Such regulations could require us to acquire expensive remediation equipment or to incur substantial expenses to comply with environmental regulations. Any failure to control the use, disposal or storage of or adequately restrict the discharge of, hazardous or toxic substances could subject us to significant liabilities.

**If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected.**

We are required to comply with Section 404 of the Sarbanes-Oxley Act of 2002. The provisions of the act require, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. Preparing our financial statements involves a number of complex processes, many of which are done manually and are dependent upon individual data input or review. These processes include, but are not limited to, calculating revenue, deferred revenue and inventory costs. While we continue to automate our processes and enhance our review and put in place controls to reduce the likelihood for errors, we expect that for the foreseeable future, many of our processes will remain manually intensive and thus subject to human error.

**Our common stock may be delisted from The NASDAQ Capital Market if we cannot maintain compliance with NASDAQ's continued listing requirements.**

In order to maintain our listing on The NASDAQ Capital Market, we are required to maintain compliance with NASDAQ's continued listing requirements. The continued listing requirements include, among others, a minimum bid price of \$1.00 per share and any of: (i) a minimum stockholders' equity of \$2.5 million; (ii) a market value of listed securities of at least \$35 million; or (iii) net income from continuing operations of \$500,000 in the most recently completed fiscal year or in two of the last three fiscal years. There are no assurances that we will be able to sustain long-term compliance with NASDAQ's continued listing requirements. On April 19, 2016, we were notified by NASDAQ that we were no longer in compliance with NASDAQ's continued listing requirements as we did not have a minimum stockholders' equity of \$2.5 million. On October 3, 2016, we were notified by NASDAQ that we had regained compliance with NASDAQ's continued listing requirements. If we fail to maintain compliance with the applicable NASDAQ continued listing requirements, our stock may be delisted.

If we are delisted, we would expect our common stock to be traded in the over-the-counter market, which could make trading our common stock more difficult for investors, potentially leading to declines in our share price and liquidity. In addition, delisting could result in negative publicity and make it more difficult for us to raise additional capital.

#### **Item 1B. Unresolved Staff Comments**

None.

#### **Item 2. Properties**

The Company's principal administrative and production facilities are located in Fremont, California, in a 51,289 square foot building. The Company's lease was renewed in February 2018 and expires in July 2023. The Company's facility in Japan is located in a 418 square foot office in Tokyo under a lease which expires in June 2022. The Company also maintains a 1,585 square foot warehouse in Yamanashi under a lease which expires in May 2020. The Company leases a 492 square foot sales and support office in Utting, Germany. The lease, which began February 1, 1992 and

expires on January 31, 2021, contains an automatic twelve months renewal, at rates to be determined, if no notice is given prior to six months from expiry. The Company periodically evaluates its global operations and facilities to bring its capacity in line with demand and to provide cost efficient services for its customers. In prior years, through this process, the Company has moved from certain facilities that exceeded the capacity required to satisfy its needs. The Company believes that its existing facilities are adequate to meet its current and reasonably foreseeable requirements. The Company regularly evaluates its expected future facilities requirements and believes that alternate facilities would be available if needed.

### Item 3. Legal Proceedings

None.

### 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

The Company’s common stock is publicly traded on the NASDAQ Capital Market under the symbol “AEHR”. The following table sets forth, for the periods indicated, the high and low sale prices for the common stock on such market. These quotations represent prices between dealers and do not include retail markups, markdowns or commissions and may not necessarily represent actual transactions.

	<u>High</u>	<u>Low</u>
Fiscal 2019:		
First quarter ended August 31, 2018. . . . .	\$2.94	\$2.21
Second quarter ended November 30, 2018. . . . .	2.57	1.80
Third quarter ended February 28, 2019. . . . .	1.97	1.03
Fourth quarter ended May 31, 2019 . . . . .	2.19	1.27
Fiscal 2018:		
First quarter ended August 31, 2017. . . . .	\$4.60	\$2.62
Second quarter ended November 30, 2017. . . . .	4.10	2.50
Third quarter ended February 28, 2018. . . . .	3.37	2.16
Fourth quarter ended May 31, 2018 . . . . .	2.80	2.12

At August 2, 2019, the Company had 134 holders of record of its common stock. A substantially greater number of holders of the Company’s common stock are “street name” or beneficial holders whose shares are held by banks, brokers and other financial institutions.

The Company has not paid cash dividends on its common stock or other securities. The Company currently anticipates that it will retain its future earnings, if any, for use in the expansion and operation of its business and does not anticipate paying any cash dividends on its common stock in the foreseeable future.

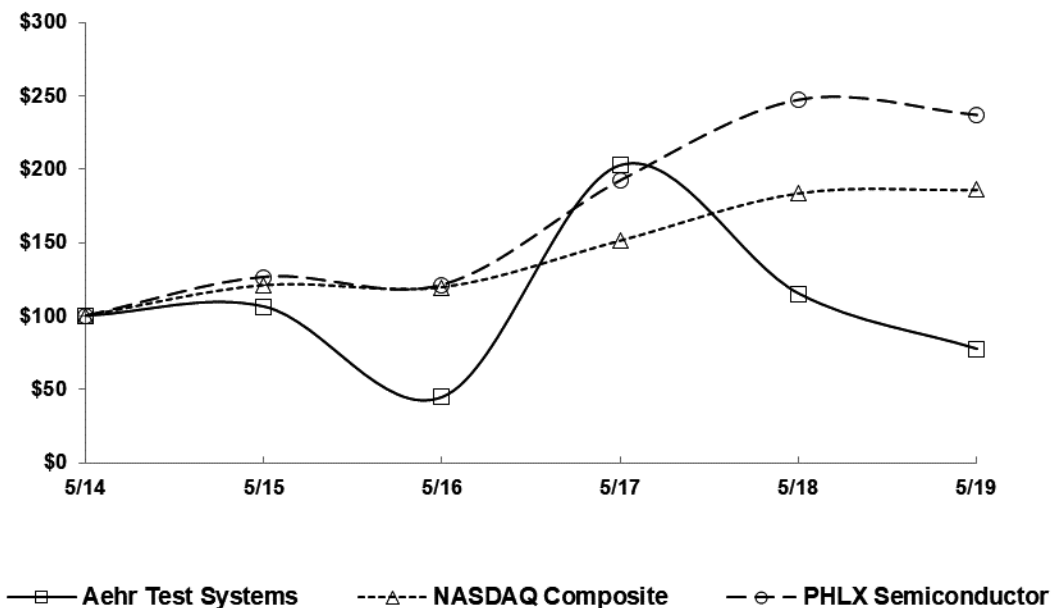
The Company did not repurchase any of its common stock during the fiscal year ended May 31, 2019.

### PERFORMANCE MEASUREMENT COMPARISON

The following graph shows a comparison of total shareholder return for holders of the Company's common stock for the last five fiscal years ended May 31, 2019, compared with the NASDAQ Composite Index and the Philadelphia Semiconductor Index. The graph assumes that \$100 was invested in the Company's common stock, in the NASDAQ Composite Index and the Philadelphia Semiconductor Index on May 31, 2014, and that all dividends were reinvested. The Company believes that while total shareholder return can be an important indicator of corporate performance, the stock prices of semiconductor equipment companies like us are subject to a number of market-related factors other than company performance, such as competitive announcements, mergers and acquisitions in the industry, the general state of the economy and the performance of other semiconductor equipment company stocks. Stock prices and shareholder returns over the indicated period should not be considered indicative of future stock prices or shareholder returns.

## COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN\*

Among Aehr Test Systems, the NASDAQ Composite Index  
and the PHLX Semiconductor Index



\*\$100 invested on 5/31/14 in stock or index, including reinvestment of dividends.  
Fiscal year ending May 31.

### Item 6. Selected Consolidated Financial Data

The selected consolidated financial data set forth below should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The selected consolidated financial data in this section are not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K.

We derived the statements of operations data for the fiscal years ended May 31, 2019, 2018 and 2017 and the balance sheet data as of May 31, 2019 and 2018 from our audited consolidated financial statements and related notes, which are included elsewhere in this Annual Report on Form 10-K. We derived the statements of operations data for the fiscal years ended May 31, 2016 and 2015 and the balance sheet data as of May 31, 2017, 2016 and 2015 from our audited consolidated financial statements and related notes which are not included in this Annual Report on Form 10-K. We have not declared or distributed any cash dividends.

	Fiscal Year Ended May 31,				
	2019	2018	2017	2016	2015
	(In thousands, except per share data)				
CONSOLIDATED STATEMENTS OF OPERATIONS:					
Net sales . . . . .	\$21,056	\$29,555	\$18,898	\$14,501	\$10,018
Cost of sales . . . . .	13,454	17,169	12,118	9,356	6,180
Gross profit . . . . .	7,602	12,386	6,780	5,145	3,838
Operating expenses:					
Selling, general and administrative . . . . .	7,724	7,290	7,052	6,975	6,470
Research and development . . . . .	4,153	4,181	4,657	4,324	4,062
Restructuring . . . . .	725	--	--	--	--
Total operating expenses . . . . .	12,602	11,471	11,709	11,299	10,532
(Loss) income from operations . . . . .	(5,000)	915	(4,929)	(6,154)	(6,694)
Interest expense . . . . .	(252)	(399)	(678)	(605)	(130)
Other income (expense), net . . . . .	44	(61)	(21)	(16)	211
(Loss) income before income tax (expense) benefit . . . . .	(5,208)	455	(5,628)	(6,775)	(6,613)
Income tax (expense) benefit . . . . .	(27)	73	(25)	(10)	(34)
Net (loss) income . . . . .	(5,235)	528	(5,653)	(6,785)	(6,647)
Less: Net income attributable to the noncontrolling interest . . . . .	--	--	--	--	--
Net (loss) income attributable to Aehr Test Systems common shareholders . . . . .	<u>\$(5,235)</u>	<u>\$528</u>	<u>\$(5,653)</u>	<u>\$(6,785)</u>	<u>\$(6,647)</u>
Net (loss) income per share:					
Basic . . . . .	\$ (0.23)	\$0.02	\$(0.35)	\$(0.52)	\$(0.55)
Diluted . . . . .	\$ (0.23)	\$0.02	\$(0.35)	\$(0.52)	\$(0.55)
Shares used in per share calculations:					
Basic . . . . .	22,387	21,732	16,267	13,091	12,047
Diluted . . . . .	22,387	22,782	16,267	13,091	12,047
	May 31,				
	2019	2018	2017	2016	2015
CONSOLIDATED BALANCE SHEETS:					
Cash and cash equivalents . . . . .	\$5,428	\$16,848	\$ 17,803	\$ 939	\$5,527
Working capital . . . . .	14,522	18,308	21,494	4,068	7,776
Total assets . . . . .	21,307	30,955	30,892	10,046	14,868
Long-term obligations, less current portion . . . . .	342	522	6,214	6,089	3,799
Total shareholders' equity (deficit) . . . . .	15,453	19,285	16,794	(723)	4,550

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion and analysis of the financial condition and results of operations should be read in conjunction with our "Selected Consolidated Financial Data" and our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

### OVERVIEW

We were founded in 1977 to develop and manufacture burn-in and test equipment for the semiconductor industry. Since our inception, we have installed over 2,500 systems at semiconductor manufacturers, semiconductor contract assemblers and burn-in and test service companies worldwide. Our principal products currently are the Advanced Burn-in and Test System, or ABTS, the FOX full wafer contact and singulated die/module parallel test and burn-in system, WaferPak Aligner, WaferPak contactors, DiePak Loader, the DiePak carriers and test fixtures.

Our net sales consist primarily of sales of systems, WaferPak Aligners and DiePak Loaders, WaferPak contactors, DiePak carriers, test fixtures, upgrades and spare parts, revenues from service contracts, and engineering development charges. Our selling arrangements may include contractual customer acceptance provisions, which are mostly deemed perfunctory or inconsequential, and installation of the product occurs after shipment and transfer of title.

### CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to customer programs and incentives, product returns, bad debts, inventories, investments, income taxes, financing operations, warranty obligations, and long-term service contracts, among others. Our estimates are derived from historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Those results form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements.

#### REVENUE RECOGNITION

In May 2014, the Financial Accounting Standards Boards (FASB) issued ASC Topic 606, *Revenue from Contracts with Customers* (Topic 606), which was subsequently updated (collectively "ASC 606"). We adopted the standard as of June 1, 2018, using the modified retrospective method. Under this method, we applied ASC 606 to contracts that were not complete as of June 1, 2018 and recognized the cumulative effect of initially applying the standard as an adjustment to the opening balance of retained earnings. Results for reporting periods beginning after June 1, 2018 are presented in accordance with ASC 606. Under the modified retrospective adoption method, prior period amounts are not adjusted and are reported in accordance with the accounting standards in effect for those periods per FASB ASC Topic 605, *Revenue Recognition*, which is also referred to herein as "legacy GAAP."

The adoption of ASC 606 did not have a material impact on our consolidated financial statements as of June 1, 2018. No adjustment was recorded to accumulated deficit as of the adoption date and reported revenue would not have been different under legacy GAAP. Additionally, we do not expect the adoption of the revenue standard to have a material impact to our net income on an ongoing basis.

We sell our products primarily through a direct sales force. In certain international markets, we sell our products through independent distributors. We consider revenue to be earned when all of the following criteria are met:

- We have a contract with a customer that creates enforceable rights and obligations,
- Promised performance obligations are identified,
- The transaction price, or the amount we expect to receive, is determinable and
- We have satisfied the performance obligations to the customer.

Transfer of control is evidenced upon passage of title and risk of loss to the customer unless we are required to provide additional services.

#### ALLOWANCE FOR DOUBTFUL ACCOUNTS

We maintain an allowance for doubtful accounts to reserve for potentially uncollectible trade receivables. We also review our trade receivables by aging category to identify specific customers with known disputes or collection issues. We exercise judgment when determining the adequacy of these reserves as we evaluate historical bad debt trends, general economic conditions in the United States and internationally and changes in customer financial conditions. Uncollectible receivables are recorded as bad debt expense when all efforts to collect have been exhausted and recoveries are recognized when they are received.

#### WARRANTY OBLIGATIONS

We provide and record the estimated cost of product warranties at the time revenues are recognized on products shipped. While we engage in extensive product quality programs and processes, including actively monitoring and evaluating the quality of our component suppliers, our warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Our estimate of warranty reserve is based on management's assessment of future warranty obligations and on historical warranty obligations. Should actual product failure rates, material usage or service delivery costs differ from our estimates, revisions to the estimated warranty liability would be required, which could affect how we account for expenses.

#### INVENTORY OBSOLESCENCE

In each of the last three fiscal years, we have written down our inventory for estimated obsolescence or unmarketable inventory by an amount equal to the difference between the cost of inventory and the estimated market value based upon assumptions about future demand and market conditions. If future market conditions are less favorable than those projected by management, additional inventory write-downs may be required.

#### INCOME TAXES

Income taxes have been provided using the liability method whereby deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and net operating loss and tax credit carryforwards measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse or the carryforwards are utilized. Valuation allowances are established when it is determined that it is more likely than not that such assets will not be realized.

A full valuation allowance was established against all deferred tax assets, as management determined that it is more likely than not that deferred tax assets will not be realized, as of May 31, 2019 and 2018.

We account for uncertain tax positions consistent with authoritative guidance. The guidance prescribes a "more likely than not" recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. We do not expect any material change in its unrecognized tax benefits over the next twelve months. We recognize interest and penalties related to unrecognized tax benefits as a component of income taxes.

Although we file U.S. federal, various state and foreign tax returns, our only major tax jurisdictions are the United States, California, Germany and Japan. Tax years 1996 – 2018 remain subject to examination by the appropriate governmental agencies due to tax loss carryovers, research and development tax credits, or other tax attributes from those years.

#### STOCK-BASED COMPENSATION EXPENSE

Stock-based compensation expense consists of expenses for stock options, restricted stock units, or RSUs, and employee stock purchase plan, or ESPP, purchase rights. Stock-based compensation cost for stock options and ESPP purchase rights is measured at each grant date, based on the fair value of the award using the Black-Scholes option valuation model, and is recognized as expense over the employee's requisite service period. This model was developed for use in estimating the value of publicly traded options that have no vesting restrictions and are fully transferable. Our employee stock options have characteristics significantly different from those of publicly traded options. For RSUs, stock-based compensation cost is based on the fair value of our common stock at the grant date. All of our stock-based compensation is accounted for as an equity instrument.



The fair value of each option grant and the right to purchase shares under our ESPP are estimated on the date of grant using the Black-Scholes option valuation model with assumptions concerning expected term, stock price volatility, expected dividend yield, risk-free interest rate and the expected life of the award. See Note 10 to our consolidated financial statements for detailed information relating to stock-based compensation and the stock option plan and the ESPP.

## RESULTS OF OPERATIONS

The following table sets forth statements of operations data as a percentage of net sales for the periods indicated.

	Year Ended May 31,		
	2019	2018	2017
Net sales . . . . .	100.0%	100.0%	100.0%
Cost of sales . . . . .	63.9	58.1	64.1
Gross profit . . . . .	36.1	41.9	35.9
Operating expenses:			
Selling, general and administrative . . . . .	36.7	24.7	37.3
Research and development . . . . .	19.7	14.1	24.7
Restructuring . . . . .	3.4	--	--
Total operating expenses. . . . .	59.8	38.8	62.0
(Loss) income from operations. . . . .	(23.7)	3.1	(26.1)
Interest expense . . . . .	(1.2)	(1.4)	(3.6)
Other income (expense), net. . . . .	0.2	(0.2)	(0.1)
(Loss) income before income tax (expense) benefit . . .	(24.7)	1.5	(29.8)
Income tax (expense) benefit. . . . .	(0.2)	0.3	(0.1)
Net (loss) income. . . . .	(24.9)	1.8	(29.9)
Less: Net income attributable to the noncontrolling interest. . . . .	--	--	--
Net (loss) income attributable to Aehr Test Systems common shareholders. . . . .	(24.9)%	1.8%	(29.9)%

## FISCAL YEAR ENDED MAY 31, 2019 COMPARED TO FISCAL YEAR ENDED MAY 31, 2018

**NET SALES.** Net sales decreased to \$21.1 million for the fiscal year ended May 31, 2019 from \$29.6 million for the fiscal year ended May 31, 2018, a decrease of 28.8%. The decrease in net sales in fiscal 2019 resulted primarily from the decrease in net sales of our Test During Burn-in (TDBI) products, partially offset by the increase in net sales of our wafer-level products. Net sales of our TDBI products for fiscal 2019 were \$6.4 million, and decreased approximately \$10.0 million from fiscal 2018. The decrease was primarily due to our customers utilizing the significant capacity that they added in the prior year and lower sales to OEM manufacturers. Net sales of our wafer-level products for fiscal 2019 were \$14.6 million, and increased approximately \$1.5 million from fiscal 2018.

**GROSS PROFIT.** Gross profit decreased to \$7.6 million for the fiscal year ended May 31, 2019 from \$12.4 million for the fiscal year ended May 31, 2018, a decrease of 38.6%. Gross profit margin decreased to 36.1% for the fiscal year ended May 31, 2019 from 41.9% for the fiscal year ended May 31, 2018. The decrease in gross profit margin was primarily the result of manufacturing inefficiencies due to a decrease in net sales, product mix, and the impact of reserves taken on excess and obsolete inventory.

**SELLING, GENERAL AND ADMINISTRATIVE.** SG&A expenses were \$7.7 million for the fiscal year ended May 31, 2019, compared with \$7.3 million for the fiscal year ended May 31, 2018, an increase of 6.0%. The increase in SG&A expenses was primarily due to increases in employment related expenses.

**RESEARCH AND DEVELOPMENT.** R&D expenses were flat at \$4.2 million for the fiscal year ended May 31, 2019 compared with the fiscal year ended May 31, 2018.

**RESTRUCTURING.** Restructuring charges for the fiscal year ended May 31, 2019 were related to a restructuring plan implemented in February 2019 in order to streamline our operations and better align our structure with our objectives going forward. We recognized \$725,000 of employee termination expenses for the fiscal year ended May 31, 2019. There were no restructuring charges incurred for the fiscal year ended May 31, 2018.

**INTEREST EXPENSE.** Interest expense decreased to \$252,000 for the fiscal year ended May 31, 2019 from \$399,000 for the fiscal year ended May 31, 2018. The decrease in interest expense for the fiscal year ended May 31, 2019 was primarily due to the repayment of the 9.0% Convertible Secured Notes (the “Convertible Notes”) on the maturity date of April 10, 2019, and the impact of an increase in interest income due to an increase in interest rates on our investment portfolio.

**OTHER INCOME (EXPENSE), NET.** Other income, net was \$44,000 for the fiscal year ended May 31, 2019 compared with other expense, net of \$61,000 for the fiscal year ended May 31, 2018. The change in other income (expense), net was due primarily to gains or losses realized in connection with the fluctuation in the value of the dollar compared to foreign currencies during the referenced periods.

**INCOME TAX (EXPENSE) BENEFIT.** Income tax expense was \$27,000 for the fiscal year ended May 31, 2019 compared with income tax benefit of \$73,000 for the fiscal year ended May 31, 2018. The income tax benefit in the fiscal year ended May 31, 2018 was primarily due to the impact of the “Tax Cuts and Jobs Act” enacted on December 22, 2017, specifically, the provision which made our alternative minimum tax credit refundable by 2022.

#### FISCAL YEAR ENDED MAY 31, 2018 COMPARED TO FISCAL YEAR ENDED MAY 31, 2017

**NET SALES.** Net sales increased to \$29.6 million for the fiscal year ended May 31, 2018 from \$18.9 million for the fiscal year ended May 31, 2017, an increase of 56.4%. The increase in net sales in fiscal 2018 resulted primarily from increases in net sales of both our TDBI products and wafer-level products. Net sales of our TDBI products for fiscal 2018 were \$16.5 million, and increased approximately \$7.3 million from fiscal 2017. Net sales of our wafer-level products for fiscal 2018 were \$13.1 million, and increased approximately \$3.5 million from fiscal 2017.

**GROSS PROFIT.** Gross profit increased to \$12.4 million for the fiscal year ended May 31, 2018 from \$6.8 million for the fiscal year ended May 31, 2017, an increase of 82.7%. Gross profit margin increased to 41.9% for the fiscal year ended May 31, 2018 from 35.9% for the fiscal year ended May 31, 2017. The increase in gross profit margin was primarily the result of manufacturing efficiencies due to an increase in net sales.

**SELLING, GENERAL AND ADMINISTRATIVE.** SG&A expenses were \$7.3 million for the fiscal year ended May 31, 2018, compared with \$7.1 million for the fiscal year ended May 31, 2017, an increase of 3.4%. The increase in SG&A expenses was primarily due to increases in employment related expenses.

**RESEARCH AND DEVELOPMENT.** R&D expenses decreased to \$4.2 million for the fiscal year ended May 31, 2018 from \$4.7 million for the fiscal year ended May 31, 2017, a decrease of 10.2%. The decrease in R&D expenses was primarily due to decreases in project expenses.

**INTEREST EXPENSE.** Interest expense decreased to \$399,000 for the fiscal year ended May 31, 2018 from \$678,000 for the fiscal year ended May 31, 2017. The decrease in interest expense for the fiscal year ended May 31, 2018 was primarily due to the debt issuance costs related to the Convertible Notes becoming fully amortized at the end of fiscal 2017, and the impact of an increase in interest income due to an increase in interest rates on our investment portfolio.

**OTHER EXPENSE, NET.** Other expense, net was \$61,000 and \$21,000 for the fiscal year ended May 31, 2018 and 2017, respectively. The change in other expense was due primarily to losses realized in connection with the fluctuation in the value of the dollar compared to foreign currencies during the referenced periods.

**INCOME TAX BENEFIT (EXPENSE).** Income tax benefit was \$73,000 for the fiscal year ended May 31, 2018 compared with income tax expense of \$25,000 for the fiscal year ended May 31, 2017. The income tax benefit in the fiscal year ended May 31, 2018 was primarily due to the impact of the “Tax Cuts and Jobs Act” enacted on December 22, 2017, specifically, the provision which made our alternative minimum tax credit refundable by 2022.

#### LIQUIDITY AND CAPITAL RESOURCES

We consider cash and cash equivalents as liquid and available for use. As of May 31, 2019 and 2018, we had \$5.4 million and \$16.8 million, respectively, in cash and cash equivalents.

Net cash used in operating activities was \$5.6 million and \$1.4 million for the fiscal years ended May 31, 2019 and 2018, respectively. For the fiscal year ended May 31, 2019, net cash used in operating activities was primarily the result of the net loss of \$5.2 million, as adjusted to exclude the effect of non-cash charges of stock-based compensation expense of \$905,000 and depreciation and amortization of \$431,000, an increase in accounts receivable of \$2.0 million, and a decrease in customer deposits and deferred revenue of \$355,000, partially offset by an increase in accrued expenses of \$402,000. The increase in accounts receivable was primarily due to large shipments toward the end of fiscal 2019. The decrease in customer deposits and deferred revenue was primarily due to the decrease in backlog of customer orders with down payments. The increase in accrued expenses was primarily due to severance expenses accrued as a result of our restructuring plan implemented in February 2019. For the fiscal year ended May 31, 2018, net cash used in operating activities was primarily the result of the net income of \$528,000, as adjusted to exclude the effect of non-cash charges of stock-based compensation expense of \$996,000 and depreciation and amortization of \$417,000, and a decrease in accounts receivable of \$1.3 million. Other changes in cash from operations primarily resulted from an increase in inventories of \$2.1 million, a decrease in customer deposits and deferred revenue of \$1.5 million, as well as the decrease in accounts payable of \$1.1 million. The decrease in accounts receivable was primarily due to improvements in customer payment terms. The increase in inventories is to support future shipments for customer orders. The decrease in customer deposits and deferred revenue was primarily due to the decrease in backlog of customer orders with down payments. The decrease in accounts payable was primarily due to the down payments applied toward vendor invoices.

Net cash used in investing activities was \$173,000 and \$572,000 for the fiscal years ended May 31, 2019 and 2018, respectively. Net cash used in investing activities for the fiscal years ended May 31, 2019 and 2018 was due to the purchases of property and equipment.

Net cash used in financing activities was \$5.6 million for the fiscal year ended May 31, 2019 as compared to net cash provided by financing activities of \$925,000 for the fiscal year ended May 31, 2018. Net cash used in financing activities during the fiscal year ended May 31, 2019 was primarily due to the repayment of the Convertible Notes of \$6.1 million on the maturity date of April 10, 2019, partially offset by proceeds from issuance of common stock under employee plans of \$559,000. Net cash provided by financing activities during the fiscal year ended May 31, 2018 was primarily due to the proceeds from issuance of common stock under employee plans.

The effect of fluctuation in exchange rates decreased cash by \$59,000 for the fiscal year ended May 31, 2019 and increased cash by \$43,000 for the fiscal year ended May 31, 2018. The changes were due to the fluctuation in the value of the dollar compared to foreign currencies.

As of May 31, 2019 and 2018, we had working capital of \$14.5 million and \$18.3 million, respectively.

For the fiscal year ended May 31, 2017, net cash used in operating activities was primarily the result of the net loss of \$5.7 million, as adjusted to exclude the effect of a non-cash charge of stock-based compensation expense of \$1.0 million, and an increase in accounts receivable of \$3.5 million, partially offset by a decrease in inventories of \$430,000. Other changes in cash from operations resulted from an increase in accounts payable as well as an increase in customer deposits and deferred revenue of \$1.7 million each. The increase in accounts receivable was primarily due to an increase in sales. The decrease in inventories is primarily due to the sales of systems on-hand at the beginning of the period. The increase in accounts payable was primarily due to higher expenditures associated with higher revenue. The increase in customer deposits and deferred revenue was primarily due to the receipt of additional down payments from certain customers.

Net cash used in investing activities was \$477,000 for the fiscal year ended May 31, 2017 was due to the purchase of property and equipment.

Net cash provided by financing activities of \$21.8 million during the fiscal year ended May 31, 2017 was primarily due to the net proceeds of \$15.8 million from the sale of our common stock in a public offering that closed on April 19, 2017, the net proceeds of \$5.3 million from the sale of our common stock in a private placement transaction with certain institutional and accredited investors that closed on September 28, 2016, and \$704,000 in proceeds from issuance of common stock under employee plans.

The effect of fluctuation in exchange rates increased cash by \$1,000 for the fiscal year ended May 31, 2017 due to the fluctuation in the value of the dollar compared to foreign currencies.

As of May 31, 2017, we had working capital of \$21.5 million.

We lease our manufacturing and office space under operating leases. We entered into a non-cancelable operating lease agreement for our United States manufacturing and office facilities, which was renewed in February 2018 and expires in July 2023. Under that lease agreement, we are responsible for payments of utilities, taxes and insurance.

From time to time, we evaluate potential acquisitions of businesses, products or technologies that complement our business. If consummated, any such transactions may use a portion of our working capital or require the issuance of equity. We have no present understandings, commitments or agreements with respect to any material acquisitions.

We anticipate that the existing cash balance together with income from operations, collections of existing accounts receivable, revenue from our existing backlog of products, the sale of inventory on hand, and deposits and down payments against significant orders will be adequate to meet our liquidity requirements for the next 12 months.

#### OFF-BALANCE SHEET FINANCING

We have not entered into any off-balance sheet financing arrangements and have not established any special purpose or variable interest entities.

#### OVERVIEW OF CONTRACTUAL OBLIGATIONS

The following table provides a summary of such arrangements, or contractual obligations.

	Payments Due by Period (in thousands)				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating Leases . . . . .	\$3,228	\$ 762	\$1,538	\$ 928	\$ --
Purchases (1) . . . . .	2,525	2,525	--	--	--
Total . . . . .	<u>\$5,753</u>	<u>\$3,287</u>	<u>\$1,538</u>	<u>\$ 928</u>	<u>\$ --</u>

(1) Shown above are our binding purchase obligations. The large majority of our purchase orders are cancelable by either party, which if canceled may result in a negotiation with the vendor to determine if there shall be any restocking or cancellation fees payable to the vendor.

In the normal course of business to facilitate sales of our products, we indemnify other parties, including customers, with respect to certain matters. We have agreed to hold the other party harmless against losses arising from a breach of representations or covenants, or from intellectual property infringement or other claims. These agreements may limit the time period within which an indemnification claim can be made and the amount of the claim. In addition, we have entered into indemnification agreements with our officers and directors, and our bylaws contain similar indemnification obligations to our agents.

It is not possible to determine the maximum potential amount under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. To date, our payments under these agreements have not had a material impact on our operating results, financial position or cash flows.

#### RECENT ACCOUNTING PRONOUNCEMENTS

For a description of recent accounting pronouncements, including the expected dates of adoption and estimated effects, if any, on our consolidated financial statements, see Note 1, "Organization and Summary of Significant Accounting Policies," of the Notes to Consolidated Financial Statements.

#### Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We had no holdings of derivative financial or commodity instruments at May 31, 2019.

We are exposed to financial market risks, including changes in interest rates and foreign currency exchange rates. We only invest our short-term excess cash in government-backed securities with maturities of 18 months or less. We do not use any financial instruments for speculative or trading purposes. Fluctuations in interest rates would not have a material effect on our financial position, results of operations or cash flows.

A majority of our revenue and capital spending is transacted in U.S. Dollars. We, however, enter into transactions in other currencies, primarily Euros and Japanese Yen. Since the price is determined at the time a purchase order is accepted, we are exposed to the risks of fluctuations in the foreign currency-U.S. Dollar exchange rates during the lengthy period from purchase order to ultimate payment. This exchange rate risk is partially offset to the extent that our subsidiaries incur expenses payable in their local currency. To date, we have not invested in instruments designed to hedge currency risks. In addition, our subsidiaries typically carry debt or other obligations due to us that may be

denominated in either their local currency or U.S. Dollars. Since our subsidiaries' financial statements are based in their local currency and our condensed consolidated financial statements are based in U.S. Dollars, our subsidiaries and we recognize foreign exchange gains or losses in any period in which the value of the local currency rises or falls in relation to the U.S. Dollar. A 10% decrease in the value of the subsidiaries' local currency as compared with the U.S. Dollar would not be expected to result in a significant change to our net income or loss. There have been no material changes in our risk exposure since the end of the last fiscal year, nor are any material changes to our risk exposure anticipated.

## Item 8. Financial Statements and Supplementary Data

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Financial statement schedules not listed above are either omitted because they are not applicable or the required information is shown in the Consolidated Financial Statements or in the Notes thereto.

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of  
Aehr Test Systems

### Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Aehr Test Systems and its subsidiaries (the “Company”) as of May 31, 2019 and 2018, the related consolidated statements of operations, comprehensive (loss) income, shareholders’ equity (deficit), and cash flows for each of the three years in the period ended May 31, 2019, and the related notes (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 as of May 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended May 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

### Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (“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 consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ BPM LLP

We have served as the Company’s auditor since 2005.

San Jose, California  
August 28, 2019

**AEHR TEST SYSTEMS AND SUBSIDIARIES  
CONSOLIDATED BALANCE SHEETS  
(IN THOUSANDS, EXCEPT PER SHARE DATA)**

	May 31,	
	2019	2018
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents . . . . .	\$5,428	\$16,848
Accounts receivable, net . . . . .	4,859	2,856
Inventories . . . . .	9,061	9,049
Prepaid expenses and other . . . . .	686	703
Total current assets . . . . .	20,034	29,456
Property and equipment, net . . . . .	1,045	1,203
Other assets . . . . .	228	296
Total assets . . . . .	\$21,307	\$30,955
<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable . . . . .	\$1,933	\$1,762
Accrued expenses . . . . .	2,034	1,646
Customer deposits and deferred revenue, short-term . . . . .	1,545	1,630
Current portion of long-term debt . . . . .	--	6,110
Total current liabilities . . . . .	5,512	11,148
Deferred rent . . . . .	153	63
Deferred revenue, long-term . . . . .	189	459
Total liabilities . . . . .	5,854	11,670
Commitments and contingencies (Note 17)		
Aehr Test Systems shareholders' equity:		
Preferred stock, \$0.01 par value:		
Authorized: 10,000 shares;		
Issued and outstanding: none . . . . .	--	--
Common stock, \$0.01 par value:		
Authorized: 75,000 shares;		
Issued and outstanding: 22,669 shares and 22,143 shares at May 31, 2019 and 2018 respectively . . . . .	227	221
Additional paid-in capital . . . . .	84,499	83,041
Accumulated other comprehensive income . . . . .	2,230	2,292
Accumulated deficit . . . . .	(71,484)	(66,249)
Total Aehr Test Systems shareholders' equity . . . . .	15,472	19,305
Noncontrolling interest . . . . .	(19)	(20)
Total shareholders' equity . . . . .	15,453	19,285
Total liabilities and shareholders' equity . . . . .	\$21,307	\$30,955

The accompanying notes are an integral part of these consolidated financial statements.



**AEHR TEST SYSTEMS AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**(IN THOUSANDS, EXCEPT PER SHARE DATA)**

	Year Ended May 31,		
	2019	2018	2017
Net sales . . . . .	\$21,056	\$29,555	\$18,898
Cost of sales . . . . .	13,454	17,169	12,118
Gross profit . . . . .	<u>7,602</u>	<u>12,386</u>	<u>6,780</u>
Operating expenses:			
Selling, general and administrative . . . . .	7,724	7,290	7,052
Research and development . . . . .	4,153	4,181	4,657
Restructuring . . . . .	<u>725</u>	<u>--</u>	<u>--</u>
Total operating expenses . . . . .	<u>12,602</u>	<u>11,471</u>	<u>11,709</u>
(Loss) income from operations . . . . .	(5,000)	915	(4,929)
Interest expense . . . . .	(252)	(399)	(678)
Other income (expense), net . . . . .	<u>44</u>	<u>(61)</u>	<u>(21)</u>
(Loss) income before income tax (expense) benefit . . . . .	(5,208)	455	(5,628)
Income tax (expense) benefit . . . . .	<u>(27)</u>	<u>73</u>	<u>(25)</u>
Net (loss) income . . . . .	(5,235)	528	(5,653)
Less: Net income attributable to the noncontrolling interest . . . . .	--	--	--
Net (loss) income attributable to Aehr Test Systems common shareholders . . . . .	<u><u>\$(5,235)</u></u>	<u><u>\$ 528</u></u>	<u><u>\$ (5,653)</u></u>
Net (loss) income per share – basic and diluted . . . . .	\$ (0.23)	\$ 0.02	\$ (0.35)
Shares used in per share calculation – basic . . . . .	22,387	21,732	16,267
Shares used in per share calculation – diluted . . . . .	22,387	22,782	16,267

The accompanying notes are an integral part of these consolidated financial statements.

**AEHR TEST SYSTEMS AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME**  
**(IN THOUSANDS)**

	Year Ended May 31,		
	2019	2018	2017
Net (loss) income. . . . .	\$(5,235)	\$ 528	\$ (5,653)
Other comprehensive (loss) income, net of tax:			
Foreign currency translation (loss) income . . . . .	(61)	42	13
Total comprehensive (loss) income. . . . .	(5,296)	570	(5,640)
Less: Comprehensive income (loss) attributable to noncontrolling interest . . . . .	1	(1)	1
Comprehensive (loss) income, attributable to Aehr Test Systems. . . . .	\$(5,297)	\$ 571	\$ (5,641)

The accompanying notes are an integral part of these consolidated financial statements.

**AEHR TEST SYSTEMS AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (DEFICIT)**  
**(IN THOUSANDS)**

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total AeHR Test Systems Shareholders' Equity (Deficit)	Noncontrolling Interest	Total Shareholders' Equity (Deficit)
	Shares	Amount						
	Balances, May 31, 2016	13,216						
Issuance of common stock under employee plans . . . . .	779	8	696	--	--	704	--	704
Issuance of common stock under public offering . . . . .	4,423	44	15,788	--	--	15,832	--	15,832
Issuance of common stock under private offering . . . . .	2,722	27	5,272	--	--	5,299	--	5,299
Issuance of common stock in consideration for cancellation of outstanding vendor invoice . . . . .	200	2	321	--	--	323	--	323
Stock-based compensation . . . . .	--	--	999	--	--	999	--	999
Net loss . . . . .	--	--	--	--	(5,653)	(5,653)	--	(5,653)
Foreign currency translation adjustment . . . . .	--	--	--	12	--	12	1	13
Balances, May 31, 2017	21,340	213	81,128	2,249	(66,777)	16,813	(19)	16,794
Issuance of common stock under employee plans . . . . .	803	8	917	--	--	925	--	925
Stock-based compensation . . . . .	--	--	996	--	--	996	--	996
Net income . . . . .	--	--	--	--	528	528	--	528
Foreign currency translation adjustment . . . . .	--	--	--	43	--	43	(1)	42
Balances, May 31, 2018	22,143	221	83,041	2,292	(66,249)	19,305	(20)	19,285
Issuance of common stock under employee plans . . . . .	526	6	553	--	--	559	--	559
Stock-based compensation . . . . .	--	--	905	--	--	905	--	905
Net loss . . . . .	--	--	--	--	(5,235)	(5,235)	--	(5,235)
Foreign currency translation adjustment . . . . .	--	--	--	(62)	--	(62)	1	(61)
Balances, May 31, 2019	22,669	\$227	\$84,499	\$2,230	\$(71,484)	\$15,472	\$(19)	\$ 15,453

The accompanying notes are an integral part of these consolidated financial statements.

**AEHR TEST SYSTEMS AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**(IN THOUSANDS)**

	Year Ended May 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net (loss) income. . . . .	\$(5,235)	\$ 528	\$ (5,653)
Adjustments to reconcile net (loss) income to net cash used in operating activities:			
Stock-based compensation expense . . . . .	905	996	999
(Recovery of) provision for doubtful accounts. . . . .	(3)	(58)	53
Amortization of debt issuance costs . . . . .	--	--	148
Depreciation and amortization . . . . .	431	417	271
Changes in operating assets and liabilities:			
Accounts receivable . . . . .	(2,043)	1,260	(3,507)
Inventories . . . . .	(112)	(2,073)	430
Prepaid expenses and other. . . . .	84	59	(707)
Accounts payable. . . . .	210	(1,095)	1,686
Accrued expenses . . . . .	402	62	53
Customer deposits and deferred revenue. . . . .	(355)	(1,482)	1,730
Deferred rent. . . . .	90	63	--
Income taxes payable. . . . .	(11)	(28)	2
Net cash used in operating activities. . . . .	<u>(5,637)</u>	<u>(1,351)</u>	<u>(4,495)</u>
Cash flows from investing activities:			
Purchases of property and equipment. . . . .	(173)	(572)	(477)
Net cash used in investing activities . . . . .	<u>(173)</u>	<u>(572)</u>	<u>(477)</u>
Cash flows from financing activities:			
Repayment of Convertible Notes . . . . .	(6,110)	--	--
Proceeds from issuance of common stock			
under public offering, net of issuance costs . . . . .	--	--	15,832
Proceeds from issuance of common stock			
under private placement, net of issuance costs . . . . .	--	--	5,299
Proceeds from issuance of common stock			
under employee plans . . . . .	559	925	704
Net cash (used in) provided by financing activities. . . . .	<u>(5,551)</u>	<u>925</u>	<u>21,835</u>
Effect of exchange rates on cash and cash equivalents. . . . .	(59)	43	1
Net (decrease) increase in cash and cash equivalents . . . . .	(11,420)	(955)	16,864
Cash and cash equivalents, beginning of year. . . . .	16,848	17,803	939
Cash and cash equivalents, end of year. . . . .	<u>\$ 5,428</u>	<u>\$16,848</u>	<u>\$ 17,803</u>
Supplemental cash flow information:			
Cash paid during the year for:			
Income taxes. . . . .	\$ 37	\$ 37	\$ 18
Interest . . . . .	\$610	\$ 550	\$ 516
Supplemental disclosure of non-cash flow information:			
Fair value of common stock issued to settle accounts payable. .	\$ --	\$ --	\$ 323
Net transfer of equipment between inventory and property and equipment. . . . .	\$119	\$ --	\$ --

The accompanying notes are an integral part of these consolidated financial statements.

**AEHR TEST SYSTEMS AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:**

**BUSINESS:**

Aehr Test Systems (the “Company”) was incorporated in California in May 1977 and primarily designs, engineers and manufactures test and burn-in equipment used in the semiconductor industry. The Company’s principal products are the Advanced Burn-In and Test System, or ABTS, the FOX full wafer contact parallel test and burn-in systems, the MAX burn-in system, WaferPak full wafer contactor, the DiePak carrier and test fixtures.

**LIQUIDITY:**

Since inception, the Company has incurred substantial cumulative losses and negative cash flows from operations. In response, the Company took steps to minimize expense levels, entered into credit arrangements, and raised capital through public and private equity offerings, to increase the likelihood that it will have sufficient cash to support operations.

At May 31, 2019, the Company had \$5.4 million in cash and cash equivalents. The Company anticipates that the existing cash balance together with income from operations, collections of existing accounts receivable, revenue from our existing backlog of products, the sale of inventory on hand, and deposits and down payments against significant orders will be adequate to meet its working capital and capital equipment requirements. We believe our existing cash and cash equivalents will be sufficient to meet our anticipated cash needs over the next 12 months. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of our spending to support research and development activities, the timing and cost of establishing additional sales and marketing capabilities, the timing and cost to introduce new and enhanced products and the timing and cost to implement new manufacturing technologies. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. Any additional debt financing obtained by us in the future could also involve restrictive covenants relating to our capital-raising activities and other financial and operational matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions. Additionally, if we raise additional funds through further issuances of equity, convertible debt securities or other securities convertible into equity, our existing stockholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences and privileges senior to those of holders of our common stock. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to grow or support our business and to respond to business challenges could be significantly limited.

**CONSOLIDATION:**

The consolidated financial statements include the accounts of the Company and both its wholly-owned and majority-owned foreign subsidiaries. Intercompany accounts and transactions have been eliminated.

**FOREIGN CURRENCY TRANSLATION AND TRANSACTIONS:**

Assets and liabilities of the Company’s foreign subsidiaries and a branch office are translated into U.S. Dollars from their functional currencies of Japanese Yen, Euros and New Taiwan Dollars using the exchange rate in effect at the balance sheet date. Additionally, their net sales and expenses are translated using exchange rates approximating average rates prevailing during the fiscal year. Translation adjustments that arise from translating their financial statements from their local currencies to U.S. Dollars are accumulated and reflected as a separate component of shareholders’ equity (deficit).

Transaction gains and losses that arise from exchange rate changes denominated in currencies other than the local currency are included in the Consolidated Statements of Operations as incurred. See Note 12 for the detail of foreign exchange transaction gains and losses for all periods presented.

**USE OF ESTIMATES:**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Significant estimates in the Company's consolidated financial statements include allowance for doubtful accounts, valuation of inventory at the lower of cost or market, and warranty reserves.

#### CASH EQUIVALENTS:

Cash equivalents consist of money market instruments purchased with an original maturity of three months or less. These investments are reported at fair value.

#### ACCOUNTS RECEIVABLE AND ALLOWANCE FOR DOUBTFUL ACCOUNTS:

Accounts receivable are derived from the sale of products throughout the world to semiconductor manufacturers, semiconductor contract assemblers, electronics manufacturers and burn-in and test service companies. Accounts receivable are recorded at the invoiced amount and are not interest bearing. The Company maintains an allowance for doubtful accounts to reserve for potentially uncollectible trade receivables. The Company also reviews its trade receivables by aging category to identify specific customers with known disputes or collection issues. The Company exercises judgment when determining the adequacy of these reserves as the Company evaluates historical bad debt trends, general economic conditions in the United States and internationally, and changes in customer financial conditions. Uncollectible receivables are recorded as bad debt expense when all efforts to collect have been exhausted and recoveries are recognized when they are received. No significant adjustments to the allowance for doubtful accounts were recorded during the fiscal year ended May 31, 2019, 2018 or 2017.

#### CONCENTRATION OF CREDIT RISK:

The Company sells its products primarily to semiconductor manufacturers in North America, Asia, and Europe. As of May 31, 2019, approximately 49%, 25% and 26% of gross accounts receivable were from customers located in North America, Asia and Europe, respectively. As of May 31, 2018, approximately 55%, 45% and 0% of gross accounts receivable were from customers located in North America, Asia, and Europe, respectively. Three customers accounted for 44%, 25% and 21% of gross accounts receivable as of May 31, 2019. Three customers accounted for 38%, 32% and 11% of gross accounts receivable as of May 31, 2018. Four customers accounted for 36%, 14%, 12% and 10% of net sales in fiscal 2019. Three customers accounted for 34%, 26% and 13% of net sales in fiscal 2018. The Company performs ongoing credit evaluations of its customers and generally does not require collateral. The Company uses letter of credit terms for some of its international customers.

The Company's cash and cash equivalents are generally deposited with major financial institutions in the United States, Japan, Germany and Taiwan. The Company invests its excess cash in money market funds and U.S. Treasury securities. The money market funds bear the risk associated with each fund. The money market funds have variable interest rates. The Company has not experienced any material losses on its money market funds or short-term cash deposits.

#### CONCENTRATION OF SUPPLY RISK:

The Company relies on subcontractors to manufacture many of the components and subassemblies used in its products. Quality or performance failures of the Company's products or changes in its manufacturers' financial or business condition could disrupt the Company's ability to supply quality products to its customers and thereby have a material and adverse effect on its business and operating results. Some of the components and technologies used in the Company's products are purchased and licensed from a single source or a limited number of sources. The loss of any of these suppliers may cause the Company to incur additional transition costs, result in delays in the manufacturing and delivery of its products, or cause it to carry excess or obsolete inventory and could cause it to redesign its products.

#### INVENTORIES:

Inventories include material, labor and overhead, and are stated at the lower of cost (first-in, first-out method) or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less costs of completion, disposal and transportation. Provisions for excess, obsolete and unusable inventories are made after management's evaluation of future demand and market conditions. The Company adjusts inventory balances to approximate the lower of its manufacturing costs or net realizable value. If actual future demand or market conditions become less favorable than those projected by management, additional inventory write-downs may be required, and would be reflected in cost of sales in the period the revision is made.

#### PROPERTY AND EQUIPMENT:

Property and equipment are stated at cost less accumulated depreciation and amortization. Major improvements are capitalized, while repairs and maintenance are expensed as incurred. Leasehold improvements are amortized over the

lesser of their estimated useful lives or the term of the related lease. Furniture and fixtures, machinery and equipment, and test equipment are depreciated on a straight-line basis over their estimated useful lives. The ranges of estimated useful lives are generally as follows:

Furniture and fixtures . . . . .	2 to 6 years
Machinery and equipment. . . . .	3 to 6 years
Test equipment . . . . .	4 to 6 years

#### REVENUE RECOGNITION:

In May 2014, the FASB issued FASB ASC Topic 606, *Revenue from Contracts with Customers* (Topic 606), which was subsequently updated (collectively “ASC 606”). We adopted the standard as of June 1, 2018, using the modified retrospective method. Under this method, we applied ASC 606 to contracts that were not complete as of June 1, 2018 and recognized the cumulative effect of initially applying the standard as an adjustment to the opening balance of retained earnings. Results for reporting periods beginning after June 1, 2018 are presented in accordance with ASC 606. Under the modified retrospective adoption method, prior period amounts are not adjusted and are reported in accordance with the accounting standards in effect for those periods per FASB ASC Topic 605, *Revenue Recognition*, which is also referred to herein as “legacy GAAP.”

The adoption of ASC 606 did not have a material impact on our consolidated financial statements as of June 1, 2018. No adjustment was recorded to accumulated deficit as of the adoption date and reported revenue would not have been different under legacy GAAP. Additionally, we do not expect the adoption of the revenue standard to have a material impact to our net income on an ongoing basis.

We sell our products primarily through a direct sales force. In certain international markets, we sell our products through independent distributors. We consider revenue to be earned when all of the following criteria are met:

- We have a contract with a customer that creates enforceable rights and obligations,
- Promised performance obligations are identified,
- The transaction price, or the amount we expect to receive, is determinable and
- We have satisfied the performance obligations to the customer.

Transfer of control is evidenced upon passage of title and risk of loss to the customer unless we are required to provide additional services.

#### PRODUCT DEVELOPMENT COSTS AND CAPITALIZED SOFTWARE:

Costs incurred in the research and development of new products or systems are charged to operations as incurred. Costs incurred in the development of software programs for the Company’s products are charged to operations as incurred until technological feasibility of the software has been established. Generally, technological feasibility is established when the software module performs its primary functions described in its original specifications, contains features required for it to be usable in a production environment, is completely documented and the related hardware portion of the product is complete. After technological feasibility is established, any additional costs are capitalized. Capitalization of software costs ceases when the software is substantially complete and is ready for its intended use. Capitalized costs are amortized over the estimated life of the related software product using the greater of the units of sales or straight-line methods over ten years. No system software development costs were capitalized or amortized in fiscal 2019, 2018 and 2017.

#### IMPAIRMENT OF LONG-LIVED ASSETS:

In the event that facts and circumstances indicate that the carrying value of assets may be impaired, an evaluation of recoverability would be performed. If an evaluation is required, the estimated future undiscounted cash flows associated with the asset would be compared to the asset’s carrying value to determine if a write-down is required.

#### ADVERTISING COSTS:

The Company expenses all advertising costs as incurred and the amounts were not material for all periods presented.

## SHIPPING AND HANDLING OF PRODUCTS:

Amounts billed to customers for shipping and handling of products are included in net sales. Costs incurred related to shipping and handling of products are included in cost of sales.

## INCOME TAXES:

Income taxes have been provided using the liability method whereby deferred tax assets and liabilities are determined based on differences between financial reporting and tax bases of assets and liabilities and net operating loss and tax credit carryforwards measured using the enacted tax rates and laws that will be in effect when the differences are expected to reverse or the carryforwards are utilized. Valuation allowances are established when it is determined that it is more likely than not that such assets will not be realized.

A full valuation allowance was established against all deferred tax assets, as management determined that it is more likely than not that deferred tax assets will not be realized, as of May 31, 2019 and 2018.

The Company accounts for uncertain tax positions consistent with authoritative guidance. The guidance prescribes a “more likely than not” recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The Company does not expect any material change in its unrecognized tax benefits over the next twelve months. The Company recognizes interest and penalties related to unrecognized tax benefits as a component of income taxes.

Although the Company files U.S. federal, various state, and foreign tax returns, the Company’s only major tax jurisdictions are the United States, California, Germany and Japan. Tax years 1996 – 2018 remain subject to examination by the appropriate governmental agencies due to tax loss carryovers, research and development tax credits, or other tax attributes from those years.

## COMPREHENSIVE (LOSS) INCOME:

Comprehensive (loss) income generally represents all changes in shareholders’ equity except those resulting from investments or contributions by shareholders. Unrealized gains and losses on foreign currency translation adjustments are included in the Company’s components of comprehensive (loss) income, which are excluded from net (loss) income. Comprehensive (loss) income is included in the statements of comprehensive (loss) income.

## RECENT ACCOUNTING PRONOUNCEMENTS:

### Accounting Standards Adopted

#### *Revenue Recognition*

In May 2014, the FASB issued Accounting Standards Codification (“ASC”) Update No. 2014-09, *Revenue from Contracts with Customers* (Topic 606), which has been subsequently updated (collectively “ASC 606”). The core principle of the standard is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. The new standard defines a five-step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under legacy GAAP, including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price, and allocating the transaction price to each distinct performance obligation. The standard permits the use of either the retrospective or modified retrospective transition methods. It also requires expanded disclosures including the nature, amount, timing, and uncertainty of revenues and cash flows related to contracts with customers. Additionally, qualitative and quantitative disclosures are required about customer contracts, significant judgments and changes in judgments, and assets recognized from the costs to obtain or fulfill a contract.

The Company adopted ASC 606 on June 1, 2018, the first day of fiscal 2019, using the modified retrospective method. The Company applied ASC 606 to all contracts not completed as of the date of adoption in order to determine any adjustment to the opening balance of retained earnings. Under the modified retrospective adoption method, the comparative financial information has not been restated and continues to be reported under the accounting standards in effect for those periods, ASC 605, “*Revenue Recognition*”, which is also referred to herein as “legacy GAAP.”

The adoption of ASC 606 did not have a material impact on the Company’s consolidated financial statements as of June 1, 2018. No adjustment was recorded to accumulated deficit as of the adoption date and reported revenue would not have been different under legacy GAAP. Additionally, the Company does not expect the adoption of the revenue standard to have a material impact to the Company’s net income on an ongoing basis.



#### *Classification of Certain Cash Receipts and Cash Payments*

In August 2016, the FASB issued authoritative guidance related to the classification of certain cash receipts and cash payments on the statement of cash flows. The Company adopted this new standard in fiscal year 2019. The adoption of this guidance did not have a significant impact on the Company's consolidated financial statements.

#### *Intra-Entity Asset Transfers*

In October 2016, the FASB issued an accounting standard update that requires recognition of the income tax consequences of intra-entity transfers of assets (other than inventory) at the transaction date. The Company adopted this new standard in fiscal year 2019. The adoption of this guidance did not have a significant impact on the Company's consolidated financial statements.

#### *Restricted Cash*

In November 2016, the FASB issued authoritative guidance related to statements of cash flows. This guidance clarifies that amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of period total amounts shown on the statement of cash flows. The Company adopted this new standard in fiscal year 2019. The adoption of this guidance did not have a significant impact on the Company's consolidated financial statements.

#### *Income Taxes*

On December 22, 2017, the US government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the US tax code including but not limited to (1) reducing the US federal corporate tax rate from 34% to 21%; (2) requiring companies to pay a one-time transition tax on certain repatriated earnings of foreign subsidiaries; (3) generally eliminating US federal income taxes on dividends from foreign subsidiaries; (4) requiring a current inclusion in US federal income of certain earnings of controlled foreign corporations; (5) creating a new limitation on deductible interest expense; (6) changing rules related to the uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017, and (7) repealing the corporate alternative minimum tax regime, or AMT, effective December 31, 2017 and permitting existing minimum tax credits to offset the regular tax liability for any tax year. Consequently, the Company has accounted for the reduction of \$6.4 million of deferred tax assets with an offsetting adjustment to the valuation allowance for the fiscal year ended 2018, and recorded a benefit of \$90,000 for the Company's Federal refundable AMT credit.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740, Income taxes. In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but it is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements. There are also certain transitional impacts of the Tax Act. As part of the transition to the new territorial tax system, the Tax Act imposes a one-time repatriation tax on deemed repatriation of historical earnings of foreign subsidiaries. The Company is not subject to the transition tax. The one-time transition tax is based on post-1986 earnings and profits that were previously deferred from U.S. income tax. The Company has finalized its calculation of the total post-1986 earnings and profits for its foreign corporations. Based on the Company's net operating loss carryovers and valuation allowance, there is no impact to its consolidated financial statements as a result of the completion of the analysis.

#### Accounting Standards Not Yet Adopted

##### *Financial Instruments*

In January 2016, the FASB issued an accounting standard update related to recognition and measurement of financial assets and financial liabilities. This standard changes accounting for equity investments, financial liabilities under the fair value option and the presentation and disclosure requirements for financial instruments. In addition, it clarifies guidance related to the valuation allowance assessment when recognizing deferred tax assets resulting from unrealized losses on available-for-sale debt securities. This standard is effective for us in fiscal year 2020. Early adoption is permitted. The Company does not expect a material impact of this new guidance on its consolidated financial statements.

In June 2016, the FASB issued an accounting standard update that requires measurement and recognition of expected credit losses for financial assets held based on historical experience, current conditions, and reasonable and supportable forecasts that affect the collectibility of the reported amount. The accounting standard update will be effective for the Company beginning in the first quarter of fiscal 2021 on a modified retrospective basis, and early adoption in fiscal 2020 is permitted. The Company does not expect a material impact of this accounting standard update on its consolidated financial statements.

### *Leases*

In February 2016, the FASB issued ASU No. 2016-02, *Leases* (Topic 842) (“ASU 2016-02”), which modifies lease accounting for lessees to increase transparency and comparability by recording lease assets and liabilities for operating leases and disclosing key information about leasing arrangements. The Company will adopt ASU 2016-02 utilizing the modified retrospective transition method through a cumulative-effect adjustment at the beginning of its first quarter of 2020. The Company has reached conclusions on its accounting assessments to the new standard and anticipates recording right of use assets and lease liabilities, including deferred rent, of approximately \$2.7 million on the Company's Condensed Consolidated Balance Sheets for those leases currently classified as operating leases. However, the ultimate impact of adopting ASU 2016-02 will depend on the Company's lease portfolio as of the adoption date.

## **2. REVENUE:**

### *Revenue recognition*

The Company recognizes revenue when promised goods or services are transferred to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services by following a five-step process, (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, and (5) recognize revenue when or as the Company satisfies a performance obligation, as further described below.

Performance obligations include sales of systems, contactors, spare parts, and services, as well as, installation and training services included in customer contracts.

A contract's transaction price is allocated to each distinct performance obligation. In determining the transaction price, the Company evaluates whether the price is subject to refund or adjustment to determine the net consideration to which the Company expects to be entitled. The Company generally does not grant return privileges, except for defective products during the warranty period.

For contracts that contain multiple performance obligations, the Company allocates the transaction price to the performance obligations on a relative standalone selling price basis. Standalone selling prices are based on multiple factors including, but not limited to historical discounting trends for products and services and pricing practices in different geographies.

Revenue for systems and spares are recognized at a point in time, which is generally upon shipment or delivery. Revenue from services is recognized over time as services are completed or ratably over the contractual period of generally one year or less.

The Company has elected the practical expedient under ASC 606 to not assess whether a contract has a significant financing component as the Company's standard payment terms are less than one year.

### *Disaggregation of revenue*

The following tables show revenues by major product categories. Within each product category, contract terms, conditions and economic factors affecting the nature, amount, timing and uncertainty around revenue recognition and cash flow are substantially similar.

The Company's revenues by product category are as follows (in thousands):

	Year Ended May 31,		
	2019	2018	2017
Type of good / service:			
Systems . . . . .	\$ 9,566	\$18,174	\$12,115
Contactors . . . . .	6,154	6,500	1,991
Services . . . . .	5,336	4,881	4,792
	<u>\$21,056</u>	<u>\$29,555</u>	<u>\$18,898</u>
Product lines:			
Wafer-level . . . . .	\$14,618	\$13,080	\$9,582
Test During Burn-In . . . . .	6,438	16,475	9,316
	<u>\$21,056</u>	<u>\$29,555</u>	<u>\$18,898</u>

The following presents information about the Company's operations in different geographic areas. Net sales are based upon ship-to location (in thousands):

	Year Ended May 31,		
	2019	2018	2017
Geographic region:			
United States . . . . .	\$13,468	\$ 8,446	\$ 7,762
Asia . . . . .	5,648	19,973	10,439
Europe . . . . .	1,940	1,136	697
	<u>\$21,056</u>	<u>\$29,555</u>	<u>\$18,898</u>

With the exception of the amount of service contracts and extended warranties, the Company's product category revenues are recognized at point in time when control transfers to customers.

	Year Ended May 31,		
	2019	2018	2017
Timing of revenue recognition (in thousands):			
Products and services transferred at a point in time . . . . .	\$18,473	\$27,337	\$17,193
Services transferred over time . . . . .	2,583	2,218	1,705
	<u>\$21,056</u>	<u>\$29,555</u>	<u>\$18,898</u>

*Contract balances*

A receivable is recognized in the period the Company delivers goods or provides services or when the Company's right to consideration is unconditional. The Company usually does not record contract assets because the Company has an unconditional right to payment upon satisfaction of the performance obligation, and therefore, a receivable is more commonly recorded than a contract asset.

Contract liabilities include payments received in advance of performance under a contract and are satisfied as the associated revenue is recognized. Contract liabilities are reported on the Condensed Consolidated Balance Sheets at the end of each reporting period as a component of deferred revenue. Contract liabilities as of May 31, 2019 and 2018 were \$1,734,000 and \$2,089,000, respectively. During the fiscal year ended May 31, 2019, the Company recognized \$1,273,000 of revenues that were included in contract liabilities as of May 31, 2018.

*Remaining performance obligations*

On May 31, 2019, the Company had \$731,000 of remaining performance obligations, which were comprised of deferred service contracts and extended warranty contracts not yet delivered. The Company expects to recognize approximately 74% of its remaining performance obligations as revenue in fiscal 2020, and an additional 26% in fiscal 2021 and thereafter. The foregoing excludes the value of other remaining performance obligations as they have original durations of one year or less, and also excludes information about variable consideration allocated entirely to a wholly unsatisfied performance obligation.

*Costs to obtain or fulfill a contract*

The Company generally expenses sales commissions when incurred as a component of selling, general and administrative expense as the amortization period is typically less than one year. Additionally, the majority of the Company's cost of fulfillment as a manufacturer of products is classified as inventory and fixed assets, which are accounted for under the respective guidance for those asset types. Other costs of contract fulfillment are immaterial due to the nature of the Company's products and their respective manufacturing process.

**3. EARNINGS PER SHARE ("EPS"):**

Basic EPS is determined using the weighted average number of common shares outstanding during the period. Diluted EPS is determined using the weighted average number of common shares and potential common shares (representing the dilutive effect of stock options, RSUs and ESPP shares) outstanding during the period using the treasury stock method.

The following table presents the computation of basic and diluted net (loss) income per share attributable to Aehr Test Systems common shareholders (in thousands, except per share data):

	Year Ended May 31,		
	2019	2018	2017
Numerator: Net (loss) income. . . . .	<u>\$ (5,235)</u>	<u>\$ 528</u>	<u>\$ (5,653)</u>
Denominator for basic net (loss) income per share: Weighted-average shares outstanding . . . . .	<u>22,387</u>	<u>21,732</u>	<u>16,267</u>
Shares used in basic net (loss) income per share calculation . .	22,387	21,732	16,267
Effect of dilutive securities. . . . .	<u>--</u>	<u>1,050</u>	<u>--</u>
Denominator for diluted net (loss) income per share . . . . .	<u>22,387</u>	<u>22,782</u>	<u>16,267</u>
Basic net (loss) income per share . . . . .	<u>\$ (0.23)</u>	<u>\$ 0.02</u>	<u>\$ (0.35)</u>
Diluted net (loss) income per share . . . . .	<u>\$ (0.23)</u>	<u>\$ 0.02</u>	<u>\$ (0.35)</u>

For the purpose of computing diluted earnings per share, the weighted average number of potential common shares does not include stock options with an exercise price greater than the average fair value of the Company's common stock for the period, as the effect would be anti-dilutive. In the fiscal years ended May 31, 2019 and 2017, potential common shares have not been included in the calculation of diluted net loss per share as the effect would be anti-dilutive. As such, the numerator and the denominator used in computing both basic and diluted net loss per share for these periods are the same. Stock options to purchase 3,107,000 and 3,074,000 shares of common stock were outstanding on May 31, 2019 and 2017, respectively, but were not included in the computation of diluted net loss per share, because the inclusion of such shares would be anti-dilutive. Stock options to purchase 1,313,000 shares of common stock were outstanding as of May 31, 2018 but were not included in the computation of diluted net income per share, because the inclusion of such shares would be anti-dilutive. ESPP rights to purchase 297,000 and 169,000 ESPP shares were outstanding on May 31, 2019 and 2017, respectively, but were not included in the computation of diluted net loss per share, because the inclusion of such shares would be anti-dilutive. RSUs for 23,000 shares and 32,000 shares were outstanding on May 31, 2019 and 2017, respectively, but were not included in the computation of diluted net loss per share, because the inclusion of such shares would be anti-dilutive. The 2,657,000 shares convertible under the Convertible Notes outstanding on May 31, 2018 and 2017 were not included in the computation of diluted net income (loss) per share, because the inclusion of such shares would be anti-dilutive.

#### 4. FAIR VALUE OF FINANCIAL INSTRUMENTS:

The Company's financial instruments are measured at fair value consistent with authoritative guidance. This authoritative guidance defines fair value, establishes a framework for using fair value to measure assets and liabilities, and disclosures required related to fair value measurements.

The guidance establishes a fair value hierarchy based on inputs to valuation techniques that are used to measure fair value that are either observable or unobservable. Observable inputs reflect assumptions market participants would use in pricing an asset or liability based on market data obtained from independent sources while unobservable inputs reflect a reporting entity's pricing based upon their own market assumptions. The fair value hierarchy consists of the following three levels:

Level 1 - instrument valuations are obtained from real-time quotes for transactions in active exchange markets involving identical assets.

Level 2 - instrument valuations are obtained from readily-available pricing sources for comparable instruments.

Level 3 - instrument valuations are obtained without observable market values and require a high level of judgment to determine the fair value.

The following table summarizes the Company's financial assets measured at fair value on a recurring basis as of May 31, 2019 (in thousands):

	Balance as of May 31, 2019	Level 1	Level 2	Level 3
Money market funds. . . . .	<u>\$ 3,017</u>	<u>\$ 3,017</u>	<u>\$ --</u>	<u>\$ --</u>
Assets. . . . .	<u>\$ 3,017</u>	<u>\$ 3,017</u>	<u>\$ --</u>	<u>\$ --</u>

The following table summarizes the Company's financial assets measured at fair value on a recurring basis as of May 31, 2018 (in thousands):

	Balance as of May 31, 2018	Level 1	Level 2	Level 3
Money market funds. . . . .	<u>\$ 7,813</u>	<u>\$ 7,813</u>	<u>\$ --</u>	<u>\$ --</u>
U.S. Treasury securities. . .	<u>5,983</u>	<u>5,983</u>	<u>--</u>	<u>--</u>
Assets. . . . .	<u>\$13,796</u>	<u>\$13,796</u>	<u>\$ --</u>	<u>\$ --</u>

The U.S. Treasury securities as of May 31, 2018 have maturities of three months and have no unrealized gain or loss.

Included in Money market funds as of May 31, 2019 and 2018 is \$80,000 restricted cash representing a security deposit for the Company's United States manufacturing and office space lease.

There were no financial liabilities measured at fair value as of May 31, 2019 and 2018.

There were no transfers between Level 1 and Level 2 fair value measurements during the fiscal years ended May 31, 2019 and 2018.

The carrying amounts of financial instruments including cash, cash equivalents, receivables, accounts payable and certain other accrued liabilities, approximate fair value due to their short maturities. Based on the borrowing rates currently available to the Company for loans with similar terms, the carrying value of the debt approximates the fair value.

## 5. ACCOUNTS RECEIVABLE:

Accounts receivable comprise (in thousands):

	May 31,	
	2019	2018
Accounts receivable. . . . .	<u>\$4,859</u>	<u>\$2,860</u>
Less: Allowance for doubtful accounts . . . . .	<u>--</u>	<u>(4)</u>
	<u>\$4,859</u>	<u>\$2,856</u>

	Balance at beginning of year	Additions charged to costs and expenses	Deductions*	Balance at end of year
Allowance for doubtful accounts receivable:				
May 31, 2019 . . . . .	<u>\$ 4</u>	<u>\$ --</u>	<u>\$ (4)</u>	<u>\$ --</u>
May 31, 2018 . . . . .	<u>\$ 61</u>	<u>\$ 4</u>	<u>\$ (61)</u>	<u>\$ 4</u>

\* Deductions include write-offs of uncollectible accounts, collections of amounts previously reserved, and releases of allowance for doubtful accounts credited to expense.

## 6. BALANCE SHEET DETAIL:

INVENTORIES:

(In Thousands)	May 31,	
	2019	2018
Raw materials and sub-assemblies. . . . .	<u>\$5,471</u>	<u>\$5,747</u>
Work in process. . . . .	<u>3,580</u>	<u>3,068</u>
Finished goods. . . . .	<u>10</u>	<u>234</u>
	<u>\$9,061</u>	<u>\$9,049</u>

PROPERTY AND EQUIPMENT, NET:

(In Thousands)	May 31,	
	2019	2018
Leasehold improvements. . . . .	\$1,154	\$1,154
Furniture and fixtures . . . . .	983	984
Machinery and equipment. . . . .	3,097	2,865
Test equipment. . . . .	2,604	2,595
	<u>7,838</u>	<u>7,598</u>
Less: Accumulated depreciation and amortization. . . . .	<u>(6,793)</u>	<u>(6,395)</u>
	<u>\$1,045</u>	<u>\$ 1,203</u>

Depreciation expense was \$431,000, \$417,000 and \$271,000 for fiscal 2019, 2018, and 2017, respectively.

ACCRUED EXPENSES:

(In Thousands)	May 31,	
	2019	2018
Payroll related. . . . .	\$ 990	\$ 1,014
Restructuring . . . . .	408	--
Commissions and bonuses. . . . .	168	101
Professional services. . . . .	162	163
Warranty. . . . .	154	135
Material purchases. . . . .	65	--
Taxes payable. . . . .	29	34
Investor relations . . . . .	19	19
Accrued interest . . . . .	--	139
Other . . . . .	39	41
	<u>\$2,034</u>	<u>\$1,646</u>

CUSTOMER DEPOSITS AND DEFERRED REVENUE, SHORT-TERM:

(In Thousands)	May 31,	
	2019	2018
Customer deposits. . . . .	\$1,003	\$ 1,340
Deferred revenue . . . . .	542	290
	<u>\$1,545</u>	<u>\$1,630</u>

**7. INCOME TAXES:**

Domestic and foreign components of (loss) income before income tax (expense) benefit are as follows (in thousands):

	Year Ended May 31,		
	2019	2018	2017
Domestic. . . . .	\$ (5,273)	\$ 433	\$(5,663)
Foreign . . . . .	65	22	35
	<u>\$ (5,208)</u>	<u>\$ 455</u>	<u>\$(5,628)</u>

The income tax (expense) benefit consists of the following (in thousands):

	Year Ended May 31,		
	2019	2018	2017
Federal income taxes:			
Current .....	\$ --	\$ 99	\$ --
Deferred .....	--	--	--
State income taxes:			
Current .....	(6)	(22)	(8)
Deferred .....	--	--	--
Foreign income taxes:			
Current .....	(21)	(4)	(17)
Deferred .....	--	--	--
	<u>\$ (27)</u>	<u>\$ 73</u>	<u>\$ (25)</u>

The Company's effective tax rate differs from the U.S. federal statutory tax rate, as follows:

	Year Ended May 31,		
	2019	2018	2017
U.S. federal statutory tax rate .....	21.0 %	28.6 %	34.0 %
State taxes, net of federal tax effect .....	(1.0)	(16.7)	(0.1)
Foreign rate differential .....	(0.7)	39.4	0.1
Stock-based compensation .....	(2.8)	39.9	(2.8)
Research and development credit .....	1.5	5.9	3.1
Change in valuation allowance .....	(15.6)	(1,349.2)	(33.8)
Federal rate change impact .....	--	1,419.7	--
Federal AMT refund .....	--	(20.0)	--
ASU 2016-09 adoption .....	--	(169.1)	--
Other .....	(2.9)	5.4	(0.9)
Effective tax rate .....	<u>(0.5)%</u>	<u>(16.1)%</u>	<u>(0.4)%</u>

The components of the net deferred tax assets are as follows (in thousands):

	Year Ended May 31,	
	2019	2018
Net operating losses .....	\$13,475	\$12,918
Credit carryforwards .....	4,995	4,952
Inventory reserves .....	790	588
Reserves and accruals .....	1,379	1,419
Other .....	298	247
	<u>20,937</u>	<u>20,124</u>
Less: Valuation allowance .....	<u>(20,937)</u>	<u>(20,124)</u>
Net deferred tax assets .....	<u>\$ --</u>	<u>\$ --</u>

The valuation allowance increased by \$813,000 during fiscal 2019, decreased by \$6,139,000 during fiscal 2018, and increased by \$1,635,000 during fiscal 2017. As of May 31, 2019 and 2018, the Company concluded that it is more likely than not that the deferred tax assets will not be realized and therefore provided a full valuation allowance against the deferred tax assets. The Company will continue to evaluate the need for a valuation allowance against its deferred tax assets on a quarterly basis.

At May 31, 2019, the Company had federal and state net operating loss carryforwards of \$53,803,000 and \$29,504,000 respectively. The federal and state net operating loss carryforwards will begin to expire in 2024. At May 31, 2019, the Company also had federal and state research and development tax credit carryforwards of \$2,071,000 and \$5,609,000, respectively. The federal credit carryforward will begin to expire in 2022, and the California credit will carryforward indefinitely. These carryforwards may be subject to certain limitations on annual utilization in case of a change in ownership, as defined by tax law. The Company also has alternative minimum tax credit carryforwards of \$34,000 for state purposes. The credits may be used to offset regular tax and do not expire.

The Company has made no provision for U.S. income taxes on undistributed earnings of certain foreign subsidiaries because it is the Company's intention to permanently reinvest such earnings in its foreign subsidiaries. If such earnings were distributed, the Company would be subject to additional U.S. income tax expense. Determination of the amount of unrecognized deferred income tax liability related to these earnings is not practicable.

Foreign net operating loss carryforwards of \$345,000 are available to reduce future foreign taxable income. The foreign net operating losses will expire starting in fiscal year 2021.

The Company maintains liabilities for uncertain tax positions. These liabilities involve considerable judgment and estimation and are continuously monitored by management based on the best information available. The aggregate changes in the balance of gross unrecognized tax benefits are as follows (in thousands):

Beginning balance as of May 31, 2016. . . . .	\$ 789
Decreases related to prior year tax positions. . . . .	--
Decreases related to lapse of statute of limitations . . .	--
	<hr/>
Balance at May 31, 2017 . . . . .	\$ 789
Increases related to prior year tax positions. . . . .	889
Increases related to current year tax positions. . . . .	107
	<hr/>
Balance at May 31, 2018 . . . . .	\$1,785
Decreases related to prior year tax positions. . . . .	(41)
Increases related to current year tax positions. . . . .	65
	<hr/>
Balance at May 31, 2019 . . . . .	<u>\$1,809</u>

The ending balance of \$1,809,000 of unrecognized tax benefits as of May 31, 2019, if recognized, would not impact the effective tax rate.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for the tax effects of the Tax Act. SAB 118 provides a measurement period that should not extend beyond one year from the Tax Act enactment date for companies to complete the accounting under ASC 740, Income taxes. In accordance with SAB 118, a company must reflect the income tax effects of those aspects of the Tax Act for which the accounting under ASC 740 is complete. To the extent that a company's accounting for certain income tax effects of the Tax Act is incomplete but it is able to determine a reasonable estimate, it must record a provisional estimate in the financial statements.

As part of the transition to the new territorial tax system, the Tax Act imposes a one-time repatriation tax on deemed repatriation of historical earnings of foreign subsidiaries. The company is not subject to the transition tax. The one-time transition tax is based on post-1986 earnings and profits that were previously deferred from U.S. income tax. During fiscal 2019 the Company finalized its calculation of the transition tax and due to carryover losses and the valuation allowance the Company determined there was no impact to the financial statements as a result of the completion of the analysis.

The Tax Act also repealed the corporate alternative minimum tax, or AMT, effective December 31, 2017. The Tax Act repealed the corporate alternative minimum tax regime and permits existing minimum tax credits to offset the regular tax liability for any tax year. Further, the credit is refundable for any tax year beginning after December 31, 2017 and before December 31, 2020 in an amount equal to 50% of the excess of the minimum tax credit over the allowable credit for the year against the regular tax liability. Any unused minimum tax credit carryforward is refundable in the following year. As result, the Company recorded a benefit of \$90,000 for its federal refundable AMT credit in its fiscal 2018 tax provision.

In addition, the reduction of U.S. federal corporate tax rate reduces the corporate tax rate to 21%, effective January 1, 2018. Consequently, the Company has accounted for the reduction of \$6.4 million of deferred tax assets with an offsetting adjustment to the valuation allowance.



Although the Company files U.S. federal, various state, and foreign tax returns, the Company's only major tax jurisdictions are the United States, California, Germany and Japan. Tax years 1996 – 2018 remain subject to examination by the appropriate governmental agencies due to tax loss carryovers, research and development tax credits, or other tax attributes from those years.

## **8. LONG-TERM DEBT:**

On April 10, 2015, the Company entered into a Convertible Note Purchase and Credit Facility Agreement (the "Purchase Agreement") with QVT Fund LP and Quintessence Fund L.P. (the "Purchasers") providing for (a) the Company's sale to the Purchasers of \$4,110,000 in aggregate principal amount of 9.0% Convertible Secured Notes due 2017 (the "Convertible Notes") and (b) a secured revolving loan facility (the "Credit Facility") in an aggregate principal amount of up to \$2,000,000. On August 22, 2016 the Purchase Agreement was amended to extend the maturity date of the Convertible Notes to April 10, 2019, decrease the conversion price from \$2.65 per share to \$2.30 per share, decrease the forced conversion price from \$7.50 per share to \$6.51 per share, and allow for additional equity awards.

The maximum amount of \$2,000,000 drawn against the Credit Facility was converted to Convertible Notes, and at May 31, 2018 there was no remaining balance available to be drawn on the Credit Facility.

The Convertible Notes bore interest at an annual rate of 9.0%. Interest was payable quarterly on March 1, June 1, September 1 and December 1 of each year. Debt issuance costs of \$356,000, which were accreted over the term of the original loan using the effective interest rate method, were offset against the loan balance.

The conversion price for the Convertible Notes was \$2.30 per share and was subject to adjustment upon the occurrence of certain specified events. Holders could convert all or any part of the principal amount of their Convertible Notes in integrals of \$10,000 at any time prior to the maturity date. Upon conversion, the Company would deliver shares of its common stock to the holder of Convertible Notes electing such conversion. The Company could not redeem the Convertible Notes prior to maturity.

The Company's obligations under the Purchase Agreement were secured by substantially all of the assets of the Company.

On the maturity date of April 10, 2019, the Company paid off the Convertible Notes in an aggregate principal amount of \$6.1 million.

## **9. EQUITY:**

On August 8, 2016 the Company issued 200,000 shares of its common stock to Semics Inc., a semiconductor test equipment provider that produces fully automatic wafer probe systems, in consideration for cancellation of an outstanding invoice of \$323,000 for capital equipment.

On September 28, 2016, the Company sold 2,722,000 shares of its common stock in a private placement transaction to certain institutional and accredited investors. The purchase price per share of the common stock sold in the private placement was \$2.15, resulting in gross proceeds to the Company of \$5,851,000, before offering expenses. The net proceeds after offering expenses were \$5,299,000.

On April 19, 2017, the Company completed a public offering of 4,423,000 shares of its common stock at a price to the public of \$3.90 per share, including the underwriter's exercise of its option to purchase 577,000 additional shares to cover over-allotments. The gross proceeds to the Company were \$17,250,000, before underwriting discounts and offering expenses. The net proceeds after underwriting discounts and offering expenses were \$15,832,000.

## 10. STOCKHOLDERS' EQUITY, COMPREHENSIVE INCOME AND STOCK-BASED COMPENSATION:

### ACCUMULATED OTHER COMPREHENSIVE INCOME:

Changes in the components of AOCI, net of tax, were as follows (in thousands):

	Cumulative Translation Adjustments	Unrealized Loss on Investments, Net	Total
Balance at May 31, 2017 . . . . .	\$2,249	\$--	\$2,249
Other comprehensive income (loss) before reclassifications.	43	--	43
Amounts reclassified out of AOCI . . . . .	--	--	--
Other comprehensive income (loss), net of tax . . . . .	43	--	43
Balance at May 31, 2018 . . . . .	\$2,292	\$--	\$2,292
Other comprehensive income (loss) before reclassifications.	(62)	--	(62)
Amounts reclassified out of AOCI . . . . .	--	--	--
Other comprehensive income (loss), net of tax . . . . .	(62)	--	(62)
Balance at May 31, 2019 . . . . .	\$2,230	\$--	\$2,230

### STOCK-BASED COMPENSATION:

Stock-based compensation expense consists of expenses for stock options, restricted stock units, or RSUs, and employee stock purchase plan, or ESPP, purchase rights. Stock-based compensation expense for stock options and ESPP purchase rights is measured at each grant date, based on the fair value of the award using the Black-Scholes option valuation model, and is recognized as expense over the employee's requisite service period. This model was developed for use in estimating the value of publicly traded options that have no vesting restrictions and are fully transferable. The Company's employee stock options have characteristics significantly different from those of publicly traded options. For RSUs, stock-based compensation expense is based on the fair value of the Company's common stock at the grant date. All of the Company's stock-based compensation is accounted for as equity instruments.

The following table summarizes the stock-based compensation expense for the fiscal years ended May 31, 2019, 2018 and 2017 (in thousands, except per share data):

	Year Ended May 31,		
	2019	2018	2017
Stock-based compensation in the form of stock options, RSUs, and ESPP purchase rights, included in:			
Cost of sales . . . . .	\$104	\$148	\$ 91
Selling, general and administrative . . . . .	545	592	714
Research and development . . . . .	256	256	194
Net effect on net income (loss) . . . . .	\$905	\$996	\$999
Effect on net income (loss) per share:			
Basic . . . . .	\$0.04	\$0.05	\$0.06
Diluted . . . . .	\$0.04	\$0.04	\$0.06

As of May 31, 2019, 2018 and 2017, there were no stock-based compensation expenses capitalized as part of inventory.

During fiscal 2019, 2018 and fiscal 2017, the Company recorded stock-based compensation related to stock options and restricted stock units of \$650,000, \$706,000 and \$884,000, respectively.

As of May 31, 2019, the total compensation expense related to unvested stock-based awards under the Company's 2016 Equity Incentive Plan, but not yet recognized, was \$1,182,000 which is net of estimated forfeitures of \$3,000. This expense will be amortized on a straight-line basis over a weighted average period of approximately 3.0 years.

During fiscal 2019, 2018 and fiscal 2017, the Company recorded stock-based compensation related to its ESPP of \$255,000, \$290,000 and \$115,000, respectively. The increase in fiscal 2018 is primarily due to employees increasing their ESPP elections during the fiscal year.

As of May 31, 2019, the total compensation expense related to purchase rights under the ESPP but not yet recognized was \$179,000. This expense will be amortized on a straight-line basis over a weighted average period of approximately 1.2 years.

#### Valuation Assumptions

**Valuation and Amortization Method.** The Company estimates the fair value of stock options granted using the Black-Scholes option valuation method and a single option award approach. The fair value under the single option approach is amortized on a straight-line basis over the requisite service periods of the awards, which is generally the vesting period.

**Expected Term.** The Company's expected term represents the period that the Company's stock-based awards are expected to be outstanding and was determined based on historical experience, giving consideration to the contractual terms of the stock-based awards, vesting schedules and expectations of future employee behavior as evidenced by changes to the terms of its stock-based awards.

**Volatility.** Volatility is a measure of the amounts by which a financial variable such as stock price has fluctuated (historical volatility) or is expected to fluctuate (expected volatility) during a period. The Company uses the historical volatility for the past five years, which matches the expected term of most of the option grants, to estimate expected volatility. Volatility for each of the ESPP's four time periods of six months, twelve months, eighteen months, and twenty-four months is calculated separately and included in the overall stock-based compensation expense recorded.

**Risk-Free Interest Rate.** The Company bases the risk-free interest rate used in the Black-Scholes option valuation method on the implied yield in effect at the time of option grant on U.S. Treasury zero-coupon issues with a remaining term equivalent to the expected term of the stock awards including the ESPP.

**Fair Value.** The fair values of the Company's stock options granted to employees in fiscal 2019, 2018 and 2017 were estimated using the following weighted average assumptions in the Black-Scholes option valuation method:

	Year Ended May 31,		
	2019	2018	2017
Expected term (in years) . . . . .	5	4	4
Volatility . . . . .	0.72	0.77	0.81
Risk-free interest rates. . . . .	2.83%	1.95%	1.02%
Weighted-average grant date fair value. . . . .	\$1.33	\$2.07	\$1.09

The fair value of our ESPP purchase rights for the fiscal 2019, 2018 and 2017 was estimated using the following weighted-average assumptions:

	Year End May 31,		
	2019	2018	2017
Expected term (in years) . . . . .	0.5 – 2.0	0.5 – 2.0	0.5 – 2.0
Volatility. . . . .	0.48 – 0.78	0.56 – 0.81	0.79 – 1.08
Risk-free interest rates. . . . .	2.33%–2.82%	1.92%–2.25%	0.48%–0.80%
Weighted-average grant date fair value. . . . .	\$1.14	\$1.01	\$1.65

## EQUITY INCENTIVE PLAN:

In October 2006, the Company's 2006 Equity Incentive Plan was approved by the shareholders, which provides for granting of incentive stock options, non-statutory stock options, restricted stock, restricted stock units, stock appreciation rights, performance units, performance shares and other stock or cash awards as the Company's Board of Directors may determine.

In October 2016, the Company's 2016 Equity Incentive Plan was approved by the Company's shareholders. The 2016 Equity Incentive Plan replaced our 2006 Equity Incentive Plan, which was scheduled to expire in October 2016, and will continue in effect until 2026. A total of 2,238,000 shares of common stock have been reserved for issuance under the Company's 2016 Equity Incentive Plan, which includes 1,438,000 shares that remained available for issuance under the 2006 Equity Incentive Plan. See the Company's Registration Statement on Form S-8 filed with the Securities and Exchange Commission on November 14, 2016 for further information regarding the 2016 Equity Incentive Plan.

As of May 31, 2019, out of the 4,277,000 shares authorized for grant under the 2016 Equity Incentive Plan, 3,129,000 stock options and RSUs were outstanding. As of May 31, 2018, out of the 4,718,000 shares authorized for grant under the 2016 Equity Incentive Plan, 2,906,000 stock options and RSUs were outstanding.

The following tables summarize the Company's stock option and RSU transactions during fiscal 2019, 2018 and 2017 (in thousands):

	Available Shares
Balance, May 31, 2016 . . . . .	1,847
Additional shares reserved . . . . .	2,238
Options granted . . . . .	(368)
RSUs granted . . . . .	(157)
Options terminated . . . . .	55
Plan shares expired . . . . .	<u>(1,446)</u>
Balance, May 31, 2017 . . . . .	2,169
Options granted . . . . .	(338)
RSUs granted . . . . .	(64)
RSUs cancelled . . . . .	33
Options terminated . . . . .	16
Plan shares expired . . . . .	<u>(4)</u>
Balance, May 31, 2018 . . . . .	1,812
Options granted . . . . .	(804)
RSUs cancelled . . . . .	8
Options terminated . . . . .	195
Plan shares expired . . . . .	<u>(64)</u>
Balance, May 31, 2019 . . . . .	<u>1,147</u>

The following table summarized the stock option transactions during fiscal 2019, 2018 and 2017 (in thousands, except per share data):

	Outstanding Options		
	Number of Shares	Weighted Average Exercise Price	Aggregate Intrinsic Value
Balances, May 31, 2016. . . . .	3,201	\$1.66	\$ 189
Options granted. . . . .	368	\$1.83	
Options terminated . . . . .	(55)	\$1.42	
Options exercised. . . . .	(440)	\$1.35	
Balances, May 31, 2017. . . . .	3,074	\$1.73	\$8,763
Options granted. . . . .	338	\$3.56	
Options terminated . . . . .	(16)	\$2.72	
Options exercised. . . . .	(537)	\$1.17	
Balances, May 31, 2018. . . . .	2,859	\$2.04	\$1,987
Options granted. . . . .	804	\$2.19	
Options terminated . . . . .	(195)	\$2.32	
Options exercised. . . . .	(361)	\$0.85	
Balances, May 31, 2019. . . . .	<u>3,107</u>	\$2.20	\$283
Options fully vested and expected to vest at May 31, 2019	<u>3,079</u>	\$2.20	\$282

The options outstanding and exercisable at May 31, 2019 were in the following exercise price ranges (in thousands, except per share data):

Range of Exercise Prices	Options Outstanding at May 31, 2019			Options Exercisable at May 31, 2019			
	Number Outstanding Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Aggregate Intrinsic Value
\$0.80-\$0.97	47	0.52	\$0.85	47	0.52	\$0.85	
\$1.09-\$1.28	456	0.78	\$1.28	456	0.78	\$1.28	
\$1.65-\$2.06	761	4.57	\$1.83	427	3.50	\$1.79	
\$2.10-\$2.81	1,600	3.55	\$2.43	1,244	2.81	\$2.44	
\$3.46-\$3.93	243	5.16	\$3.85	140	5.20	\$3.79	
\$0.80-\$3.93	<u>3,107</u>	3.47	\$2.20	<u>2,314</u>	2.64	\$2.14	\$274

The total intrinsic values of options exercised were \$338,000, \$1,058,000 and \$810,000 during fiscal 2019, 2018 and 2017, respectively. The weighted average contractual life of the options exercisable and expected to be exercisable at May 31, 2019 was 3.46 years.

Options to purchase 2,314,000, 2,312,000 and 2,422,000 shares were exercisable at May 31, 2019, 2018 and 2017, respectively. These exercisable options had weighted average exercise prices of \$2.14, \$1.89 and \$1.63 as of May 31, 2019, 2018 and 2017, respectively.

During the fiscal year ended May 31, 2019, there were no RSUs granted to employees. During the fiscal year ended May 31, 2019, 16,000 RSUs became fully vested and 8,000 RSUs were cancelled. 23,000 RSUs were outstanding and unvested at May 31, 2019. The intrinsic value of the outstanding and unvested RSUs at May 31, 2019 was \$40,000. During the fiscal year ended May 31, 2018, RSUs for 64,000 shares were granted to employees. The market value on the date of the grant of these RSUs was \$3.93 per share. During the fiscal year ended May 31, 2018, 16,000 RSUs became

fully vested and 33,000 RSUs were cancelled. 47,000 RSUs were outstanding and unvested at May 31, 2018. The intrinsic value of the outstanding and unvested RSUs at May 31, 2018 was \$122,000. During the fiscal year ended May 31, 2017, RSUs for 74,000 shares were granted to employees. The market value on the date of the grant of these RSUs was \$1.68 per share. 42,000 RSUs became fully vested during the fiscal year ended May 31, 2017, and 32,000 RSUs were outstanding and unvested at May 31, 2017. The intrinsic value of the outstanding and unvested RSUs at May 31, 2017 was \$145,000.

There were no RSUs granted to members of the Board of Directors during fiscal 2019 and 2018. During the fiscal year ended May 31, 2017, RSUs for 83,000 shares were granted to members of the Company's Board of Directors. The weighted average market value on the date of the grant of these RSUs was \$1.86 per share. All of these RSUs were fully vested at May 31, 2017.

#### EMPLOYEE STOCK PURCHASE PLAN:

In October 2006, the Company's shareholders approved the 2006 Employee Stock Purchase Plan. In October 2016, the Company's shareholders approved the Company's Amended and Restated 2006 Employee Stock Purchase Plan (the "Purchase Plan"), which amended and restated the 2006 Employee Stock Purchase Plan. The Purchase Plan extended the term of the 2006 Employee Stock Purchase Plan indefinitely. See the Company's Registration Statements on Form S-8 filed with the Securities and Exchange Commission on November 14, 2016 and November 21, 2018 for further information regarding the Purchase Plan. The Purchase Plan has consecutive, overlapping, twenty-four month offering periods. Each twenty-four-month offering period includes four six-month purchase periods. The offering periods generally begin on the first trading day on or after April 1 and October 1 each year. All employees who work a minimum of 20 hours per week and are customarily employed by the Company (or an affiliate thereof) for at least five months per calendar year are eligible to participate. Under the Purchase Plan, shares are purchased through employee payroll deductions at exercise prices equal to 85% of the lesser of the fair market value of the Company's common stock at either the first day of an offering period or the last day of the purchase period. If a participant's rights to purchase stock under all employee stock purchase plans of the Company accrue at a rate which exceeds \$25,000 worth of stock for a calendar year, such participant may not be granted an option to purchase stock under the Purchase Plan. The maximum number of shares a participant may purchase during a single purchase period is 3,000 shares. In October 2018, the Company's shareholders approved an amendment to the Purchase Plan to increase the number of shares authorized for issuance thereunder by an additional 350,000 shares of the Company's common stock. After such amendment, a total of 1,850,000 shares of the Company's common stock have been authorized for issuance under the Purchase Plan. During the fiscal years ended May 31, 2019, 2018 and 2017, ESPP purchase rights of 379,000, 359,000, and 1,000 shares, respectively, were granted. For the fiscal years ended May 31, 2019, 2018 and 2017, approximately 125,000, 237,000 and 151,000 shares of common stock, respectively, were issued under the Purchase Plan. As of May 31, 2019, a total of 1,481,000 shares have been issued under the Purchase Plan, and 369,000 ESPP shares remain available for issuance.

#### 11. EMPLOYEE BENEFIT PLANS:

##### EMPLOYEE STOCK OWNERSHIP PLAN:

The Company has a non-contributory, trustee employee stock ownership plan for full-time employees who have completed three consecutive months of service and for part-time employees who have completed one year of service and have attained an age of 21. The Company can contribute either shares of the Company's stock or cash to the plan. The contribution is determined annually by the Company and cannot exceed 15% of the annual aggregate salaries of those employees eligible for participation in the plan. On May 31, 2007, the Company converted the Aehr Test Systems Employee Stock Bonus Plan into the Aehr Test Systems Employee Stock Ownership Plan (the "Plan"). The stock bonus plan was converted to an employee stock ownership plan ("ESOP") to enable the Plan to better comply with changes in the law regarding Company stock. Individuals' account balances vest at a rate of 20% per year commencing upon completion of two years of service. Non-vested balances, which are forfeited following termination of employment, are allocated to the remaining employees in the Plan. Under the Plan provisions, each employee who reaches age fifty-five (55) and has been a participant in the Plan for ten years will be offered an election each year to direct the transfer of up to 25% of his/her ESOP account to the employee self-directed account in the Savings and Retirement Plan. For anyone who met the above prerequisites, the first election to diversify holdings was offered after May 31, 2008. In the sixth year, employees will be able to diversify up to 50% of their ESOP accounts. Contributions of \$60,000 per year were authorized for the plan during fiscal 2019, 2018 and 2017. The contribution amounts are recorded as compensation expense, in the period authorized and included in accrued expenses, in the period authorized. Contributions of 23,000 shares were made to the ESOP during fiscal 2019 for fiscal 2018. Contributions of 13,000 shares were made to the ESOP during fiscal 2018 for fiscal 2017. Contributions of 59,000 shares were made to the ESOP during fiscal 2017 for fiscal 2016. The contribution for fiscal 2019 will be made in fiscal 2020. Shares held in the ESOP are included in the EPS calculation.

#### 401(K) PLAN:

The Company maintains a defined contribution savings plan (the “401(k) Plan”) to provide retirement income to all qualified employees of the Company. The 401(k) Plan is intended to be qualified under Section 401(k) of the Internal Revenue Code of 1986, as amended. The 401(k) Plan is funded by voluntary pre-tax contributions from employees. Contributions are invested, as directed by the participant, in investment funds available under the 401(k) Plan. The Company is not required to make, and did not make, any contributions to the 401(k) Plan during fiscal 2019, 2018 and 2017.

#### 12. OTHER INCOME (EXPENSE), NET:

Other income (expense), net comprises the following (in thousands):

	Year Ended May 31,		
	2019	2018	2017
Foreign exchange gain (loss). . . . .	\$43	\$(63)	\$(21)
Other income, net. . . . .	1	2	--
	<u>\$44</u>	<u>\$(61)</u>	<u>\$(21)</u>

#### 13. PRODUCT WARRANTIES:

The Company provides for the estimated cost of product warranties at the time revenues are recognized on the products shipped. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company’s warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from the Company’s estimates, revisions to the estimated warranty liability would be required.

The standard warranty period is one year for systems and ninety days for parts and service.

Following is a summary of changes in the Company’s liability for product warranties during the fiscal years ended May 31, 2019 and 2018 (in thousands):

	May 31,	
	2019	2018
Balance at the beginning of the year. . . . .	\$ 135	\$ 113
Accruals for warranties issued during the year . . . . .	214	329
Consumption of reserves . . . . .	(195)	(307)
Balance at the end of the year. . . . .	<u>\$ 154</u>	<u>\$ 135</u>

The accrued warranty balance is included in accrued expenses on the consolidated balance sheets.

#### 14. SEGMENT INFORMATION:

The Company has only one reportable segment. The information for revenue category by type, product line, geography and timing of revenue recognition, is summarized in Note “2. REVENUE.”

Property and equipment information is based on the physical location of the assets. The following table presents property and equipment information for geographic areas (in thousands):

	May 31,	
	2019	2018
United States. . . . .	\$1,005	\$1,156
Asia . . . . .	40	40
Europe. . . . .	--	7
	<u>\$1,045</u>	<u>\$1,203</u>

There were no revenues through distributors for the fiscal years ended May 31, 2019 and 2018.

The Company's Japanese and German subsidiaries primarily comprise the foreign operations. Substantially all of the sales of the subsidiaries are made to unaffiliated Japanese or European customers. Net sales from outside the United States include those of Aehr Test Systems Japan K.K. and Aehr Test Systems GmbH.

#### 15. RESTRUCTURING:

During the fiscal year ended May 31, 2019, the Company implemented a restructuring plan in order to streamline its operations and better align its structure with its objectives going forward. In connection with the restructuring plan, the Company recognized \$725,000 of restructuring charges related to employee termination expenses during the fiscal year ended May 31, 2019. The Company paid \$317,000 of the restructuring charge during fiscal year ended May 31, 2019. At May 31, 2019, the balance of \$408,000 of the restructuring charge was included in accrued expenses on the accompanying condensed consolidated balance sheets, and is expected to be paid in fiscal year 2020. The Company does not expect to incur any further expenses in connection with this restructuring plan. There were no restructuring charges incurred for the fiscal years ended May 31, 2018 and 2017.

#### 16. RELATED PARTY TRANSACTIONS:

Mario M. Rosati, one of the Company's directors, is also a member of Wilson Sonsini Goodrich & Rosati, Professional Corporation, which has served as the Company's outside corporate counsel and has received compensation at normal commercial rates for these services. The amounts of transactions during fiscal years ended May 31, 2019, 2018 and 2017 were \$90,000, \$64,000, and \$440,000, respectively. At May 31, 2019 and 2018, the Company had \$13,000 and \$5,000, respectively, payable to Wilson Sonsini Goodrich & Rosati.

#### 17. COMMITMENTS AND CONTINGENCIES:

##### COMMITMENTS

The Company leases most of its manufacturing and office space under operating leases. The Company entered into non-cancelable operating lease agreements for its United States manufacturing and office facilities and maintains equipment under non-cancelable operating leases in Germany. The Company's principal administrative and production facilities are located in Fremont, California, in a 51,289 square foot building. The Company's lease was renewed in February 2018 and expires in July 2023. The Company's facility in Japan is located in a 418 square foot office in Tokyo under a cancellable lease which expires in June 2022. The Company also maintains a 1,585 square foot warehouse in Yamanashi under a lease which expires in May 2020. The Company leases a 492 square foot sales and support office in Utting, Germany. The lease, which began February 1, 1992 and expires on January 31, 2021, contains an automatic twelve months renewal, at rates to be determined, if no notice is given prior to six months from expiry. Under the lease agreements, the Company is responsible for payments of utilities, taxes and insurance.

Minimum annual rentals payments under non-cancellable operating leases in each of the next five fiscal years and thereafter are as follows (in thousands):

Years Ending May 31,	
2020 . . . . .	\$762
2021 . . . . .	766
2022 . . . . .	772
2023 . . . . .	795
2024 . . . . .	133
Thereafter . . . . .	--
Total	<u>\$3,228</u>

Rental expense for the fiscal years ended May 31, 2019, 2018 and 2017 was \$787,000, \$587,000 and \$509,000, respectively.

At both May 31, 2019 and 2018, the Company had restricted cash of \$80,000 held by a financial institution, representing a security deposit for its United States manufacturing and office space lease. This amount is included in other assets on the consolidated balance sheets.



## PURCHASE OBLIGATIONS

The Company has purchase obligations to certain suppliers. In some cases the products the Company purchases are unique and have provisions against cancellation of the order. At May 31, 2019, the Company had \$2,525,000 of purchase obligations which are due within the following 12 months. This amount does not include contractual obligations recorded on the consolidated balance sheets as liabilities.

## CONTINGENCIES

The Company may, from time to time, be involved in legal proceedings arising in the ordinary course of business. While there can be no assurances as to the ultimate outcome of any litigation involving the Company, management does not believe any pending legal proceedings will result in judgment or settlement that will have a material adverse effect on the Company's consolidated financial position, results of operations or cash flows.

In the normal course of business to facilitate sales of its products, the Company indemnifies other parties, including customers, with respect to certain matters, for example, including against losses arising from a breach of representations or covenants, or from intellectual property infringement or other claims. These agreements may limit the time within which an indemnification claim can be made and the amount of the claim. In addition, the Company has entered into indemnification agreements with its officers and directors, and the Company's bylaws contain similar indemnification obligations to the Company's agents.

It is not possible to determine the maximum potential amount under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement. To date, payments made by the Company under these agreements have not had a material impact on the Company's operating results, financial position or cash flows.

## 18. SELECTED QUARTERLY CONSOLIDATED FINANCIAL DATA (UNAUDITED):

The following tables (presented in thousands, except per share data) sets forth selected unaudited condensed consolidated statements of operations data for each of the four quarters of the fiscal years ended May 31, 2019 and 2018. The unaudited quarterly information has been prepared on the same basis as the annual information presented elsewhere herein and, in the Company's opinion, includes all adjustments (consisting only of normal recurring entries) necessary for a fair statement of the information for the quarters presented. The operating results for any quarter are not necessarily indicative of results for any future period and should be read in conjunction with the audited consolidated financial statements of the Company's and the notes thereto included elsewhere herein.

	Three Months Ended			
	Aug. 31, 2018	Nov. 30, 2018	Feb. 28, 2019	May 31, 2019
Net sales . . . . .	\$ 4,740	\$ 5,911	\$ 3,163	\$ 7,242
Gross profit . . . . .	\$ 1,553	\$ 2,398	\$ 272	\$ 3,379
Net (loss) income . . . . .	\$(1,515)	\$ (629)	\$(3,201)	\$ 110
Net (loss) income per share basic and diluted . .	\$ (0.07)	\$ (0.03)	\$ (0.14)	\$ 0.00

	Three Months Ended			
	Aug. 31, 2017	Nov. 30, 2017	Feb. 28, 2018	May 31, 2018
Net sales . . . . .	\$6,970	\$7,923	\$ 7,393	\$ 7,269
Gross profit . . . . .	\$2,918	\$ 3,131	\$ 3,176	\$ 3,161
Net income . . . . .	\$ 10	\$ 60	\$ 267	\$ 191
Net income per share basic and diluted . . . . .	\$ 0.00	\$ 0.00	\$ 0.01	\$ 0.01

## **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure**

None.

### **Item 9A. Controls and Procedures**

#### **(a) Evaluation of disclosure controls and procedures.**

Our management evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that our disclosure controls and procedures are effective to ensure that information we are required to disclose in reports that we file or submit under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow for timely decisions regarding required disclosure.

#### **(b) Management's report on internal control over financial reporting.**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act. Under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, our management conducted an evaluation of the effectiveness of our internal control over financial reporting based upon the framework in "*Internal Control – Integrated Framework*" (2013 Framework) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, management has concluded that the Company's internal control over financial reporting was effective as of May 31, 2019. This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this Annual Report.

#### **(c) Changes in internal controls over financial reporting.**

There were no changes in our internal controls over financial reporting that occurred during the period covered by this Annual Report on Form 10-K that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

### **Item 9B. Other Information**

None.

## **PART III**

### **Item 10. Directors, Executive Officers and Corporate Governance**

The information required by this item is incorporated by reference to our Proxy Statement to be filed with the Securities and Exchange Commission in connection with our 2019 Annual Meeting of Shareholders.

### **Item 11. Executive Compensation**

The information required by this item is incorporated by reference to our Proxy Statement to be filed with the Securities and Exchange Commission in connection with our 2019 Annual Meeting of Shareholders.

### **Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The information required by this item is incorporated by reference to our Proxy Statement to be filed with the Securities and Exchange Commission in connection with our 2019 Annual Meeting of Shareholders.

### **Item 13. Certain Relationships and Related Transactions, and Director Independence**

The information required by this item is incorporated by reference to our Proxy Statement to be filed with the Securities and Exchange Commission in connection with our 2019 Annual Meeting of Shareholders.

### **Item 14. Principal Accountant Fees and Services**

The information required by this item is incorporated by reference to our Proxy Statement to be filed with the Securities and Exchange Commission in connection with our 2019 Annual Meeting of Shareholders.

## PART IV

### Item 15. Exhibits, Financial Statement Schedules

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

1. Financial Statements  
See Index under Item 8.
2. Financial Statement Schedule  
See Index under Item 8.
3. Exhibits  
See Item 15(b) below.

(b) Exhibits

The following exhibits are filed as part of or incorporated by reference into this Report:

Exhibit No.	Description
3.1(1)	Restated Articles of Incorporation of Registrant.
3.2	Amended and Restated Bylaws of Registrant.
4.1(2)	Form of Common Stock certificate.
4.7(3)	Registration Rights Agreement by and among the Company and the Investors (as defined therein), dated as of September 22, 2016.
10.1(4)	2006 Equity Incentive Plan.*
10.2(5)	Amended and Restated 2006 Employee Stock Purchase Plan.*
10.3(6)	2016 Equity Incentive Plan.*
10.4(7)	Form of Indemnification Agreement entered into between Registrant and its directors and executive officers.*
10.5(8)	Form of Change of Control Agreement.*
10.6(9)	Lease dated August 3, 1999 for facilities located at Building C, 400 Kato Terrace, Fremont, California.
10.6.1(10)	First Amendment dated May 06, 2008 for facilities located at 400 Kato Terrace, Fremont, California.
10.6.2(11)	Second Amendment dated November 7, 2014 for facilities located at 400 Kato Terrace, Fremont, California.
10.6.3(12)	Third Amendment dated February 27, 2018 for facilities located at 400 Kato Terrace, Fremont, California.
10.10(13)	Offer Letter dated January 3, 2012, between the Company and Gayn Erickson.*
10.11(14)	Offer Letter dated March 5, 2013, between the Company and Rhea Posedel.*
10.12(15)	Change of Control Severance Agreement dated January 3, 2012, between the Company and Gayn Erickson.*
10.13(16)	Amended and Restated Change of Control Severance Agreement dated March 5, 2013, between the Company and Rhea J. Posedel.*
10.15(17)	Form of 2006 Equity Incentive Plan Stock Option Award Agreement.*
10.16(18)	Form of 2006 Equity Incentive Plan Restricted Stock Unit Award.*
10.17(19)	Form of 2016 Equity Incentive Plan Stock Option Award Agreement.*
10.18(20)	Form of 2016 Equity Incentive Plan Restricted Stock Unit Award.*
10.19(21)	Purchase Agreement by and among the Company and the Investors (as defined therein), dated as of September 22, 2016.
10.21(22)	Underwriting Agreement dated April 13, 2017, between the Company and Craig-Hallum Capital Group LLC
21.1	Subsidiaries of the Company.
23.1	Consent of BPM LLP - Independent Registered Public Accounting Firm (filed herewith).
24.1	Power of Attorney (incorporated by reference to the signature page of this Annual Report on Form 10-K).
31.1	Certification Statement of Chief Executive Officer pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002 (filed herewith).
31.2	Certification Statement of Chief Financial Officer pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002 (filed herewith).
32.1	Certification of 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
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

(1) Incorporated by reference to the same-numbered exhibit previously filed with the Company's Registration Statement on Form S-1 filed June 11, 1997 (File No. 333-28987).

(2) Incorporated by reference to the same-numbered exhibit previously filed with Amendment No.1 to the Company's Registration Statement on Form S-1 filed July 17, 1997 (File No. 333-28987).

(3) Incorporated by reference to Exhibit 10.2 previously filed with the Company's Current Report on Form 8-K filed September 28, 2016 (File No. 000-22893).

(4) Incorporated by reference to Exhibit 4.1 previously filed with the Company's Registration Statement on Form S-8 filed October 27, 2006 (File No. 333-138249).

- (5) Incorporated by reference to Exhibit 4.2 previously filed with the Company's Registration Statement on Form S-8 filed November 14, 2016 (File No. 333-214589).
- (6) Incorporated by reference to Exhibit 4.1 previously filed with the Company's Registration Statement on Form S-8 filed November 14, 2016 (File No. 333-214589).
- (7) Incorporated by reference to Exhibit 10.4 previously filed with Amendment No.1 to the Company's Registration Statement on Form S-1 filed July 17, 1997 (File No. 333-28987).
- (8) Incorporated by reference to Exhibit 10.14 previously filed with the Company's Form 10-K for the year ended May 31, 2001 filed August 29, 2001 (File No. 000-22893).
- (9) Incorporated by reference to Exhibit 10.12 exhibit previously filed with the Company's Form 10-K for the year ended May 31, 1999 filed August 30, 1999 (File No. 000-22893).
- (10) Incorporated by reference to Exhibit 10.15 previously filed with the Company's Current Report on Form 8-K filed May 9, 2008 (File No. 000-22893).
- (11) Incorporated by reference to Exhibit 10.1 previously filed with the Company's Current Report on Form 8-K filed November 12, 2014 (File No. 000-22893).
- (12) Incorporated by reference to Exhibit 10.1 previously filed with the Company's Current Report on Form 8-K filed March 2, 2018 (File No. 000-22893).
- (13) Incorporated by reference to Exhibit No. 10.1 previously filed with the Company's Current Report on Form 8-K filed January 9, 2012 (File No. 000-22893).
- (14) Incorporated by reference to Exhibit No. 10.1 previously filed with the Company's Current Report on Form 8-K filed March 8, 2013 (File No. 000-22893).
- (15) Incorporated by reference to Exhibit No. 10.3 previously filed with the Company's Current Report on Form 8-K filed January 9, 2012 (File No. 000-22893).
- (16) Incorporated by reference to Exhibit No. 10.2 previously filed with the Company's Current Report on Form 8-K filed March 8, 2013 (File No. 000-22893).
- (17) Incorporated by reference to Exhibit 10.17 previously filed with the Company's Annual Report on Form 10-K filed August 29, 2016 (File No. 000-22893).
- (18) Incorporated by reference to Exhibit 10.18 previously filed with the Company's Annual Report on Form 10-K filed August 29, 2016 (File No. 000-22893).
- (19) Incorporated by reference to Exhibit 10.19 previously filed with the Company's Annual Report on Form 10-K filed August 29, 2017 (File No. 000-22893).
- (20) Incorporated by reference to Exhibit 10.20 previously filed with the Company's Annual Report on Form 10-K filed August 29, 2017 (File No. 000-22893).
- (21) Incorporated by reference to Exhibit 10.1 previously filed with the Company's Current Report on Form 8-K filed September 28, 2016 (File No. 000-22893).
- (22) Incorporated by reference to Exhibit 1.1 previously filed with the Company's Current Report on Form 8-K filed April 19, 2017 (File No. 000-22893).

\* Management contracts or compensation plans or arrangements in which directors or executive officers are eligible to participate.

**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: August 28, 2019

AEHR TEST SYSTEMS

By: /s/ GAYN ERICKSON

-----  
 Gayn Erickson  
 PRESIDENT AND CHIEF EXECUTIVE OFFICER

**POWER OF ATTORNEY**

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Gayn Erickson and Kenneth B. Spink, jointly and severally, his attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1934, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
----- /s/ GAYN ERICKSON ----- Gayn Erickson	President, Chief Executive Officer, and Director (Principal Executive Officer)	August 28, 2019 -----
----- /s/ KENNETH B. SPINK ----- Kenneth B. Spink	Vice President of Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	August 28, 2019 -----
----- /s/ LAURA OLIPHANT ----- Laura Oliphant	Director	August 28, 2019 -----
----- /s/ RHEA J. POSEDEL ----- Rhea J. Posedel	Chairman	August 28, 2019 -----
----- /s/ MARIO M. ROSATI ----- Mario M. Rosati	Director	August 28, 2019 -----
----- /s/ JOHN M. SCHNEIDER ----- John M. Schneider	Director	August 28, 2019 -----
----- /s/ HOWARD T. SLAYEN ----- Howard T. Slayen	Director	August 28, 2019 -----

**BY-LAWS**  
**OF**  
**AEHR TEST SYSTEMS**  
**(As Amended as of July 17, 2019)**

ARTICLE I

CORPORATE OFFICES

1.1 PRINCIPAL OFFICE.

The board of directors shall fix the location of the principal executive office of the corporation at any place within or outside the State of California. If the principal executive office is located outside such state, and the corporation has one or more business offices in such state, the board of directors shall fix and designate a principal business office in the State of California.

1.2 OTHER OFFICES.

The board of directors may at any time establish branch or subordinate offices at any place or places where the corporation is qualified to do business.

ARTICLE II

MEETINGS OF SHAREHOLDERS

2.1 PLACE OF MEETINGS.

Meetings of shareholders shall be held at any place within or outside the State of California designated by the board of directors. In the absence of any such designation, shareholders' meetings shall be held at the principal executive office of the corporation.

2.2 ANNUAL MEETING.

The annual meeting of shareholders shall be held each year on a date and at a time designated by the board of directors. In the absence of such designation, the annual meeting of shareholders shall be held on the first Wednesday of October in each year at 4:00 p.m. However, if such day falls on a legal holiday, then the meeting shall be held at the same time and place on the next succeeding full business day. At the meeting, directors shall be elected, and any other proper business may be transacted.

2.3 SPECIAL MEETING.

A special meeting of the shareholders may be called at any time by the board of directors, or by the chairman of the board, or by the president, or by one or more shareholders holding shares in the aggregate entitled to cast not less than ten percent (10%) of the votes at that meeting.

If a special meeting is called by any person or persons other than the board of directors, the request shall be in writing, specifying the time of such meeting and the general nature of the business proposed to be transacted, and shall be delivered personally or sent by registered mail or by telegraphic or other facsimile transmission to the chairman of the board, the president, any vice president or the secretary of the corporation. The officer receiving the request shall cause notice to be promptly given to the shareholders entitled to vote, in accordance with the provisions of Sections 2.4 and 2.5 of these by-laws, that a meeting will be held at the time requested by the person or persons calling the meeting, not less than thirty-five (35) nor more than sixty (60) days after the receipt of the request. If the notice is not given within twenty (20) days after receipt of the request, the person or persons requesting the meeting may give the notice. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing or affecting the time when a meeting of shareholders called by action of the board of directors may be held.



## 2.4 NOTICE OF SHAREHOLDERS' MEETINGS.

All notices of meetings of shareholders shall be sent or otherwise given in accordance with Section 2.5 of these by-laws not less than ten (10) nor more than sixty (60) days before the date of the meeting. The notice shall specify the place, date and hour of the meeting and (i) in the case of a special meeting, the general nature of the business to be transacted (no business other than that specified in the notice may be transacted) or (ii) in the case of the annual meeting, those matters which the board of directors, at the time of giving the notice, intends to present for action by the shareholders. The notice of any meeting at which directors are to be elected shall include the name of any nominee or nominees whom, at the time of the notice, management intends to present for election.

If action is proposed to be taken at any meeting for approval of (i) a contract or transaction in which a director has a direct or indirect financial interest, pursuant to Section 310 of the Corporations Code of California (the "Code"), (ii) an amendment of the articles of incorporation, pursuant to Section 902 of the Code, (iii) a reorganization of the corporation, pursuant to Section 1201 of the Code, (iv) a voluntary dissolution of the corporation, pursuant to Section 1900 of the Code, or (v) a distribution in dissolution other than in accordance with the rights of outstanding preferred shares, pursuant to Section 2007 of the Code, the notice shall also state the general nature of that proposal.

## 2.5 MANNER OF GIVING NOTICE; AFFIDAVIT OF NOTICE.

Notice of any meeting of shareholders shall be given either personally or by first-class mail or telegraphic or other written communication, charges prepaid, addressed to the shareholder at the address of that shareholder appearing on the books of the corporation or given by the shareholder to the corporation for the purpose of notice. If no such address appears on the corporation's books or is given, notice shall be deemed to have been given if sent to that shareholder by first-class mail or telegraphic or other written communication to the corporation's principal executive office, or if published at least once in a newspaper of general circulation in the county where that office is located. Notice shall be deemed to have been given at the time when delivered personally or deposited in the mail or sent by telegram or other means of written communication.

If any notice addressed to a shareholder at the address of that shareholder appearing on the books of the corporation is returned to the corporation by the United States Postal Service marked to indicate that the United States Postal Service is unable to deliver the notice to the shareholder at that address, all future notices or reports shall be deemed to have been duly given without further mailing if the same shall be available to the shareholder on written demand of the shareholder at the principal executive office of the corporation for a period of one (1) year from the date of the giving of the notice.

An affidavit of the mailing or other means of giving any notice of any shareholders' meeting, executed by the secretary, assistant secretary or any transfer agent of the corporation giving the notice, shall be prima facie evidence of the giving of such notice.

## 2.6 QUORUM.

The presence in person or by proxy of the holders of a majority of the shares entitled to vote thereat constitutes a quorum for the transaction of business at all meetings of shareholders. The shareholders present at a duly called or held meeting at which a quorum is present may continue to do business until adjournment, notwithstanding the withdrawal of enough shareholders to leave less than a quorum, if any action taken (other than adjournment) is approved by at least a majority of the shares required to constitute a quorum.

## 2.7 ADJOURNED MEETING; NOTICE.

Any shareholders' meeting, annual or special, whether or not a quorum is present, may be adjourned from time to time by the vote of the majority of the shares represented at that meeting, either in person or by proxy, but in the absence of a quorum, no other business may be transacted at that meeting, except as provided in Section 2.6 of these by-laws.

When any meeting of shareholders, either annual or special, is adjourned to another time or place, notice need not be given of the adjourned meeting if the time and place are announced at the meeting at which the adjournment is taken, unless a new record date for the adjourned meeting is fixed, or unless the adjournment is for more than forty-five (45) days from the date set for the original meeting, in which case notice of the adjourned meeting shall be given. Notice of any such adjourned meeting shall be given to each shareholder of record entitled to vote at the adjourned meeting in accordance with the provisions of Sections 2.4 and 2.5 of these by-laws. At any adjourned meeting the corporation may transact any business which might have been transacted at the original meeting.

## 2.8 VOTING.

The shareholders entitled to vote at any meeting of shareholders shall be determined in accordance with the provisions of Section 2.11 of these by-laws, subject to the provisions of Sections 702 to 704, inclusive, of the Code (relating to voting shares held by a fiduciary, in the name of a corporation or in joint ownership).

The shareholders' vote may be by voice vote or by ballot; provided, however, that any election for directors must be by ballot if demanded by any shareholder before the voting has begun.

On any matter other than the election of directors, any shareholder may vote part of the shares in favor of the proposal and refrain from voting the remaining shares or vote them against the proposal, but, if the shareholder fails to specify the number of shares which the shareholder is voting affirmatively, it will be conclusively presumed that the shareholder's approving vote is with respect to all shares which the shareholder is entitled to vote.

If a quorum is present, the affirmative vote of the majority of the shares represented at the meeting and entitled to vote on any matter (other than the election of directors) shall be the act of the shareholders, unless the vote of a greater number, or voting by classes, is required by the Code or by the articles of incorporation.

At a shareholders' meeting at which directors are to be elected, no shareholder shall be entitled to cumulate votes (i.e. cast for any one or more candidates a number of votes greater than the number of the shareholder's shares) unless the candidates' names have been placed in nomination prior to commencement of the voting and a shareholder has given notice prior to commencement of the voting of the shareholder's intention to cumulate votes. If any shareholder has given such a notice, then every shareholder entitled to vote may cumulate votes for candidates placed in nomination and give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of votes to which that shareholder's shares are entitled, or distribute the shareholder's votes on the same principle among any or all of the candidates, as the shareholder thinks fit. The candidates receiving the highest number of votes, up to the number of directors to be elected, shall be elected.

## 2.9 VALIDATION OF MEETINGS: WAIVER OF NOTICE; CONSENT.

The transactions of any meeting of shareholders, either annual or special, however called and noticed, and wherever held, shall be as valid as though had at a meeting duly held after regular call and notice, if a quorum be present either in person or by proxy, and if, either before or after the meeting, each person entitled to vote, who was not present in person or by proxy, signs a written waiver of notice or a consent to the holding of the meeting or an approval of the minutes thereof. The waiver of notice or consent need not specify either the business to be transacted or the purpose of any annual or special meeting of shareholders, except that if action is taken or proposed to be taken for approval of any of those matters specified in the second paragraph of Section 2.4 of these by-laws, the waiver of notice or consent shall state the general nature of the proposal. All such waivers, consents and approvals shall be filed with the corporate records or made a part of the minutes of the meeting.

Attendance by a person at a meeting shall also constitute a waiver of notice of that meeting, except when the person objects, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened, and except that attendance at a meeting is not a waiver of any right to object to the consideration of a matter not included in the notice of the meeting, if that objection is expressly made at the meeting.

## 2.10 SHAREHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING.

Any action which may be taken at any annual or special meeting of shareholders may be taken without a meeting and without prior notice, if a consent in writing, setting forth the action so taken, is signed by the holders of outstanding shares having not less than the minimum number of votes that would be necessary to authorize or take that action at a meeting at which all shares entitled to vote on that action were present and voted.

In the case of election of directors, such a consent shall be effective only if signed by the holders of all outstanding shares entitled to vote for the election of directors; provided, however, that a director may be elected at any time to fill a vacancy on the board of directors that has not been filled by the directors, by the written consent of the holders of a majority of the outstanding shares entitled to vote for the election of directors.

All such consents shall be maintained in the corporate records. Any shareholder giving a written consent, or the shareholder's proxy holders, or a transferee of the shares, or a personal representative of the shareholder, or their respective proxy holders, may revoke the consent by a writing received by the secretary of the corporation before written consents of the number of shares required to authorize the proposed action have been filed with the secretary.

If the consents of all shareholders entitled to vote have not been solicited in writing, and if the unanimous written consent of all such shareholders shall not have been received, the secretary shall give prompt notice of the corporate action approved by the shareholders without a meeting. Such notice shall be given in the manner specified in Section 2.5 of these by-laws. In the case of approval of (i) a contract or transaction in which a director has a direct or indirect financial interest, pursuant to Section 310 of the Code, (ii) indemnification of a corporate "agent", pursuant to Section 317 of the Code, (iii) a reorganization of the corporation, pursuant to Section 1201 of the Code, and (iv) a distribution in dissolution other than in accordance with the rights of outstanding preferred shares, pursuant to Section 2007 of the Code, the notice shall be given at least ten (10) days before the consummation of any action authorized by that approval.

#### 2.11 RECORD DATE FOR SHAREHOLDER NOTICE, VOTING AND GIVING CONSENTS.

For purposes of determining the shareholders entitled to notice of any meeting or to vote thereat or entitled to give consent to corporate action without a meeting, the board of directors may fix, in advance, a record date, which shall not be more than sixty (60) days nor less than ten (10) days before the date of any such meeting nor more than sixty (60) days before any such action without a meeting, and in such event only shareholders of record on the date so fixed are entitled to notice and to vote or to give consents, as the case may be, notwithstanding any transfer of any shares on the books of the corporation after the record date, except as otherwise provided in the Code.

If the board of directors does not so fix a record date:

(a) the record date for determining shareholders entitled to notice of or to vote at a meeting of shareholders shall be at the close of business on the business day next preceding the day on which notice is given or, if notice is waived, at the close of business on the business day next preceding the day on which the meeting is held; and

(b) the record date for determining shareholders entitled to give consent to corporate action in writing without a meeting, (i) when no prior action by the board has been taken, shall be the day on which the first written consent is given or (ii) when prior action by the board has been taken, shall be the day on which the board adopts the resolution relating to that action, or the sixtieth (60th) day before the date of such other action, whichever is later.

The record date for any other purpose shall be as provided in Article VIII of these by-laws.

#### 2.12 PROXIES.

Every person entitled to vote for directors, or on any other matter, shall have the right to do so either in person or by one or more agents authorized by a written proxy signed by the person and filed with the secretary of the corporation. A proxy shall be deemed signed if the shareholder's name is placed on the proxy (whether by manual signature, typewriting, telegraphic transmission or otherwise) by the shareholder or the shareholder's attorney-in-fact. A validly executed proxy which does not state that it is irrevocable shall continue in full force and effect unless (i) revoked by the person executing it, before the vote pursuant to that proxy, by a writing delivered to the corporation stating that the proxy is revoked, or by a subsequent proxy executed by, or attendance at the meeting and voting in person by, the person executing the proxy or (ii) written notice of the death or incapacity of the maker of that proxy is received by the corporation before the vote pursuant to that proxy is counted; provided, however, that no proxy shall be valid after the expiration of eleven (11) months from the date of the proxy, unless otherwise provided in the proxy. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Sections 705(e) and 705(f) of the Code.

#### 2.13 INSPECTORS OF ELECTION.

Before any meeting of shareholders, the board of directors may appoint an inspector or inspectors of election to act at the meeting or its adjournment. If no inspector of election is so appointed, the chairman of the meeting may, and on the request of any shareholder or a shareholder's proxy shall, appoint an inspector or inspectors of election to act at the meeting. The number of inspectors shall be either one (1) or three (3). If inspectors are appointed at a meeting pursuant to the request of one (1) or more shareholders or proxies, the holders of a majority of shares or their proxies present at the meeting shall determine whether one (1) or three (3) inspectors are to be appointed. If any person appointed as inspector fails to appear or fails or refuses to act, the chairman of the meeting may, and upon the request of any shareholder or a shareholder's proxy shall, appoint a person to fill that vacancy.

Such inspectors shall:

- (a) Determine the number of shares outstanding and the voting power of each, the number of shares represented at the meeting, the existence of a quorum, and the authenticity, validity and effect of proxies;
- (b) Receive votes, ballots or consents;
- (c) Hear and determine all challenges and questions in any way arising in connection with the right to vote;
- (d) Count and tabulate all votes or consents;
- (e) Determine when the polls shall close;
- (f) Determine the result; and
- (g) Do any other acts that may be proper to conduct the election or vote with fairness to all shareholders.

### ARTICLE III

#### DIRECTORS

##### 3.1 POWERS.

Subject to the provisions of the Code and any limitations in the articles of incorporation and these by-laws relating to action required to be approved by the shareholders or by the outstanding shares, the business and affairs of the corporation shall be managed and all corporate powers shall be exercised by or under the direction of the board of directors.

##### 3.2 NUMBER AND QUALIFICATION OF DIRECTORS.

The number of directors of the corporation shall be not less than four (4) nor more than seven (7). The exact number of directors shall be seven (7) until changed, within the limits specified above, by a by-law amending this Section 3.2, duly adopted by the board of directors or by the shareholders. The indefinite number of directors may be changed, or a definite number fixed without provision for an indefinite number, by a duly adopted amendment to this by-law duly adopted by the vote or written consent of holders of a majority of the outstanding shares entitled to vote; provided, however, that an amendment reducing the number of the minimum number of directors to a number less than five (5) cannot be adopted if the votes cast against its adoption at a meeting of the shareholders, or the shares not consenting in the case of action by written consent, are equal to more than sixteen and two-thirds percent (16 2/3%) of the outstanding shares entitled to vote thereon. No amendment may change the stated maximum number of authorized directors to a number greater than two (2) times the stated minimum number of directors minus one (1).

##### 3.3 ELECTION AND TERM OF OFFICE OF DIRECTORS.

Directors shall be elected at each annual meeting of shareholders to hold office until the next such annual meeting. Each director, including a director elected to fill a vacancy, shall hold office until the expiration of the term for which elected and until a successor has been elected and qualified.

##### 3.4 VACANCIES.

Vacancies in the board of directors may be filled by a majority of the remaining directors, though less than a quorum, or by a sole remaining director, except that a vacancy created by the removal of a director by the vote or written consent of the shareholders or by court order may be filled only by the vote of a majority of the shares entitled to vote thereon represented at a duly held meeting at which a quorum is present, or by the written consent of holders of a majority of the outstanding shares entitled to vote thereon. Each director so elected shall hold office until the next annual meeting of the shareholders and until a successor has been elected and qualified.

A vacancy or vacancies in the board of directors shall be deemed to exist in the event of the death, resignation or removal of any director, or if the board of directors by resolution declares vacant the office of a director who has been declared of unsound mind by an order of court or convicted of a felony, or if the authorized number of directors is

increased, or if the shareholders fail, at any meeting of shareholders at which any director or directors are elected, to elect the number of directors to be elected at that meeting.

The shareholders may elect a director or directors at any time to fill any vacancy or vacancies not filled by the directors, but any such election, if by written consent, shall require the consent of the holders of a majority of the outstanding shares entitled to vote thereon.

Any director may resign effective on giving written notice to the chairman of the board, the president, the secretary or the board of directors, unless the notice specifies a later time for that resignation to become effective. If the resignation of a director is effective at a future time, the board of directors may elect a successor to take office when the resignation becomes effective.

No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

### 3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE.

Regular meetings of the board of directors may be held at any place within or outside the State of California that has been designated from time to time by resolution of the board. In the absence of such a designation, regular meetings shall be held at the principal executive office of the corporation. Special meetings of the board may be held at any place within or outside the State of California that has been designated in the notice of the meeting or, if not stated in the notice or if there is no notice, at the principal executive office of the corporation.

Any meeting, regular or special, may be held by conference telephone or similar communication equipment, so long as all directors participating in the meeting can hear one another; and all such directors shall be deemed to be present in person at the meeting.

### 3.6 REGULAR MEETINGS.

Regular meetings of the board of directors may be held without notice if the times of such meetings are fixed by the board of directors.

### 3.7 SPECIAL MEETINGS.

Special meetings of the board of directors for any purpose or purposes may be called at any time by the chairman of the board, the president, any vice president, the secretary or any two directors.

Notice of the time and place of special meetings shall be delivered personally or by telephone to each director or sent by first-class mail or telegram, charges prepaid, addressed to each director at that director's address as it is shown on the records of the corporation. If the notice is mailed, it shall be deposited in the United States mail at least four (4) days before the time of the holding of the meeting. If the notice is delivered personally, or by telephone or telegram, it shall be delivered personally or by telephone or to the telegraph company at least forty-eight (48) hours before the time of the holding of the meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the corporation.

### 3.8 QUORUM.

A majority of the authorized number of directors shall constitute a quorum for the transaction of business, except to adjourn as provided in Section 3.10 of these by-laws. Every act or decision done or made by a majority of the directors present at a duly held meeting at which a quorum is present shall be regarded as the act of the board of directors, subject to the provisions of Section 310 of the Code (as to approval of contracts or transactions in which a director has a direct or indirect material financial interest), Section 311 of the Code (as to appointment of committees) and Section 317(e) of the Code (as to indemnification of directors).

A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

3.9 WAIVER OF NOTICE.

The transactions of any meeting of the board of directors, however called and noticed or wherever held, shall be as valid as though had at a meeting duly held after regular call and notice if a quorum is present and if, either before or after the meeting, each of the directors not present signs a written waiver of notice, a consent to holding the meeting or an approval of the minutes thereof. The waiver of notice or consent need not specify the purpose of the meeting. All such waivers, consents and approvals shall be filed with the corporate records or made a part of the minutes of the meeting. Notice of a meeting shall also be deemed given to any director who attends the meeting without protesting, before or at its commencement, the lack of notice to that director.

3.10 ADJOURNMENT.

A majority of the directors present, whether or not constituting a quorum, may adjourn any meeting to another time and place.

3.11 NOTICE OF ADJOURNMENT.

Notice of the time and place of holding an adjourned meeting need not be given, unless the meeting is adjourned for more than twenty-four (24) hours, in which case notice of the time and place shall be given before the time of the adjourned meeting, in the manner specified in Section 3.7 of these by-laws, to the directors who were not present at the time of the adjournment.

3.12 ACTION WITHOUT MEETING.

Any action required or permitted to be taken by the board of directors may be taken without a meeting, if all members of the board shall individually or collectively consent in writing to that action. Such action by written consent shall have the same force and effect as a unanimous vote of the board of directors. Such written consent and any counterparts thereof shall be filed with the minutes of the proceedings of the board.

3.13 FEES AND COMPENSATION OF DIRECTORS.

Directors and members of committees may receive such compensation, if any, for their services, and such reimbursement of expenses, as may be fixed or determined by resolution of the board of directors. This Section 3.13 shall not be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee or otherwise, and receiving compensation for those services.

ARTICLE IV

COMMITTEES

4.1 COMMITTEES OF DIRECTORS.

The board of directors may, by resolution adopted by a majority of the authorized number of directors, designate one (1) or more committees, each consisting of two or more directors, to serve at the pleasure of the board. The board may designate one (1) or more directors as alternate members of any committee, who may replace any absent member at any meeting of the committee. Any committee, to the extent provided in the resolution of the board, shall have all the authority of the board, except with respect to:

- (a) the approval of any action which, under the Code, also requires shareholders' approval or approval of the outstanding shares;
- (b) the filling of vacancies in the board of directors or in any committee;
- (c) the fixing of compensation of the directors for serving on the board or any committee;
- (d) the amendment or repeal of these by-laws or the adoption of new by-laws;
- (e) the amendment or repeal of any resolution of the board of directors which by its express terms is not so amendable or repealable;

(f) a distribution to the shareholders of the corporation, except at a rate or in a periodic amount or within a price range determined by the board of directors; or

(g) the appointment of any other committees of the board of directors or the members of such committees.

#### 4.2 MEETINGS AND ACTION OF COMMITTEES.

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of Article III of these by-laws, Section 3.5 (place of meetings), Section 3.6 (regular meetings), Section 3.7 (special meetings and notice), Section 3.8 (quorum.), Section 3.9 (waiver of notice), Section 3.10 (adjournment), Section 3.11 (notice of adjournment) and Section 3.12 (action without meeting), with such changes in the context of those by-laws as are necessary to substitute the committee and its members for the board of directors and its members, except that the time of regular meetings of committees may be determined either by resolution of the board of directors or by resolution of the committee; special meetings of committees may also be called by resolution of the board of directors; and notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors may adopt rules for the government of any committee not inconsistent with the provisions of these by-laws.

### ARTICLE V

#### OFFICERS

##### 5.1 OFFICERS.

The officers of the corporation shall be a president, a secretary, and a chief financial officer. The corporation may also have, at the discretion of the board of directors, a chairman of the board, one or more vice presidents, one or more assistant secretaries, one or more assistant treasurers, and such other officers as may be appointed in accordance with the provisions of Section 5.3 of these by-laws. Any number of offices may be held by the same person.

##### 5.2 ELECTION OF OFFICERS.

The officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 or Section 5.5 of these by-laws, shall be chosen by the board, subject to the rights, if any, of an officer under any contract of employment.

##### 5.3 SUBORDINATE OFFICERS.

The board of directors may appoint, or may empower the president to appoint, such other officers as the business of the corporation may require, each of whom shall hold office for such period, have such authority and perform such duties as are provided in these by-laws or as the board of directors may from time to time determine.

##### 5.4 REMOVAL AND RESIGNATION OF OFFICERS.

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by the board of directors at any regular or special meeting of the board or, except in case of an officer chosen by the board of directors, by any officer upon whom such power of removal may be conferred by the board of directors.

Any officer may resign at any time by giving written notice to the corporation. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice; and, unless otherwise specified in that notice, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

##### 5.5 VACANCIES IN OFFICES.

A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in these by-laws for regular appointments to that office.

5.6 CHAIRMAN OF THE BOARD.

The chairman of the board, if such an officer be elected, shall, if present, preside at meetings of the board of directors and exercise and perform such other powers and duties as may be from time to time assigned to him by the board of directors or prescribed by these by-laws. If there is no president, the chairman of the board shall also be the chief executive officer of the corporation and shall have the powers and duties prescribed in Section 5.7 of these by-laws.

5.7 PRESIDENT.

Subject to such supervisory powers, if any, as may be given by the board of directors to the chairman of the board, if there be such an officer, the president shall be the chief executive officer of the corporation and shall, subject to the control of the board of directors, have general supervision, direction and control of the business and the officers of the corporation. He shall preside at all meetings of the shareholders and, in the absence of the chairman of the board, or if there be none, at all meetings of the board of directors. He shall have the general powers and duties of management usually vested in the office of president of a corporation, and shall have such other powers and duties as may be prescribed by the board of directors or these bylaws.

5.8 VICE PRESIDENTS.

In the absence or disability of the president, the vice presidents, if any, in order of their rank as fixed by the board of directors or, if not ranked, a vice president designated by the board of directors, shall perform all the duties of the president and when so acting shall have all the powers of, and be subject to all the restrictions upon, the president. The vice presidents shall have such other powers and perform such other duties as from time to time may be prescribed for them respectively by the board of directors, these by-laws, the president or the chairman of the board.

5.9 SECRETARY.

The secretary shall keep or cause to be kept, at the principal executive office of the corporation, or such other place as the board of directors may direct, a book of minutes of all meetings and actions of directors, committees of directors, and shareholders, with the time and place of holding, whether regular or special (and, if special, how authorized and the notice given), the names of those present at directors' meetings or committee meetings, the number of shares present or represented at shareholders' meetings, and the proceedings thereof.

The secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the board of directors, a share register, or a duplicate share register, showing the names of all shareholders and their addresses, the number and classes of shares held by each, the number and date of certificates evidencing such shares, and the number and date of cancellation of every certificate surrendered for cancellation.

The secretary shall give, or cause to be given, notice of all meetings of the shareholders and of the board of directors required by these by-laws or by law to be given, and he shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the board of directors or by these by-laws.

5.10 CHIEF FINANCIAL OFFICER.

The chief financial officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital, retained earnings, and shares. The books of account shall at all reasonable times be open to inspection by any director.

The chief financial officer shall deposit all money and other valuables in the name and to the credit of the corporation with such depositories as may be designated by the board of directors. He shall disburse the funds of the corporation as may be ordered by the board of directors, shall render to the president and directors, whenever they request it, an account of all of his transactions as chief financial officer and of the financial condition of the corporation, and shall have such other powers and perform such other duties as may be prescribed by the board of directors or these by-laws.



## ARTICLE VI

### INDEMNIFICATION OF DIRECTORS, AND OFFICERS, EMPLOYEES AND OTHER AGENTS

#### 6.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS.

The corporation shall, to the maximum extent and in the manner permitted by the Code, indemnify each of its directors and officers against expenses (as defined in Section 317(a) of the Code), judgments, fines, settlements, and other amounts actually and reasonably incurred in connection with any proceeding (as defined in Section 317(a) of the Code), arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Article VI, a "director" or "officer" of the corporation includes any person (i) who is or was a director or officer of the corporation, (ii) who is or was serving at the request of the corporation as a director or officer of another corporation, partnership, joint venture, trust or other enterprise, or (iii) who was a director or officer of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

#### 6.2 INDEMNIFICATION OF OTHERS.

The corporation shall have the power, to the extent and in the manner permitted by the Code, to indemnify each of its employees and agents (other than directors and officers) against expenses (as defined in Section 317(a) of the Code), judgments, fines, settlements, and other amounts actually and reasonably incurred in connection with any proceeding (as defined in Section 317(a) of the Code), arising by reason of the fact that such person is or was an agent of the corporation. For purposes of this Article VI, an "employee" or "agent" of the corporation (other than a director or officer) includes any person (i) who is or was an employee or agent of the corporation, (ii) who is or was serving at the request of the corporation as an employee or agent of another corporation, partnership, joint venture, trust or other enterprise, or (iii) who was an employee or agent of a corporation which was a predecessor corporation of the corporation or of another enterprise at the request of such predecessor corporation.

#### 6.3 PAYMENT OF EXPENSES IN ADVANCE.

Expenses incurred in defending any civil or criminal action or proceeding for which indemnification is required pursuant to Section 6.1 or for which indemnification is permitted pursuant to Section 6.2 following authorization thereof by the Board of Directors shall be paid by the corporation in advance of the final disposition of such action or proceeding upon receipt of an undertaking by or on behalf of the indemnified party to repay such amount if it shall ultimately be determined that the indemnified party is not entitled to be indemnified as authorized in this Article VI.

#### 6.4 INDEMNITY NOT EXCLUSIVE.

The indemnification provided by this Article VI shall not be deemed exclusive of any other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of shareholders or disinterested directors or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office, to the extent that such additional rights to indemnification are authorized in the Articles of Incorporation.

#### 6.5 INSURANCE INDEMNIFICATION.

The corporation shall have the power to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation against any liability asserted against or incurred by such person in such capacity or arising out of such person's status as such, whether or not the corporation would have the power to indemnify him against such liability under the provisions of this Article VI.

#### 6.6 CONFLICTS.

No indemnification or advance shall be made under this Article VI, except where such indemnification or advance is mandated by law or the order, judgment or decree of any court of competent jurisdiction, in any circumstance where it appears:

(a) That it would be inconsistent with a provision of the Articles of Incorporation, these bylaws, a resolution of the shareholders or an agreement in effect at the time of the accrual of the alleged cause of the action asserted in the proceeding in which the expenses were incurred or other amounts were paid, which prohibits or otherwise limits indemnification; or

(b) That it would be inconsistent with any condition expressly imposed by a court in approving a settlement.

## ARTICLE VII

### RECORDS AND REPORTS

#### 7.1 MAINTENANCE AND INSPECTION OF SHARE REGISTER.

The corporation shall keep at its principal executive office, or at the office of its transfer agent or registrar, if either be appointed and as determined by resolution of the board of directors, a record of its shareholders, giving the names and addresses of all shareholders and the number and class of shares held by each shareholder.

A shareholder or shareholders of the corporation holding at least five percent (5%) in the aggregate of the outstanding voting shares of the corporation or who holds at least one percent (1%) of such voting shares and has filed a Schedule 14B with the Securities and Exchange Commission relating to the election of directors, may (i) inspect and copy the records of shareholders' names and addresses and shareholdings during usual business hours on five (5) days' prior written demand on the corporation, (ii) obtain from the transfer agent of the corporation, on written demand and on the tender of such transfer agent's usual charges for such list, a list of the names and addresses of the shareholders who are entitled to vote for the election of directors, and their shareholdings, as of the most recent record date for which that list has been compiled or as of a date specified by the shareholder after the date of demand. Such list shall be made available to any such shareholder by the transfer agent on or before the later of five (5) days after the demand is received or five (5) days after the date specified in the demand as the date as of which the list is to be compiled.

The record of shareholders shall also be open to inspection on the written demand of any shareholder or holder of a voting trust certificate, at any time during usual business hours, for a purpose reasonably related to the holder's interests as a shareholder or as the holder of a voting trust certificate.

Any inspection and copying under this Section 7.1 may be made in person or by an agent or attorney of the shareholder or holder of a voting trust certificate making the demand.

#### 7.2 MAINTENANCE AND INSPECTION OF BY-LAWS.

The corporation shall keep at its principal executive office, or if its principal executive office is not in the State of California, at its principal business office in such state, the original or a copy of these by-laws as amended to date, which bylaws shall be open to inspection by the shareholders at all reasonable times during office hours. If the principal executive office of the corporation is outside the State of California and the corporation has no principal business office in such state, the secretary shall, upon the written request of any shareholder, furnish to that shareholder a copy of these by-laws as amended to date.

#### 7.3 MAINTENANCE AND INSPECTION OF OTHER CORPORATE RECORDS.

The accounting books and records, and the minutes of proceedings of the shareholders and the board of directors and any committee or committees of the board of directors, shall be kept at such place or places designated by the board of directors or, in absence of such designation, at the principal executive office of the corporation. The minutes shall be kept in written form and the accounting books and records shall be kept either in written form or in any other form capable of being converted into written form.

The minutes and accounting books and records shall be open to inspection upon the written demand of any shareholder or holder of a voting trust certificate, at any reasonable time during usual business hours, for a purpose reasonably related to the holder's interests as a shareholder or as the holder of a voting trust certificate. The inspection may be made in person or by an agent or attorney, and shall include the right to copy and make extracts. Such rights of inspection shall extend to the records of each subsidiary corporation of the corporation.

#### 7.4 INSPECTION BY DIRECTORS.

Every director shall have the absolute right at any reasonable time to inspect all books, records and documents of every kind and the physical properties of the corporation and each of its subsidiary corporations. Such inspection by a director may be made in person or by an agent or attorney, and the right of inspection includes the right to copy and make extracts of documents.

7.5 ANNUAL REPORT TO SHAREHOLDERS: WAIVER.

The board of directors shall cause an annual report to be sent to the shareholders not later than one hundred twenty (120) days after the close of the fiscal year adopted by the corporation. Such report shall be sent at least fifteen (15) days before the annual meeting of shareholders to be held during the next fiscal year and in the manner specified in Section 2.5 of these by-laws for giving notice to shareholders of the corporation.

The annual report shall contain a balance sheet as of the end of the fiscal year and an income statement and statement of changes in financial position for the fiscal year, accompanied by any report of independent accountants or, if there is no such report, the certificate of an authorized officer of the corporation that the statements were prepared without audit from the books and records of the corporation.

The foregoing requirement of an annual report may be waived by the board so long as the shares of the corporation are held by less than one hundred (100) holders of record.

7.6 FINANCIAL STATEMENTS.

A copy of any annual financial statement and any income statement of the corporation for each quarterly period of each fiscal year, and any accompanying balance sheet of the corporation as of the end of each such period, that has been prepared by the corporation shall be kept on file in the principal executive office of the corporation for twelve (12) months; and each such statement shall be exhibited at all reasonable times to any shareholder demanding an examination of any such statement or a copy shall be mailed to any such shareholder.

If a shareholder or shareholders holding at least five percent (5%) of the outstanding shares of any class of stock of the corporation makes a written request to the corporation for an income statement of the corporation for the three-month, six-month or nine-month period of the then current fiscal year ended more than thirty (30) days before the date of the request, and for a balance sheet of the corporation as of the end of that period, the chief financial officer shall cause that statement to be prepared, if not already prepared, and shall deliver personally or mail that statement or statements to the person making the request within thirty (30) days after the receipt of the request. If the corporation has not sent to the shareholders its annual report for the last fiscal year, such report shall likewise be delivered or mailed to the shareholder or shareholders within thirty (30) days after the request.

The corporation shall also, on the written request of any shareholder, mail to the shareholder a copy of the last annual, semi-annual or quarterly income statement which it has prepared, and a balance sheet as of the end of that period.

The quarterly income statements and balance sheets referred to in this section shall be accompanied by the report, if any, of any independent accountants engaged by the corporation or the certificate of an authorized officer of the corporation that the financial statements were prepared without audit from the books and records of the corporation.

ARTICLE VIII

GENERAL MATTERS

8.1 RECORD DATE FOR PURPOSES OTHER THAN NOTICE AND VOTING.

For purposes of determining the shareholders entitled to receive payment of any dividend or other distribution or allotment of any rights or entitled to exercise any rights in respect of any other lawful action (other than action by shareholders by written consent without a meeting), the board of directors may fix, in advance, a record date, which shall not be more than sixty (60) days before any such action, and in that case only shareholders of record on the date so fixed are entitled to receive the dividend, distribution or allotment of rights, or to exercise such rights, as the case may be, notwithstanding any transfer of any shares on the books of the corporation after the record date so fixed, except as otherwise provided in the Code.

If the board of directors does not so fix a record date, the record date for determining shareholders for any such purpose shall be at the close of business on the day on which the board adopts the applicable resolution or the sixtieth (60th) day before the date of that action, whichever is later.

## 8.2 CHECKS, DRAFTS, EVIDENCES OF INDEBTEDNESS.

All checks, drafts, or other orders for payment of money, notes, or other evidences of indebtedness, issued in the name of or payable to the corporation, shall be signed or endorsed by such person or persons and in such manner as, from time to time, shall be determined by resolution of the board of directors.

## 8.3 CORPORATE CONTRACTS AND INSTRUMENTS: HOW EXECUTED.

The board of directors, except as otherwise provided in these by-laws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any instrument in the name of and on behalf of the corporation, and such authority may be general or confined to specific instances; and, unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

## 8.4 CERTIFICATES FOR SHARES.

A certificate or certificates for shares of the corporation shall be issued to each shareholder when any of such shares are fully paid, and the board of directors may authorize the issuance of certificates or shares as partly paid provided that these certificates shall state the amount of the consideration to be paid for them and the amount paid. All certificates shall be signed in the name of the corporation by the chairman or vice chairman of the board or the president or a vice president and by the chief financial officer or an assistant treasurer or the secretary or any assistant secretary, certifying the number of shares and the class or series of shares owned by the shareholder. Any or all of the signatures on the certificate may be facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed on a certificate has ceased to be that such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if such person were an officer, transfer agent or registrar at the date of issue.

Notwithstanding the foregoing paragraph, the corporation may adopt a system of issuance, recordation and transfer of its shares by electronic or other means not involving any issuance of certificates, including provisions for notice to purchasers in substitution for the required statements on certificates under Sections 417, 418 and 1302 of the Code, and as may be required by the commissioner in administering the California Corporate Securities Law of 1968, which system (1) has been approved by the United States Securities and Exchange Commission, (2) is authorized in any statute of the United States, or (3) is in accordance with Division 8 of the California Commercial Code. Any system so adopted shall not become effective as to issued and outstanding certificated securities until the certificates therefor have been surrendered to the corporation.

## 8.5 LOST CERTIFICATES.

Except as provided in this Section 8.5, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The board of directors may, in case any share certificate or certificate for any other security is lost, stolen or destroyed, authorize the issuance of replacement certificates on such terms and conditions as the board may require, including provision for indemnification of the corporation secured by a bond or other adequate security sufficient to protect the corporation against any claim that may be made against it, including any expense or liability, on account of the alleged loss, theft or destruction of the certificate or the issuance of the replacement certificate.

## 8.6 CONSTRUCTION AND DEFINITIONS.

Unless the context requires otherwise, the general provisions, rules of construction and definitions in the Code shall govern the construction of these by-laws. Without limiting the generality of this provision, the singular number includes the plural, the Plural number includes the singular, and the term "person" includes both a corporation and a natural person.

ARTICLE IX  
AMENDMENTS

9.1 AMENDMENT BY SHAREHOLDERS.

New by-laws may be adopted or these by-laws may be amended or repealed by the vote or written consent of holders of a majority of the outstanding shares entitled to vote; provided, however, that if the articles of incorporation of the corporation set forth the number of authorized directors of the corporation, the authorized number of directors may be changed only by an amendment of the articles of incorporation.

9.2 AMENDMENT BY DIRECTORS.

Subject to the rights of the shareholders as provided in Section 9.1 of these by-laws, by-laws, other than a by-law or an amendment of a by-law changing the authorized number of directors (except to fix the authorized number of directors pursuant to a by-law providing for a variable number of directors), may be adopted, amended, or repealed by the board of directors.

**SUBSIDIARIES OF AEHR TEST SYSTEMS**

1. Aehr Test Systems Japan K.K., incorporated in Japan
2. Aehr Test Systems GmbH, incorporated in Germany

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-204008, 333-214218 and 333-216792) and Registration Statements on Form S-8 (No. 333-208130, 333-200442, 333-184865, 333-177954, 333-163100, 333-155389, 333-138249, 333-119636, 333-52592, 333-40577, 333-214589, and 333-228509) of Aehr Test Systems of our report dated August 28, 2019 relating to the consolidated financial statements, which appears in this Form 10-K.

/s/ BPM LLP

San Jose, California

August 28, 2019

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER  
PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT**

I, Gayn Erickson, certify that:

1. I have reviewed this annual report on Form 10-K of Aehr Test Systems;
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(s) 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 28, 2019

/s/ GAYN ERICKSON

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Gayn Erickson  
President and Chief Executive Officer



**CERTIFICATION OF CHIEF FINANCIAL OFFICER  
PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT**

I, Kenneth B. Spink, certify that:

1. I have reviewed this annual report on Form 10-K of Aehr Test Systems;
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(s) 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 28, 2019

/s/ KENNETH B. SPINK

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Kenneth B. Spink  
Vice President of Finance and Chief Financial Officer

**CERTIFICATION OF 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, Gayn Erickson, 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 Aehr Test Systems on Form 10-K for the period ending May 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 Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of Aehr Test Systems.

Date: August 28, 2019

By: /s/ GAYN ERICKSON

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Gayn Erickson  
President and Chief Executive Officer

I, Kenneth B. Spink, 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 Aehr Test Systems on Form 10-K for the period ending May 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 Annual Report on Form 10-K fairly presents in all material respects the financial condition and results of operations of Aehr Test Systems.

Date: August 28, 2019

By: /s/ KENNETH B. SPINK

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Kenneth B. Spink  
Vice President of Finance and Chief Financial Officer

## CORPORATE INFORMATION

### ***DIRECTORS***

**Rhea J. Posedel**  
Chairman

**Gayn Erickson**  
President  
Chief Executive Officer

**Laura Oliphant** <sup>(1) (2)</sup>  
Independent consultant and investor

**Mario M. Rosati**  
Member  
Wilson Sonsini Goodrich & Rosati,  
Professional Corporation

**John M. Schneider** <sup>(1) (3)</sup>  
Private investor

**Howard T. Slayen** <sup>(1) (2) (3)</sup>  
Retired Partner  
PricewaterhouseCoopers

<sup>(1)</sup> Member of the Audit Committee

<sup>(2)</sup> Member of the Compensation Committee

<sup>(3)</sup> Member of the Corporate Governance and  
Nominating Committee

### ***OFFICERS***

**Gayn Erickson**  
President  
Chief Executive Officer

**Kenneth B. Spink**  
Vice President of Finance  
Chief Financial Officer

**David Fucci**  
Vice President of Operations

**David S. Hendrickson**  
Chief Technology Officer

**Donald P. Richmond II**  
Vice President of Engineering

**Vernon Rogers**  
Executive V.P. of Sales and Marketing

**Kunio Sano**  
President  
Aehr Test Systems Japan

### ***CORPORATE HEADQUARTERS***

400 Kato Terrace  
Fremont, CA 94539  
Telephone: 510.623.9400  
Fax: 510.623.9450  
Website: www.aehr.com

### ***SUBSIDIARIES***

**Aehr Test Systems Japan**  
Hashikan Bldg., 1-14  
Azuma-Cho  
Hachioji  
Tokyo, Japan 192-0082  
Telephone: 81.42.642.3530  
Fax: 81.42.642.3531  
Email: ats@aejr.com

**Aehr Test Systems GmbH**  
Industriestrasse 9  
D-86919 Utting  
Germany  
Telephone: 49.8806.2021  
Fax: 49.8806.2024  
Email: atsg@aejr.com

Aehr Test Systems' corporate headquarters has been certified to the International Standards Organization (ISO) 9001 standard since 1997.

### ***SHAREHOLDER INFORMATION***

**Legal Counsel**  
Wilson Sonsini Goodrich & Rosati,  
Professional Corporation  
Palo Alto, CA

**Independent Registered  
Public Accounting Firm**  
BPM LLP  
San Jose, CA

**Transfer Agent and Registrar**  
Computershare Trust Company, N.A.  
P. O. Box 505000  
Louisville, KY 40233  
Toll free: 800.962.4284  
Telephone: 303.262.0600  
Fax: 303.262.0700

**Investor Relations**  
MKR Group, Inc.  
Telephone: 323.468.2300  
Email: aehr@mkr-group.com

**Annual Meeting**  
The annual meeting of shareholders will be held at 4:00 p.m. on October 22, 2019 at the Company's Corporate Headquarters.





**CORPORATE HEADQUARTERS**

400 KATO TERRACE

FREMONT, CA 94539

TELEPHONE: 510.623.9400

FAX: 510.623.9450

WEB: [WWW.AEHR.COM](http://WWW.AEHR.COM)