AEHR TEST SYSTEMS

Form S-3

October 25, 2016 As filed with the Securities and	Exchange Commission on October 25, 2016
Registration No. 333-	
SECURITIES AND EXCHANG	GE COMMISSION
Washington, D.C. 20549	
FORM S-3	
REGISTRATION STATEMEN	T
Under	
THE SECURITIES ACT OF 19	233
AEHR TEST SYSTEMS (Exact name of registrant as spe	ecified in its charter)
California	94-2424084
(State or other jurisdiction of	(I.R.S. Employer Identification Number)
incorporation or organization) 400 Kato Terrace	
Fremont, CA 94539	
(510) 623-9400	
(Address, including zip code, an offices)	d telephone number, including area code, of registrant's principal executive
Gayn Erickson	
Chief Executive Officer	

Aehr Test Systems	
400 Kato Terrace	
Fremont, CA 94539	
(510) 623-9400	
(Name, address, including z	cip code, and telephone number, including area code, of agent for service)
Copies to:	
Kenneth B. Spink	Mark L. Reinstra
Chief Financial Officer and	Wilson Sonsini Goodrich & Rosati, P.C.
Vice President of Finance	Professional Corporation
Aehr Test Systems	650 Page Mill Road
400 Kato Terrace	Palo Alto, CA 94304
Fremont, CA 94539	(650) 493-9300
(510) 623-9400	
Approximate date of commo	encement of proposed sale to the public:
From time to time, after the e	ffective date of this Registration Statement.
If the only securities being replans, please check the follow	gistered on this Form are being offered pursuant to dividend or interest reinvestment ving box.
-	registered on this Form are to be offered on a delayed or continuous basis pursuant to a Act of 1933, other than securities offered only in connection with dividend or interest following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large Accelerated filer Accelerated filer

Non-accelerated filer (Do not check if smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be	Amount To Be	Proposed Maximum Offering	Proposed Maximum Aggregate	Amount of Registration
Registered		Price per Unit or	0.00	$\mathbf{Fee}^{(1)}$
		Share ⁽²⁾	Price(2)	
Common Stock, \$0.01 par value per share	2,721,540	\$2.75	\$7,484,235	\$868

(1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, this registration statement shall also cover any additional shares of common stock resulting from stock splits, stock dividends or similar transactions.

Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) under the (2) Securities Act of 1933, as amended, based on the average of the high and low reported sales prices on the NASDAQ Capital Market on October 18, 2016.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delaits effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Ac 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.	•

The information in this prospectus is not complete and may be changed. We and the selling stockholders may not sell the securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.
SUBJECT TO COMPLETION, DATED OCTOBER 25, 2016
PROSPECTUS
AEHR TEST SYSTEMS
2,721,540 Shares of Common Stock

The selling stockholders identified in this prospectus or their transferees may sell or otherwise dispose of up to 2,721,540 shares of our common stock, par value \$0.01 per share. We are not offering any shares of common stock under this prospectus and will not receive any proceeds from the sale or other disposition of the shares covered hereby.

The selling stockholders (which term includes their respective donees, pledgees, transferees or other successors-in-interest) may, from time to time, sell, transfer or otherwise dispose of the shares or interests therein on any stock exchange, market or trading facility on which the shares are traded or in private transactions at fixed prices, at market prices prevailing at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. The selling stockholders will bear all fees, discounts,

concessions or commissions of broker-dealers or agents in connection with the offering of the shares by the selling stockholders. See "Plan of Distribution" beginning on page 6 of this prospectus for more information about how the selling stockholders may sell their shares of common stock.
Our common stock is traded on the NASDAQ Capital Market under the symbol "AEHR". On October 21, 2016, the las reported sale price of our common stock on the NASDAQ Capital Market was \$2.99 per share.
Investing in our common stock involves a high degree of risk. You should carefully read and consider the risk factors described in, and incorporated by reference under, "Risk Factors" beginning on page 4 of this prospectu
Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.
The date of this prospectus is October 25, 2016

Table of Contents

Page

About This Prospectus	
Cautionary Statement Regarding Forward-Looking Statements	
Prospectus Summary	3
Risk Factors	4
Use of Proceeds	4
Selling Stockholders	4
Plan of Distribution	(
Legal Matters	1
Experts	8
Where You Can Find More Information	8
Information Incorporated by Reference	8

-i-

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the United States Securities and Exchange Commission (the "SEC"). Under this registration statement, the selling stockholders may sell, at any time and from time to time, in one or more offerings, up to 2,721,540 shares of common stock. When the selling stockholders elect to make an offer of any common stock described in this prospectus, pursuant to this registration statement, a prospectus supplement, if required, may be distributed that will contain specific information about the terms of that offering. Any required prospectus supplement may also add, update or change information contained in this prospectus.

You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement. No person has been authorized to give any information or make any representations other than those contained or incorporated by reference in this prospectus or any accompanying prospectus supplement in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us or the selling stockholders.

You should read the entire prospectus and any prospectus supplement, as well as the documents incorporated by reference into this prospectus or any prospectus supplement, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement is correct as of any date subsequent to the date hereof or of such prospectus supplement, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

This prospectus may be supplemented from time to time by one or more prospectus supplements. Any such prospectus supplements may include additional or different information, such as additional or different risk factors or other special considerations applicable to us or our business, financial condition or results of operations. If there is any inconsistency between the information in this prospectus and any prospectus supplement, you should rely on the information contained in the prospectus supplement.

This prospectus is neither an offer to sell nor a solicitation of an offer to buy any securities other than those registered by this prospectus, nor it is an offer to sell or a solicitation of an offer to buy securities where an offer or solicitation would be unlawful.

Unless the context requires otherwise, references in this prospectus to "Aehr Test," "the Company," "we," "us" and "our" references to "Aehr Test Systems, a California corporation, and our consolidated subsidiaries. This prospectus, including the documents incorporated herein by reference, contains references to a number of trademarks that are our registered trademarks or those of our affiliates, or trademarks for which we or our affiliates have pending registration applications or common law rights. This prospectus may also include trade names, trademarks and service marks of other companies and organizations.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). The words "believe," "may," "will," "potentially," "estimate," "continue," "anticip "intend," "could," "would," "project," "plan," "expect" and the negative and plural forms of these words and similar expression are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. Those statements appear in this prospectus, any accompanying prospectus supplement and the documents incorporated herein and therein by reference, particularly in the sections titled "Prospectus Summary" and

-1-

"Risk Factors," and include statements regarding the intent, belief or current expectations of the Company and management that are subject to known and unknown risks, uncertainties and assumptions.

This prospectus, any prospectus supplement and the information incorporated by reference in this prospectus and any prospectus supplement also contain statements that are based on the current expectations of our Company and management. You are cautioned that any such forward-looking statements are not guarantees of future performance and involve risks and uncertainties, and that actual results may differ materially from those projected in the forward-looking statements as a result of various factors.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained herein after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

-2-

PROSPECTUS SUMMARY

This summary description about us and our business highlights selected information contained elsewhere in this prospectus or incorporated in this prospectus by reference. This summary does not contain all of the information you should consider before investing in our common stock. You should carefully read this entire prospectus and any applicable prospectus supplement, including each of the documents incorporated herein or therein by reference, before making an investment decision.

The Company

Aehr Test was incorporated in the state of California on May 25, 1977. We develop, manufacture and sell systems which are designed to reduce the cost of testing and to perform reliability screening, or burn-in, of complex logic and memory devices. These systems can be used to simultaneously perform parallel testing and burn-in of packaged integrated circuits, or ICs, singulated bare die or ICs still in wafer form. Increased quality and reliability needs of the Automotive, Mobility and flash memory integrated circuit markets are driving additional testing requirements, capacity needs and opportunities for Aehr Test products in package and wafer level testing. Leveraging its expertise as a long-time leading provider of burn-in equipment, with over 2,500 systems installed worldwide, the Company has developed and introduced several innovative product families, including the ABTSTM and FOXTM systems, the WaferPakTM cartridge and the DiePak[®] carrier. The latest ABTS family of systems can perform test during burn-in of complex devices, such as digital signal processors, microprocessors, microcontrollers 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. The WaferPak cartridge 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 final test and burn-in of singulated bare die. The mailing address and telephone number of Aehr Test's principal executive offices are 400 Kato Terrace, Fremont, CA 94539 and (510) 623-9400, respectively.

The Offering

We are registering 2,721,540 shares of our common stock, par value \$0.01 per share, for resale or other disposition by the selling stockholders or their transferees. The shares are being registered pursuant to the Purchase Agreement, dated September 22, 2016, by and among the Company and the other parties thereto (the "Purchase Agreement") and the related Registration Rights Agreement, dated September 22, 2016, by and among the Company and the other parties thereto (the "Registration Rights Agreement"). We are not offering any shares of common stock under this prospectus and will not receive any proceeds from the sale or other disposition of the shares covered hereby. See "Selling Stockholders" beginning on page 4 of this prospectus.

RISK FACTORS

Investing in our common stock involves risks. Before deciding to invest in our common stock, please read carefully the risks and uncertainties described below and incorporated by reference in this prospectus or any prospectus supplement. These risks and uncertainties include those discussed in our Annual Report on Form 10-K for the fiscal year ended May 31, 2016 and in our Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 2016 and which may be updated, supplemented or superseded by the risks and uncertainties described in the reports we subsequently file with the SEC. See "Information Incorporation by Reference" and "Where You Can Find More Information." 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, may also become important factors that affect us. If any of the risks or uncertainties described in this prospectus or our SEC filings or any such additional risks and uncertainties actually 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 prospectus or our SEC filings or presented elsewhere by management from time to time. In that case, the trading price of our common stock could decline and you could lose all or part of your investment. Please also see "Cautionary Statement Regarding Forward-Looking Statements" beginning on page 1.

The number of shares being registered for sale is significant in relation to our trading volume.

We have filed a registration statement of which this prospectus is a part to register the shares offered hereunder for sale into the public market by the selling stockholders. These shares represent a large number of shares of our common stock, and if sold in the market all at once or at about the same time, could depress the market price of our common stock during the period the registration statement remains effective and could also affect our ability to raise equity capital.

USE OF PROCEEDS

We will not receive any of the proceeds from the sale or other disposition by the selling stockholders or their transferees of the shares of common stock of the Company covered hereby. See "Selling Stockholders" and "Plan of Distribution" described below.

SELLING STOCKHOLDERS

The selling stockholders identified in this prospectus or their transferees may sell or otherwise dispose of up to 2,721,540 shares of our common stock, par value \$0.01 per share. We are not offering any shares of common stock under this prospectus and will not receive any proceeds from the sale or other disposition of the shares covered hereby

The shares of common stock being registered are those issued pursuant to the Purchase Agreement. The registration statement to which this prospectus relates is being filed pursuant to the Registration Rights Agreement and the Purchase Agreement. Subject to the terms and conditions of those agreements, we agreed to file this registration statement and to this registration statement effective until the earlier of (i) the date that shares securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 and certain other conditions have been satisfied, or (ii) all of the shares have been sold or otherwise disposed of pursuant to this registration statement or in a transaction in which the transferee receives freely tradable shares.

The following table sets forth certain information regarding the beneficial ownership of common stock by each of the selling stockholders named below and the number of shares that may be sold or otherwise disposed of by the selling stockholders or their transferees. Information with respect to beneficial ownership is based upon information obtained from the selling stockholders. **We have determined beneficial ownership in accordance with the rules of the SEC.** Because the selling stockholders may sell, transfer or otherwise dispose of all, some or none of the shares of our common stock covered by this prospectus, we cannot determine the number of such shares that will be sold,

-4-

transferred or otherwise disposed of by the selling stockholders, or the amount or percentage of shares of our common stock that will be held by the selling stockholders upon termination of any particular offering. See "Plan of Distribution." For purposes of the table below, we assume that the selling stockholders will sell all of the shares of common stock covered by this prospectus.

	Beneficial Ownership Prior to the		Shares Beneficially Owned After Offering		
	Offering Number of	Percentage of	Number of Shares Being	Number of	Percentage of
Name of Selling	Shares	Outstanding Common Stock	Registered for	rShares ⁽¹⁾	Outstanding Common Stock
Stockholder			Resale		
Special Situations Technology Fund, L.P.(2)	166,000	1.0%	166,000	0	0
Special Situations Technology Fund II, L.P.(2)	884,000	5.4%	884,000	0	0
Columbus Capital Partners, L.P.	400,000	2.5%	400,000	0	0
Columbus Capital QP Partners, L.P.	125,000	*	125,000	0	0
AIGH Investment Partners LP	626,725	3.8%	600,000	26,725	*
Jon D and Linda W Gruber Trust	260,000	1.6%	260,000	0	0
Kettle Hill Partners, LP	133,376	*	133,376	0	0
Kettle Hill Partners II, LP	53,164	*	53,164	0	0
Pennington Capital	50,000	*	50,000	0	0
Geoffrey G. Scott	554,929	3.4%	50,000	504,929	3.1%

Less than 1%

-5-

⁽¹⁾ Assumes the sale of all shares being offered pursuant to this prospectus.

AWM Investment Company, Inc. ("AWM") is the investment adviser to the Special Situations Technology Fund,

L.P. and the Special Situations Technology Fund II, L.P. David M. Greenhouse and Adam Stettner are the principal owners of AWM. Through their control of AWM, Messrs. Greenhouse and Stettner share voting and investment control over the portfolio securities of each of the funds listed above.

PLAN OF DISTRIBUTION

The selling stockholders, which as used herein includes donees, pledgees, transferees or other successors-in-interest selling shares of common stock or interests in shares of common stock received after the date of this prospectus from a selling stockholder as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of common stock or interests in shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The selling stockholders may use any one or more of the following methods when disposing of shares or interests therein:

ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;

block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by the broker-dealer for its account;

an exchange distribution in accordance with the rules of the applicable exchange;

privately negotiated transactions;

short sales effected after the date the registration statement of which this Prospectus is a part is declared effective by the SEC;

through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;

broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;

a combination of any such methods of sale; and

any other method permitted by applicable law.

The selling stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

In connection with the sale of our common stock or interests therein, the selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the common stock in the course of hedging the positions they assume. The selling stockholders may also sell shares of our common stock short and deliver these securities to close out their short positions, or loan or pledge the common stock to

-6-

broker-dealers that in turn may sell these securities. The selling stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the selling stockholders from the sale of the common stock offered by them will be the purchase price of the common stock less discounts or commissions, if any. Each of the selling stockholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

The selling stockholders also may resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act of 1933, provided that they meet the criteria and conform to the requirements of that rule.

The selling stockholders and any underwriters, broker-dealers or agents that participate in the sale of the common stock or interests therein may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling stockholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our common stock to be sold, the names of the selling stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the common stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the common stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the selling stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the selling stockholders and their affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the selling stockholders for the purpose of satisfying the prospectus delivery requirements of

the Securities Act. The selling stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

We have agreed to indemnify the selling stockholders against liabilities, including liabilities under the Securities Act and state securities laws, relating to the registration of the shares offered by this prospectus.

We have agreed with the selling stockholders to keep the registration statement of which this prospectus constitutes a part effective until the earlier of (i) the date that such securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 and certain other conditions have been satisfied, or (ii) all of the securities have been sold or otherwise disposed of pursuant to the registration statement of which this prospectus forms a part or in a transaction in which the transferee receives freely tradable shares.

LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon by Wilson Sonsini Goodrich & Rosati, P.C., Palo Alto, California.

-7-

EXPERTS

The consolidated financial statements of Aehr Test Systems as of May 31, 2016 and 2015 and for each of the three years in the period ended May 31, 2016, incorporated in this Registration Statement on Form S-3 by reference to the Annual Report on Form 10-K for the year ended May 31, 2016, have been so incorporated in reliance on the report of Burr Pilger Mayer, Inc., an independent registered public accounting firm, given on the authority of such firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We have filed with the SEC a registration statement under the Securities Act relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed above. The registration statement and certain of the documents referred to below under "Information Incorporated by Reference" are also available on our website, www.aehr.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

our Annual Report on Form 10-K for the fiscal year ended May 31, 2016, filed on August 29, 2016;

our Quarterly Report on Form 10-Q for the fiscal quarter ended August 31, 2016, filed on October 14, 2016;

our Current Reports on Form 8-K filed with the SEC on August 24, 2016, September 28, 2016, September 30, 2016, October 4, 2016 and October 20, 2016; and

the description of our common stock contained in our Registration Statement on Form 8-A as filed with the SEC on July 29, 1997.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information deemed furnished and not filed with the SEC. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be

-8-

modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

This prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus. You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus.

Requests for such documents should be directed to:

Aehr Test Systems

400 Kato Terrace

Fremont, California 94539

Attention: Chief Financial Officer

You may also access certain of the documents incorporated by reference in this prospectus through our website at www.aehr.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

-9-

Part II

Information Not Required in the Prospectus

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth an estimate of the registrant's expenses, other than any sales commissions or discounts, in connection with the issuance and distribution of the securities being registered hereby. All amounts are estimates except the SEC registration fee.

Securities and Exchange Commission registration fee	\$868
Accounting fees and expenses	6,000
Legal fees and expenses	135,000
Miscellaneous	3,000

\$144,868

Total

Item 15. Indemnification of Directors and Officers

Section 317 of the California Corporations Code allows for indemnification of officers, directors, and other corporate agents in terms sufficiently broad to indemnify such persons under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act. Article IV of the registrant's Restated Articles of Incorporation (Exhibit 3.1(1) of the registrant's Registration Statement on Form S-1 filed with the SEC on June 11, 1997) and Article VI of the registrant's Amended and Restated Bylaws (Exhibit No. 3.1 previously filed with the Company's Current Report on Form 8-K filed with the SEC on January 9, 2012) provide for indemnification of the registrant's directors, officers, employees and other agents to the extent and under the circumstances permitted by the California Corporations Code. The registrant has also entered into agreements with its directors and executive officers that will require the registrant, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors and executive officers to the fullest extent not prohibited by law.

The above discussion of Section 317 of the California Corporations Code, our Restated Articles of Incorporation, our Amended and Restated Bylaws and our indemnification agreements is not intended to be exhaustive and is qualified in its entirety by the actual provisions of our Restated Articles of Incorporation and Amended and Restated Bylaws, the California Corporations Code and the indemnification agreements.

See also the undertakings set out in response to Item 17 herein.
Item 16. Exhibits
A list of exhibits filed herewith is contained in the exhibit index that immediately precedes such exhibits and is incorporated herein by reference.
Item 17. Undertakings
(a) The undersigned registrant hereby undertakes:
To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
II-1

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

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

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the SEC by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

- That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective (2) amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
- (i) If the registrant is relying on Rule 430B,
- (A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and
- (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As

provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof. *Provided*, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to the effective date; or

(ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or

II-2

other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

- That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer and sell such securities to such purchaser:
- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(5)

- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding), is asserted by such director, officer or controlling person in connection with the securities being registered, the

registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes that:

For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

II-3

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

II-4

Signatures

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in Fremont, California, on the 24th day of October 2016.

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 hereby constitutes and appoints Gayn Erickson and Kenneth B. Spink, and each of them acting individually, jointly and severally, as his true and lawful attorneys-in-fact and agents, with full power of each to act alone, with full powers of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Registration Statement on Form S-3 with all exhibits thereto and all documents in connection therewith, with the SEC, granting unto said attorneys-in-fact and agents, with full power of each to act alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or their substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933 this registration statement has been signed 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)	October 24, 2016
/s/ Kenneth B. Spink Kenneth B. Spink	Vice President of Finance and Chief Financial Officer (Principal Financial and Accounting Officer)	October 24, 2016
/s/ Rhea J. Posedel	Chairman	October 24, 2016

Rhea J. Posedel

/s/ Robert R. Anderson Robert R. Anderson	Director	October 24, 2016
/s/ William W.R. Elder William W.R. Elder	Director	October 24, 2016
/s/ Mario M. Rosati Mario M. Rosati	Director	October 24, 2016
/s/ John M. Schneider John M. Schneider	Director	October 24, 2016

II-5

Signature Title Date

/s/ Howard T. Slayen Director October 24, 2016

Howard T. Slayen

II-6

Exhibit Index

Exhibit Exhibit Title Number 3.1(1) Restated Certificate of Incorporation of Registrant. 3.2(2)Amended and Restated Bylaws of Registrant. 4.1(3) Form of Common Stock certificate. Purchase Agreement, dated September 22, 2016, by and among Aehr Test Systems and the Investors (as 4.2(4) defined therein). Registration Rights Agreement, dated September 22, 2016, by and among Aehr Test Systems and the 4.3(5) Investors (as defined therein). 5.1 Opinion of Wilson Sonsini Goodrich & Rosati, P.C. 23.1 Consent of Burr Pilger Mayer, Inc., Independent Registered Public Accounting Firm. 23.2 Consent of Wilson Sonsini Goodrich & Rosati, P.C. (included in Exhibit 5.1). 24.1 Power of Attorney (included in page II- to this registration statement on Form S-3).

- (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 Exhibit No. 3.1 previously filed with the Company's Current Report on Form 8-K filed January 9, 2012 (File No. 000-22893).
- (3) 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).
- (4) Incorporated by reference to Exhibit No. 10.1 previously filed with the Company's Current Report on Form 8-K filed September 28, 2016 (File No. 000-22893).
- (5) Incorporated by reference to Exhibit No. 10.2 previously filed with the Company's Current Report on Form 8-K filed September 28, 2016 (File No. 000-22893).